HDD Alternative Crossing Method Wetland Impacts

Wetland [1]	Milepost [2]	Cowardin Classification [3]	Wetland Category (County/City) [6]	Wetland Category (WDOE)	Length of Ditch Excavated in Wetland (feet)	Acres of Existing Permanent Easement in Wetland	Acres of New Permanent Easement in Wetland	Acres of Temporary Construction Right-of-Way in Wetland	Acres of Temporary Extra Workspace in Wetland	Acres of Temporary Access Road in Wetland	Total Construction Disturbance in Wetland (acres)	Total Permanent Disturbance in Wetland Vegetation Type Conversion [5] (or fill*) (acres)
Sumas Loop (Whatcom County) – North Fork Nooksack Open Cut												
Wetland S-68 (Jim Creek)	1468.68	R	N/A	N/A	23.99	0.04	0.00	0.01	0.01	0.00	0.06	0.00
Wetland S-69 (Trib. to Nooksack)	1468.44	R	N/A	N/A	50.77	0.23	0.00	0.00	0.00	0.00	0.23	0.00
Wetland S-70 (N. Fork Nooksack River)	1468.20	R	N/A	N/A	560.07	3.06	0.10	0.00	2.61	0.00	5.77	0.00
Mt. Vernon Loop (Snohomish County) – North Fork Stillaguamish Open Cut												
Wetland MV-13A, B, C	1424.37 1424.32	PSS PEM POW	3	II	168.61 440.18 7.53	0.44 1.03 <0.01	0.01 0.01 0.00	0.00 0.00 0.00	2.42 0.17 0.00	0.00 0.00 0.00	2.87 1.21 <0.01	0.04 0.00 0.00
Wetland MV-14[4] (N. Fork Stillaguamish River)	1424.23	R	N/A	N/A	228.17	0.53	0.00	0.00	0.70	0.00	1.23	0.00
Mt. Vernon Loop (Snohomish County) – South Fork Stillaguamish Open Cut												
Wetland MV-15[4] (S. Fork Stillaguamish River)	1423.84	R	N/A	N/A	361.81	0.59	0.00	0.00	1.22	0.00	1.81	0.00
MV-16 (Eagle Creek)	1423.46	PEM POW R	3	III	132.68 22.87 4.36	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00	0.07 0.02 0.01	0.00 0.00 0.00	0.10	0.00 0.00 0.00

[1] Wetland numbers correspond to the wetland numbers shown on the Environmental Alignment Sheets.
[2] Approximate milepost is at the center of the wetland perpendicular to the pipeline.
[3] Wetland types according to Cowardin *et al.* (1979).
- Palustrine Forested (PFO)
- Palustrine Scrub-Shrub (PSS)
- Palustrine Emergent (PEM)
- Palustrine Open Water (POW)
- Palustrine Aquatic Bed (PAB)
- Riverine (R)
- Lacustrine (L)

[4] Farmed Wetlands-COE Jurisdictional.
[5] Permanent wetland vegetation type conversion impacts are associated with scrub-shrub and forested wetlands. Operational requirements (corrosion/leak surveys) allow a 10-foot wide corridor centered on the pipeline to be maintained in a herbaceous state and allows trees within 15 feet of the pipeline that are greater than 15 feet in height to be selectively cut from the right-of-way. To determine permanent conversion impacts to scrub-shrub wetlands a 10-foot wide corridor center on the pipeline was assessed. A 30-foot wide corridor centered on the pipeline was assessed for forested wetlands.
[6] Wetland category types for each jurisdiction are provided in Appendix E of the Wetland Report.