

Lower Dakota Focus Area

Water Quality Status: Fecal Coliform Bacteria

as of April 11, 2019

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 protect water quality, Washington State has developed criteria for bacteria levels in both fresh and marine waters.

Freshwater Standards

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

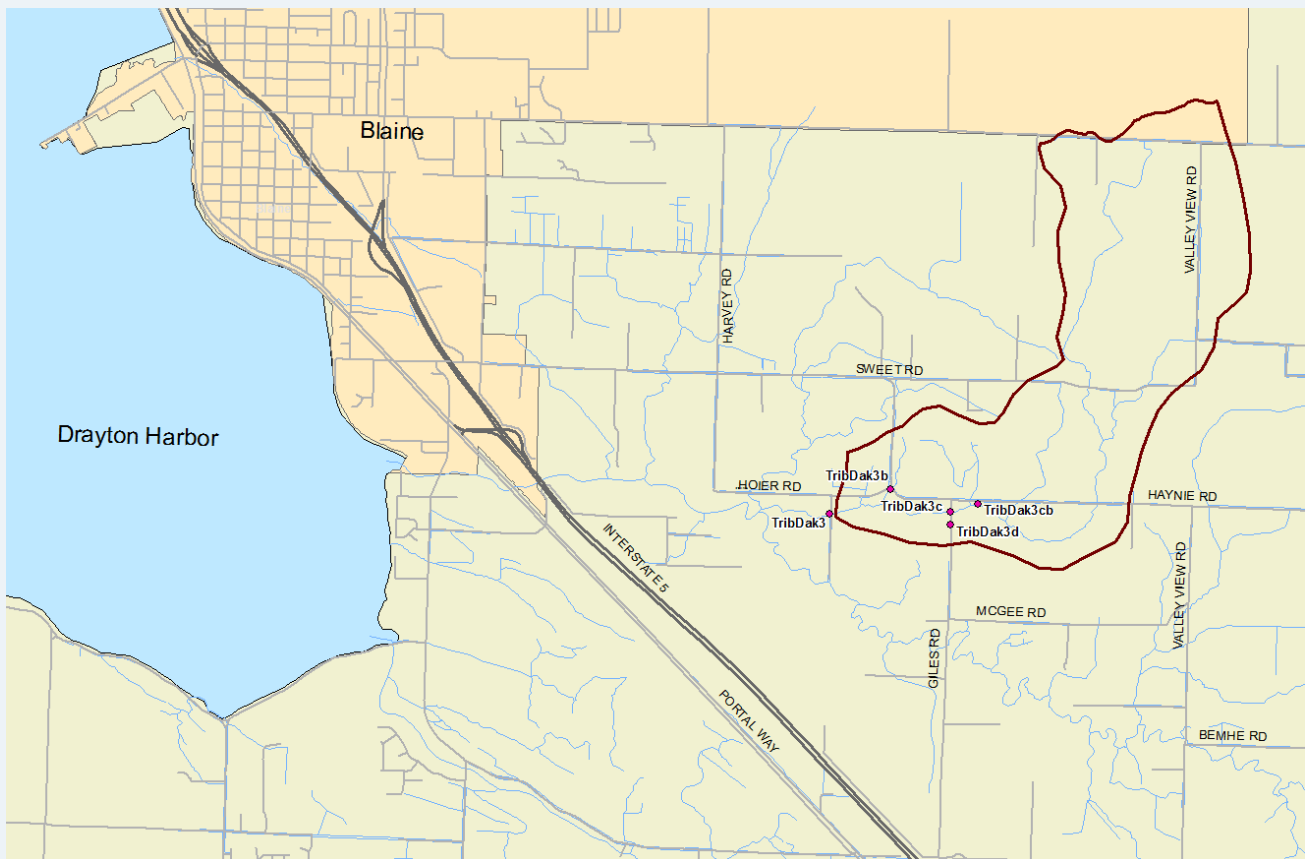
Where Does the Bacteria Come From?

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

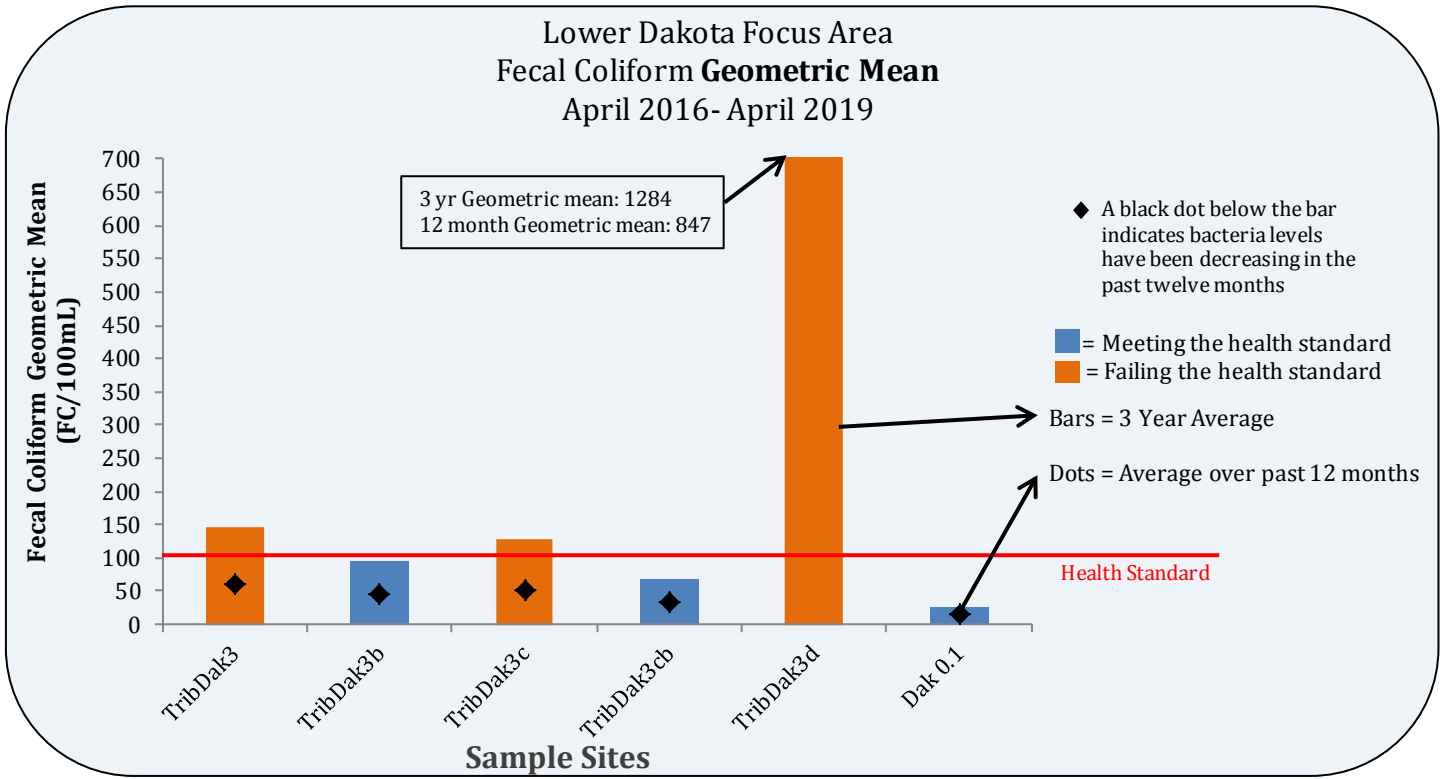
Focus Area Monitoring: The Lower Dakota drainage has been identified as a *focus area* for water quality monitoring due to high levels of bacteria observed through the routine monitoring program. Whatcom County Public Works (WCPW) has monitored fecal coliform bacterial in the Lower Dakota drainage area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

Whatcom County Public Works Lower Dakota Water Quality Monitoring Stations

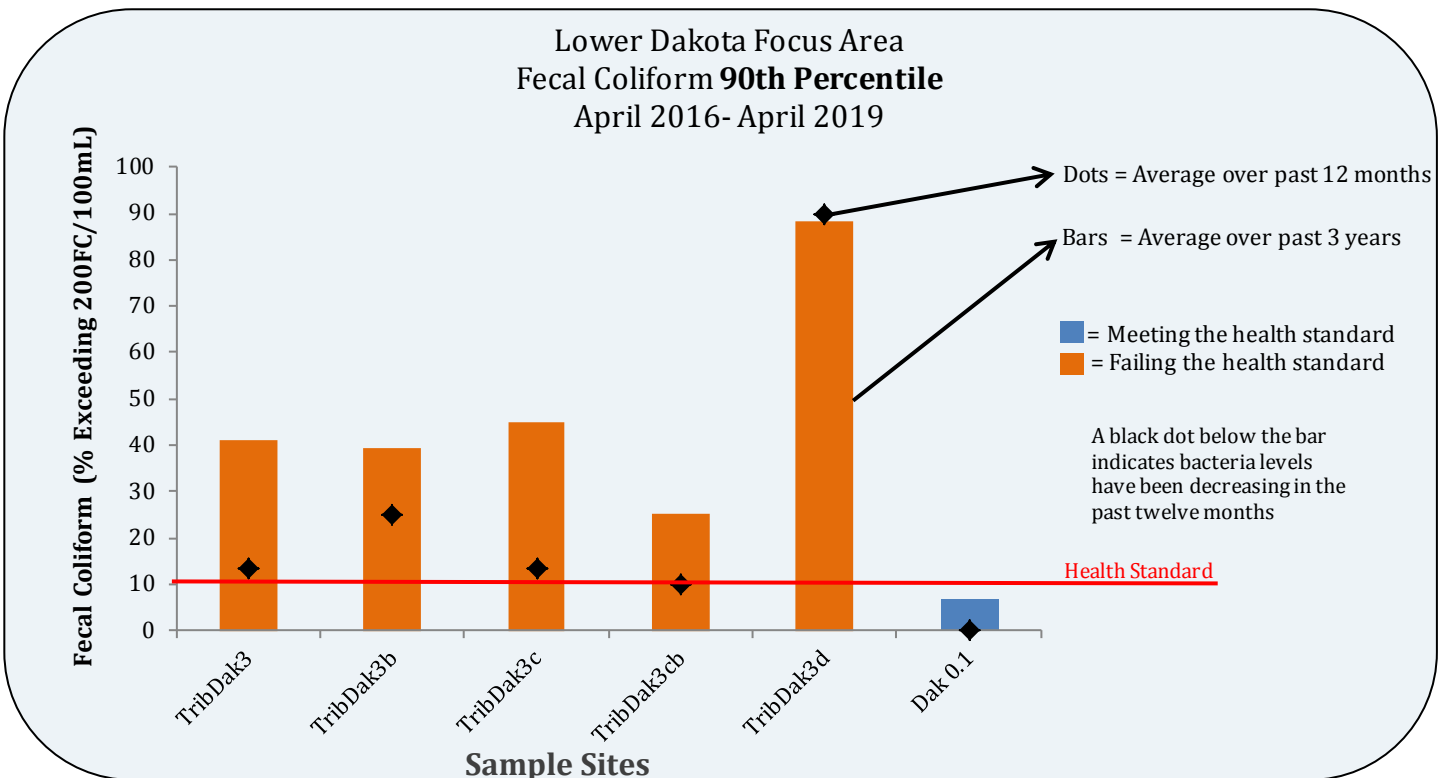


Lower Dakota Focus Area Comparison of Bacteria Levels to Health Standards

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 standard.



Lower Dakota Focus Area 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.

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
4/5/2018	114	133	58	33	610	58
4/12/2018	31	6	19	26	54	10
4/26/2018	74	72	39	44	340	12
5/9/2018	106	790	30	36	1340	30
5/17/2018	163	137	96	161	4900	87
5/31/2018	17	58	40	27	3800	106
6/14/2018	100	320	80	90	LF	12
6/28/2018	116	66	108	80	LF	9
7/12/2018	98	12	148	138	LF	44
7/25/2018	60	LF	260	186	LF	52
7/31/2018	70	LF	156	167	LF	17
8/29/2018	133	LF	128	141	LF	17
9/12/2018	290	250	590	250	LF	15
9/26/2018	70	27	19	43	LF	2
10/10/2018	19	LF	10	2	LF	4
10/17/2018	2	LF	9	4	LF	9
10/31/2018	156	60	80	40	11200	30
11/14/2018	520	3600	664	570	4500	76
11/20/2018	17	4	12	4	1228	32
11/29/2018	27	520	15	22	250	23
12/06/2018	30	5	52	25	440	2
12/19/2018	10	15	5	2	52	9
12/26/2018	20	32	22	22	330	30
1/08/2019	30	7	43	27	260	2
1/30/2019	66	4	60	12	973	15
2/20/2019	88	NA	28	20	470	52
2/28/2019	79	2	25	5	1800	3
3/6/2019	620	42	78	13	690	11
3/20/2019	39	18	26	7	900	2
3/28/2019	46	270	31	18	1600	2
4/11/2019	210	118	230	300	3200	58

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