

Brown Malloy Focus Area

Water Quality Status: Fecal Coliform Bacteria

as of May 28, 2020

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

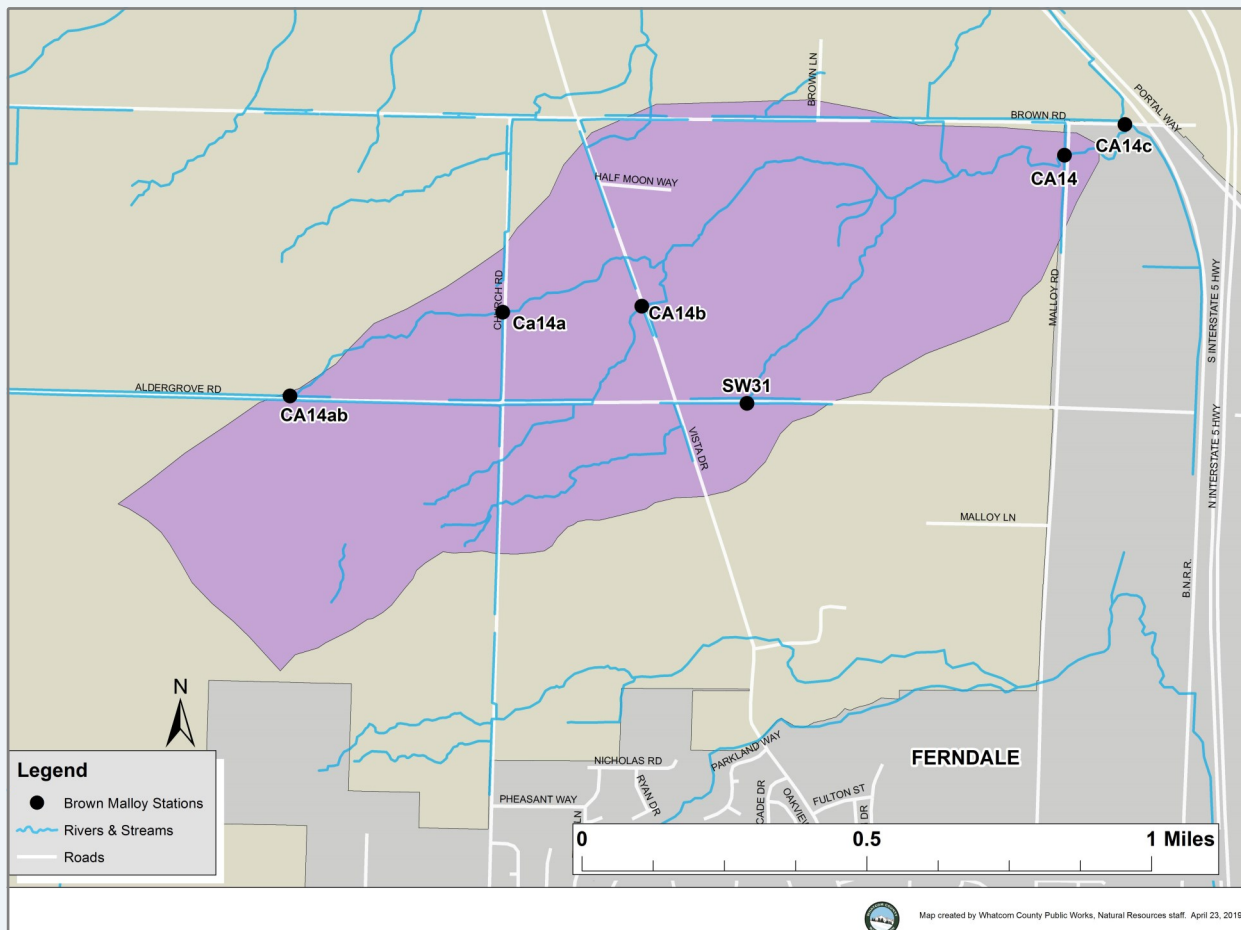
Where Does the Bacteria Come From?

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

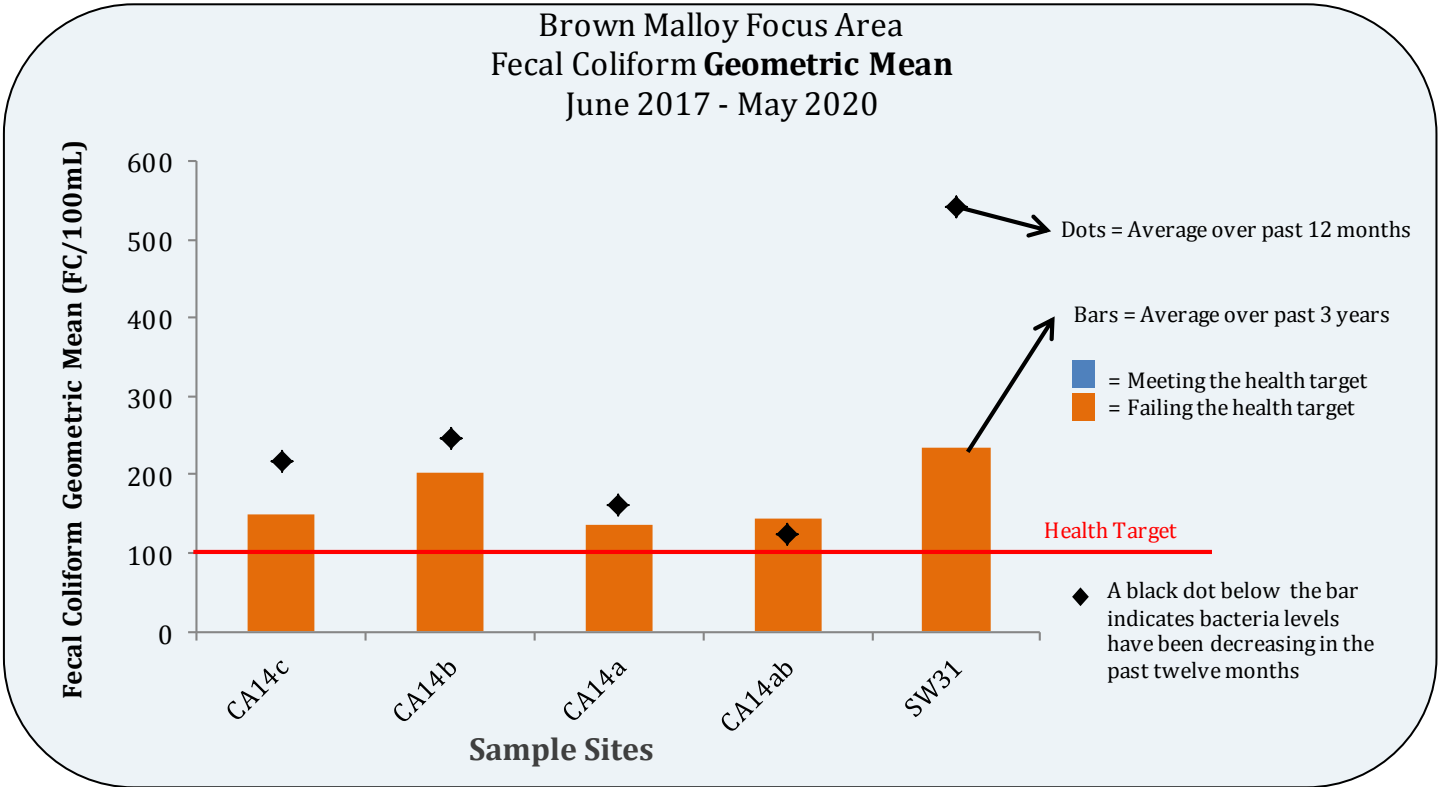
Focus Area Monitoring: The Brown Malloy drainage has been identified as a *focus area* for water quality monitoring due to high levels of bacteria observed through the routine monitoring program. Whatcom County Public Works (WCPW) has monitored fecal coliform bacterial in the Brown Malloy drainage area since 2014.

Whatcom County Public Works Brown Malloy Water Quality Monitoring Stations

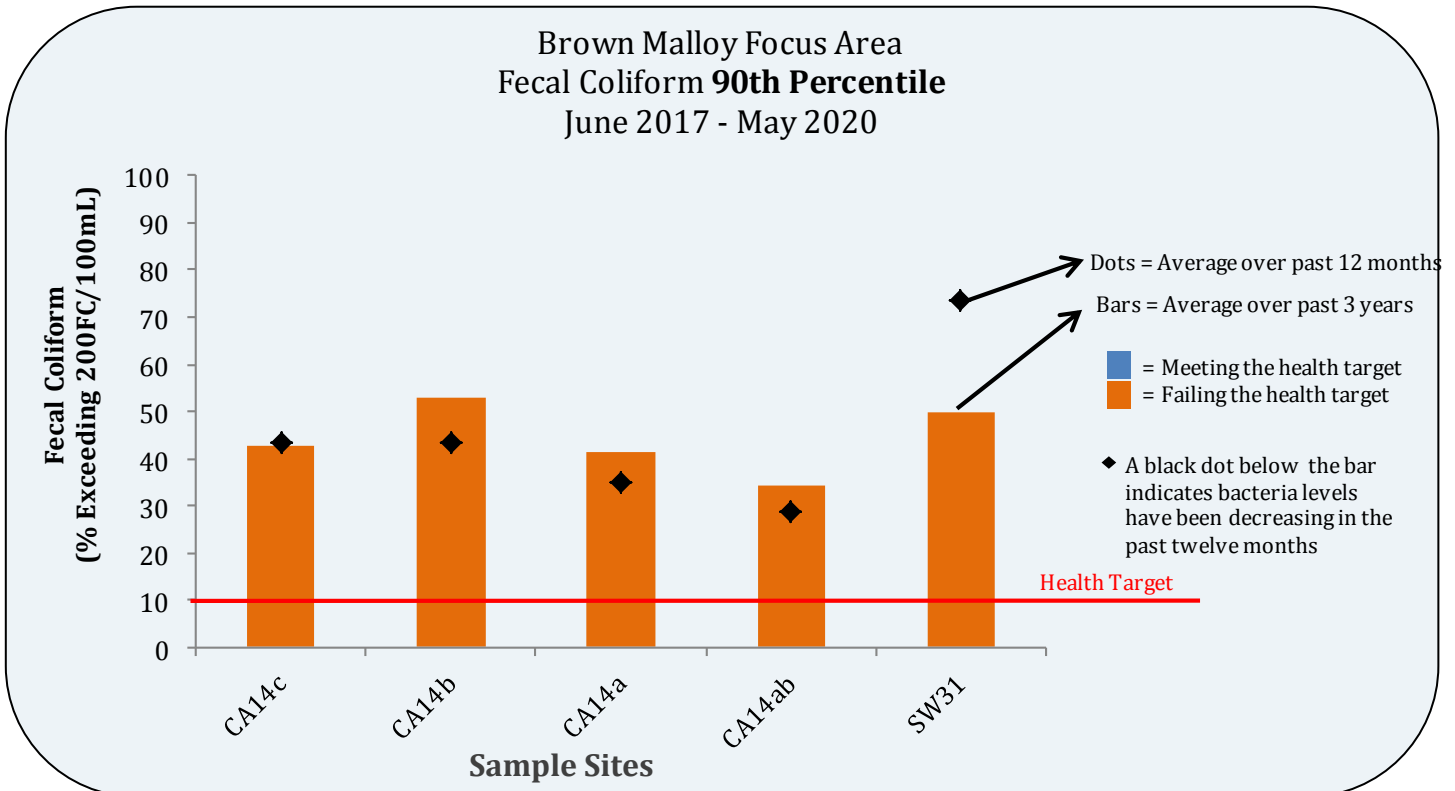


Brown Malloy Focus Area Comparison of Bacteria Levels to Health Standards

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.



Brown Malloy 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	Site Location		Brown Rd, East of Malloy	Vista Drive, North of Aldergrove	Church Rd, North of Aldergrove	Aldergrove Rd, W of Church, Southside	Aldergrove Rd, East of Vista
	Rainfall Data		CA14c	CA14b	CA14a	CA14ab	SW31
	24 hr*	72hr**					
05/01/19	0.00	0.00	300	1,900	38	70	118
05/14/19	0.39	0.00	400	6,000	6,000	ST	ST
05/22/19	NR	0.38	23	470	600	ST	ST
05/29/19	0.00	0.00	420	280	38	ST	ST
06/05/19	0.01	0.00	78	50	78	D	D
06/19/19	0.00	0.01	D	LF	LF	D	D
06/26/19	0.00	0.00	D	LF	LF	D	D
7/3/19	0.00	0.00	ST	LF	LF	ST	ST
7/9/19	0.00	0.00	ST	LF	LF	D	D
7/17/19	0.00	0.00	D	LF	LF	ST	D
8/7/19	0.00	0.00	D	LF	LF	D	D
8/14/19	0.00	0.00	D	LF	LF	D	D
8/28/19	0.00	0.00	D	LF	LF	D	D
9/4/19	0.00	0.00	D	LF	LF	D	D
9/11/19	0.00	0.26	D	TNS	ST	D	D
9/25/19	0.00	0.99	ST	LF	LF	D	ST
10/3/19	0.02	0.00	D	LF	LF	D	D
10/10/19	0.00	0.92	ST	LF	LF	ST	D
10/16/19	0.20	0.06	114	2,100	78	LF	LF
10/30/19	0.00	0.00	39	310	102	27	ST
11/05/19	0.00	0.00	300	410	98	164	LF
11/20/19	0.00	1.83	70	74	58	80	1,100
11/26/19	0.00	0.36	54	173	210	40	2,200
12/03/19	0.44	0.05	4,400	2,100	1,100	210	6,000
12/18/19	0.04	0.14	54	74	72	50	410
12/26/19	0.00	0.03	16	34	3	21	40
1/23/20	0.98	0.84	191	52	200	280	218
1/28/20	0.33	0.48	6,000	104	118	112	900
2/06/20	0.31	1.52	84	88	114	82	280
2/18/20	0.00	0.31	380	1,500	49	84	500
2/27/20	0.08	0.14	270	155	60	72	173
03/03/20	0.07	0.77	88	96	108	200	400
03/24/20	0.29	0.31	2,800	1,000	700	800	1,800
04/01/20	0.00	0.04	310	13	21	8	4,200
04/07/20	0.00	0.01	33	380	900	44	1,300
04/16/20	0.00	0.00	54	118	114	30	8
04/22/20	0.55	0.00	3,400	1,200	4,500	1,200	5,200
05/05/20	0.08	0.08	42	114	270	84	96
05/12/20	0.37	0.20	5,600	4,300	1,700	5,900	6,000
05/28/20	0.00	0.50	360	3,000	1,100	1,600	82

Gray box indicated an event where no sample was collected for varying reasons. D– Dry, ST– Stagnant, NA– Not Accessible, Temporarily Not Sampling

*Day of sampling event **Three days prior to, but not including, day of sampling event

Rainfall data is taken from the Bertrand Creek stream flow monitoring station. Rainfall data was taken from CoCoRaHS Station WA-WC-29 8/2019–12/2019.

Measured in inches. NR– Not Recorded

Note: These sites are seasonally dry. No samples were collected on the sample runs ranging from 6/19/19 to 10/10/19