

Scott Ditch Drainage Focus Area

Water Quality Status: Fecal Coliform Bacteria

September, 2022

Background: Clean water is a valuable resource; it is essential for human health and for the health of fish, shellfish, wildlife, and livestock. Water provides irrigation for crops and a safe place for water-based recreation. To maintain safe shellfish harvest, Washington State has developed standards for fecal bacteria in marine waters. Meeting the fecal coliform benchmarks in freshwater systems leads to satisfying the marine water standards to protect public health.

Freshwater Benchmarks

Geometric Mean

Average sample contains less than:
100 fecal coliform/100mL

- and -

90th Percentile

Less than 10% of samples contain over:
200 fecal coliform/100mL

Routine Monitoring: The Scott Ditch drainage has been identified as a **focus area** for water quality monitoring due to high levels of bacteria observed through the Portage routine monitoring program. Whatcom County Public Works (WCPW) has monitored fecal coliform bacteria in the Scott drainage focus area since January 2020.

What are Fecal Coliform Bacteria?

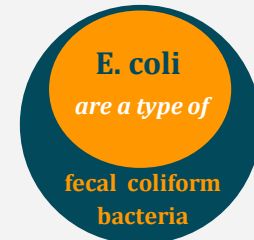
Fecal coliform bacteria are found in human and animal feces. Detection in a creek is a sign that pathogens from these wastes may be polluting the water. Contact with fecal contaminated waters can result in **gastroenteritis, skin rashes, upper respiratory infections** and other illnesses.

Where Does the Bacteria Come From?

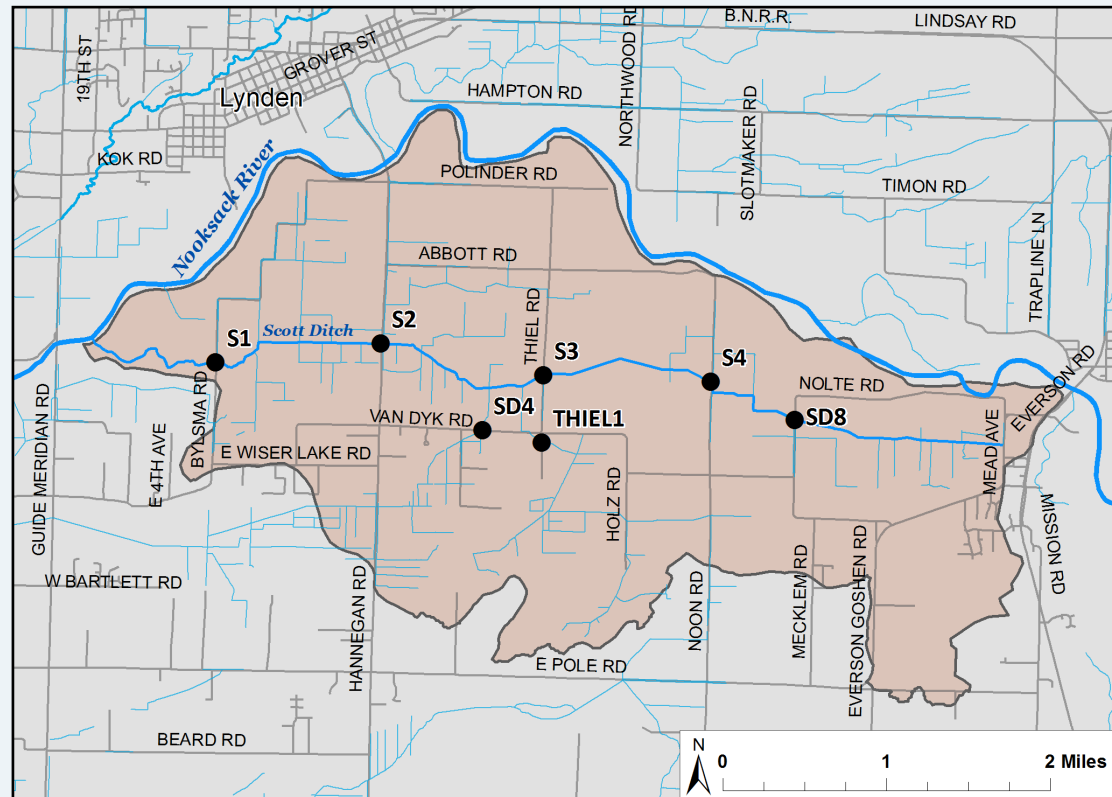
Potential sources of bacteria include:

- 1) Animal waste from livestock, domestic pets, and wildlife
- 2) Human sewage from failing septic systems, leaking sewer lines or cross-connections between sewer and stormwater systems

Other potential sources are continually being investigated.



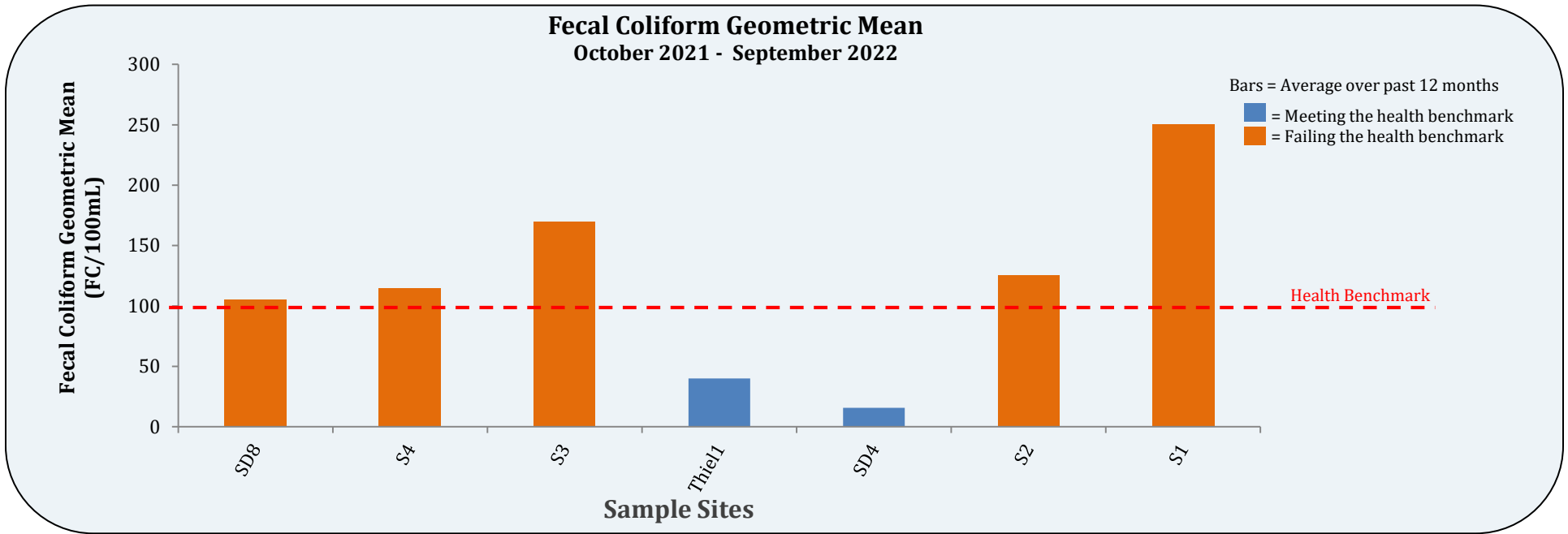
Whatcom County Public Works Scott Ditch Drainage Water Quality Monitoring Stations



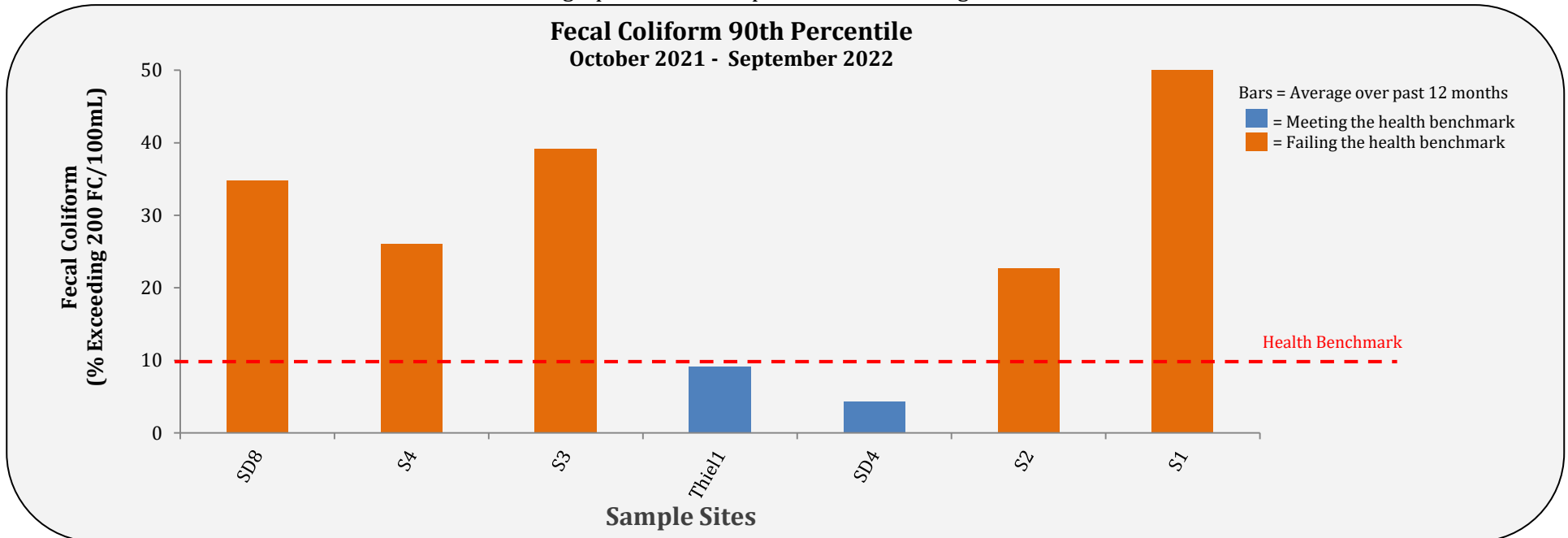
Scott Ditch Drainage Sampling Stations

Comparison of Bacteria Levels to Health Benchmarks

Refer to the map on page 1 or the tables on pages 4 for site locations.



*The bar must be blue on both graphs for the sample site to be meeting the freshwater health benchmark.



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Historical Fecal Coliform Bacteria Data in FC/100mL

These tables provides the individual results at each station for the last thirteen months.

Results in light orange exceeded 200 FC/100mL. Results in dark orange exceed 1000 FC/100mL.

Date	Creek Access		Nolte Rd.	Noon Rd.	Thiel Rd.	Thiel Rd. S of Van Dyk Rd.	Van Dyk Rd. W of Thiel Rd.	Hannegan Rd.	Blyssma Rd.
	Rainfall Data 24 hr*	72 hr**	SD8	S4	S3	Thiel1	SD4	S2	S1
9/1/21	0.00	0.16	250	109	40	230	16	90	300
9/13/21	0.00	0.62	560	102	78	500	25	98	260
9/27/21	0.05	0.87	280	230	52	118	116	74	155
10/11/21	0.00	0.29	127	48	28	54	18	18	31
10/25/21	0.43	0.54	106	44	91	48	13	88	600
11/2/21	0.47	0.19	114	21	127	8	3	110	2400
12/1/21	0.12	3.48	45	82	60	35	18	119	FL
12/13/21	0.04	0.78	36	7	21	7	2	23	91
1/10/22	0.05	0.86	34	112	275	54	2	78	118
1/24/22	0.00	0.00	7	218	440	2	2	86	500
2/9/22	0.01	0.1	34	33	314	31	9	98	114
2/22/22	0.00	0.35	24	68	460	98	42	440	620
3/3/22	0.02	NR	78	191	700	70	3	390	91
3/14/22	0.75	0.71	13	52	420	21	2	145	310
4/7/22	NR	0.24	173	127	118	13	10	173	164
4/20/22	0.07	0.37	16	25	136	30	20	42	360
5/3/22	0.03	0.58	82	2700	1200	18	11	400	2100
5/18/22	0.10	0.61	94	88	260	28	280	86	210
6/13/22	0.01	NR	320	5000	3000	40	40	1800	145
6/27/22	0.00	NR	260	200	109	60	30	127	250
7/13/22	NR	0.00	800	260	191	82	23	110	118
7/25/22	0.00	0.00	1400	560	155	173	33	104	191
8/8/22	0.00	0.00	540	127	80	96	200	82	260
8/22/22	0.00	0.00	600	340	78	290	68	145	380
9/6/22	0.00	NR	420	50	31	380	34	NA	290
9/22/22	0.00	0.00	250	68	102	LF	62	230	200