Brown Malloy Focus Area

Water Quality Status: Fecal Coliform Bacteria

as of June 26, 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?

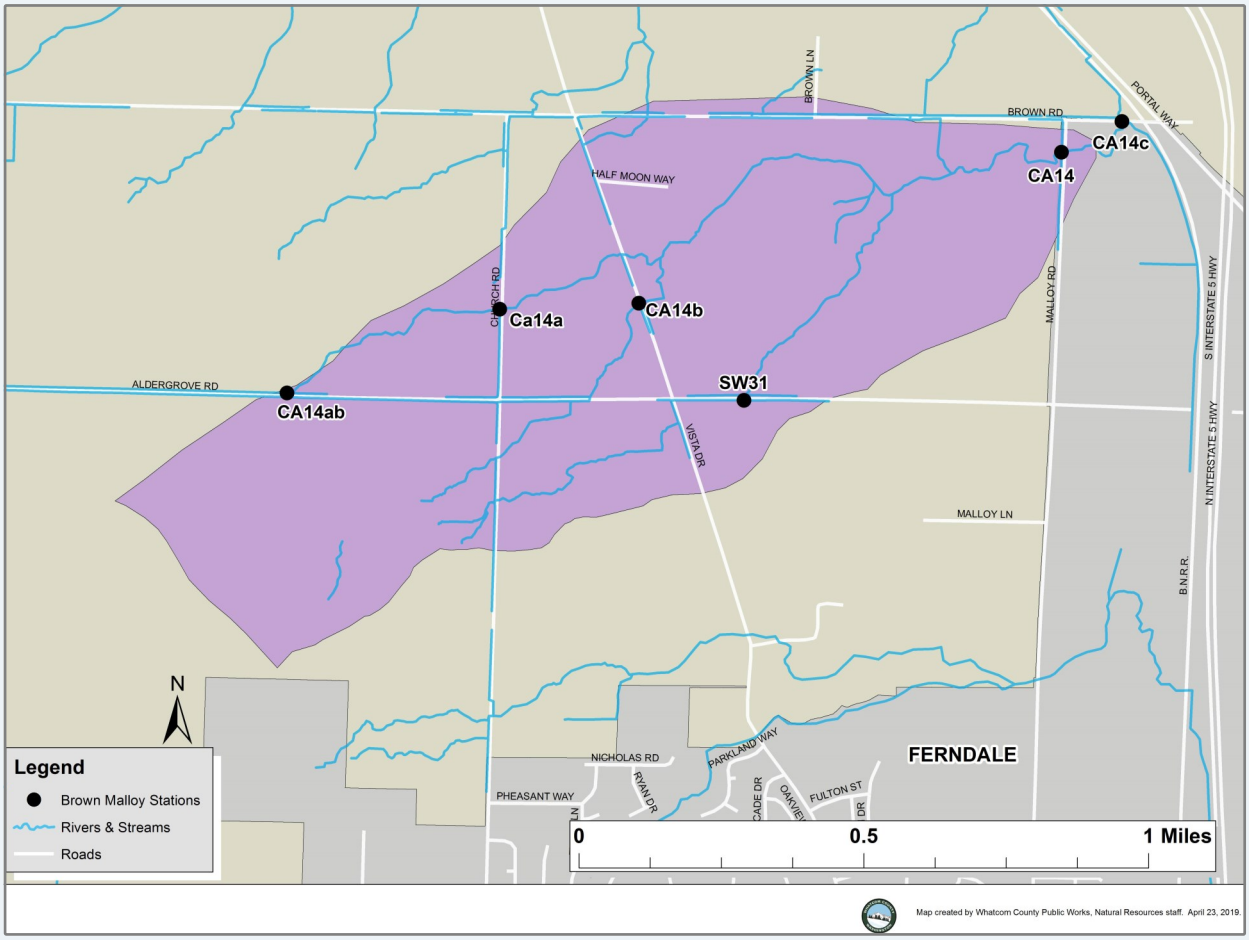
Potential sources of bacteria include:

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 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



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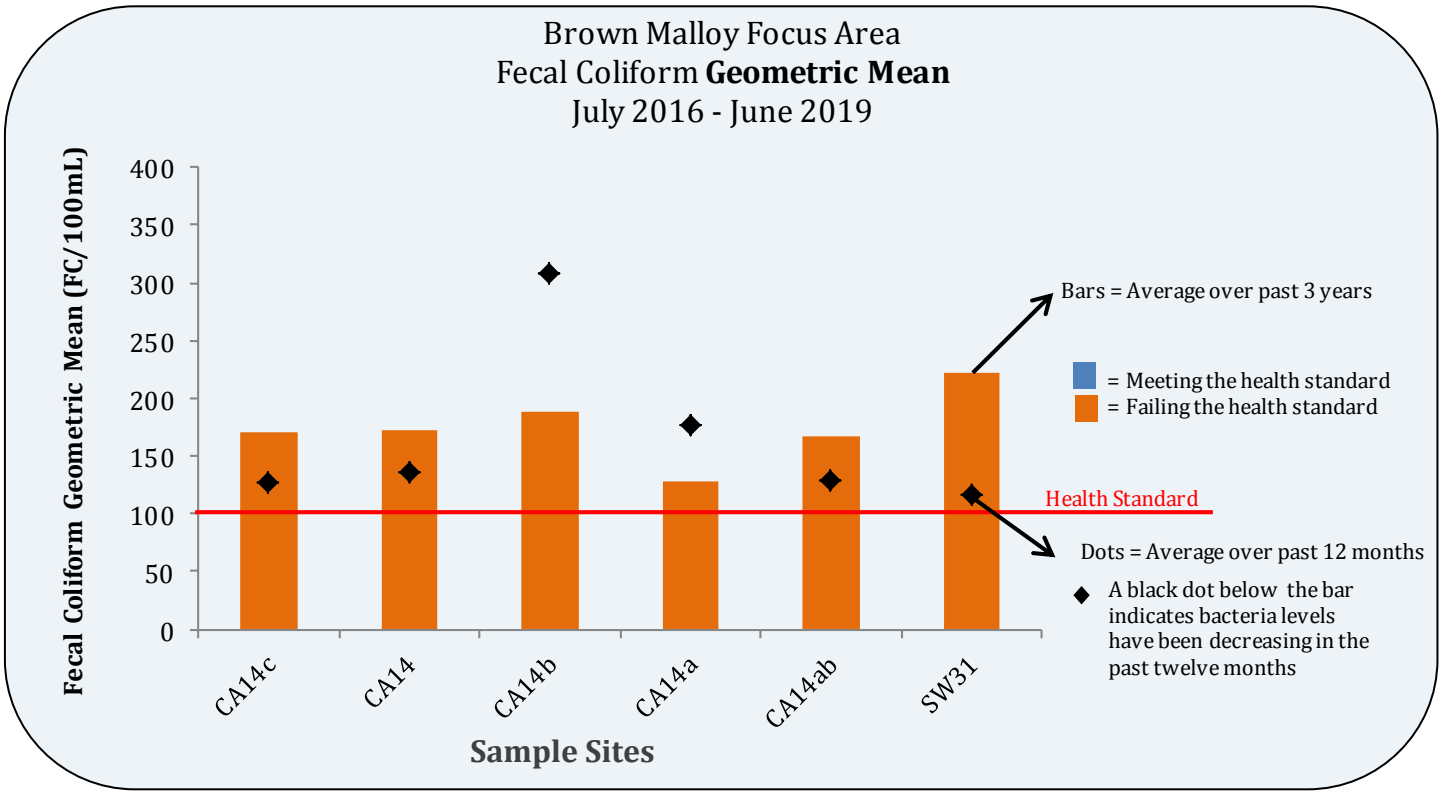
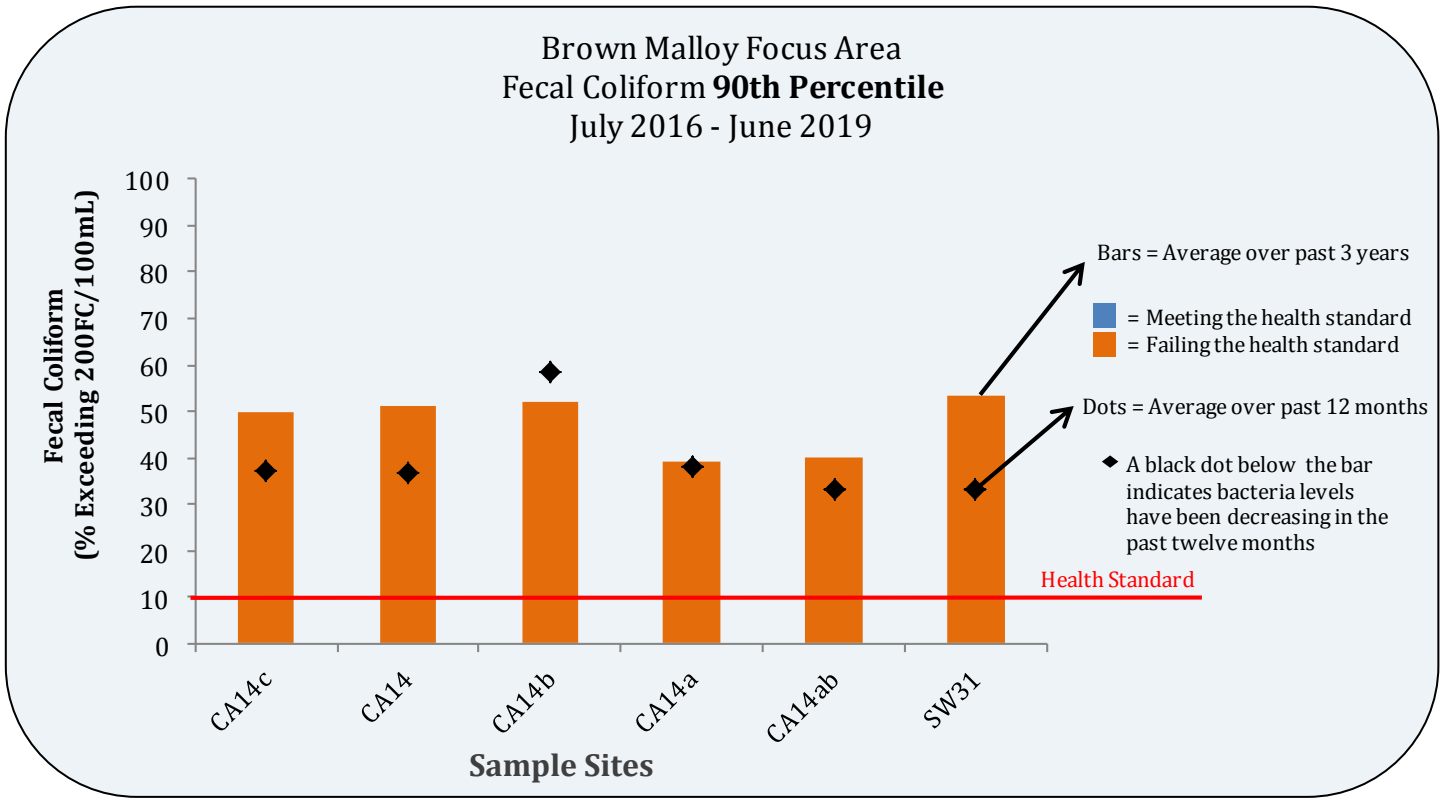
Comparison of Bacteria Levels to Health Standards

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	Site Location / Rainfall Data: 24 hr*	73hr**	*Brown Rd, East of Malloy*	*Malloy Rd, South of Brown*	*Vista Drive, North of Aldergrove*	*Church Rd, North of Aldergrove*	*Aldergrove Rd, W of Church, Southside*	*Aldergrove Rd, East of Vista*
			CA14c	**CA14**	**CA14b**	**CA14a**	**CA14ab**	**SW31**
06/06/18	0.00	0.21	610	430	846	846	ST	D
06/14/18	0.00	0.08	350	330	364	300	D	D
06/28/18	0.00	0.02	410	380	855	910	D	D
07/05/18	0.00	0.03	430	280	2400	430	D	D
07/12/18	0.00	0.03	1382	1482	1428	2900	D	D
07/25/18	0.00	0.00	D	ST	1828	2300	D	D
07/31/18	0.00	0.00	D	ST	84	94	D	D
9/26/18	0.00	0.02	450	96	3500	2500	D	D
10/3/18	0.00	0.79	56	873	470	33	D	D
10/10/18	0.00	0.26	50	132	691	15	D	D
10/31/18	0.38	1.38	98	152	320	88	2100	94
11/14/18	0.82	0.46	3100	1173	2800	2700	4200	350
11/20/18	0.00	0.00	60	40	102	46	220	14
11/29/18	0.07	1.62	4600	2000	80	72	86	130
12/6/18	0.00	0.00	9	14	370	74	70	141
12/19/18	0.03	0.86	41	44	44	72	149	58
12/26/19	0.26	0.29	14	33	100	380	380	873
1/8/19	0.01	0.54	17	22	42	62	82	84
1/30/19	0.00	0.00	30	62	173	159	37	32
2/20/19	0.04	0.28	460	540	220	230	122	350
2/28/19	0.00	0.02	88	60	25	38	13	390
3/6/19	0.09	0.00	26	3	143	430	340	126
3/20/19	0.00	0.00	28	NA	330	78	2,000	8
3/28/19	0.00	0.66	170	NA	54	86	46	220
4/11/19	0.59	0.61	1,400	1,900	360	60	82	900
4/17/19	0.12	0.00	58	108	550	1,500	10	42
4/24/19	0.00	0.20	110	NA	136	34	18	104
05/01/19	0.00	0.00	300	NA	1,900	38	70	118
05/14/19	0.39	0.00	400	NA	6,000	6,000	ST	ST
05/22/19	NR	0.38	23	NA	470	600	ST	ST
05/29/19	0.00	0.00	420	NA	280	38	ST	ST
06/05/19	0.01	0.00	78	NA	50	78	D	D
06/19/19	0.00	0.01	D	ST	LF	LF	D	D
06/26/19	0.00	0.00	D	ST	LF	LF	D	D

Gray box indicated an event where no sample was collected for varying reasons. D– Dry, ST– Stagnant, NA– Not Accessible,
*Day of sampling event **Three days prior to, but not including, day of sampling event
Rainfall data taken from the Bertrand Creek stream flow monitoring station. Measured in inches. NR– Not Recorded

Note: These sites are seasonally dry. No samples were collected on the sample runs ranging from 7/31/18 to 9/5/18