

Table P-1. Absolute loading rates for dissolved arsenic by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	3.30	3.32	3.36	5.57	6.31		12	3.79	5.22	6.17	7.83	11.5	
Snohomish Residential	4	66.6	77.1	92.7	119	139		12	10.2	102	118	141	153	
Snohomish Agricultural	4	39.3	40.2	46.1	56.0	61.1		12	47.7	55.0	63.1	74.3	97.7	
Snohomish Forest/Field/Other	4	893	1030	1260	2410	3410		12	556	645	791	1050	1790	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	1.16	1.36	1.97	2.07	2.11		12	2.21	2.97	3.55	3.98	6.26	
Puyallup Residential	4	22.9	24.2	93.4	263	364		12	20.1	23.9	29.1	48.2	132	
Puyallup Agricultural	4	8.28	8.85	10.5	15.0	18.3		12	12.8	18.3	21.1	26.5	40.4	
Puyallup Forest/Field/Other	4	109	140	176	187	192		12	111	156	192	252	347	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-2. Absolute loading rates for total arsenic by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	3.10	3.10	3.10	5.34	6.07		12	6.41	6.80	7.91	9.17	18.4	
Snohomish Residential	4	77.1	77.1	90.1	115	128		12	125	137	172	214	290	
Snohomish Agricultural	4	44.6	46.6	55.4	66.3	70.7		12	50.8	77.7	85.8	104	155	
Snohomish Forest/Field/Other	4	1060	1120	1420	2880	4100		12	556	763	998	1410	13900	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	1.14	1.40	2.15	2.29	2.34		12	2.91	3.98	5.07	7.65	7.98	
Puyallup Residential	4	22.9	23.8	86.7	249	349		12	22.7	25.7	37.9	57.2	97.0	
Puyallup Agricultural	4	8.37	8.37	10.1	14.6	17.4		12	12.4	17.6	19.7	30.4	40.1	
Puyallup Forest/Field/Other	4	135	156	181	192	197		12	133	223	289	355	888	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-3. Absolute loading rates for dissolved cadmium by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.0633	0.0633	0.0633	0.0633	0.0633		12	0.0791	0.237	0.475	0.791	1.03	
Snohomish Residential	4					< 2.90	U	12					< 4.09	U
Snohomish Agricultural	4					< 0.587	U	12	0.426	0.426	0.426	0.853	2.13	E
Snohomish Forest/Field/Other	4					< 66.1	U	12					< 58.8	U
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.0200	0.0200	0.0200	0.0400	0.0400	E	12	0.0633	0.190	0.190	0.253	0.317	
Puyallup Residential	4					< 0.849	U	12					< 0.855	U
Puyallup Agricultural	4					< 0.285	U	12	0.345	0.345	0.345	1.04	2.07	E
Puyallup Forest/Field/Other	4					< 10.4	U	12					< 14.8	U

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-4. Absolute loading rates for total cadmium by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow						Storm Event							
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.211	U	12	0.396	0.396	0.633	1.26	1.34	E
Snohomish Residential	4					< 14.5	U	12					< 20.4	U
Snohomish Agricultural	4					< 2.93	U	12					< 4.26	U
Snohomish Forest/Field/Other	4					< 331	U	12					< 293	U
Puyallup Watershed														
Puyallup Commercial/Industrial	3					< 0.200	U	12	0.317	0.317	0.317	0.317	1.14	E
Puyallup Residential	4					< 4.25	U	12					< 4.28	U
Puyallup Agricultural	4					< 1.42	U	12					< 3.45	U
Puyallup Forest/Field/Other	4					< 51.8	U	12					< 73.9	U

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-5. Absolute loading rates for dissolved copper by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	1.59	1.67	1.90	2.77	3.06		12	16.7	17.3	18.7	23.5	26.9	
Snohomish Residential	4	87.2	91.4	102	109	113		12	10.2	161	213	298	484	
Snohomish Agricultural	4	19.9	23.8	29.0	42.2	54.3		12	62.3	89.5	142	191	253	
Snohomish Forest/Field/Other	4	1160	1190	1230	1660	2050		12	1030	1200	1350	1580	2640	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	2.87	3.04	3.53	5.44	6.08		12	7.78	10.3	12.9	16.9	24.6	
Puyallup Residential	4	16.1	16.6	17.9	24.6	30.7		12	26.5	34.6	63.2	98.5	201	
Puyallup Agricultural	4	19.0	20.9	68.0	117	121		12	76.7	129	201	288	331	
Puyallup Forest/Field/Other	4	217	244	322	518	663		12	238	326	533	1440	2930	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-6. Absolute loading rates for total copper by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow						Storm Event							
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	1.83	2.04	2.70	3.38	3.61		12	23.9	29.2	34.9	38.7	54.1	
Snohomish Residential	4	104	116	128	136	144		12	237	313	451	758	2030	
Snohomish Agricultural	4	23.8	27.9	34.9	51.0	63.7		12	92.2	117	165	304	381	
Snohomish Forest/Field/Other	4	1420	1490	1820	2220	2410		12	1410	1550	2050	3720	26900	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	4.09	4.16	4.43	6.25	6.87		12	16.7	19.8	22.9	29.8	37.3	
Puyallup Residential	4	26.4	26.8	33.4	41.6	42.5		12	46.1	51.8	107	145	253	
Puyallup Agricultural	4	22.0	24.0	78.7	132	133		12	91.7	158	255	342	417	
Puyallup Forest/Field/Other	4	306	322	388	622	808		12	378	607	1060	1670	7620	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-7. Absolute loading rates for dissolved lead by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.0211	0.0211	0.0633	0.169	0.211		12	0.949	1.26	1.42	1.97	2.30	
Snohomish Residential	4	5.81	7.25	11.6	16.0	17.4		12	2.04	16.3	22.5	38.8	48.9	
Snohomish Agricultural	4	0.293	0.587	1.17	1.76	1.76		12	1.71	3.84	4.69	5.97	6.82	
Snohomish Forest/Field/Other	4	33.1	33.1	99.4	198	265	E	12	88.0	117	147	176	471	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.439	0.459	0.459	0.878	1.02		12	0.823	1.20	2.15	4.05	4.61	
Puyallup Residential	4	1.27	1.27	1.70	1.70	1.70		12	1.71	2.99	5.12	5.99	8.55	
Puyallup Agricultural	4	0.427	0.427	0.853	1.42	1.71		12	2.07	2.76	3.80	4.83	5.18	
Puyallup Forest/Field/Other	4	5.18	5.18	10.4	15.6	20.7	E	12	7.39	7.39	29.5	66.7	355	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-8. Absolute loading rates for total lead by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.106	0.106	0.106	0.253	0.295	E	12	2.22	6.72	10.8	15.9	23.8	
Snohomish Residential	4	16.0	18.9	23.2	24.7	26.1		12	61.5	88.0	131	235	417	
Snohomish Agricultural	4	1.47	1.47	2.64	3.81	4.11	E	12	2.13	8.53	13.2	37.5	80.2	
Snohomish Forest/Field/Other	4	166	166	298	430	463	E	12	147	147	323	471	7180	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.798	0.837	0.978	1.36	1.48		12	4.81	8.92	12.8	19.7	23.1	
Puyallup Residential	4	5.51	5.51	6.81	13.6	20.0		12	9.40	13.7	20.5	42.8	62.3	
Puyallup Agricultural	4	0.712	0.712	1.71	2.99	3.27	E	12	5.53	6.21	9.97	17.6	22.4	
Puyallup Forest/Field/Other	4					< 51.8	U	12	37.0	88.8	111	148	1560	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-9. Absolute loading rates for dissolved mercury by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.00422	U	12	0.00791	0.0159	0.0237	0.0316	0.0553	
Snohomish Residential	4	0.145	0.145	0.290	0.434	0.581	E	12	0.204	0.817	1.02	1.23	1.43	
Snohomish Agricultural	4	0.0587	0.0587	0.0587	0.0880	0.0880		12	0.171	0.213	0.256	0.341	0.469	
Snohomish Forest/Field/Other	4					< 6.61	U	12	2.93	2.93	5.88	8.80	11.7	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.00400	0.00598	0.00798	0.00998	0.00998		12	0.00633	0.0190	0.0190	0.0253	0.0570	
Puyallup Residential	4	0.0425	0.0425	0.0849	0.0849	0.0849	E	12	0.0428	0.0428	0.171	0.257	0.343	
Puyallup Agricultural	4	0.0427	0.0427	0.0853	0.142	0.171		12	0.173	0.241	0.310	0.483	0.794	
Puyallup Forest/Field/Other	4	0.518	0.518	1.04	2.07	2.58	E	12	0.739	0.739	2.23	8.14	14.8	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-10. Absolute loading rates for total mercury by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.00422	0.00422	0.00422	0.00422	0.00422		12	0.0237	0.0396	0.0553	0.0712	0.134	
Snohomish Residential	4	0.290	0.290	0.434	0.581	0.725		12	1.02	1.43	1.84	2.45	3.07	
Snohomish Agricultural	4	0.0880	0.0880	0.117	0.117	0.117		12	0.213	0.341	0.469	0.512	0.810	
Snohomish Forest/Field/Other	4	3.31	3.31	6.61	6.61	6.61	E	12	5.88	5.88	8.80	11.7	70.6	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.00598	0.00598	0.00998	0.0120	0.0140		12	0.0253	0.0317	0.0443	0.0570	0.0570	
Puyallup Residential	4	0.0425	0.0849	0.127	0.170	0.212		12	0.0855	0.0855	0.299	0.385	0.599	
Puyallup Agricultural	4	0.0569	0.0569	0.114	0.185	0.228		12	0.241	0.345	0.380	0.483	0.794	
Puyallup Forest/Field/Other	4	0.518	1.04	1.56	2.07	2.58		12	0.739	2.23	4.44	8.14	28.1	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-11. Absolute loading rates for dissolved zinc by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	21.8	22.8	25.9	30.8	32.4		12	99.7	205	285	350	513	
Snohomish Residential	4	232	247	276	334	377		12	451	573	695	939	1310	
Snohomish Agricultural	4	29.3	64.5	114	197	264		12	64.0	102	193	392	2260	
Snohomish Forest/Field/Other	4	1660	1660	2650	3970	3970	E	12	1470	1470	1470	5880	9980	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3	14.9	16.6	21.1	39.5	45.7		12	79.1	115	165	221	307	
Puyallup Residential	4	46.7	55.1	68.1	93.4	111		12	68.4	111	154	355	1180	
Puyallup Agricultural	4	19.9	21.4	81.2	150	159		12	93.3	200	314	701	1910	
Puyallup Forest/Field/Other	4	258	673	1190	1660	2020		12	1260	2000	2290	4150	7390	

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-12. Absolute loading rates for total zinc by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	25.3	27.5	33.6	37.7	39.3		12	271	291	373	437	533	
Snohomish Residential	4	363	363	363	712	1070	E	12	510	817	1720	2230	2920	
Snohomish Agricultural	4	73.3	135	311	1240	2050		12	107	298	375	422	2270	
Snohomish Forest/Field/Other	4	8280	8280	8280	16900	25500	E	12	7340	7340	7340	7340	54800	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3	17.7	21.4	31.9	46.4	51.2		12	97.5	203	214	245	342	
Puyallup Residential	4	106	106	106	183	259	E	12	107	107	252	325	449	
Puyallup Agricultural	4	35.6	35.6	95.7	170	183	E	12	86.1	235	383	797	2170	
Puyallup Forest/Field/Other	4					< 2580	U	12	1850	1850	1850	1850	16100	E

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-13. Absolute loading rates for total PCBs by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (g/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.226	0.366	0.786	2.38	2.92		6	1.04	6.90	51.4	104	217	
Snohomish Residential	4	1.38	1.42	2.54	30.5	57.3	E	6	9.69	20.0	56.0	235	385	
Snohomish Agricultural	4	0.293	0.704	2.05	6.19	9.39	E	2	3.03		4.50		5.97	
Snohomish Forest/Field/Other	4	36.4	61.3	209	771	1210		6	29.3	104	145	293	491	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.459	0.498	0.619	2.18	2.70		6	4.43	4.50	12.8	16.2	38.6	
Puyallup Residential	4	5.69	7.59	11.8	15.7	17.4	E	6	0.557	1.07	5.24	14.3	23.6	
Puyallup Agricultural	4	2.27	3.98	5.77	9.09	12.3		2	14.2		18.4		22.7	
Puyallup Forest/Field/Other	4	61.1	62.8	118	181	192	E	6	73.9	81.4	244	405	487	

g/year: grams per year

PCBs: polychlorinated biphenyls

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-14. Absolute loading rates for total PDBEs by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (g/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.636	0.702	0.899	15.0	19.6		8	0.0396	10.6	25.9	227	2150	
Snohomish Residential	4	18.2	18.6	31.8	67.8	91.0	E	8	2.14	3.15	5.01	18.3	25.5	
Snohomish Agricultural	4	1.02	2.34	3.75	6.04	8.21	E	8	0.853	1.50	5.34	5.36	27.1	E
Snohomish Forest/Field/Other	4	181	297	414	3490	6570	E	8	58.8	227	438	925	2240	
Puyallup Watershed														
Puyallup Commercial/Industrial	6	0.0393	0.252	0.889	0.981	1.01		16	5.37	8.57	23.6	104	277	
Puyallup Residential	8	0.551	0.620	3.00	5.30	5.30	E	16	0.488	5.36	5.39	8.67	18.9	E
Puyallup Agricultural	9	0.146	0.386	1.78	1.85	1.85	E	16	0.621	0.949	4.31	24.6	2030	
Puyallup Forest/Field/Other	8					< 135	U	16	8.51	92.5	92.5	97.1	3510	E

g/year: grams per year

PBDE: polybrominated diphenyl ethers

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-15. Absolute loading rates for total PAHs by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow						Storm Event							
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.0422	U	12	0.0989	1.07	1.42	1.88	3.16	
Snohomish Residential	4					< 2.90	U	12	0.939	1.53	2.00	2.04	6.53	E
Snohomish Agricultural	4					< 0.587	U	12	0.209	0.320	0.406	0.426	0.887	E
Snohomish Forest/Field/Other	4					< 66.1	U	12	14.4	25.7	29.3	32.3	49.9	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.0200	0.0229	0.0317	0.0428	0.0464		12	0.163	0.454	1.10	1.93	3.63	
Puyallup Residential	4					< 0.849	U	12	0.207	0.209	0.422	0.593	3.55	E
Puyallup Agricultural	4					< 0.270	U	12	0.167	0.169	0.171	0.345	0.909	E
Puyallup Forest/Field/Other	4					< 10.4	U	12	3.59	3.64	3.70	7.39	8.88	E

kg/year: kilograms per year

PAHs: polycyclic aromatic hydrocarbons

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-16. Absolute loading rates for carcinogenic PAHs by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.0206	U	12	0.0989	0.484	0.621	0.746	1.72	
Snohomish Residential	4					< 1.60	U	12	1.00	1.02	1.94	2.04	3.90	E
Snohomish Agricultural	4					< 0.290	U	12	0.209	0.212	0.406	0.411	0.426	E
Snohomish Forest/Field/Other	4					< 32.8	U	12					< 58.8	U
Puyallup Watershed														
Puyallup Commercial/Industrial	3					< 0.0196	U	12	0.0380	0.231	0.574	0.913	1.67	
Puyallup Residential	4					< 0.467	U	12	0.207	0.207	0.257	0.428	1.28	E
Puyallup Agricultural	4					< 0.142	U	12					< 0.690	U
Puyallup Forest/Field/Other	4					< 5.12	U	12					< 14.8	U

kg/year: kilograms per year

PAHs: polycyclic aromatic hydrocarbons

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-17. Absolute loading rates for high molecular weight PAHs by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow						Storm Event							
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.0422	U	12	0.0989	0.999	1.20	1.65	3.02	
Snohomish Residential	4					< 2.90	U	12	0.939	1.02	1.94	2.04	6.53	E
Snohomish Agricultural	4					< 0.587	U	12	0.209	0.212	0.406	0.411	0.426	E
Snohomish Forest/Field/Other	4					< 66.1	U	12					< 58.8	U
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.0120	0.0140	0.0200	0.0208	0.0211		12	0.124	0.412	0.960	1.63	3.00	
Puyallup Residential	4					< 0.849	U	12	0.207	0.207	0.257	0.446	2.39	E
Puyallup Agricultural	4					< 0.270	U	12	0.0759	0.168	0.169	0.171	0.345	E
Puyallup Forest/Field/Other	4					< 10.4	U	12					< 14.8	U

kg/year: kilograms per year

PAHs: polycyclic aromatic hydrocarbons

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-18. Absolute loading rates for low molecular weight PAHs by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow						Storm Event							
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.0206	U	12	0.0364	0.0799	0.103	0.166	0.659	
Snohomish Residential	4					< 1.60	U	12	0.990	0.998	1.07	2.00	3.48	E
Snohomish Agricultural	4					< 0.290	U	12	0.206	0.208	0.245	0.378	0.469	E
Snohomish Forest/Field/Other	4					< 32.8	U	12	14.2	14.4	16.9	31.9	49.9	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.00978	0.0123	0.0197	0.0239	0.0253		12	0.0322	0.0497	0.111	0.234	0.629	
Puyallup Residential	4					< 0.467	U	12	0.207	0.209	0.213	0.340	1.92	E
Puyallup Agricultural	4					< 0.142	U	12	0.167	0.169	0.171	0.189	0.828	E
Puyallup Forest/Field/Other	4					< 5.12	U	12	3.59	3.64	3.66	4.07	8.88	E

kg/year: kilograms per year

PAHs: polycyclic aromatic hydrocarbons

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-19. Absolute loading rates for bis(2-ethylhexyl) phthalate by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.338	U	12	0.672	1.42	3.34	7.87	11.9	E
Snohomish Residential	4	11.6	11.9	12.3	876	1740	E	12	14.3	16.3	16.3	18.4	48.0	E
Snohomish Agricultural	4					< 4.99	U	12	2.98	3.33	3.41	3.41	4.91	E
Snohomish Forest/Field/Other	4					< 564	U	12	176	235	235	235	250	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3					< 0.319	U	12	0.507	0.727	2.15	3.10	6.96	
Puyallup Residential	4					< 7.23	U	12	3.22	3.34	3.43	3.98	5.12	E
Puyallup Agricultural	4					< 2.28	U	12	2.59	2.76	2.76	3.63	6.21	E
Puyallup Forest/Field/Other	4					< 88.2	U	12	59.3	59.3	59.3	100	266	E

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-20. Absolute loading rates for triclopyr by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.0548	0.0572	0.0644	0.0644	0.0644	E	12	0.241	0.245	0.253	0.281	0.704	E
Snohomish Residential	4					< 9.44	U	12	5.73	5.94	6.32	13.9	57.3	
Snohomish Agricultural	4	0.645	0.772	0.895	0.895	0.895	E	12	1.24	1.29	1.31	1.34	1.58	E
Snohomish Forest/Field/Other	4					< 202	U	12					< 188	U
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.0459	0.0497	0.0608	0.0720	0.0758		12	0.152	0.196	0.232	0.332	0.608	
Puyallup Residential	4					< 2.72	U	12	1.20	1.30	1.33	1.41	4.70	E
Puyallup Agricultural	4	0.442	0.442	0.499	5.69	10.9	E	12	1.05	1.05	1.08	1.95	16.6	E
Puyallup Forest/Field/Other	4					< 32.2	U	12	14.8	22.5	23.1	25.2	312	E

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-21. Absolute loading rates fo nonylphenol by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)													
	Baseflow						Storm Event							
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.675	U	12	0.633	1.24	1.26	1.30	1.34	E
Snohomish Residential	4					< 48.0	U	12					< 67.4	U
Snohomish Agricultural	4					< 9.68	U	12					< 14.0	U
Snohomish Forest/Field/Other	4					< 1120	U	12					< 970	U
Puyallup Watershed														
Puyallup Commercial/Industrial	3					< 0.658	U	12					< 2.08	U
Puyallup Residential	4					< 14.0	U	12					< 14.1	U
Puyallup Agricultural	4					< 4.70	U	12					< 11.4	U
Puyallup Forest/Field/Other	4					< 171	U	12					< 275	U

kg/year: kilograms per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-22. Absolute loading rates for total DDT by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (kg/year)														
	Baseflow							Storm Event							
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	
Snohomish Watershed															
Snohomish Commercial/Industrial	3					< 0.000422	U	12						< 0.0237	U
Snohomish Residential	4					< 0.0305	U	12						< 0.531	U
Snohomish Agricultural	4					< 0.00587	U	12	0.00426	0.0276	0.0534	0.0534	0.0554	E	
Snohomish Forest/Field/Other	4					< 0.661	U	12						< 7.63	U
Puyallup Watershed															
Puyallup Commercial/Industrial	3	0.000200	0.000964	0.00325	0.00436	0.00473		12	0.000633	0.00791	0.0129	0.0480	0.142	E	
Puyallup Residential	4					< 0.00849	U	12						< 0.111	U
Puyallup Agricultural	4					< 0.00314	U	12						< 0.0901	U
Puyallup Forest/Field/Other	4					< 0.104	U	12	0.0739	0.0739	0.925	0.962	1.85	E	

kg/year: kilograms per year

DDT: dichlorodiphenyltrichloroethane

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-23. Absolute loading rates for oil and grease by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (MT/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.844	U	12	1.59	1.59	2.37	3.96	6.33	E
Snohomish Residential	4					< 58.1	U	12	40.9	40.9	40.9	71.6	204	E
Snohomish Agricultural	4					< 11.7	U	12	8.53	8.53	8.53	8.53	25.6	E
Snohomish Forest/Field/Other	4					< 1320	U	12	588	588	588	1320	2930	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.400	0.400	0.400	0.698	0.798	E	12	1.27	1.27	1.27	1.90	5.07	E
Puyallup Residential	4	8.49	8.49	12.7	17.0	17.0	E	12	8.55	8.55	8.55	8.55	21.4	E
Puyallup Agricultural	4	2.85	2.85	2.85	5.69	8.53	E	12	6.90	6.90	6.90	6.90	69.0	E
Puyallup Forest/Field/Other	4	104	104	156	492	777	E	12					< 370	U

MT/year: metric tons per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-24. Absolute loading rates for lube oil (TPH-DOG) by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (MT/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 0.0760	U	12	0.159	0.553	0.831	1.03	1.74	
Snohomish Residential	4					< 5.22	U	12	3.07	3.07	3.27	6.15	7.37	E
Snohomish Agricultural	4	0.469	0.469	0.578	0.989	1.29	E	12	0.640	0.640	0.682	0.692	3.41	E
Snohomish Forest/Field/Other	4					< 116	U	12	43.8	43.8	47.1	88.0	176	E
Puyallup Watershed														
Puyallup Commercial/Industrial	3					< 0.0698	U	12	0.101	0.101	0.291	0.651	1.20	
Puyallup Residential	4					< 1.79	U	12					< 1.41	U
Puyallup Agricultural	4					< 0.499	U	12	0.518	0.553	0.553	0.559	1.38	E
Puyallup Forest/Field/Other	4					< 18.1	U	12					< 35.5	U

MT/year: metric tons per year

TPH-DOG: total petroleum hydrocarbons, extract of oil and grease (lube oil)

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-25. Absolute loading rates for total suspended solids by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (MT/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3					< 2.11	U	12	15.9	47.5	90.9	112	151	
Snohomish Residential	4	145	218	290	363	434		12	1020	1810	3580	7880	24100	
Snohomish Agricultural	4	58.7	58.7	88.0	161	205		12	42.6	132	235	587	1790	
Snohomish Forest/Field/Other	4	6610	6610	6610	9940	13200		12	1470	5880	11700	34300	120000	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.998	1.76	4.00	4.00	4.00		12	19.0	47.4	63.3	104	272	
Puyallup Residential	4	127	149	191	382	551		12	128	257	557	876	2180	
Puyallup Agricultural	4	14.2	28.5	42.7	49.9	56.9		12	69.0	104	241	725	1730	
Puyallup Forest/Field/Other	4	1040	1040	1040	2330	3640		12	739	3330	5930	18500	146000	

MT/year: metric tons per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-26. Absolute loading rates for total phosphorus by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (MT/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.0291	0.0620	0.161	0.167	0.169		12	0.219	0.264	0.297	0.347	0.552	
Snohomish Residential	4	3.12	3.45	4.01	4.42	4.68		12	6.36	7.96	9.94	20.0	27.4	
Snohomish Agricultural	4	1.40	1.50	2.41	3.70	4.17		12	2.02	3.86	5.38	7.39	8.79	
Snohomish Forest/Field/Other	4	25.2	28.1	31.4	36.7	41.0		12	20.0	27.9	35.5	43.8	174	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.0554	0.0663	0.0985	0.125	0.134		12	0.144	0.274	0.343	0.436	0.734	
Puyallup Residential	4	1.39	1.61	3.64	9.61	13.7		12	1.62	2.18	3.95	5.57	11.8	
Puyallup Agricultural	4	1.71	2.24	2.84	3.09	3.27		12	7.11	8.04	9.33	19.4	22.8	
Puyallup Forest/Field/Other	4	9.13	10.6	13.2	14.7	15.1		12	14.1	19.6	24.4	54.1	156	

MT/year: metric tons per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

Table P-27. Absolute loading rates for nitrate + nitrite nitrogen by land use in the Snohomish Watershed and Puyallup Watershed.

	Absolute Loading Rates (MT/year)													
	Baseflow							Storm Event						
	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag	n	Minimum	25th Percentile	Median	75th Percentile	Maximum	Non-Detect Frequency Flag
Snohomish Watershed														
Snohomish Commercial/Industrial	3	0.0548	0.515	1.89	1.95	1.97		12	0.831	1.12	1.67	2.37	2.89	
Snohomish Residential	4	103	112	144	185	203		12	86.8	171	192	259	286	
Snohomish Agricultural	4	3.52	5.67	9.04	12.0	13.8		12	8.16	13.9	38.8	50.8	102	
Snohomish Forest/Field/Other	4	59.6	155	295	377	414		12	114	483	653	840	3340	
Puyallup Watershed														
Puyallup Commercial/Industrial	3	0.0858	0.166	0.402	0.487	0.515		12	0.279	0.512	0.841	1.38	2.81	
Puyallup Residential	4	35.5	37.0	108	198	219		12	10.3	25.2	64.4	150	166	
Puyallup Agricultural	4	0.641	1.09	1.95	3.96	5.56		12	2.07	18.5	89.3	253	759	
Puyallup Forest/Field/Other	4	20.7	25.8	148	399	533		12	20.0	62.2	177	394	822	

MT/year: metric tons per year

n: water quality sample size

Non-detect frequency flag

E: 50 percent or more of the data are non-detect values; reported values are considered estimates with relatively low accuracy.

U: All of the data are non-detect values; reported values were computed based on the maximum reporting limit.

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