Appendix D – Water Quality Standard Results

Table 1. 7DADMax Temperatures in water year 2024. Cells bolded and shaded in green pass the state standard.

Watershed	Site	Waterbody	7DADMax (°C)
Samish Bay	11	Upper Samish River	16.23
	8	Swede Creek	19.69
	6	Friday Creek	21.80
	4	Upper Thomas Creek	**16.96**
	3	Lower Thomas Creek	--[1]
	32	Lower Samish River	20.34
	39	Colony Creek	16.91
Middle Skagit	24	Mannser Creek	--[1]
	22	Upper Coal Creek	17.70
	21	Lower Coal Creek	19.23
	20	Upper Hansen Creek	--[2]
	19	Lower Hansen Creek	22.50
Nookachamps	18	Lake Creek	20.37
	17	Upper Nookachamps Creek	26.88
	15	Middle Nookachamps Creek	24.34
	16	Upper East Fork Nookachamps Creek	21.42
	13	Lower East Fork Nookachamps Creek	--[2]
	12	Lower Nookachamps Creek	--[1]
Lower Skagit	51	Upper Carpenter Creek	21.31
	42	Lower Carpenter Creek	25.36
	48	Fisher Creek	17.32
	41	Maddox Creek/Big Ditch	--[1]
Skagit River	30	Skagit River near Hamilton	16.20
	45	North Fork Skagit River	18.25

[1] Incomplete or quality issues with dataset.

[2] Logger was lost or was unable to be retrieved.

Table 2. Minimum and mean dissolved oxygen (DO) concentrations in water year 2024. Cells shaded green pass the state standard. Please see the Methods section in the Annual Report for a further description of the DO state standard.

Watershed	Site	Watercourse	Min. DO (mg/L)	Min. DO (% sat.)	Mean DO (mg/L)	Mean DO (% sat.)
Samish Bay	11	Upper Samish River	6.77	64.2	8.54	73.4
	8	Swede Creek	8.36	81.0	10.81	93.1
	6	Friday Creek	9.58	96.3	11.63	103.0
	4	Upper Thomas Creek	9.33	92.1	11.42	98.1
	3	Lower Thomas Creek	5.17	54.1	8.04	71.6
	32	Lower Samish River	8.99	84.7	11.11	99.0
	39	Colony Creek	8.12	78.3	10.98	93.9
	37	North Edison Drainage	2.25	18.9	6.15	63.9
	38	South Edison Drainage	1.88	21.1	9.79	106.4
	36	Edison Slough	0.89	9.7	7.42	72.8
	33	Alice Bay Drainage	2.52	13.2	7.91	85.6
Padilla Bay	49	Middle Joe Leary Slough	1.73	16.5	4.62	42.4
	50	Lower Joe Leary Slough	2.20	23.1	5.80	54.2
	34	No Name Slough	0.21	2.7	7.49	69.1
	52	Little Indian Slough	1.55	15.9	4.64	42.2
	40	Big Indian Slough	2.48	24.2	6.43	55.6
	47	Swinomish Channel*	6.25	70.5	8.59	91.0
Middle Skagit	25	Red Cabin Creek	11.41	95.80	12.16	101.6
	24	Mannser Creek	5.94	49.9	7.59	64.5
	23	Wiseman Creek	9.40	93.1	12.05	101.5
	22	Upper Coal Creek	8.58	85.7	11.46	95.9
	21	Lower Coal Creek	9.53	94.5	12.16	103.1
	20	Upper Hansen Creek	9.51	91.2	11.49	98.4
	19	Lower Hansen Creek	6.19	65.1	9.71	84.8
Nookachamps	18	Lake Creek	7.98	77.5	11.42	100.5
	17	Upper Nookachamps Creek	7.13	78.5	10.39	96.6
	15	Middle Nookachamps Creek	1.51	14.5	7.99	71.3
	16	Upper East Fork Nookachamps Creek	9.92	91.4	11.93	104.3
	13	Lower East Fork Nookachamps Creek	2.73	29.0	8.01	69.7
	12	Lower Nookachamps Creek	5.42	53.7	9.07	81.0
Lower Skagit	51	Upper Carpenter Creek	1.38	13.9	9.91	85.9
	42	Lower Carpenter Creek	3.47	28.9	7.79	69.6
	48	Fisher Creek	8.92	84.5	11.32	98.3
	43	Wiley Slough	1.10	12.0	4.47	41.6
	41	Maddox Creek/Big Ditch	4.17	35.0	6.49	61.3
	44	Sullivan Slough	3.05	27.4	6.86	67.8
Skagit River	30	Skagit River near Hamilton	8.80	76.7	10.90	93.5
	29	Skagit River near Mount Vernon	9.45	88.8	11.40	93.5
	45	North Fork Skagit River	9.10	82.6	11.18	98.9
	46	South Fork Skagit River	8.53	80.7	11.18	97.4

*The marine site is ranked as “Excellent” based on these results.

Table 3. *E. coli* results for water year 2024. Cells shaded dark green pass the state standard a geomean less 100 MPN/100 mL and less than 10% of the results are greater than 320 MPN/100 mL. The light green shading meets one of the two requirements.

Watershed	Site	Watercourse	n	Geometric Mean (MPN/100 mL)	Percentage > 320 MPN/100 mL
Samish Bay	11	Upper Samish River	26	18	4
	8	Swede Creek	25	38	8
	6	Friday Creek	26	26	0
	4	Upper Thomas Creek	26	111	23
	3	Lower Thomas Creek	26	51	15
	32	Lower Samish River	26	29	4
	39	Colony Creek	26	31	19
	37	North Edison Drainage	26	180	38
	38	South Edison Drainage	26	93	12
	36	Edison Slough	26	140	35
	33	Alice Bay Drainage	26	33	0
Padilla Bay	49	Middle Joe Leary Slough	26	66	8
	50	Lower Joe Leary Slough	26	92	8
	34	No Name Slough	25	122	36
	52	Little Indian Slough	24	115	23
	40	Big Indian Slough	26	95	29
	47	Swinomish Channel*	26	6	0
Middle Skagit	25	Red Cabin Creek	17	5	0
	24	Mannser Creek	26	19	0
	23	Wiseman Creek	24	15	8
	22	Upper Coal Creek	26	81	20
	21	Lower Coal Creek	20	12	8
	20	Upper Hansen Creek	26	29	4
	19	Lower Hansen Creek	22	57	14
Nookachamps	18	Lake Creek	26	25	4
	17	Upper Nookachamps Creek	26	13	8
	15	Middle Nookachamps Creek	26	24	4
	16	Upper East Fork Nookachamps Creek	26	20	8
	13	Lower East Fork Nookachamps Creek	26	36	4
	12	Lower Nookachamps Creek	26	46	15
Lower Skagit	51	Upper Carpenter Creek	26	70	12
	42	Lower Carpenter Creek	26	42	12
	48	Fisher Creek	26	62	12
	43	Wiley Slough	26	61	8
	41	Maddox Creek/Big Ditch	26	76	23
	44	Sullivan Slough	26	64	15
Skagit River	30	Skagit River near Hamilton	26	5	0
	29	Skagit River near Mount Vernon	26	20	4
	45	North Fork Skagit River	26	7	0
	46	South Fork Skagit River	26	18	0

*****Marine sites do not have an *E. coli* water quality standard.

Table 4. Fecal coliform results for water year 2024. Cells shaded dark green pass the former state standard of a geomean less 100 MPN and less than 10% of the results are greater than 200 MPN. The light green shading meets one of the two requirements.

Watershed	Site	Watercourse	n	Geometric Mean (MPN/100 mL)	Percentage > 200 MPN/100 mL
Samish Bay	11	Upper Samish River	26	21	4
	8	Swede Creek	25	52	23
	6	Friday Creek	26	33	4
	4	Upper Thomas Creek	26	211	50
	3	Lower Thomas Creek	26	72	27
	32	Lower Samish River	26	46	12
	39	Colony Creek	26	62	35
	37	North Edison Drainage	26	254	58
	38	South Edison Drainage	26	138	35
	36	Edison Slough	26	235	50
	33	Alice Bay Drainage	26	65	27
Padilla Bay	49	Middle Joe Leary Slough	26	98	31
	50	Lower Joe Leary Slough	26	139	35
	34	No Name Slough	25	133	40
	52	Little Indian Slough	24	176	44
	40	Big Indian Slough	26	144	50
	47	Swinomish Channel*	26	7	4
Middle Skagit	25	Red Cabin Creek	26	6	6
	24	Mannser Creek	24	21	4
	23	Wiseman Creek	26	20	13
	22	Upper Coal Creek	20	121	30
	21	Lower Coal Creek	26	15	12
	20	Upper Hansen Creek	22	38	15
	19	Lower Hansen Creek	26	72	23
Nookachamps	18	Lake Creek	26	35	19
	17	Upper Nookachamps Creek	26	18	8
	15	Middle Nookachamps Creek	26	37	15
	16	Upper East Fork Nookachamps Creek	26	33	12
	13	Lower East Fork Nookachamps Creek	26	50	15
	12	Lower Nookachamps Creek	26	68	19
Lower Skagit	51	Upper Carpenter Creek	26	113	23
	42	Lower Carpenter Creek	26	56	12
	48	Fisher Creek	26	89	27
	43	Wiley Slough	26	86	23
	41	Maddox Creek/Big Ditch	26	95	35
	44	Sullivan Slough	26	111	31
Skagit River	30	Skagit River near Hamilton	26	6	0
	29	Skagit River near Mount Vernon	26	25	8
	45	North Fork Skagit River	26	9	0
	46	South Fork Skagit River	26	25	12

* For marine sites, the former fecal coliform standard requires a geomean less than 14 MPN/100mL, with no more than 10% of the results greater than 43 MPN/100mL.