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Date: **January 9, 2002**
Project Number: **556-2912-001-01-03**
Project Name: **STIA MPU Permitting**

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We are transmitting the following materials:

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1. Revised Section 8-References, to replace the section in the previously submitted report.
2. Errata Sheet correcting several reference call outs.
3. Revised Table 3.1-4.

Comments:

Section 8 is provided to replace the section in the report binder (NRMP, November 2001) because several references cited in the text of the NRMP were omitted from the reference list. The errata sheet corrects several reference call outs in the text of the report.

The replacement table (Table 3.1-4) correctly sums the acreage of wetlands affected by mitigation activities (44.36 acres vs. 43.34 acres as reported). The value of 44.36 acres should replace the value of 43.34 reported on pages 3-6 and 5-120.

Finally, on page 3-11, Section 3.1-5, "Category III" should read "Category II".

Please call me at 425 822 8880 if you have any questions.

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Sincerely,

cc: Elizabeth Leavitt

Jim Kelley

AR 031660

Exhibit-2056

Table 3.1-4. Summary of wetlands disturbed during mitigation activities.

Wetland	Vegetation Types	Total Area (acres)	Vegetation Type Disturbed (acres)		
			Forest	Shrub	Emergent
Temporary impacts to wetlands associated with implementing mitigation that includes excavation or installation of temporary roads					
FW 1, 2, 3, 8, 9, 10, and FW 11 ^a	Farmed Wetlands	0.88	0.00	0.00	0.88
A1 ^a	Forest/Shrub/Emergent	3.74	0.56	0.56	2.62
A2 ^a	Shrub	0.05	0.00	0.05	0.00
A3 ^a	Shrub	0.01	0.00	0.01	0.00
A4 ^a	Shrub	0.03	0.00	0.03	0.00
Auburn Area 1 ^b	Emergent	1.55	0.00	0.00	1.55
Auburn Area 2 ^c	Emergent	0.06	0.00	0.00	0.06
Auburn Area 3 ^c	Emergent	5.11	0.00	0.00	5.11
Auburn Area 4 ^c	Emergent	0.99	0.00	0.00	0.99
Auburn Area 5 ^c	Emergent	3.27	0.00	0.00	3.27
Auburn Area 6 ^c	Emergent	0.35	0.00	0.00	0.35
Auburn Area 8 ^c	Emergent	0.60	0.00	0.00	0.60
Auburn Area 11 ^c	Emergent	0.01	0.00	0.00	0.01
Auburn ^d	Emergent	2.20	0.00	0.00	2.20
	Subtotal	18.85	0.65	0.65	17.64
Temporary impacts in wetlands associated with enhancement planting					
18 ^e	Forest/Shrub/Emergent	1.27	1.27	0.00	0.00
28 ^f	Forest/Shrub/Emergent	4.50	0.00	0.00	4.50
37a ^{e,i}	Forest/Emergent	1.96	1.50	0.00	0.46
A1 ^{e,i}	Forest/Shrub/Emergent	0.34	0.34	0.00	0.00
A9 ^{e,i}	Shrub	0.04	0.00	0.04	0.00
A10 ^{e,i}	Shrub	0.01	0.00	0.01	0.00
A11 ^{e,i}	Shrub	0.02	0.00	0.02	0.00
A13 ^{e,i}	Forest	0.12	0.12	0.00	0.00
A16 ^{e,i}	Shrub/Emergent	0.05	0.00	0.00	0.05
A17 ^{e,i} , Water D	Forest/Shrub/Emergent	2.85	0.27	0.53	2.05
N8, N9, N10 ^e	Emergent/Forest	0.86	0.08	0.00	0.78
R1 ^e	Emergent	0.04	0.00	0.00	0.04
R2 ^{e,i}	Shrub/Emergent	0.12	0.00	0.06	0.06
R3 ^{e,i}	Shrub	0.02	0.00	0.02	0.00
R4 ^{e,i}	Emergent	0.11	0.00	0.00	0.11
R4 ^{b,e,i}	Forest/Emergent	0.11	0.03	0.00	0.08
R5 ^{e,i}	Emergent	0.05	0.00	0.00	0.05
R5 ^{b,e,i}	Forest/Emergent	0.07	0.02	0.00	0.05
R6 ^{e,i}	Forest/Emergent	0.21	0.05	0.00	0.16
R6 ^{b,e,i}	Emergent	0.09	0.00	0.00	0.09
R7 ^{e,i}	Forest/Emergent	0.04	0.04	0.00	0.00
R7 ^{a,e,i}	Emergent	0.04	0.04	0.00	0.00
R8 ^{e,i}	Shrub/Emergent	0.40	0.00	0.20	0.20
R9 ^{e,i}	Forest	0.38	0.38	0.00	0.00

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Table 3.1-4. Summary of wetlands disturbed during mitigation activities (continued).

Wetland	Vegetation Types	Total Area (acres)	Vegetation Type Disturbed (acres)		
			Forest	Shrub	Emergent
R9 ^{a, c, i}	Forest/Shrub/Emergent	0.30	0.30	0.00	0.00
R10 ^{c, i}	Shrub	0.04	0.04	0.00	0.00
R11 ^{c, i}	Emergent	0.42	0.00	0.00	0.42
R12 ^{c, i}	Forest	0.03	0.03	0.00	0.00
R13 ^{c, i}	Emergent	0.12	0.00	0.00	0.12
R14 ^{a, c, i}	Shrub/Emergent	0.13	0.13	0.00	0.00
R14 ^{b, c, i}	Emergent	0.08	0.00	0.00	0.08
R15 ^{a, c, i}	Forest/Shrub/Emergent	0.79	0.25	0.40	0.14
R15 ^{b, c, i}	Forest/Emergent	0.25	0.06	0.00	0.19
R17 ^{c, i}	Forest	0.31	0.31	0.00	0.00
Waters B, D, V1 and V2 ^f	Open Water	0.21	0.00	0.00	0.21
Auburn ^{c, h}	Emergent	9.13	0.00	0.00	9.13
	Subtotal	25.51	5.26	1.28	18.97
TOTAL		44.36	5.82	1.93	36.61

^a Temporary impacts will be associated with restoration activities at the Vacca Farm site. Wetlands A1 and farmed wetland (FW) 11 extend off-site. Values given are for the portion of the wetland occurring on site.

^b Temporary impacts result from constructing temporary roads to provide access to the mitigation site.

^c Excavation activities in wetlands at off-site mitigation area to increase habitat diversity/complexity will include construction of temporary roads to access the interior portion of the site to conduct monitoring and maintenance activities, and creation of approximately 3 acres of temporary staging area.

^d Maximum of 2.20 acres of existing off-site ditches and FW will be converted to a wetland drainage channel that connects the mitigation site to the 100-year floodplain of the Green River.

^e Enhancements activities in these wetlands may include excavation for temporary irrigation systems.

^f Planting and removal of culverts will occur in the wetland located at the Tyee Valley Golf Course.

^g Existing drain tiles will be removed and natural wetland topography restored.

^h Mowing, discing, and planting will occur in an existing low quality emergent wetland.

ⁱ These wetlands are in the Miller Creek buffer.

The calculated permanent impacts to wetlands (18.37 acres) also include about 2.4 acres of indirect wetland impacts (see Table 3.1-1) that could occur in certain locations where there are changes to wetland hydrology, shading, or fragmentation resulting in loss of wetland functions (Parametrix 2001b). While these indirect impacts could result in the loss of some wetland functions from an area, they may not necessarily remove all functions. For example, where the SASA bridge crosses Wetland 52, shading will eliminate wetland vegetation and therefore, some wildlife habitat function will be lost from this wetland. The wildlife corridor and hydrologic functions provided by this wetland will remain. In other areas, if wetland hydrology were reduced or eliminated, vegetation would remain and habitat or other functions would continue to be provided. Even though indirect impacts will not, in all cases, eliminate all wetland functions, these impacts are mitigated at ratios in excess of 3:1.

Other indirect impacts to wetlands that could affect their function include noise and human disturbance, changes in water quality impacts, and changes in surface hydrology. These impacts could alter or reduce the level of some functions, but would not eliminate the wetlands themselves or their functions. These impacts are also mitigated by this plan because, in most cases, land use

Natural Resources Mitigation Plan (November 2001)

Page	Existing:	Change to:
1-14	(Ecology 1994a)	(Ecology 1994)
3-1	...Parametrix 1996a)	...Parametrix 1996)
4-3	(Hart Crowser 2000c, 2001b...	(Hart Crowser 2000a, 2001a...
4-15	FAA Record of Decision (1997c)	FAA Record of Decision (1997b)
4-21	Allen (1995)	Allan (1995)
4-21	Gregory et al. (1986)	Gregory et al. (1987)
4-22	(Fieberg et al. 1990...	(Fiebig et al. 1990...
4-22	...Paulson 1953)	...Poulson 1952)
4-23	Allen (1995)	Allan (1995)
4-23	Gregory et al. (1986)	Gregory et al. (1987)
4-25	(Hart Crowser 2000c...	(Hart Crowser 2000a...
4-26	(Knutson and Naef...	(Knutson and Naef...
4-26	Brazier et al. 1973	Brazier and Brown 1973
4-26	Hewlett and Fortson 1982	Hewlett and Fortson 1992
4-26	U.S. Forest Service et al. 1993	U.S. Forest Service 1993
4-26	Moring et al. 1982	Moring 1982
4-29	(Knutson and Naef 1997)	(Knutson and Naef 1997)
4-29	Allen (1995)	Allan (1995)
4-30	Gregory et al. (1986)	Gregory et al. (1987)
4-31	(Fieberg et al. 1990...	(Fiebig et al. 1990...
4-31	...Paulson 1953)	...Poulson 1952)
4-48	(FWS 2001) [each occurrence]	(NMFS and FWS 2001)
4-48	Ecology (2000)	Ecology (2001c)
5-2	(Ecology 1994a)	(Ecology 1994)
5-16	(Rosgen 1994...	(Rosgen 1996...
5-119	Hart Crowser (2001a...	Hart Crowser (2001b...
5-149	(Hart Crowser 2000b,c; 2001b)	(Hart Crowser 2000a,b; 2001a)
5-151	(Hart Crowser 2000b,c; 2001b...	(Hart Crowser 2000a,b; 2001a...
5-151	(Hart Crowser 2000b,c)	(Hart Crowser 2000a,b)
5-151	(Hart Crowser 2000c)	(Hart Crowser 2000a)
5-152	(Ecology 2001)	(Ecology 2001a)
6-17	(Port of Seattle 1998)	(Port of Seattle 1998a)
7-1	(FAA 1997b) [each occurrence]	(FAA 1997c)
7-9	(FAA 1997b)	(FAA 1997c)
7-12	(FAA 1997b)	(FAA 1997c)
7-44	(Ecology 1994a)	(Ecology 1994)
7-75	(Mockler 1999b)	(Mockler et al. 1998)

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