

Lower Dakota Focus Area

Water Quality Status: Fecal Coliform Bacteria

as of September 25, 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

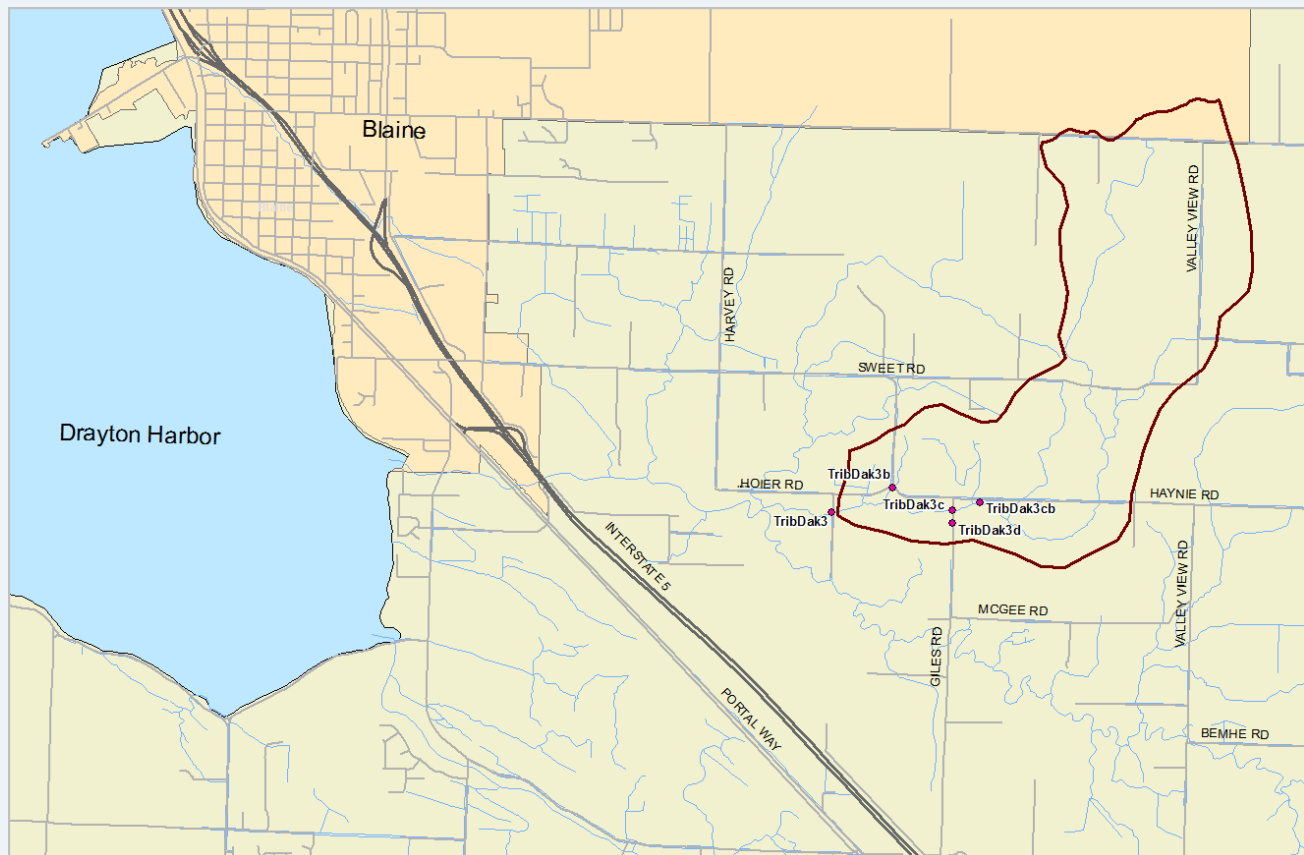
Where Does the Bacteria Come From?

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

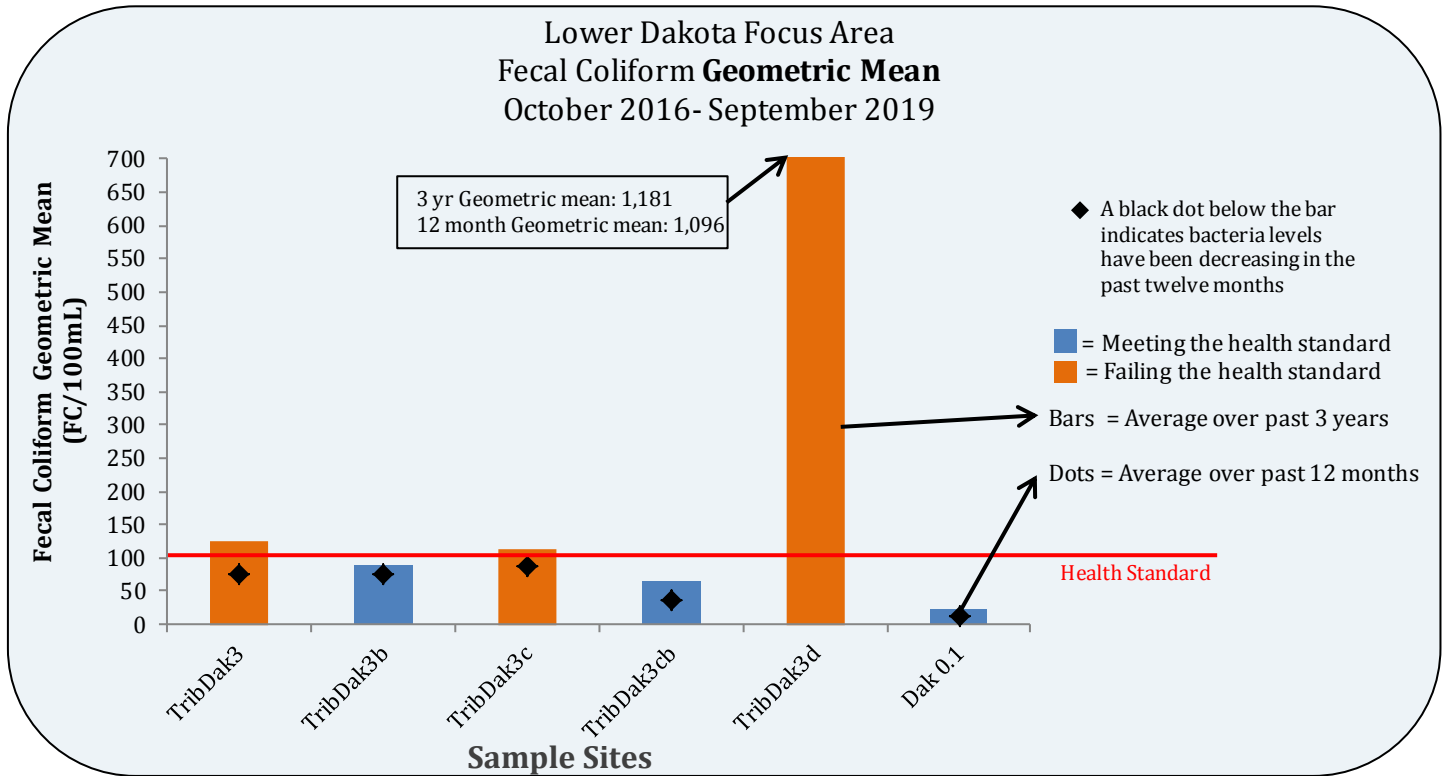
Focus Area Monitoring: The Lower Dakota drainage has been identified as a **focus area** for water quality monitoring due to high levels of bacteria observed through the routine monitoring program. Whatcom County Public Works (WCPW) has monitored fecal coliform bacterial in the Lower Dakota drainage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

Whatcom County Public Works Lower Dakota Water Quality Monitoring Stations

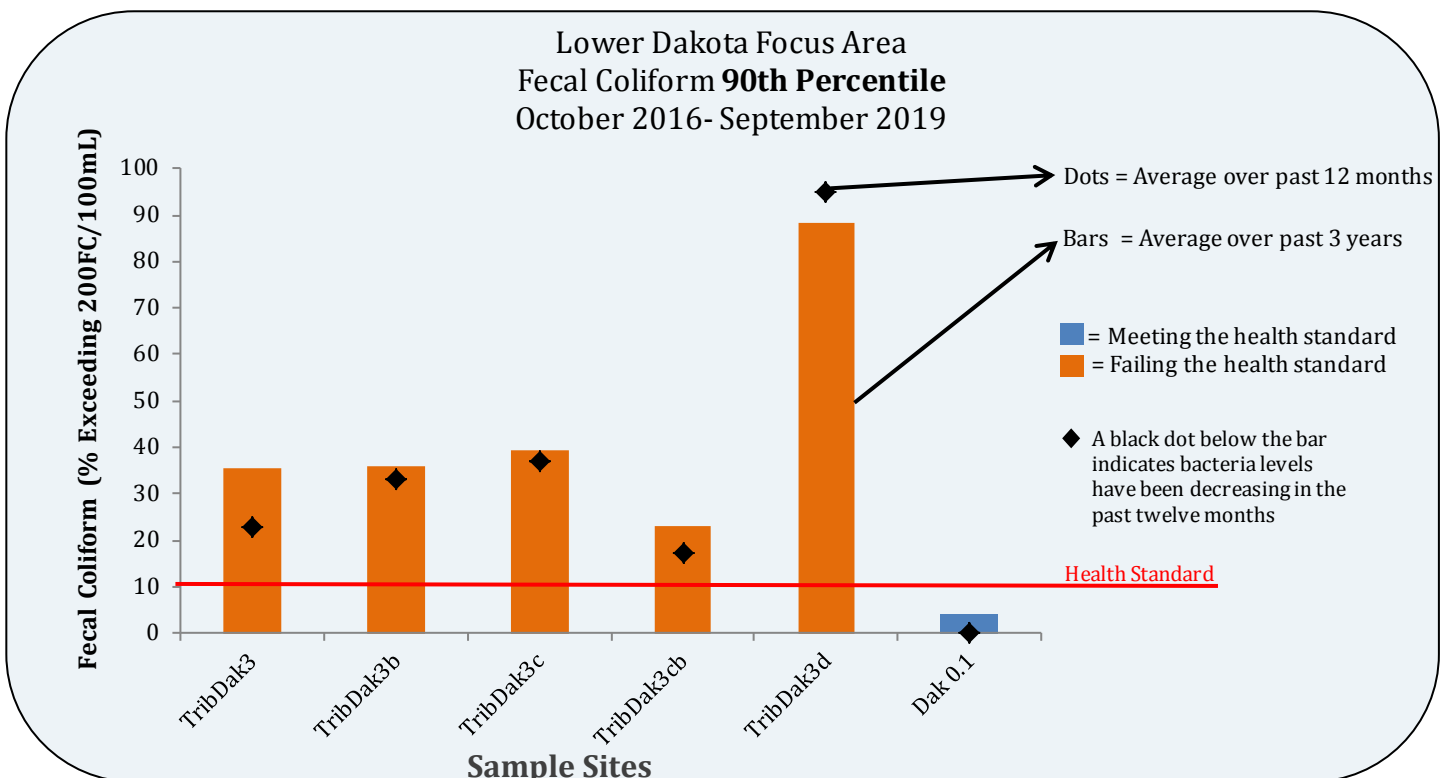


Lower Dakota Focus Area Comparison of Bacteria Levels to Health Standards

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.



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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.

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, 2 nd Culvert S of Haynie	Mouth of Dakota Creek
	TribDak3	TribDak3b	TribDak3c	TribDak3cb	TribDak3d	Dak 0.1
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	11,200	30
11/14/2018	520	3,600	664	570	4,500	76
11/20/2018	17	4	12	4	1,228	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	1,800	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	1,600	2
4/11/2019	210	118	230	300	3,200	58
4/17/2019	108	25	54	26	1,800	20
4/24/2019	230	145	210	340	1,900	52
5/1/2019	96	200	200	90	1,300	11
5/14/2019	173	6,000	210	330	6,000	5
5/22/2019	42	370	54	13	540	15
5/29/2019	250	2,700	240	260	6,000	33
6/5/2019	74	LF	72	33	LF	13
6/19/2019	68	LF	340	118	LF	18
6/26/2019	62	LF	80	48	LF	5
7/3/2019	30	LF	106	56	LF	23
7/9/2019	114	LF	155	116	LF	7
7/17/2019	320	LF	390	330	LF	76
8/7/2019	120	LF	900	60	LF	2
8/14/2019	420	LF	270	68	LF	28
8/28/2019	96	LF	330	62	LF	58
9/4/2019	76	LF	510	64	LF	2
9/11/2019	68	LF	370	36	LF	31
9/25/2019	300	340	380	82	LF	50

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