

Lower Dakota Focus Area

Water Quality Status: Fecal Coliform Bacteria

as of April 28, 2021

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

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.

E. coli are a fecal coliform bacteria

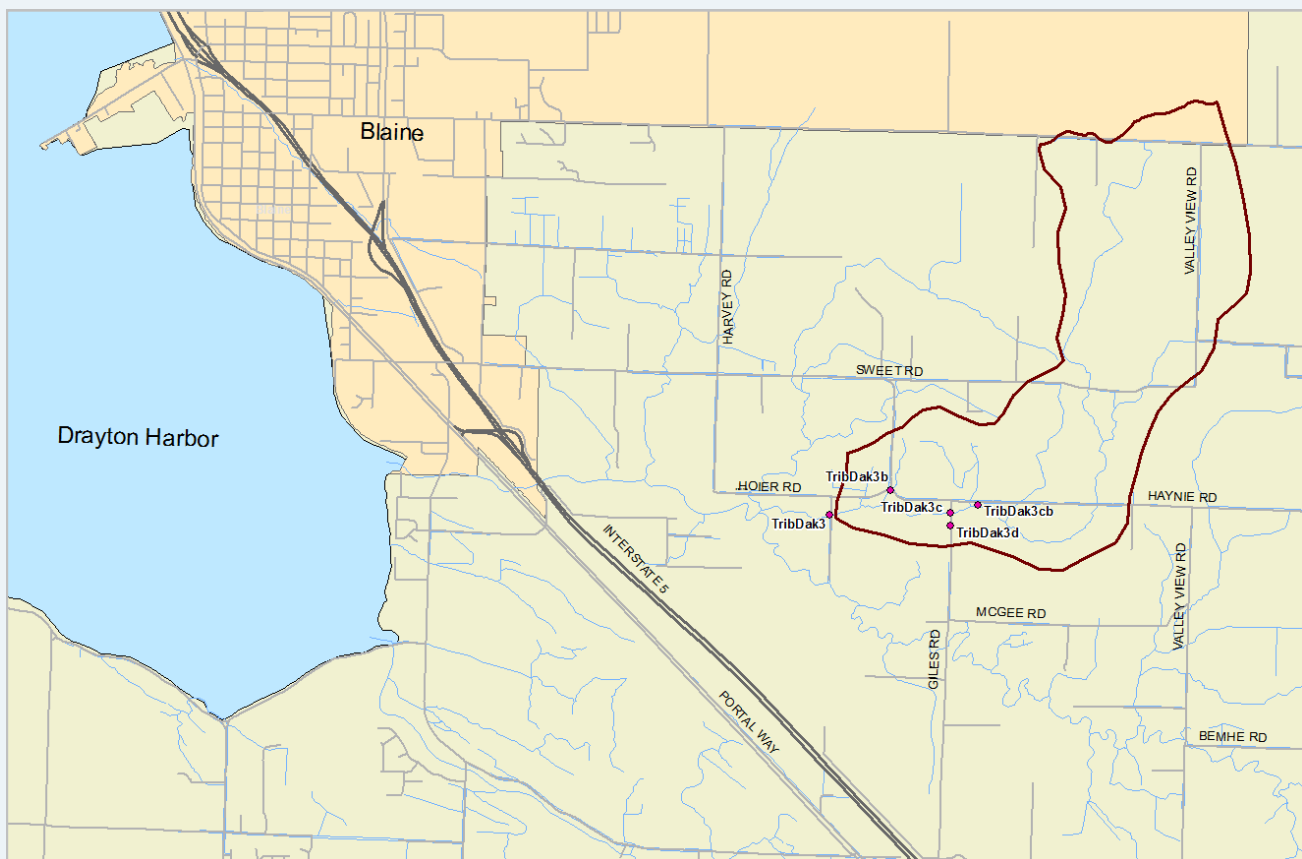
Where Does the Bacteria Come From?

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

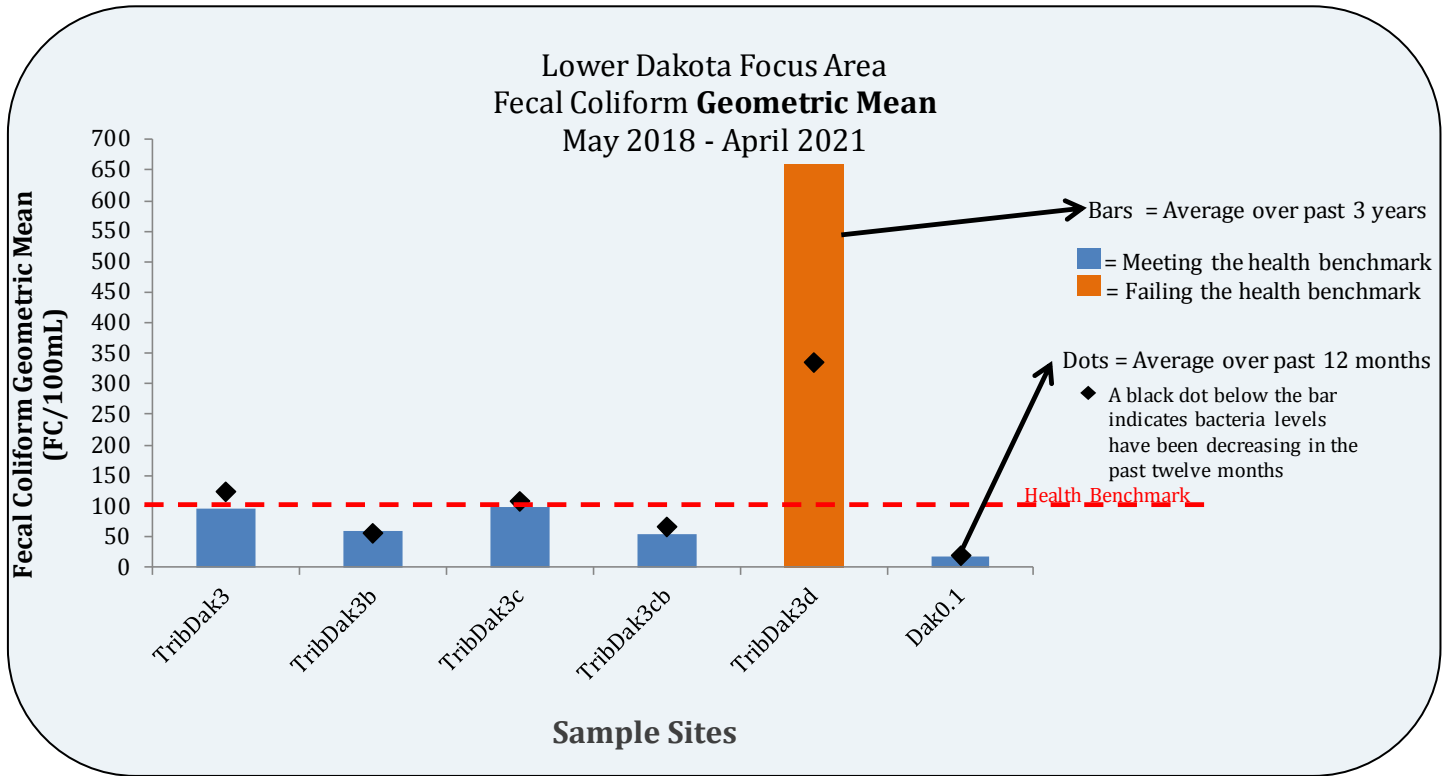
Focus Area Monitoring: The Lower Dakota drainage has been identified as a *focus area* for water quality monitoring due to high levels of bacteria observed through the routine monitoring program. Whatcom County Public Works (WCPW) has monitored fecal coliform bacterial in the Lower Dakota drainage area since December 2013.

Whatcom County Public Works Lower Dakota Water Quality Monitoring Stations

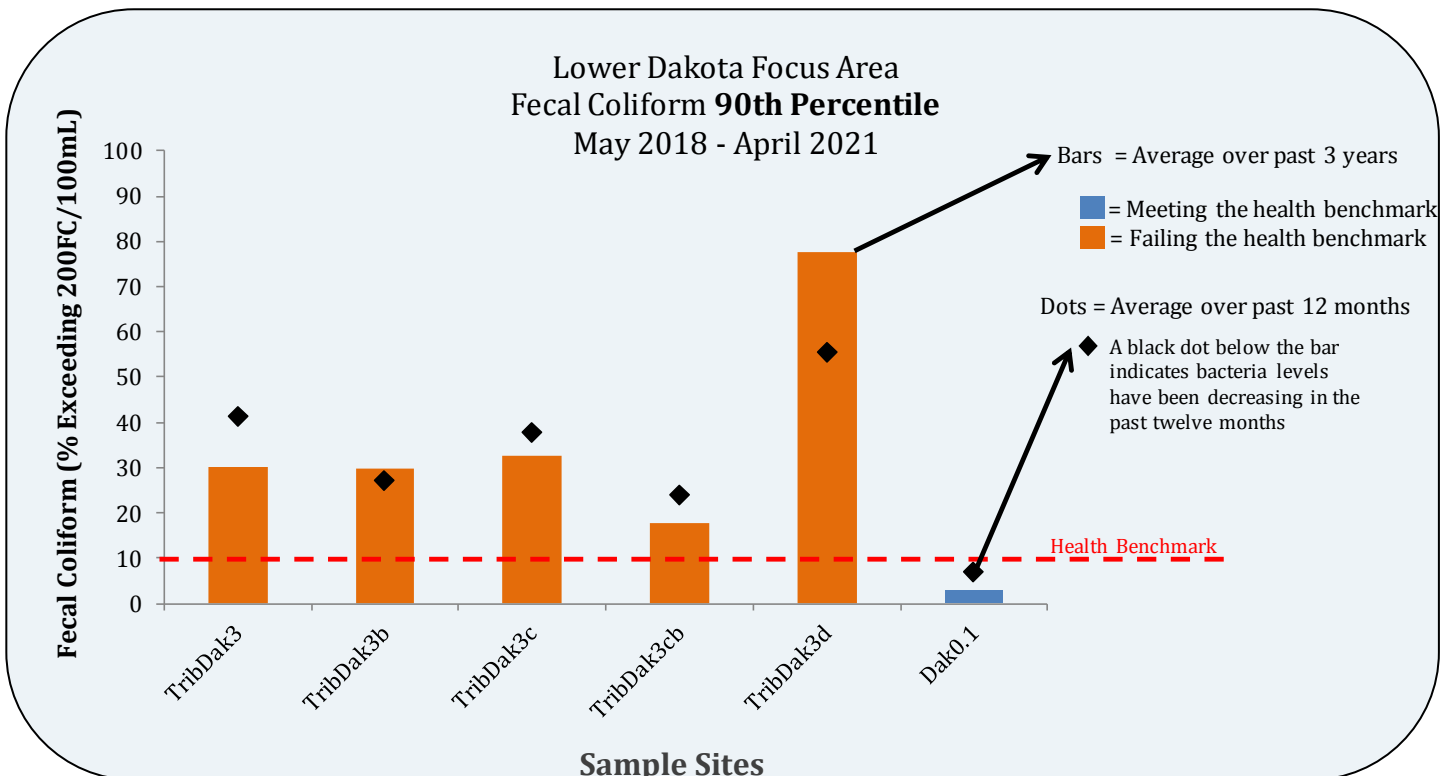


Lower Dakota Focus Area Comparison of Bacteria Levels to Health Benchmarks

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.



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13-Month Historical Fecal Coliform Bacteria Data

These tables provide 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 Location Date	<i>Roger Rd, S of Hoier</i>	<i>Corner of Hoier Rd and Haynie</i>	<i>Giles Rd, S of Haynie</i>	<i>South side of Haynie, E of Giles</i>	<i>Giles Rd, 2nd Culvert S of Haynie</i>	<i>Mouth of Dakota Creek</i>
	TribDak3	TribDak3b	TribDak3c	TribDak3cb	TribDak3d	Dak 0.1
4/1/20	92	210	40	28	240	18
4/7/20	320	3	210	200	11	2
4/16/20	23	4,900	10	10	290	11
4/22/20	250	38	118	106	420	16
5/5/20	280	2,200	70	400	400	11
5/12/20	2,400	5,800	1,400	2,600	1,700	200
5/28/20	1,300	380	104	108	112	13
6/3/20	560	34	330	350	6,000	64
6/18/20	109	18	410	440	LF	15
7/1/20	450	380	209	182	LF	30
7/22/20	540	LF	570	220	LF	52
8/12/20	340	240	1,100	86	LF	2
8/19/20	280	LF	380	58	LF	2
8/27/20	82	LF	68	21	LF	5
9/1/20	104	LF	88	86	LF	15
9/16/20	380	LF	460	200	LF	33
9/29/20	39	LF	82	72	LF	54
10/14/20	370	98	320	88	LF	108
10/28/20	7	LF	13	18	LF	2
11/4/20	550	50	300	230	900	280
11/10/20	28	3	34	23	78	2
12/3/20	8	7	20	8	145	34
12/16/20	31	28	28	15	10	82
12/29/20	23	10	18	5	5	16
1/12/21	173	100	48	33	56	136
1/20/21	16	2	26	15	30	3
2/2/21	94	700	82	44	38	220
3/10/21	112	92	54	18	6,000	13
3/17/21	20	2	18	16	500	5
3/24/21	340	155	420	240	6,000	3
3/30/21	92	26	56	20	3,000	5
4/14/21	118	25	96	104	2,800	3
4/28/21	46	18	40	28	1,200	60

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