

Appendix N: Noise Discipline Report

Pages vii and viii, Baseline Conditions

Section is revised as follows:

Baseline conditions (year 2014) incorporate the effects of the Renton Nickel Improvement Project. Under these conditions, some study area locations already approach, meet, or exceed the NAC for sensitive receptors. Locations that currently approach, meet, or exceed 67 dBA include approximately ~~98~~ 106 residences, ~~1~~ 2-hotels, 6 parks, and 3 trails. ~~Eleven~~ Nineteen of these residences and the ~~1~~ 2-hotels exceed the NAC because of noise from local traffic on Main Avenue S, S Grady Way, Benson Road S, N 3rd Avenue, the SR 169/N 3rd Avenue connector, and/or SR 169.

Page viii, Project Effects

Section is revised as follows:

If this project is built, WSDOT will acquire 30 noise-affected residences and one park as right-of-way for the roadway project. With the project in place, 92 residences, 1 library, and 1 park will go from being below the NAC to being at or above the NAC. Added to the ~~98~~ 106 residences, ~~1~~ 2-hotels, 5 parks, and 3 trails that are already at or above the NAC, a total of ~~190~~ 198 residences, ~~1~~ 2-hotels, 1 library, 6 parks, and 3 trails are predicted to experience noise levels at or above the NAC of 66 dBA set for residences in 2030.

If this project is not built, no additional receptors will approach, meet, or exceed the NAC. Under the No Build Alternative, the ~~98~~ 106 residences, ~~1~~ 2-hotels, 6 parks, and 3 trails that already approach, meet, or exceed the NAC will continue to experience noise levels that approach, meet or exceed the NAC in 2030.

Page x, Unavoidable Adverse Effects

Section is revised as follows:

For the Build Alternative, noise levels will approach, meet, or exceed the NAC at 36 locations (representing ~~121~~ 129 residences, ~~1~~ 2-hotels, 1 library, 6 parks, and 3 trails) with the relocated Noise Barrier East 5, and new Noise Barrier 8 and Noise Barrier 10. Noise Receptor Sites 22, 25, 26, 30, 31, 34, and Freeway Park are planned for acquisition by the I-405, Tukwila to Renton Improvement Project. The Tukwila to Renton Project will not cause any substantial increases in noise.

Page 1-2, What are the key points from this report?

Paragraph 1 of this section is revised as follows:

Under baseline conditions, some places in the study area already exceed the NAC, including approximately ~~98~~ 106 residences, ~~1~~ 2 hotels, 6 parks, and 3 trails. ~~Eleven~~ Nineteen of these residences and ~~1~~ 2 hotels exceed the NAC because of noise generated from local traffic on Main Avenue S, S Grady Way, Benson Road S, NE 3rd Avenue, the SR 169/NE 3rd Avenue connector, and/or SR 169.

Paragraph 3 of this section is revised as follows:

If this project is built, 92 residences, 1 park, and 1 library will go from being below the NAC to being at or above the NAC. Added to the ~~98~~ 106 residences, ~~1~~ 2 hotels, 5 parks, and 3 trails that are already at or above the NAC under baseline conditions, a total of ~~190~~ 198 future residences, ~~1~~ 2 hotels, 6 parks, 3 trails, and 1 library are predicted to experience noise levels at or above the NAC of 67 dBA set for residences in 2030.

Page 1-3, What will happen if we adopt the No Build Alternative?

Section is revised as follows:

If this project is not built, no additional residences will approach, meet, or exceed the NAC (the equivalent sound level of 67 dBA) until at least the year 2030. The ~~98~~ 106 residences, ~~1~~ 2 hotels, 6 parks, and 3 trails that already approach, meet, or exceed the NAC will continue to do so until at least 2030.

Page 4-3, Where are the modeled noise receptor locations?

Section is revised as follows:

Baseline noise levels were modeled at 64 locations that represent ~~339~~ 347 residences, ~~1~~ 2 hotels, 8 parks, 3 trails, 1 aquatic center, and 1 library. Traffic noise is the dominant noise source in the study area, with periodic air and rail noise.

Page 4-18, Exhibit 4-14

Exhibit is revised to reflect receptor 61 as an apartment building and not a hotel as shown here.

**I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 – PHASE 2)
FINDING OF NO SIGNIFICANT IMPACT**

Exhibit 4-14: Modeled Noise Levels at Receptors, as shown on Sheet 7 of 7

Noise Receptor Number	Activity Description	Total Residences Represented	Modeled Baseline Noise Level (dBA)	Future Modeled Noise Levels (dBA) without Additional Abatement	
				2030 No Build	2030 Tukwila to Renton Project
42A	Residence at Mill Ave. S	1	70	70	74
42B	Residence at Mill Ave. S	4	68	68	72
42C	Second-story Residence at Mill Ave. S	2	71	71	75
42D	Third-story Residence at Mill Ave. S	2	73	73	77
42E	Residence at Mill Ave. S	2	68	68	72
42F	Second-story Residence at Mill Ave. S	2	71	71	75
42G	Third-Story Residence at Mill Ave. S	2	73	73	77
42H	Fourth-story Residence at Mill Ave. S	2	74	74	78
43A	Residence at 412 Mill Ave. S	3	70	70	71
43B	Second-story Residence at 412 Mill Ave. S	2	75	75	76
43C	Third-story Residence at 412 Mill Ave. S	2	76	76	77
43D	Residence at 412 Mill Ave. S	2	70	70	71
44A	Residence at Cedar Ave. S	3	62	62	68
44B	Residence at Cedar Ave. S	2	63	63	69
44C	Residence at Cedar Ave. S	2	61	61	67
45A	Residence at Cedar Ave. S	3	59	59	65
45B	Residence at Cedar Ave. S	4	55	55	61
46A	Residence at Beacon Way S	3	64	64	67
46B	Residence at Beacon Way S	1	66	66	69
46C	Residence at Beacon Way S	2	65	65	68
47A	Residence at Beacon Way S	3	58	58	62
47B	Residence at Beacon Way S	4	57	57	61
48	Veteran's Park	1	69	69	70
49	Freeway Park	1	76	76	N/A
50A	Residence at Mill Ave. S	2	67	67	71
50B	Residence at Mill Ave. S	3	63	63	67
51A	Residence at Renton Ave. S	2	66	66	69
51B	Residence at Renton Ave. S	2	63	63	66
52	Cedar River Park – trail, picnic, recreational open space, beach area	5	63	63	67
53	Liberty Park – playground	1	68	68	69
54	Renton Public Library	Library	65	65	67
55*	Liberty Park – furthest baseball field in outfield and tennis court	3	64	64	65
56*	Liberty Park – baseball field, stands, and basketball court	3	69	69	69
57*	Cedar River Park – soccer field and baseball field	3	71	71	73
58	Aquatic Center	Aquatic Center	63	63	63
59	Single-Family Residence	1	64	64	65
60	Silver Cloud Inn	Hotel	71	71	71
61	Hotel Apartment	Hotel 8	74	74	74

Values in **BOLD** approach, meet, or exceed the NAC

* Measurements were taken as part of the I-405 Renton to Bellevue Project, but were analyzed as part of the Tukwila to Renton Project

N/A indicates that property is acquired by WSDOT for right-of-way

Page 4-20, What are the modeled noise levels?

Section is revised as follows:

Noise levels for baseline conditions in the study area were modeled using TNM, and levels ranged between 56 and 76 dBA. These levels range from typical suburban outdoor sound levels (from 50 to 60 dBA⁹) to very noisy levels (above 70 dBA), which is typical of locations within 100 feet of a busy freeway. Noise levels at 28 sites, representing an equivalent of ~~98~~ 106 residences, ~~12~~ hotels, 6 parks and 3 trails, were modeled to approach, meet, or exceed the FHWA criteria of 67 dBA for baseline conditions.

Page 5-1, Build Alternative

Section is revised as follows:

Modeling for the Build Alternative indicates that noise levels will approach, meet, or exceed the NAC at ~~40~~ 36 locations representing an equivalent of ~~190~~ 198 residences, ~~12~~ hotels, 1 library, 6 parks, and 3 trails. Noise levels at 28 locations representing ~~98~~ 106 residences, ~~12~~ hotels, 6 parks, and 3 trails approach, meet, or exceed the NAC criteria under baseline conditions.

Page 5-1, No Build Alternative

Section is revised as follows:

Modeling for the No Build Alternative indicates that noise levels will not approach, meet, or exceed the NAC at any additional locations. This means that noise levels for the No Build Alternative and baseline conditions are the same; they approach, meet, or exceed FHWA criteria at 28 locations representing an equivalent of ~~98~~ 106 residences, ~~12~~ hotels, 6 parks, and 3 trails.

Page 5-1, How do the Baseline Conditions, No Build, and Build Alternatives differ?

Section is revised as follows:

Baseline conditions indicate that noise levels at 28 locations including ~~98~~ 106 residences, ~~12~~ hotels, 6 parks, and 3 trails approach, meet, or exceed the NAC. Noise levels for the No Build Alternative are predicted to be the same as noise levels under baseline conditions.

Page 5-2, First paragraph

Paragraph is revised as follows:

Noise levels for the Build Alternative were predicted to increase by 0 to 12 dBA over baseline conditions at residences in the study area. Noise levels at ~~40~~ 36 locations, including ~~190~~ 198 residences, ~~12~~ hotels, 1 library, 6 parks, and 3 trails, will approach, meet, or exceed the NAC. These levels remain constant despite the effects of relocating Noise Barrier East 5. The number of residences that experience noise levels that approach, meet, or exceed the NAC would be reduced from ~~190~~ 198 to ~~121~~ 129 with construction of Noise Barrier 8 and Noise Barrier 10, which are included in the Build Alternative.

Page 6-18, Noise Barrier 14 (Not Feasible)

Second paragraph of this section is revised as follows:

The maximum noise reduction provided by Noise Barrier 14 is 3 dBA at Modeled Site 61, which represents ~~a hotel~~ an apartment. With a 28-foot-high wall, Noise Barrier 14 will not provide a 7-dBA reduction in I-405 and SR 169 traffic noise levels for any of the sites represented in the area (see Appendix B). For this reason, Noise Barrier 14 is not feasible.

Page 8-1, First paragraph

Paragraph is revised as follows:

For the Build Alternative, noise levels will approach, meet, or exceed the NAC at ~~36-35~~ locations (representing ~~116-129~~ residences, 12 hotels, 1 library, 6 parks, and 3 trails) with the relocated Noise Barrier East 5, and new Noise Barrier 8 and Noise Barrier 10. Noise Receptor Sites 22, 25, 26, 30, 31, 34, and Freeway Park are planned for acquisition by the project. The Tukwila to Renton Project will not cause any substantial increases in noise.

Page B-12, Exhibit B-20

Exhibit is revised as follows:

Exhibit B-20: Noise Barrier 14 – 28 feet tall					
Modeled Site	Residences Represented	Leq (dBA)	Allowed Barrier Area (ft ²)	Noise Level with Barrier	Reduction (dBA)
59	1	65	0	64	1
60	1	71	0	70	1
61	1 <u>8</u>	74	1,244 <u>9,952</u>	71	3
Total Barrier Area (ft ²)			1,244 <u>9,952</u>	21,000	
Planning-Level Cost (\$)			\$66,430 <u>\$531,437</u>	\$1,121,400	
*Planning-level cost based on typical construction techniques and engineering for noise barriers with a maximum height of 24 feet.					

Appendix Q: Transportation Discipline Report

Appendix A

The following routes are added to the table on page A-1.

Existing Transit Service in the Study Area		
Route	Service Area	Service Type
154	Tukwila, Kent, Auburn	Weekdays
161	Seattle, Tukwila, Renton, Kent	Weekdays

Appendix R: Visual Quality Technical Memorandum

Page C-2, information for Viewpoints T9 and T10

The table was inadvertently cut off. The table below now includes T9 and T10 information.

Tukwila to Renton Improvement Project																					
VISUAL QUALITY ASSESSMENT																					
5/1/2007 Prepared by: Jon Gage																					
Views Toward Road																					
VIEWPOINT NUMBER (E=existing, P=proposed)	T1		T2		T3		T4		T5		T6		T7		T8		T9		T10		
	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	
LAND	4	3	2	2	4	4	2	2	4	3	3	3	5	3	4	2	3	3	3	5	3
WATER	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
VEGETATION	4	4	3	4	4	3	2	1	4	2	3	3	5	5	4	2	3	3	3	4	3
Manned	3	4	4	3	4	5	3	3	4	5	4	4	4	4	4	5	3	3	3	4	4
AVERAGE	3.25	3.25	2.50	2.50	3.25	3.25	2.00	1.75	3.25	2.75	2.75	2.75	3.75	3.25	3.25	2.50	2.50	2.50	4.25	2.75	
DEVELOPMENT	4	3	4	4	4	2	3	3	4	2	3	2	4	3	4	2	2	3	4	4	
ENCROACHMENT	5	2	3	3	4	2	3	2	4	2	3	3	4	2	4	2	2	2	5	2	
AVERAGE	4.50	2.50	3.50	3.50	4.00	2.00	3.00	2.50	4.00	2.00	3.00	2.50	4.00	2.50	4.00	2.00	2.00	2.50	4.50	3.00	
OVERALL	4.00	3.00	4.00	5.00	4.00	3.00	3.00	2.00	3.00	3.00	3.00	3.00	5.00	3.00	4.00	2.00	2.00	2.00	4.00	3.00	
*TOTAL VISUAL QUALITY	3.92	2.92	3.33	3.67	3.75	2.75	2.67	2.08	3.42	2.58	2.92	2.75	4.25	2.92	3.75	2.17	2.17	2.33	4.25	2.92	
VIEWPOINT NUMBER (E=existing, P=proposed)	T1	T1	T2	T2	T3	T3	T4	T4	T5	T5	T6	T6	T7	T7	T8	T8	T9	T9	T10	T10	
E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P	E	P
*Total Visual Quality is the average of the averaged values for vividness, intactness and unity for each viewpoint																					
Evaluation Scale											UNITY										
VIVIDNESS											INTACTNESS										
(DEVELOPMENT)											(ENCROACHMENT)										
7 = VERY HIGH											7 = NO ENCROACHMENT TO NON-EXISTENT										
6 = HIGH											6 = LITTLE ENCROACHMENT										
5 = MODERATELY HIGH											5 = SOME ENCROACHMENT										
4 = AVERAGE											4 = AVERAGE LEVEL OF DEVELOPMENT										
3 = MODERATELY LOW											3 = MODERATELY HIGH ENCROACHMENT										
2 = LOW											2 = HIGH LEVEL OF ENCROACHMENT										
1 = VERY LOW TO NON-EXISTENT											1 = VERY HIGH LEVEL OF ENCROACHMENT										

Appendix S: Water Resources Discipline Report

Page 3-2, What policies or regulations are related to effects on water resources?

Bullet list augmented as follows:

- Tribal treaty rights, including any associated senior water rights where applicable.

Page 4-5, Thunder Hills Creek

Section revised as follows:

Thunder Hills Creek also originates on the hills above I-405 just northeast of Rolling Hills Creek and is a tributary of Rolling Hills Creek. It has a basin size of approximately 0.6 square miles. Thunder Hills Creek crosses under I-405 at milepost 3.0 in a 48-inch-diameter culvert. This culvert has been replaced as part of an emergency repair project permitted in March 2008. At this point, the creek joins the flow from a historic coalmine. Drainage from these two culverts enters a concrete flume that flows southwest to Talbot Road. From here, the flows are piped and discharged to Rolling Hills Creek.

Page 4-11, Ecology Embankments

Second paragraph is revised as follows:

Ecology embankments are very efficient at improving water quality and remove around 90 percent of total suspended solids (TSS) most pollutants.¹² These BMPs are typically used as the first step management system that then conveys stormwater to detention ponds for flow control. Ecology embankments are generally constructed as shown in the drawing below.

¹² ~~WSDOT 2004~~ WSDOT 2006b

Page 6-6, What measures will be taken to mitigate effects of operation?

Section revised as follows:

- Stormwater facilities for this project will maintain the peak flow rate and duration 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. WSDOT will provide routine maintenance for these facilities.

Attachment 2: Notices

This attachment provides the notices prepared for the EA and FONSI and the Determination of Nonsignificance (DNS) prepared under SEPA Rules along with information on publication of these notices.

NOTICE OF AVAILABILITY OF FINDING OF NO SIGNIFICANT IMPACT I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 – PHASE 2)

The Federal Highway Administration (FHWA) issued the I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2) Finding of No Significant Impact (FONSI) on July 18, 2008.

This finding is based on the evaluation of the Environmental Assessment (EA) and Draft Section 4(f) Evaluation as issued on April 4, 2008, and public and agency input during the public comment period from April 4 through May 19, 2008. The public comment period included a public hearing on April 22, 2008.

Description of Proposal

WSDOT intends to improve I-405 from I-5 to SR 169. These improvements are a part of the I-405 Corridor Program. The proposed action includes the following improvements to support construction and operation of the facility:

- Add capacity to both I-405 and SR 167;
- Reconstruct bridges over the Green River and Cedar River, and add one new bridge over the Green River;
- Modify the SR 181 and SR 169 interchanges;
- Reconstruct the SR 167 interchange, including a new general-purpose direct-connector ramp from southbound I-405 to southbound SR 167, HOV direct-connector ramps from northbound SR 167 to northbound I-405 and from southbound I-405 to southbound SR 167, and a split-diamond interchange on I-405 at Lind Avenue and Talbot Road (SR 515) with connecting frontage roads; and
- Reconstruct the two local street accesses to Renton Hill.

Where Can I View the EA and FONSI?

Copies of the I-405, Tukwila to Renton Improvement Project EA and FONSI are available for a cost of \$40 or \$23, respectively, which does not exceed the cost of printing and distribution. Both documents are available for review online at: <http://www.wsdot.wa.gov/projects/i405/>. The EA and the FONSI may also be reviewed at the WSDOT I-405 Project Office at 600 108th Avenue NE, Suite 405, Bellevue.

Who Can I Contact with Questions?

Please contact William Jordan, WSDOT I-405 Project Office, 600 108th Avenue NE, Suite 405, Bellevue, WA 98004; telephone (425) 456-8647 if you have any questions.

Individuals requiring reasonable accommodations may request written materials in alternative formats; large print, Braille, cassette tape, or on computer disk, please call (360) 705-7097. Persons who are deaf or hard of hearing, please call the Washington State Telecommunications Relay Service, or Tele-Braille at 7-1-1, Voice (800) 833-6384, and ask to be connected to (360) 705-7097.

The FHWA and the WSDOT ensure full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin, or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding WSDOT's Title VI Program, you may contact WSDOT's Title VI Coordinator at (360) 705-7098.

The preceding legal notice was advertised in the following newspaper on the date noted:

Seattle Times and Seattle Post Intelligencer, July 21, 2008.

**NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT
I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 – PHASE 2)**

The Federal Highway Administration (FHWA) and Washington State Department of Transportation (WSDOT) will issue an Environmental Assessment (EA) and Draft Section 4(f) Evaluation on April 4, 2008, for the I-405, Tukwila to Renton Improvement Project. The project extends for approximately 4 miles along Interstate 405 (I-405) from the I-5 interchange to the State Route (SR) 169 interchange and approximately two miles along SR 167 from I-405 to SW 43rd Street. It is the purpose of this notice and of the public hearing to provide for the exchange of information regarding the effect of the proposed project on the community. This purpose is in accordance with and pursuant to the National Environmental Policy Act (NEPA) and the Federal Highway Act (Title 23 U.S.C., 101 et. seq.) and amendments.

Description of Proposal

WSDOT intends to improve I-405 from I-5 to SR 169. These improvements are a part of the I-405 Corridor Program. The proposed action includes the following improvements to support construction and operation of the facility:

- Add capacity to both I-405 and SR 167;
- Reconstruct bridges over the Green River and Cedar River, and add one new bridge over the Green River;
- Modify the SR 181 and SR 169 interchanges;
- Reconstruct the SR 167 interchange, including a new general-purpose direct-connector ramp from southbound I-405 to southbound SR 167, HOV direct-connector ramps from northbound SR 167 to northbound I-405 and from southbound I-405 to southbound SR 167, and a split-diamond interchange on I-405 at Lind Avenue and Talbot Road (SR 515) with connecting frontage roads; and
- Reconstruct the two local street accesses to Renton Hill.

Public Hearing

WSDOT has scheduled a combined open house and environmental public hearing to answer questions and receive comments on the Environmental Assessment and Draft Section 4(f) Evaluation. The open house and hearing will be from 4:00 pm to 7:00 pm on April 22, 2008, in Renton, at the Renton Technical College, 3000 NE Fourth Street, Renton, WA 98056.

The meeting will use an open house format, which is an informal arrangement that allows for one-on-one discussion with project staff while still providing the opportunity to offer testimony for the official public record to a court reporter.

Each participant may present testimony either orally to the court reporter or in writing. All written comments must be postmarked or received by May 19, 2008, to be considered by the project administrators and included in the official public record. Project questions and comments should be submitted in writing to the I-405 Environmental Manager, William Jordan, at the following address or e-mail address:

600 – 108th Ave NE, Suite 405, Bellevue, WA 98004
Email: TukwilatoRentonNEPA_EA@i405.wsdot.wa.gov

Copies of these documents are available for purchase at the above location at a cost of \$40.00 for a hard copy or \$3.25 for the compact disk (CD), which does not exceed the cost of reproduction and distribution.

Plans, maps, environmental documents, and other pertinent information about this project will be on display at the open house and hearing. The EA and Draft Section 4(f) Evaluation are also available for public review at Renton Public Library; Renton Highlands Library; Foster Library; University of Washington Library (Suzzalo); and Tukwila and Renton City Halls. The EA document and appendices can be viewed on-line at: <http://www.wsdot.wa.gov/projects/i405/>

The Renton Technical College public hearing site is accessible to persons with disabilities. Individuals requiring reasonable accommodation may request written materials in alternative formats; large print, Braille, cassette tape, or on computer disk, please call (360) 705-7097. Persons who are deaf or hard of hearing, please call the Washington State Telecommunications Relay Service, or Tele-Braille at 7-1-1, Voice (800) 833-6384, and ask to be connected to (360) 705-7097.

The FHWA and the WSDOT ensure full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person on the basis of race, color, national origin, or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions regarding WSDOT's Title VI Program, you may contact WSDOT's Title VI Coordinator at (360) 705-7098.

The preceding legal notice was advertised in the following newspaper on the date noted:
Seattle Times and Seattle Post Intelligencer, April 4, 2008.

**DETERMINATION OF NONSIGNIFICANCE (DNS)
AND ADOPTION OF EXISTING ENVIRONMENTAL DOCUMENTATION
I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2), I-5 to SR 169**

Washington State Department of Transportation (WSDOT) issued a determination of nonsignificance (DNS) for the I-405, Tukwila to Renton Improvement Project that extends for approximately 4 miles along Interstate 405 (I-405) from the I-5 interchange to the State Route (SR) 169 interchange and approximately 2 miles along SR 167 from I-405 to SW 43rd Street. WSDOT intends to improve Interstate 405 (I-405) from I-5 to SR 169. These improvements are part of the I-405 Corridor Program. The proposed action includes the following improvements to support construction and operation of the facility:

- Add capacity to both I-405 and SR 167;
- Reconstruct bridges over the Green River and Cedar River and add one new bridge over the Green River;
- Modify the SR 181 and SR 169 interchanges;
- Reconstruct the SR 167 interchange, including a new general-purpose direct-connector ramp from southbound I-405 to southbound SR 167, HOV direct-connector ramps from northbound SR 167 to northbound I-405 and from southbound I-405 to southbound SR 167, and a split-diamond interchange on I-405 at Lind Avenue and Talbot Road (SR 515) with connecting frontage roads; and
- Reconstruct the two local street accesses to Renton Hill.

Other features of the project include:

- Stripe lanes to provide buffer between HOV and general-purpose lanes along portions of I-405 and SR 167;
- Construct several retaining walls to accommodate the project;
- Construct stormwater management facilities to provide water quality treatment and detention and upgrade the conveyance system;
- Implement context-sensitive solutions during the project;
- Implement measures that avoid or minimize effects to the environment;
- Use Springbrook Creek Wetland and Habitat Mitigation Bank for wetland mitigation;
- Construct a noise barrier approximately 1,100 feet long and 20 feet high along northbound I-405 just north of the Benson Road;
- Construct a noise barrier approximately 2,200 feet long and 20 feet high along northbound I-405 from just north of Thunder Hills Creek to the Renton Avenue bridge over I-405; and
- Reduce the eastern end of the proposed Talbot Hill noise barrier that is discussed in the Renton Nickel Improvement Project Environmental Assessment by approximately 300 feet.

The Tukwila to Renton Project will provide many short- and long-term benefits. Some of these benefits are:

- Improving travel speeds between I-5 and SR 169 by approximately 10 to 15 miles per hour by 2014;
- Improving traffic flow and safety by limiting access points to the HOV lanes with a striped buffer; and
- Improving water quality conditions in the project area by treating approximately 200 percent of the new impervious surfaces.

Proponent: Washington State Department of Transportation

Location of current proposal: The I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2) extends for approximately 4 miles along I-405 from the I-5 interchange to the SR 169 interchange. Also, the project extends south on SR 167 for approximately 2 miles (milepost 24.4 to 26.3) from I-405 to SW 43rd Street.

Title and Description of documents being adopted: *I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2), I-5 to SR 169, Environmental Assessment and Draft Section 4(f) Evaluation (WSDOT/FHWA, March, 2008).*

The EA contains the results of environmental analyses to identify potential impacts of the project and the No Build Alternative, and is used to convey the project information to the public and project decision-makers so well informed decisions can be made. This EA was prepared in accordance with the *National Environmental Policy Act* (NEPA).

The document is available to be read at (place/time): The NEPA EA and Draft Section 4(f) Evaluation and supporting discipline studies can be found on the project website at: <http://www.wsdot.wa.gov/projects/i405/>

**I-405, TUKWILA TO RENTON IMPROVEMENT PROJECT (I-5 TO SR 169 – PHASE 2)
FINDING OF NO SIGNIFICANT IMPACT**

The documents can be read at the following location from 8:00 a.m. to 5:00 p.m.:

I-405 Project Office,
600 – 108th Avenue NE, Suite 405,
Bellevue, WA 98004

Copies are also available for review at the following locations: Renton Public Library; Renton Highlands Library; Foster Library; the University of Washington Library (Suzzalo); and Tukwila and Renton City Halls.

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed Environmental Checklist and other information on file with the lead agency. This information is available to the public on request.

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below.

Comments must be submitted by April 18, 2008.

We have identified and adopted this document as being appropriate for this proposal after independent review. The document meets our environmental review needs for the current proposal and will accompany the proposal to the decision maker.

Name of agency adopting document: Washington State Department of Transportation, Urban Corridors Office

Contact person: William Jordan
Phone: 425-456-8647
Email: TukwilatoRentonSEPA_DNS@i405.wsdot.wa.gov

The preceding legal notice was advertised in the following newspaper on the date noted:

Seattle Times and Seattle Post Intelligencer, April 4, 2008

Attachment 3: FONSI Distribution List

To promote good communication and enhance interagency coordination, we acknowledge that this FONSI is a public document and has involved the public, agencies, and tribes in implementing NEPA procedures. All those who received a copy of the EA have been sent postcards notifying them of the availability of the FONSI. The FONSI was sent to the following government agencies and tribe who commented on the EA and Draft Section 4(f) Evaluation:

- City of Renton
- King County
- Muckleshoot Indian Tribe
- U.S. Department of the Interior

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Attachment 4: Mitigation Commitment List

This attachment describes project mitigation commitments. The mitigation measures are organized by element of the environment, as presented in the EA. These commitments were included in the EA as Chapter 6, “Measures to Avoid or Minimize Effects,” issued on April 4, 2008. In addition to these commitments, WSDOT will also use standard construction best management practices in the usual and accustomed fashion as required by local, state, and federal regulations.

Since the issuance of the EA, corrections have been made to these commitments. These corrections serve to clarify or enhance readability. Changes are identified using strikethrough and underlining. Each deletion of original text is shown with a line striking through it; new text is shown as underlined. These minor revisions are incorporated into the EA by reference.

These commitments have been adopted as part of FHWA’s final decision on the proposed project. They are listed to “assist with agency planning and decision-making” and to “aid an agency’s compliance with NEPA when no Environmental Impact Statement is necessary” [40 CFR 1501.3(b) and 1508.9(a)(2)].

List of Commitments Identified in the EA

WSDOT has well-established design and construction practices for avoiding or minimizing impacts resulting from environmental conditions anticipated along the project alignment. The following sections describe the established design and construction practices that WSDOT will include to avoid or minimize impact to the various environmental resources during both the construction and operation phases of the project.

Transportation

WSDOT will coordinate with the local agencies and other projects to prepare a Traffic Management Plan prior to making any changes to the traffic flow or closing lanes. Local agencies, the public, school districts, emergency services providers, and transit agencies will be informed of the changes in advance through a public information process. Pedestrian and bicycle circulation will be maintained as much as possible during construction.

Transportation demand management strategies will be an important part of the construction management program. The transportation demand management strategies in the Tukwila to Renton Project area will be implemented prior to construction to increase public awareness and participation in HOV travel. The major focus will be on expanding vanpooling and vanshare opportunities.

Noise

To reduce construction noise at nearby receptors, WSDOT will incorporate the following activities where practicable:

- Limit the noisiest construction activities (e.g., pile driving) to between 7 a.m. and 10 p.m., to reduce construction noise levels during sensitive nighttime hours.
- Equip construction equipment engines with adequate mufflers, intake silencers, and engine enclosures to reduce their noise.
- Turn off construction equipment during prolonged periods of nonuse to eliminate noise.
- Where possible, locate stationary equipment away from residences to decrease noise.
- Construct temporary noise barriers or curtains around stationary equipment that must be located near residences, to decrease noise levels at nearby sensitive receptors.
- Require use of Occupational Safety and Health Administration approved ambient sound-sensing backup alarms, to reduce disturbances from backup alarms during quiet periods.

Two new noise barriers are planned for construction with the Tukwila to Renton Project. Noise Barrier 8 will be constructed in front of the Berkshire Apartments and will be 20 feet high and roughly 1,100 feet long. Noise Barrier 10, a system of two walls, will be in front of the Renton Hill Neighborhood. Noise Barrier 10 ~~that~~ separates at Cedar Avenue S and becomes Noise Barrier 10A to the north and Noise Barrier 10B to the south. Noise Barrier 10A will sit at the top of the stacked structure and overlap with Noise Barrier 10B where the upper and lower Mill Avenue roadway structure begins. Noise Barrier 10B will follow Mill Avenue to the bottom of

the new stacked road structure. Noise Barrier 10A will be 14 to 20 feet high and Noise Barrier 10B will be 20 feet high. Noise Barrier 10 has a total length of roughly 2,500 feet. Other noise calming options may be considered for use on this project if appropriate.

Communities, Businesses, and Public Services

To avoid and/or minimize effects to communities, businesses, and public services, WSDOT will:

- Continue active public involvement and work with neighborhood associations and public services.
- Coordinate with any affected resident or business owner to provide them relocation assistance, in compliance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.
- Coordinate with business owners and the local jurisdictions to ensure that parking losses are mitigated at an appropriate level.
- Maintain access to businesses throughout the construction period and provide reasonable access during business hours. Access measures will be prepared as part of the traffic management plan and included in the contract specifications.
- Post appropriate signs that communicate revised access information to potential customers.

Impacts to existing utilities will be avoided through project design when feasible. Where avoidance is not feasible, utilities will be relocated or protected in place.

Recreational and Cultural Resources

During final design, WSDOT will meet with staff from the Renton and Tukwila Parks and Public Works Departments to coordinate temporary trail closures and detours related to the project. If it is not possible to maintain trail traffic during construction, then the team will identify appropriate, safe detours for use by cyclists and/or pedestrians. WSDOT will develop signs explaining the temporary closure timing and detour routes.

Temporary disturbances to landscaping for recreational and cultural resources will be restored following protocols in the *I-405 Context-Sensitive Solutions Master Plan*. Specific measures to mitigate project effects are described below:

- **Duwamish-Green River Trail/Christensen Greenbelt.** During construction, a segment of the Duwamish-Green River Trail/Christensen Greenbelt where it crosses beneath the Southcenter Boulevard bridge, the I-405 bridges, and the Tukwila Parkway bridge will be closed for public safety reasons. A signed detour will be provided during the closure and notices will be posted to keep the public informed about the construction.

The Duwamish-Green River Trail/Christensen Greenbelt is a Section 6(f) resource. As such, the Recreation and Conservation Office (RCO) will review the conversion approval request for permanent direct use effects once this portion of the project is funded for construction. WSDOT, in consultation with the City of Tukwila, will identify proposed replacement property. This replacement property can be conveyed in a variety of forms, such as:

- Acquisition of property that can be added to the existing trail corridor;
- Acquisition of property within the City of Tukwila that can be used for public outdoor recreation;
- Monetary compensation to the City of Tukwila for the fair market value of the affected property. The City must use these funds to acquire outdoor recreation property within the city limits.

An appraisal will be completed to establish the fair market value of the ~~trial~~ trail and of the proposed replacement property. The fair market value of the replacement property must be at least equal to the outdoor recreation property to be converted. The replacement property must also be of reasonably equal recreational value before approval will be granted.

- **Duwamish-Green River Trail Trailhead.** During construction, the trailhead will be closed for public safety reasons. Notices will be posted to keep the public informed about the construction. The trailhead will be restored by replacing existing picnic tables, signs, trash receptacles, and landscaping. WSDOT proposes to replace the lost parking adjacent to the proposed stormwater detention site immediately west of the existing parking.
- **Tri-Park complex.** WSDOT has worked with the City of Renton, through a design charrette, to assist in the City's development of the Tri-Park Master Plan incorporating Liberty Park, Cedar River Park, Cedar River Trail, and the Narco property into one large recreational complex. This plan resolves several conflicts that arise from having a water supply system, recreational facilities, and a widened interstate highway all within a confined space. WSDOT will continue to coordinate with the City of Renton so that the timing of the Tri-Park Master Plan and the Tukwila to Renton Project ~~coincide~~ are compatible.

Both the City and WSDOT will have distinct scope and funding responsibilities to implement the agreed approach in the Tri-Park area. However, neither the City nor WSDOT has secured its funding to implement their portions of the shared plan. The lack of funding and presumed timing of funding poses a complication in mitigation. It is WSDOT's desire to implement the Section 4(f) mitigation during construction of the project. However, if the City's own funding and timeline for implementation makes this impractical, then the City and WSDOT will work together to develop a strategy to effectively implement both parties' responsibilities.

- **James Nelsen House.** During construction, fencing will be placed to establish the limits of construction and ensure there will be no encroachment near the historic structure. Retaining walls to minimize the footprint and avoid the historic structure are an integral component in the Tukwila Parkway design. The property subject to temporary disturbance, including landscaping, will be restored after construction.

If archaeological sites are discovered in the currently unfunded and inaccessible portions of the APE during future work, the I-405 Programmatic Agreement affirms that avoidance and minimization are the preferred options where possible. If unavoidable adverse effects to

archaeological sites are discovered during future work, the I-405 Programmatic Agreement provides for the development of mitigation measures in consultation with DAHP and interested and affected Indian tribes (see Attachment 6).

WSDOT will also follow their Unanticipated Discovery Plan in the event that archaeological artifacts are found during construction.

Visual Quality

Guidelines from the WSDOT Roadside Classification Plan (RCP) and the Urban Design Criteria (UDC) for the I-405 corridor will be applied to mitigate for unavoidable negative visual effects caused by this project. For improvement projects such as this, the RCP requires roadside restoration within the right-of-way throughout the project limits. For this project, disturbed areas will be restored to a treatment level 2 per the 1996 RCP, with the following guidelines applied where appropriate and practicable:

- Minimize site disturbance to protect native plant communities and specimen trees.
- Restore roadside character with trees (conifers up to 4 feet in height and deciduous trees up to 1 inch in diameter) and shrub seedlings.
- Locate plantings to enhance views of natural features.
- Select vegetation and design planting density to achieve blending with adjacent land use.

If areas are expected to be disturbed by future corridor improvements within 10 years after project completion, temporary erosion control type plantings will be used. In other areas within the project construction limits, additional plantings may be installed where ~~future~~ future corridor improvements that are planned to be completed within the next 10 years will not affect those ~~plantings within 10 years.~~

The UDC implements context-sensitive solutions policy for the I-405 corridor and provides another ~~layer of compensation for~~ means to offset unavoidable negative effects caused by the project. In some instances, the UDC guidelines are redundant with those found in the RCP. The major project elements will have the following UDC guidelines applied where appropriate and practicable:

- Ensure visual unity and consistency throughout the I-405 corridor. This includes defining the appearance and style of built elements, such as lighting, paving, railings, signs, bridges, structures (and associated elements), and walls around bridges. The guidelines address the use of aesthetic treatments in the corridor, including the process for selecting and locating architectural treatment.
- Enhance the architectural design of project features such as retaining walls by including terracing to reduce apparent height, using a consistent design theme throughout the corridor, applying texture to the concrete surfaces to reduce apparent scale, and applying pigmented sealer for uniform color and to limit the effects of graffiti and to reduce reflective glare.

- Shield roadway light fixtures to minimize glare and ambient light spillover into adjacent residential areas.
- Minimize clearing for construction, preserving existing stands of mature trees where possible.
- Screen views of the roadway, elevated structures, retaining walls, noise walls, and other project features from areas with high viewer sensitivity where possible.
- Grade slopes to blend with the natural topography by softening slope transitions.
- Follow the guidelines in the RCP to blend the project into the adjacent land uses, while creating a unified experience for the freeway traveler.

For this project, the UDC guidelines will be applied to local street bridges over I-405 at (from south to north): 66th Avenue, Lind Avenue, and Renton Avenue. UDC guidelines will also be applied to I-405 bridges over (from south to north): the Green River, SR 181, SR 167, Talbot Road, Lower Mill Avenue, and SR 169. Additional structures that the UDC guidelines will be applied to include the new Tukwila Parkway Bridge over the Green River, the new ramps at the SR 181 interchanges, the new ramps and frontage roads associated with the SR 167 interchange improvements, the new Mill Avenue stacked structure, and the two new noise walls, and the SR 169 off-ramp.

Water Resources

Surface Water

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 the highway widening. These ponds may be used for temporary erosion and sedimentation control. WSDOT will provide routine maintenance for these facilities throughout construction.

Stormwater facilities for this project will maintain the peak flow rate of stormwater runoff at baseline 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. WSDOT will provide routine maintenance for these facilities.

The area of the project that is within 10,000 feet of the Renton Municipal Airport will require measures to minimize hazards associated with wildlife attraction to stormwater detention ponds. The following are guidelines that will be considered for stormwater management facilities sited near the airport:

- Design system to minimize the frequency and duration of open water to acceptable levels. Water that is detained by the 2-year design storm should completely drain or fall to a level that is covered by a net or solid cover within 24 hours after the end of the storm event.
- Minimize the size of open water ponds within the FAA 10,000-foot-radius wildlife hazard management zone to minimize aircraft-wildlife interactions.

- Use steep side slopes and deep pond depths to minimize shallow water areas and minimize the total water surface area.
- Slope the pond bottom to allow quick drainage and reduce the potential for standing water.
- Eliminate the potential for wetland vegetation growth on the pond bottom and side slopes by lining the pond with riprap or quarry spalls. Alternatively, plants that provide minimal habitat to wildlife can be used. Dense brush and small trees that will be perceived by waterfowl as hiding places for predators are a good choice. Avoid closely mowed grass, which is preferred by waterfowl.
- Break up possible flight lines by planting trees, setting up poles and or fences, which do not allow most water fowl clear landing or takeoff room on the pond surface.
- Introduce islands within open water areas as needed to support scrub-shrub vegetation cover within wetpools with emergent aquatic planting areas.
- Cover or net all permanent open water surfaces if water fowl use becomes an issue at the site.

Water Quality

The primary means of avoiding and reducing potential effects from this project are to use standard BMPs during construction. WSDOT makes the following commitments to protect water quality during construction of I-405 projects:

- Where construction must occur within stream channels, such construction will occur “in the dry” whereby stream flow is temporarily diverted around the work site, where practicable to prevent turbidity.
- Construction disturbances will be limited to the minimum area needed, the shortest duration, and an appropriate distance away from water bodies as practical. Seasonal work windows will be identified and implemented.
- BMPs such as erosion-control fencing, landscaping, erosion matting, hydro mulching, soil imprinting, straw bales, detention/sediment trap basins, and vegetated fringes as described in the HRM will be used as appropriate.
- Stormwater chemical treatment following Ecology’s guideline may be used as a contingency measure and if approved by WSDOT.
- A scour analysis will be conducted on any highway-related structures that are over river or creek crossings or below OHWM of these water bodies. Appropriate

What is an erosion-control fence?

An erosion-control fence consists of a temporary sediment barrier made of synthetic fabric stretched between posts, with a shallow trench located upslope. The erosion-control fence is “keyed” into the ground to prevent water from running under the fence.

What is a sediment trap?

A sediment trap consists of a temporary ponding area formed by an earthen embankment or an excavation. ~~Both silt fences and~~ Sediment traps are designed to slow the flow of water, allowing sediment to settle out.

measures such as fish-friendly stream bank protection or bridge modifications will be implemented if the scour analysis identifies needs.

- Construction mitigation measures such as use of non-hazardous chemicals when possible and establishment of special hazardous materials storage and handling areas will be implemented to reduce the use, transfer, and storage of hazardous materials in sensitive areas.
- WSDOT will prepare and implement a Temporary Erosion and Sedimentation Control (TESC) Plan. The TESC Plan will consist of operational and structural measures to control the transport of sediment. Operational measures will consist of good housekeeping practices, such as removing mud and dirt from trucks before they leave the site, covering fill stockpiles or disturbed areas, or avoiding unnecessary vegetation clearing. Structural measures will consist of the construction of temporary structures to reduce the transport of sediment, such as silt fences or sediment traps. Should any BMP or other operation not function as intended, WSDOT will take additional action to minimize erosion and maintain water quality.
- Fuel and chemical storage and fueling operations for construction vehicles and equipment will be located within secondary containment areas during construction whenever practicable. A Spill Prevention Control and Countermeasures (SPCC) Plan will be established for construction activities and will also detail the procedures that will be followed in the event of a spill to prevent or minimize effects. The SPCC Plan will specifically address potential fuel spills from vehicles and potential spills of chemicals that are commonly used during construction. Spill response equipment will be located at regular and specified intervals within the construction zones to minimize countermeasure response times.
- WSDOT will identify and develop staging areas for equipment repair and maintenance away from all drainage courses except in areas that are already paved and where no excavation will occur within the staging area. WSDOT will require that washout from concrete trucks not be dumped into storm drains or onto soil or pavement that carries stormwater runoff. During work on the site, thinners and solvents will not be used to wash oil, grease, or similar substances from heavy machinery or machine parts within the construction areas. WSDOT will designate a washdown area for equipment and concrete trucks.
- WSDOT will obtain a NPDES (National Pollutant Discharge Elimination System) construction permit. WSDOT will ensure that water meets the standards specified in the NPDES permit prior to discharge from the construction site. If necessary, water quality will be improved by using such BMPs as sediment ponds to allow sediment to settle out prior to discharge.

BMPs for this project will remove pollutants from runoff generated by the project. With these BMPs, the runoff is expected to meet Washington State water quality standards listed in WAC 173-201(A). 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. WSDOT will provide routine maintenance for these facilities.

Floodplains

Plans for compensatory floodplain storage for temporary and permanent fill will be developed after the project is funded but before construction begins. Mitigation will compensate for fill by volume. Excavation for mitigation will be done in the same floodplain as the fill and the same one-foot elevation. For fill in the Springbrook Creek floodplain, excavation from the construction of the Springbrook Creek Wetland and Habitat Mitigation Bank ~~may~~will be used as compensatory storage. WSDOT will analyze the effectiveness of the proposed fill mitigation to confirm that the 100-year floodplain elevation will have no rise due to the project.

In addition to providing compensatory floodplain storage, stormwater detention will also be provided in the Green River and Springbrook basins for drainage from new impervious surfaces. Detaining stormwater will help minimize changes to flow patterns of inlet sources to the floodplain.

Bridge piers placed within the floodplain will be designed to minimize hydraulic disturbance to flow. This may be achieved by designing piers that are all the same size and placed in lines parallel to the flow path.

Groundwater

Several construction mitigation measures have been identified by WSDOT, in consultation with the City of Renton and include the following:

- WSDOT will protect groundwater quality during construction by implementing TESC and SPCC Plans to prevent erosion, sedimentation, and spills.
- WSDOT will provide an independent construction environmental coordinator to monitor groundwater quality, storage of hazardous substances, chemical use practices, containment of hazardous materials, and to develop an emergency response and recovery plan for the sole-source aquifer.
- WSDOT will develop an environmental protection plan for the City's review prior to construction. This will ~~include~~cover additional investigation of the support structures and mitigation for the increase in impervious surfaces, including a monitoring plan.
- WSDOT will identify and locate staging areas away from all drainage courses except in areas that are already paved and where no excavation will occur with the staging area. Washout from concrete trucks will not be dumped into storm drains or onto soils or pavement that carries stormwater runoff. During work on the site, thinners and solvents will not be used to wash oil, grease, or similar substances from heavy machinery or machine parts within the construction areas. WSDOT will designate a wash down area for equipment and concrete trucks.

- WSDOT will ensure that fuel and chemical storage is located within secondary containment areas. These areas will be surfaced with an impermeable material and sized to contain the volume of stored fuel and/or chemicals.
- WSDOT will conduct construction within the City of Renton's Aquifer Protection Zones 1 and 2 in compliance with State of Washington Wellhead Protection Requirements outlined in WAC 246-290-135(4) and the City of Renton Municipal Code RMC 4-9. The storage of fuel and construction chemicals and refueling operations will not be allowed within the City of Renton's Aquifer Protection Zone 1. Every effort will be taken to minimize the storage of fuels and chemicals within Renton's Aquifer Protection Zone 2. Emergency countermeasures equipment will be specified in the SPCC Plan and will be dedicated and maintained at designated locations within Renton's Aquifer Protection Zones 1 and 2 for rapid and effective response to fuel spill from a vehicle or chemical spill.
- WSDOT will conduct groundwater monitoring during construction to monitor for spills that can affect the sole-source aquifer. If necessary, existing City of Renton monitoring wells can be supplemented with additional monitoring wells at key locations and used to monitor water quality during construction activities in Aquifer Protection Zone 1.
- WSDOT will take added measures for stormwater control and conveyance during construction within Renton's Aquifer Protection Zones 1 and 2 to protect aquifers. Within Aquifer Protection Zones 1 and 2, WSDOT will construct either a lined or piped stormwater conveyance system. Stormwater will go through an existing lined detention pond, or WSDOT will construct a new lined detention pond.
- WSDOT will construct new roadway that is located over Aquifer Protection Zone 1 with an impervious liner underneath the pavement for additional protection from spills escaping the stormwater collection system.
- WSDOT will avoid placement of imported contaminated fill during construction. Imported fill must meet the state's Model Toxics Control Act (MTCA) Method A or B soil cleanup standards (WAC 173-340-740) for unrestricted use. A fill evaluation and testing plan will be developed prior to commencing construction activities.
- For any fill over 50 cubic yards in quantity to be placed over Renton's Aquifer Protection Zone 1, a professional engineer or geologist will certify that the soils meet MTCA cleanup standards (City of Renton Municipal Code RMC 4-9). A plan will be developed that establishes criteria for evaluating fill sources. Analytical testing protocol for sources that may contain suspect fill materials shall be specified in the plan to ensure MTCA Cleanup Method A or B soil cleanup standards are met. If analytical testing is required, imported fill soils will be analyzed before arriving at the construction site. The fill testing plan will also apply to suspect excavated soils encountered during construction. All sampling will be ~~performed~~ reviewed by a professional engineer or geologist.
- WSDOT will avoid drawdown of nearby wells during construction. These effects can be avoided by the use of recharge wells and/or cut-off walls, if necessary.

- WSDOT will implement good construction management, safety precautions, and safety enforcements near the City of Renton’s well field to avoid a construction-related traffic accident, which could damage and disrupt these wells.
- WSDOT will locate areas where permanent drainage will be required by site conditions for cut slopes. If local private groundwater users or downgradient wetlands and spring water right holders could become affected by drawdown of the groundwater table from these drain systems, these effects shall be avoided on a site-specific basis by designing the permanent drainage system to recharge or replenish the downgradient water table.
- WSDOT will locate concrete structures away from production wells and use non-hazardous concrete curing chemicals.
- WSDOT will use steel piles when structures are within 50 feet of production wells and locate new embankments at least 50 feet away from production wells.
- WSDOT will minimize ground vibration and settlement within 50 feet of production wells.
- WSDOT acknowledges that existing structures in the production well area use spread-footing foundations. ~~After~~ Unless indicated otherwise by further geotechnical study, spread-footing foundations may be used that do not substantially penetrate the Cedar Valley sole-source aquifer may be used for the reconstructed bridges over the Cedar River.
- WSDOT will use two ponds for highway spill containment to protect the sole-source aquifer from construction spills.

WSDOT will further minimize effects by using BMPs from WSDOT’s Geotechnical Design Manual and Bridge Design Manual.

Several operational mitigation measures have been identified by WSDOT, in consultation with the City of Renton, and including the following:

- WSDOT will operate stormwater facilities to minimize leakage within Aquifer Protection Zone 1.
- WSDOT will use two ponds for highway spill containment to protect the sole-source aquifer from vehicle spills.
- WSDOT will use the stormwater collection and detention system to capture fuel and chemical spills from vehicles ~~using the stormwater collection and detention system~~. Any new stormwater systems installed for the project will include a shut-off capability for containing a spill or release. WSDOT will establish a plan to contain, clean-up, and minimize potential effects from vehicular accidents.
- A higher level of protection is needed for the City of Renton’s Aquifer Protection Zones 1 and 2. To protect the aquifer protection zones, WSDOT will establish a plan in compliance with Washington State Wellhead Protection Requirements outlined in WAC 246-290-135(4) and the City of Renton Municipal Code RMC 4-9. The roadway and access ramps over Renton’s Aquifer Protection Zone 1 will have curbs and gutters or berms to collect and route major spills to the stormwater collection system. The system will be constructed in

accordance with City of Renton requirements for sanitary sewage facilities in Aquifer Protection Zone 1 and will be sized to contain a liquid spill from a double tanker truck.

- WSDOT will routinely inspect the roadway for cracks or openings that would permit leakage and escape of a major spill from the stormwater collection system within Aquifer Protection Zone 1. Patching of observed cracks/openings will be within a short time after discovery. Emergency counter measures equipment will be dedicated and maintained at a designated location within Renton's Aquifer Protection Zone 1 for rapid response to a fuel spill from a vehicle or chemical spill occurring during use. Procedures will be specified for emergency containment, control, and cleanup of minor and major spills.

The Green-Duwamish Alluvial Aquifer near the study area is not used for domestic water supply or irrigation purposes and will be protected during operation by WSDOT maintenance following standard pollution control practices.

Ecosystems

All in-water work will be restricted to authorized construction periods when juvenile salmon are not likely to be present in substantial numbers. Adherence to designated work windows, as defined by appropriate permitting agencies (Washington State Department of Fish and Wildlife, NMFS, and the USFWS), will also eliminate or reduce in-water interference during periods when juvenile and adult salmon are likely to be present.

WSDOT will restore temporarily cleared areas to preconstruction grades and replant the areas with appropriate native vegetation. This applies to both wetland and upland areas.

Wetlands

WSDOT, in partnership with the City of Renton, ~~is currently developing~~ has developed a wetland mitigation bank called the Springbrook Creek Wetland and Habitat Mitigation Bank (Bank). WSDOT intends to debit credits from this Bank to mitigate for permanent effects to wetlands resulting from project construction. Mitigation banking is one early-action approach identified in the *I-405 Corridor Program Final Environmental Impact Statement* and the Bank is part of WSDOT's watershed approach to wetland mitigation. By consolidating mitigation into one large site, we have created mitigation that specifically contributes aquatic ecosystem functions that are lacking in the local watershed while providing safe, high-quality wildlife habitat away from the dangers of a roadside location.

Aquatic Resources

Temporary construction effects will be reduced or avoided by the use of standard construction BMPs.

Aquatic resources effects will be mitigated by implementing either the Panther Creek Watershed Rehabilitation Plan, or performing on-site, in-kind mitigation (such as planting native trees near where trees have to be removed to construct the project), or off-site mitigation to improve habitat conditions in areas away from the project where mitigation might be more beneficial. Specific mitigation plans will be included in the permit applications for construction of the Tukwila to Renton Project. In any of the mitigation scenarios, WSDOT will address over-

water, in-stream, and stream buffer effects to satisfy the requirements of the local critical areas regulations, the Hydraulic Code, and ESA to enhance in-stream fish habitat to the maximum extent practicable.

The Panther Creek Watershed Rehabilitation Plan is an I-405 Water Resource Initiative that proposes stream mitigation for the Panther Creek system. The plan will provide phased stream mitigation (concurrent and/or advance) at a watershed level for effects from improvements in the I-405/SR 167 vicinity that affect the Panther Creek and lower Springbrook Creek subbasins. This plan also evaluates highway drainage and how it could be cost-effectively managed to complement the stream mitigation work. Additional mitigation will be provided for effects to aquatic resources in other basins.

The benefits of implementing this conceptual plan include:

- Providing stream mitigation to address limiting factors at a watershed level.
- Providing fish habitat improvements via stream flow management to: 1) provide more reliable stream base flows; 2) create stream flow changes that are compatible with wetland floodplain enhancement; and 3) manage stream flows to be compatible with downstream flood control needs.
- Preserving high quality forested wetlands within the contiguous Panther Creek wetland complex.
- Providing a direct discharge of treated highway stormwater into the Panther Creek wetland complex to provide additional project benefits that are compatible with the mitigation proposal.

If the Panther Creek Watershed Rehabilitation Plan is not implemented, WSDOT, in cooperation with resource agencies and tribes, will develop alternative plans for habitat improvement, restoration, or construction to mitigate the effects of roadway widening and the increased width of stream crossings.

The I-405 Team will conduct further evaluation on the ~~seven~~six culverts that are fish passage barriers to determine which ones will be retrofitted or replaced as part of the project. The determination of which culverts will be retrofitted or replaced will occur during the project's permitting phase.

Wildlife and Vegetation

Mitigation measures to offset construction effects will include the revegetation of all temporarily disturbed soils resulting from construction activities. Planted shrubs and tree species will be maintained for a period to ensure the revegetation of target cover types. Planting will occur in areas that provide connectivity to existing wildlife habitat but still meet safety and maintenance standards set forth by WSDOT.

No measures are necessary to mitigate for operational effects to wildlife habitat.

Cumulative Effects

No additional measures beyond those already listed in this section will be necessary during construction and operation of the Tukwila to Renton Project to avoid or minimize substantial adverse cumulative effects.