Lower Dakota 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

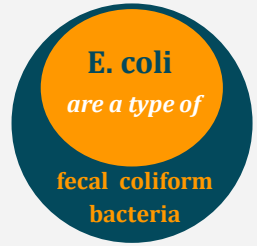
Less than 10% of samples contain over:

200 fecal coliform/100mL

Focus Area Monitoring: The Lower Dakota drainage has been identified as a ***focus area*** for water quality monitoring due to high levels of bacteria observed through the routine monitoring program. Whatcom County Public Works (WCPW)

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?

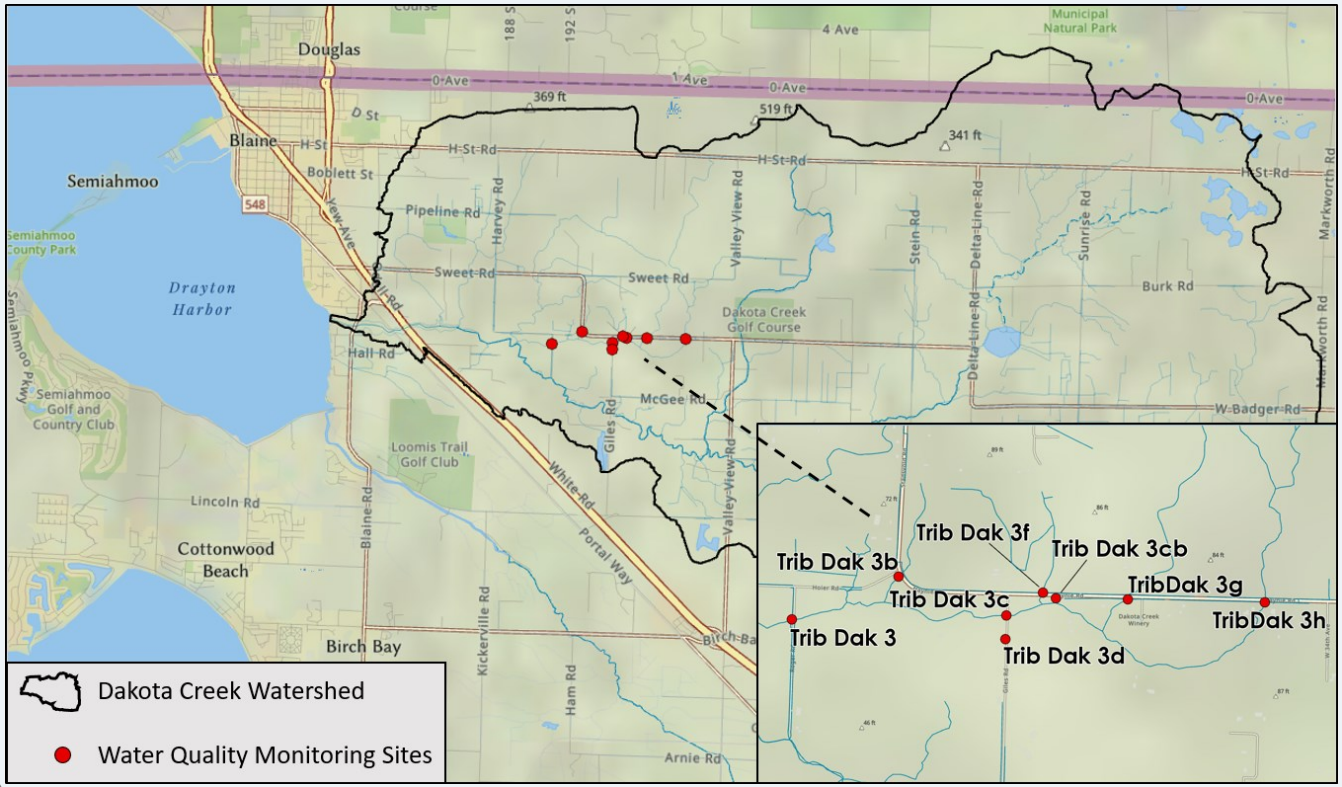
Potential sources of bacteria include:

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

Lower Dakota Water Quality Monitoring Stations

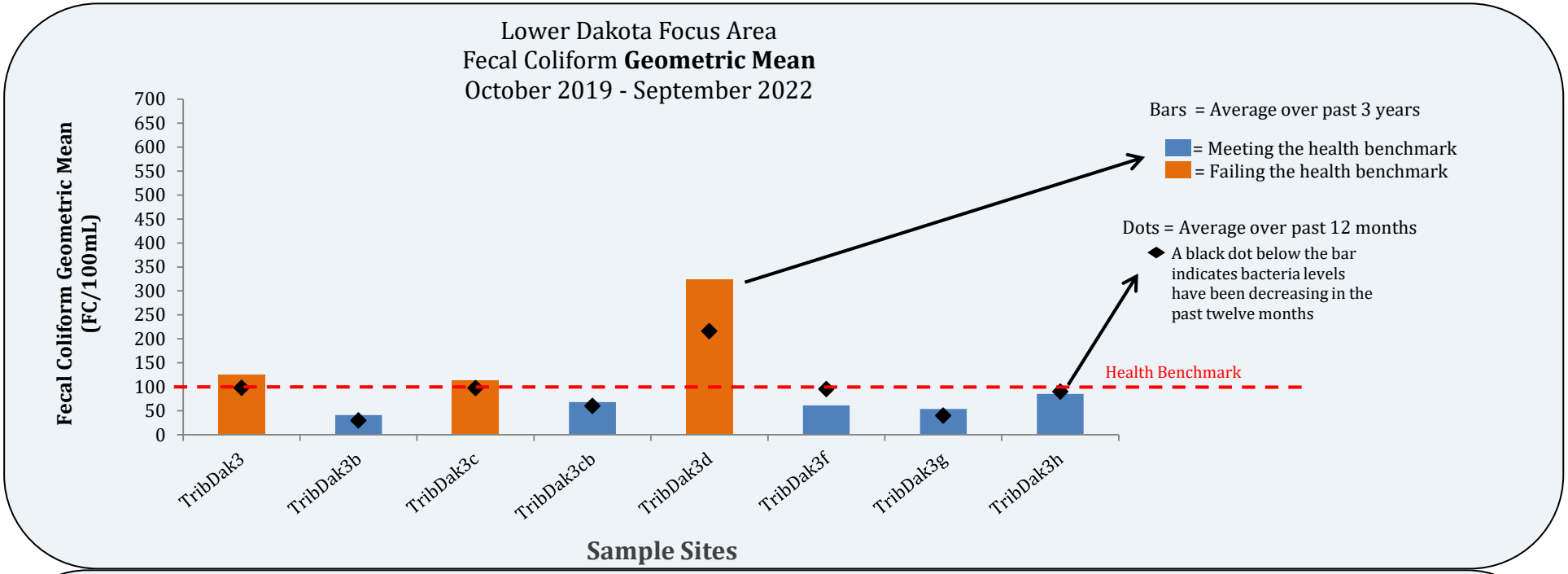


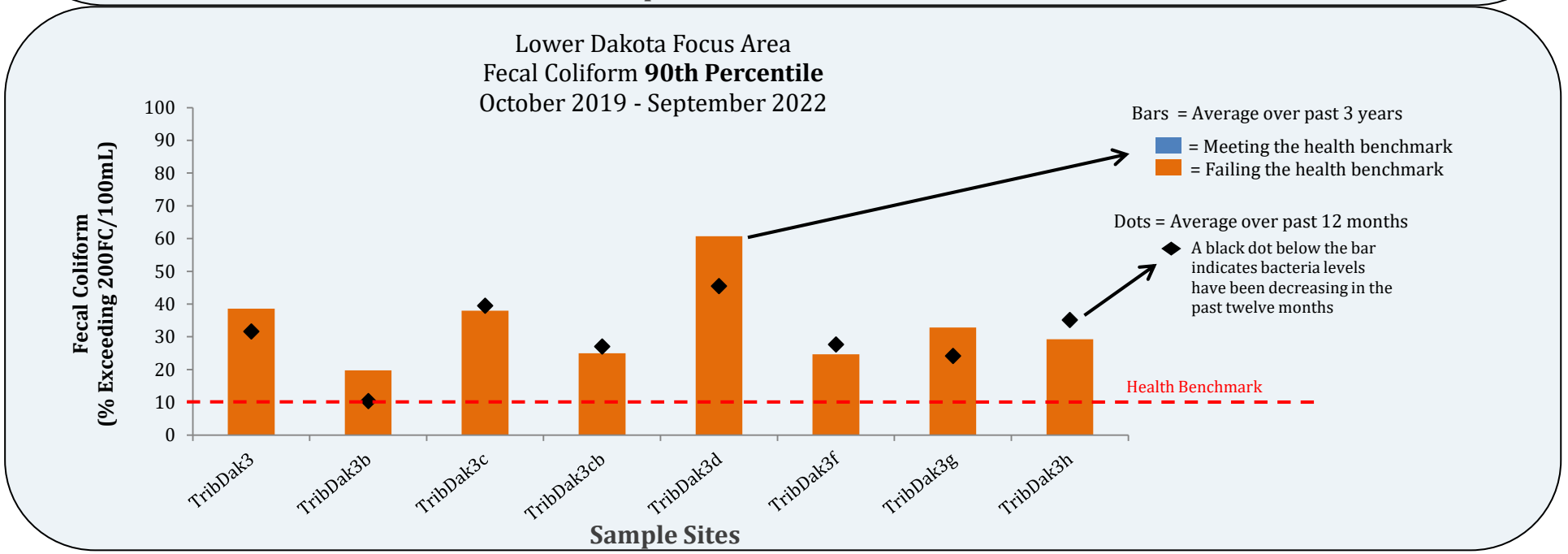
More information is available at: www.whatcomcounty.us/2170/Water-Quality-Monitoring-Results

Lower Dakota Focus Area

Comparison of Bacteria Levels to Health Benchmarks

Refer to the map on page 1 or the tables on pages 3-4 for site locations.





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

*No bar indicates fewer than three years data for respective sampling location.

Lower Dakota Focus Area

13–Month Historical Fecal Coliform Bacteria Data

This table provides the individual results at each station for the past thirteen months. Results in light orange exceeded 200 FC/100mL. Results in dark orange exceed 1000 FC/100mL.

Site / Loca- / Date	*Roger Rd, S of Hoier*	*Corner of Hoier Rd and Haynie*	*Giles Rd, S of Haynie*	*South side of Haynie, E of Giles*	*Giles Rd, 2nd Culvert S of Haynie*	Haynie Rd., E of Giles	Haynie Rd., E of TribDak3cb, south side	South side of Haynie Rd., West of fire station
	TribDak3	**TribDak3b**	**TribDak3c**	**TribDak3cb**	**TribDak3d**	**TribDak3f**	**TribDak3g**	**TribDak3h**
9/29/21	200	800	300	370	LF	3400	1600	360
10/7/21	420	173	470	40	LF	82	191	330
10/20/21	54	145	86	33	LF	90	310	39
10/28/21	430	118	490	2000	6000	310	900	114
11/4/21	173	230	218	209	1200	340	16	155
11/9/21	112	102	250	240	4000	58	28	22
11/23/21	28	25	8	12	79	10	2	15
12/2/21	52	5	34	11	191	200	104	210
12/7/21	40	25	41	15	42	155	28	145
12/21/21	48	7	40	42	80	54	5	26
1/5/22	42	44	28	20	250	18	23	10
1/19/22	20	13	7	16	104	18	18	25
1/26/22	5	2	5	4	33	66	2	56
2/1/22	22	33	13	13	333	64	15	70
2/16/22	68	18	48	31	80	5	4	7
2/23/22	34	7	50	7	LF	13	2	2
3/1/22	46	70	78	216	235	102	88	86
3/10/22	56	16	20	10	44	15	10	38
3/16/22	48	42	21	20	72	108	108	25
3/24/22	7	3	5	20	10	16	11	21
3/31/22	11	28	10	15	18	44	31	52
4/12/22	7	5	7	11	5	20	5	21
4/19/22	TNS	TNS	TNS	TNS	TNS	TNS	TNS	TNS
4/26/22	220	TNS	28	TNS	TNS	TNS	TNS	TNS
5/5/22	1700	20	182	58	4800	200	68	94
5/10/22	92	11	110	21	600	52	33	39
5/23/22	173	3	98	38	6000	540	420	109
6/2/22	420	20	370	116	6000	420	390	210
6/9/22	200	23	136	68	LF	1300	50	600
6/23/22	200	200	220	108	LF	900	340	800
6/30/22	240	410	340	91	LF	1900	370	240
7/7/22	1700	1600	2500	900	LF	2900	1200	900
7/20/22	460	LF	500	270	LF	LF	LF	2200
7/28/22	102	LF	82	390	LF	LF	LF	240
8/4/22	1200	LF	1800	800	LF	LF	LF	570
8/11/22	530	LF	1300	500	LF	LF	LF	390
8/23/22	84	LF	220	145	LF	LF	LF	100
9/1/22	240	LF	280	270	LF	LF	LF	210
9/21/22	76	LF	2100	173	LF	LF	D	360
9/29/22	300	LF	3800	118	LF	LF	D	182

Gray box indicates an event where no sample was collected for varying reasons. D– Dry, ST– Stagnant, LF– Low Flow, NA— Not accessible