

# Water Quality at BCL

Water Testing Results

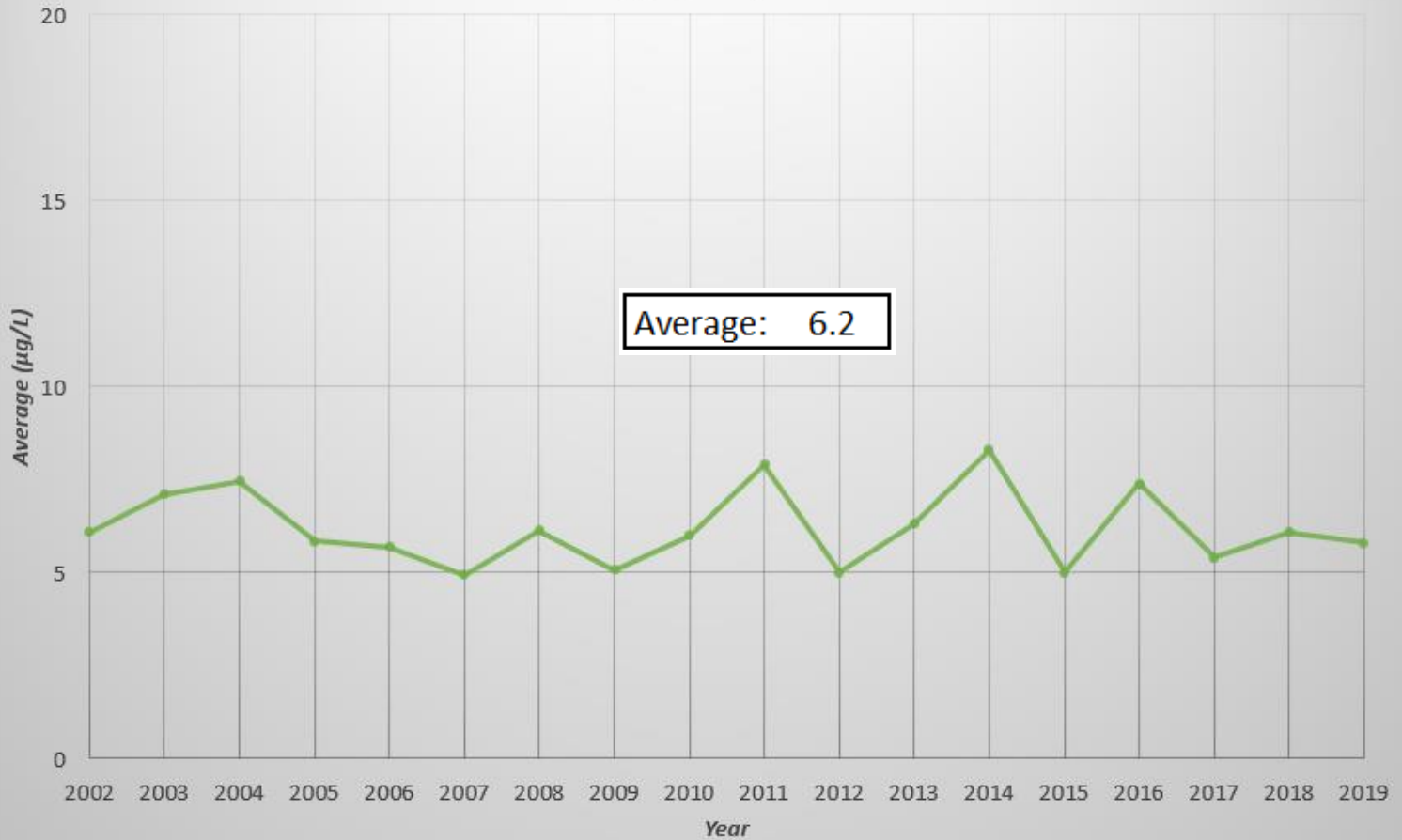
2019



## Total Phosphorus

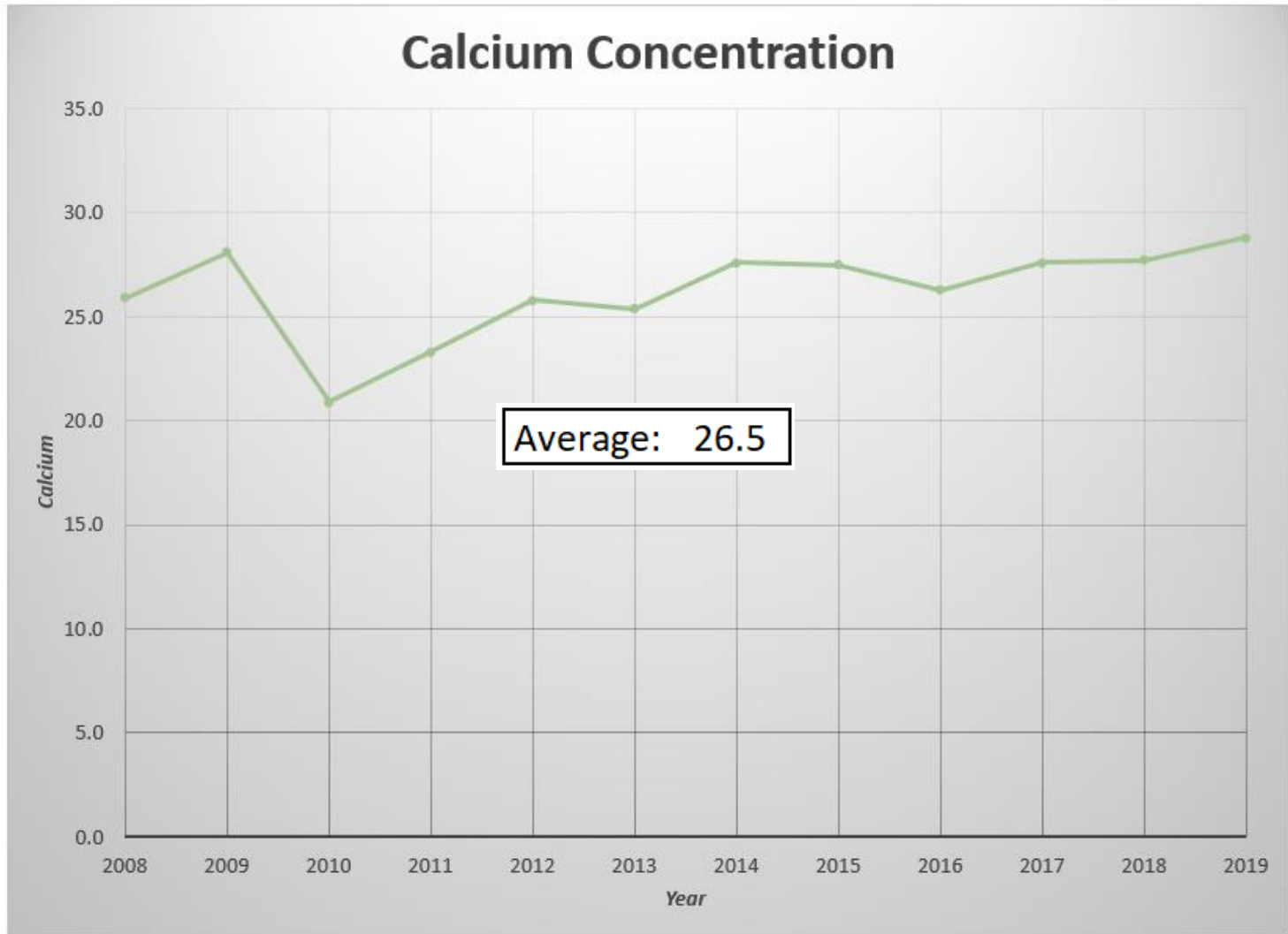
Year	Average ( $\mu\text{g/L}$ )
2002	6.1
2003	7.1
2004	7.47
2005	5.85
2006	5.7
2007	4.95
2008	6.13
2009	5.07
2010	6
2011	7.9
2012	5
2013	6.3
2014	8.3
2015	5
2016	7.4
2017	5.4
2018	6.1
2019	5.8

## Average Total Phosphorus (TP) Concentration ( $\mu\text{g/L}$ )



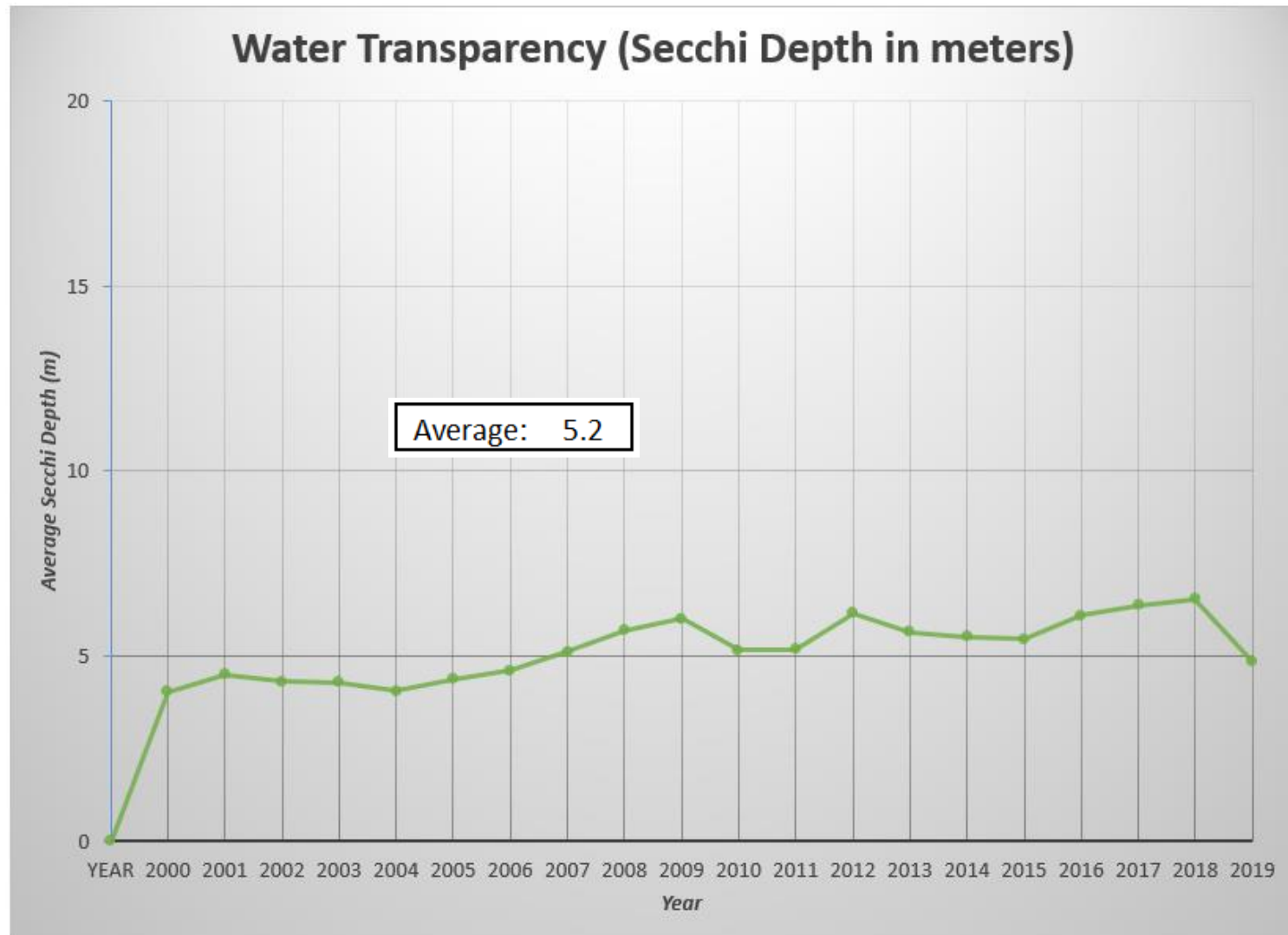
## Calcium Concentration

Year	Calcium (mg/L)
2008	25.9
2009	28.1
2010	20.9
2011	23.3
2012	25.8
2013	25.4
2014	27.6
2015	27.5
2016	26.3
2017	27.6
2018	27.7
2019	28.8



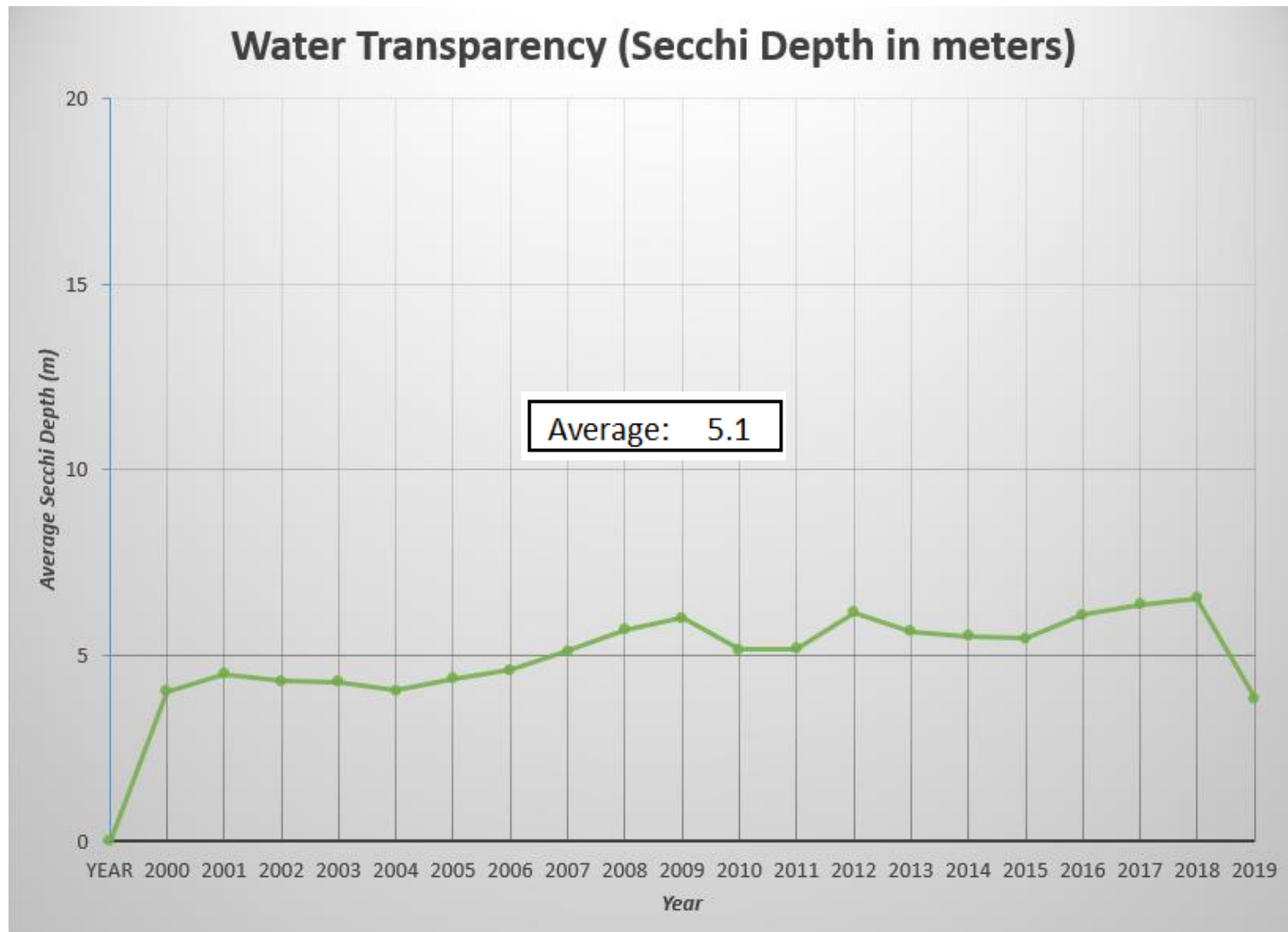
## Water Transparency (Secchi Depth in meters)

Year	Average Depth (m)
2000	4.03
2001	4.51
2002	4.3
2003	4.28
2004	4.06
2005	4.38
2006	4.6
2007	5.11
2008	5.69
2009	6.02
2010	5.16
2011	5.19
2012	6.15
2013	5.65
2014	5.53
2015	5.45
2016	6.09
2017	6.38
2018	6.54
2019	4.85

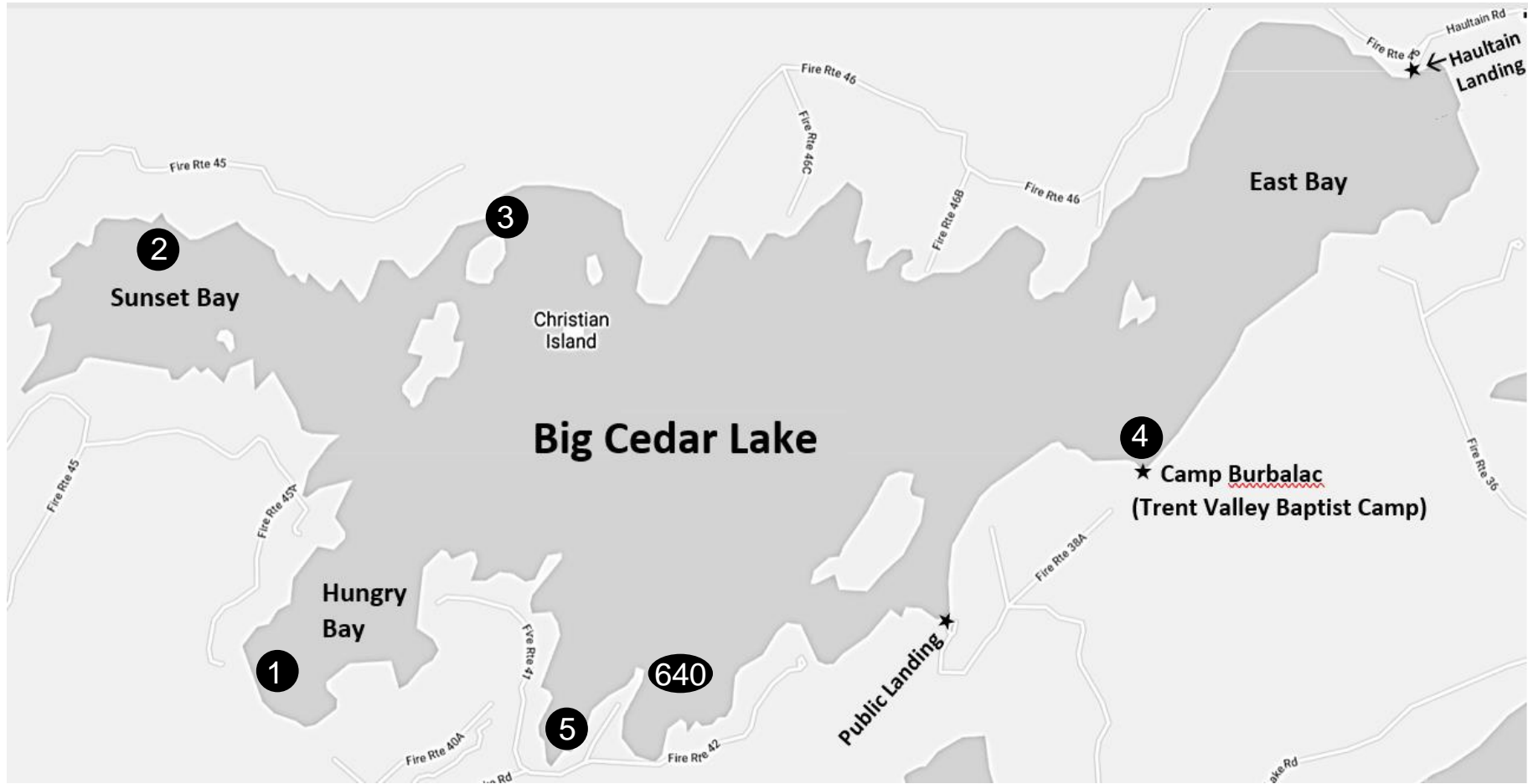


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# e-Coli Testing sites



# eColi Testing – Results (cfu/100ml)

Sample Site	08-Aug-17	03-Jul-18	25-Jul-18	05-Aug-18	10-Aug-18	26-Aug-18	03-Jul-19	26-Jul-19	29-Jul-19	07-Aug-19	12-Aug-19	02-Sep-19
#1 – Base of Hungry Bay (near shore)	2	0	2	0	1		2			1		0
#2 – Inlet in Sunset Bay	0	0	0	0	0		0			0		0
#3 – Inlet behind McGill Island	1	0	7	0	3		1			1		6
## – Near Clam Bay			0	0	0							
## – At eastern end of lake, north shore			1	0	1							
#4 – In front of camp, east end of lake	0	0	2	0	0		0			1		1
#5 – In Bolton’s Bay, south end (near shore)	1	1	2	0	0		0			2		1
640 – Cole's Bay (reported by KLSA)	0	0	0	0	1	1	11	0	2	2	1	1

\* KLSA considers counts over 50 cfu/100mL as “high” for Kawartha Lakes and triggers retesting. Counts 20 and below (with occasional between 20-50) are normal for Kawartha Lakes. The safe swimming level (at which public beaches are posted) is 100 cfu/100mL. Count of zero for drinking water.

# eColi Testing

Going forward:

- KLSA suggest testing after long weekends and/or after rainfall
- They suggest monitoring the same sites year-to-year *“to provide a baseline, identify long-term trends and observe the effect of weather. Notwithstanding this, if a site has extremely low counts over 3-4 years it may be appropriate to dedicate the resources to another site of greater concern.”*
- Sites are to be 1 to 1 ½ metres deep, near shorelines
- For the last 3 years, we have been testing the same 5 sites (in addition to the site that Rudi Harner did in the past) around the lake (gives a nice spread) which includes tests of recommended specific sites (inflows, areas of poor circulation such as quiet bays, areas where waterfowl are numerous, etc.)