

Black Lake Water Quality Data for Selected Sites from RVCA

March 2021 (With Limited Data for 2020, due to Covid-19)



Notes:**The Data Source:**

This file contains graphs from Rideau Valley Conservation Authority (RVCA) data on water quality in Black Lake. The data is collected every year (usually twice), although not all sites are sampled every year. Some data goes back to 2002.

The data shown here are for the longest sampled sites, although some sites have year gaps. The actual observations are the markers on the charts.

The Metrics:

The data collected covers E. Coli levels and nutrient levels.

E. Coli is measured by cfa/mL (coliform counts per milliliter).

Nitrogen is measured by a Total Kjeldahl Nitrogen count, in ug/L (micrograms per litre) and total phosphorus in the same units of mg/L.

Water Quality Standards:

The water quality 'standard' is 100 for E. Coli, 500 for nitrogen and 20 for phosphorus. For phosphorus, 10 or less is pristine.

Black Lake Results:

We tend to think that Black Lake has high water quality. Black Lake quality is high from the E. Coli perspective.

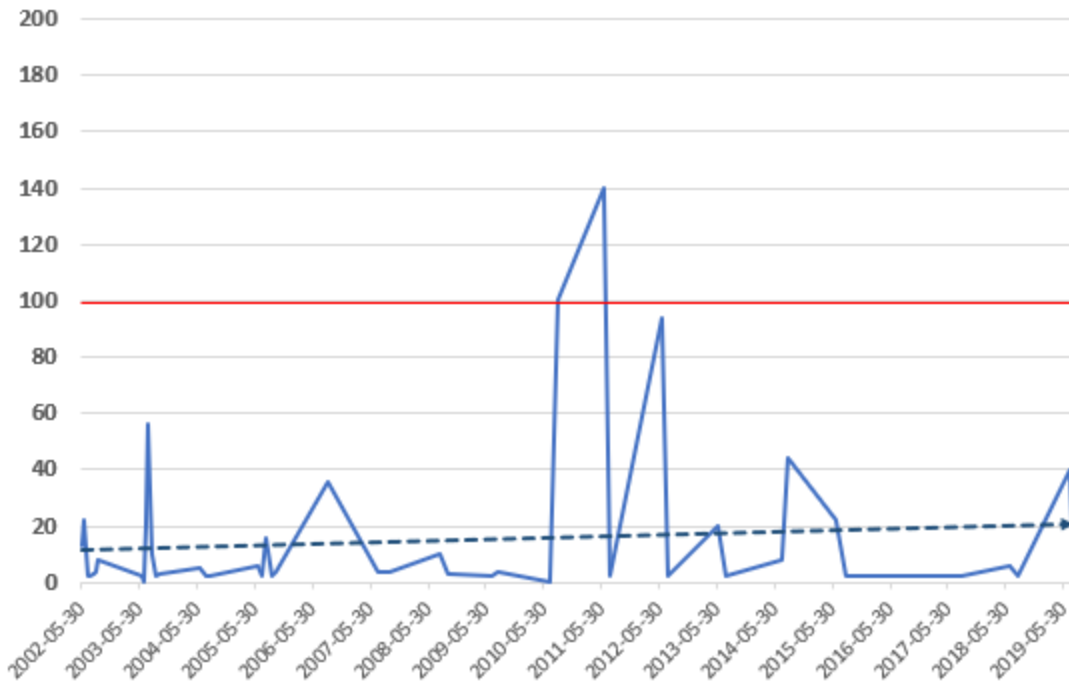
Black Lake is *not so good* from the nutrient perspective. The nitrogen and phosphorus levels are pretty much below the 'standard', for the most part but not always (there are always variations with weather and outflows from Black Creek and other creeks flowing into the lake).

RVCA rates the lake as fair in water quality.

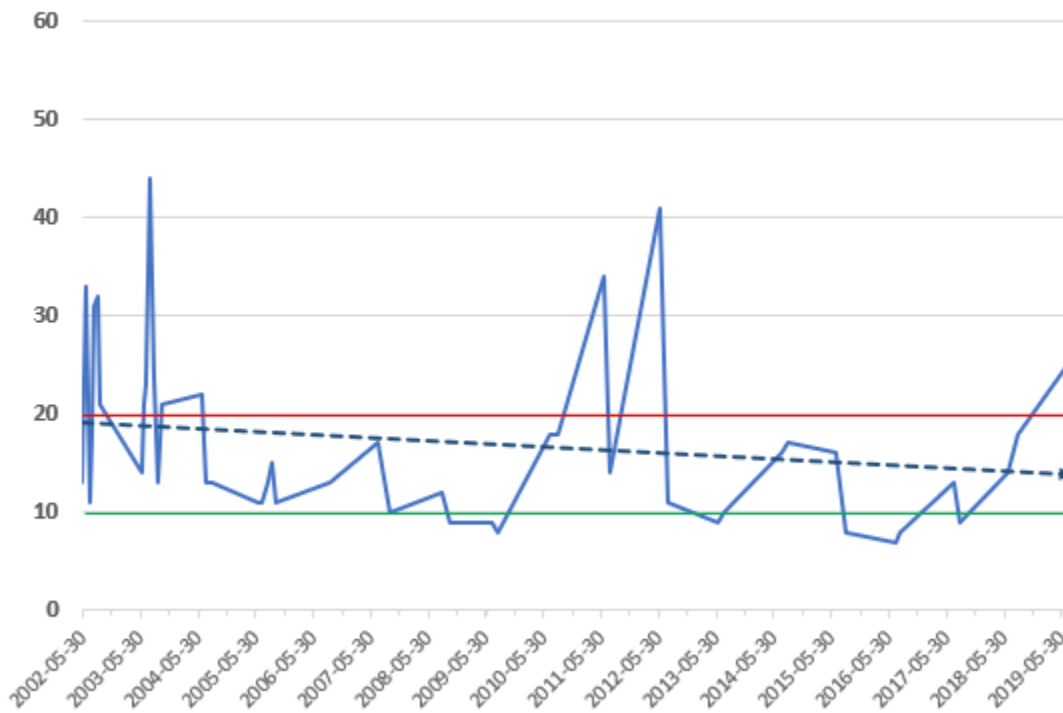
The Consequences:

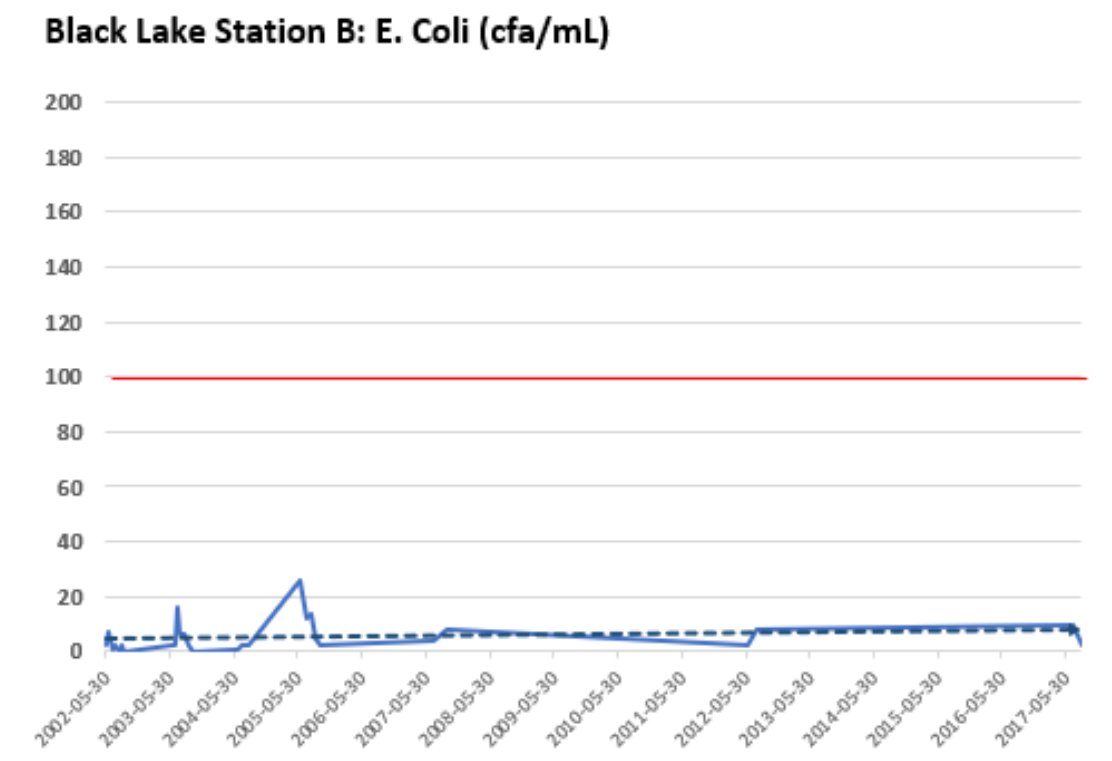
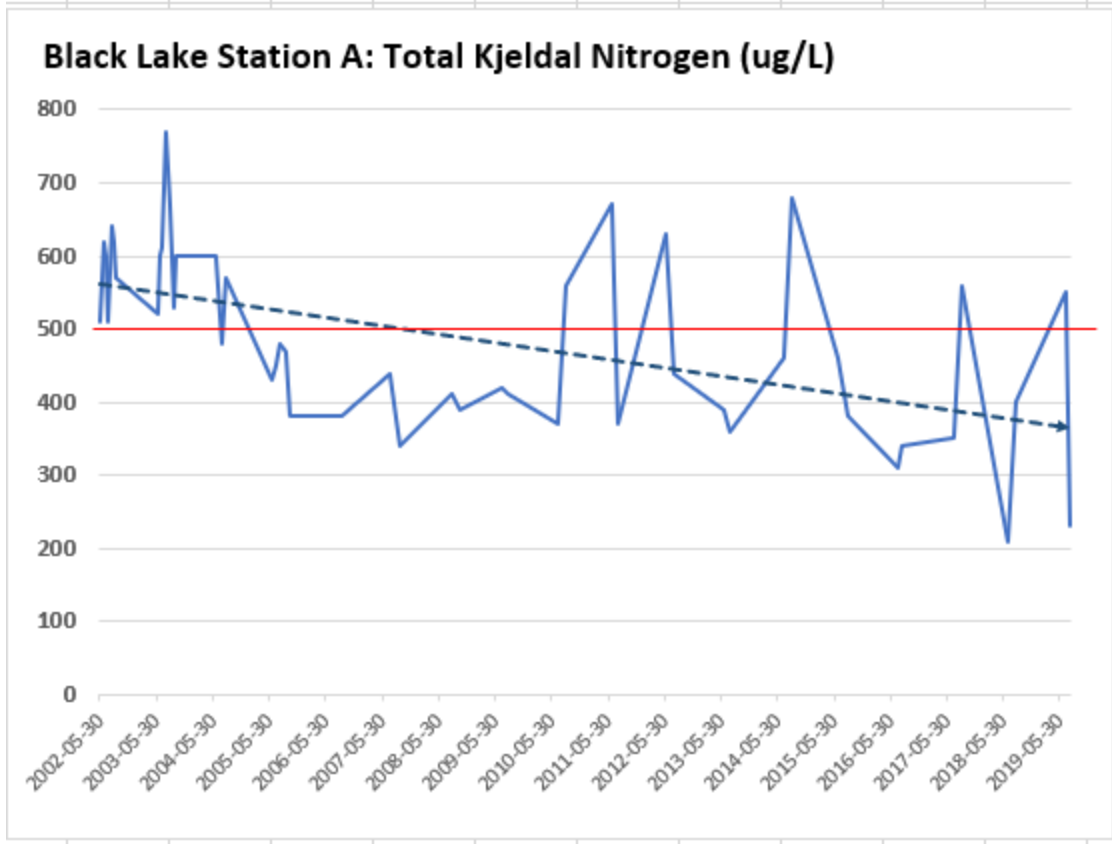
Black Lake's nutrient levels are such that they do help support weed and algae growth, although to a lesser extent than the risks if the water quality 'standard' is exceeded. The 'headroom' for any deterioration through greater development or deteriorating septic systems is limited.

Black Lake Station A: E. Coli (cfa/mL)

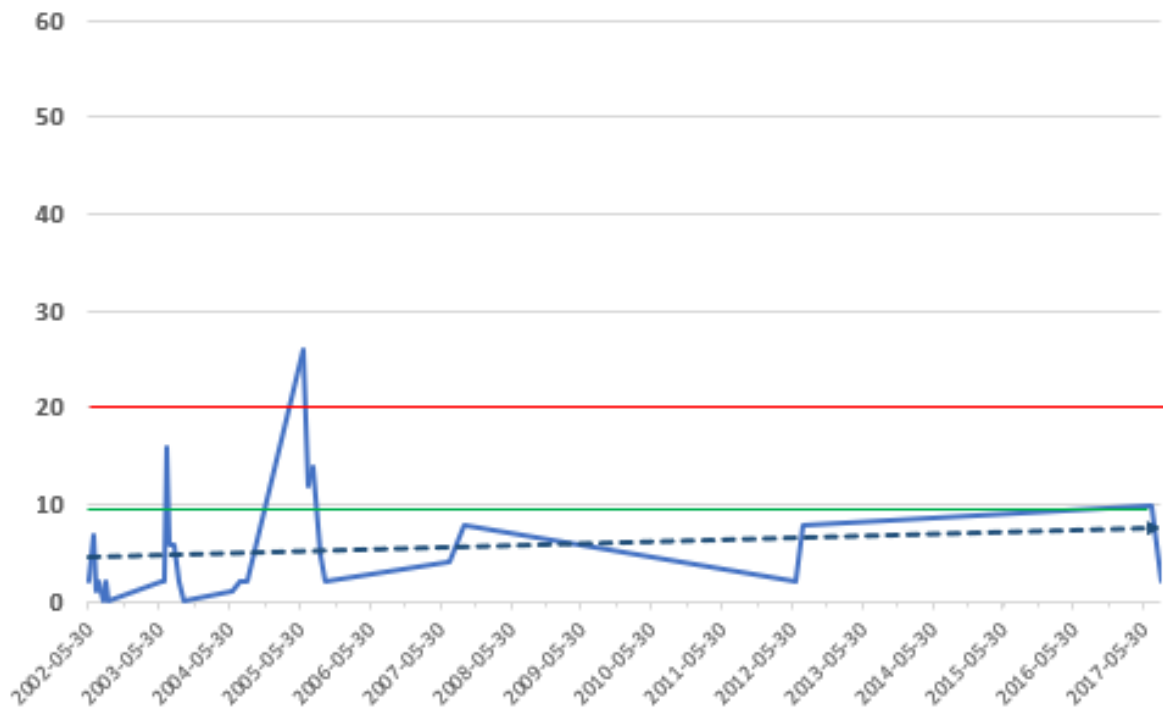


Black Lake Station A: Total Phosphorus (mg/L)

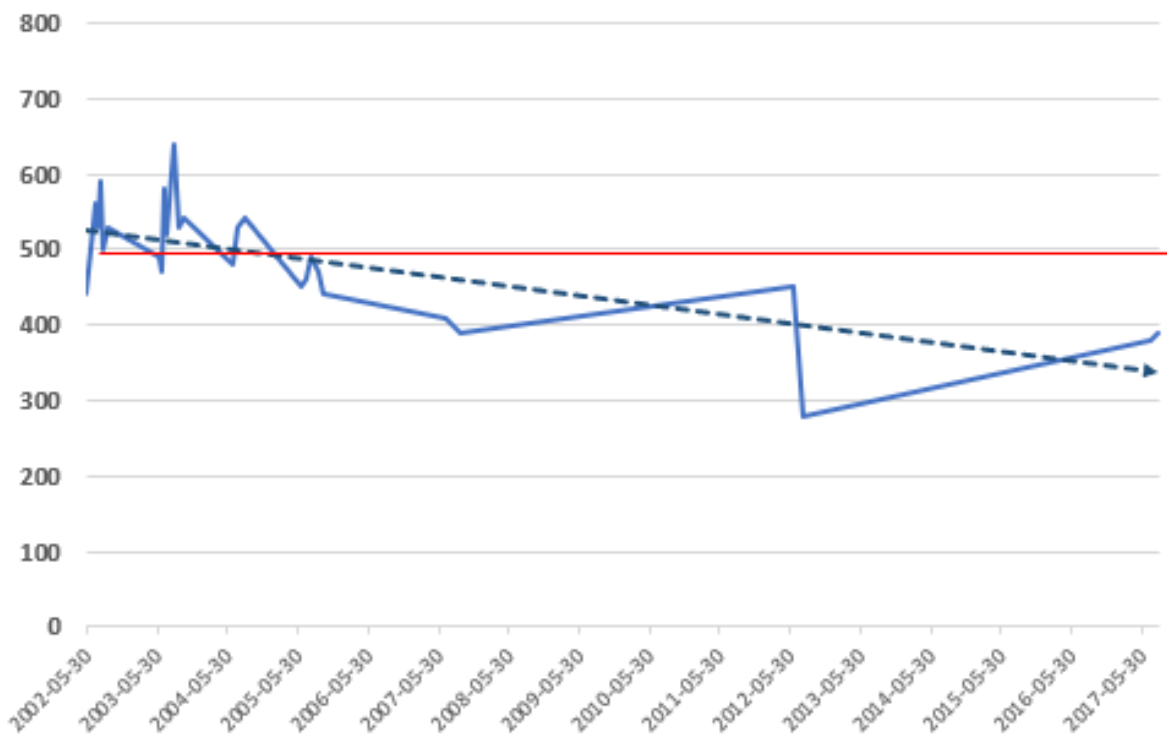




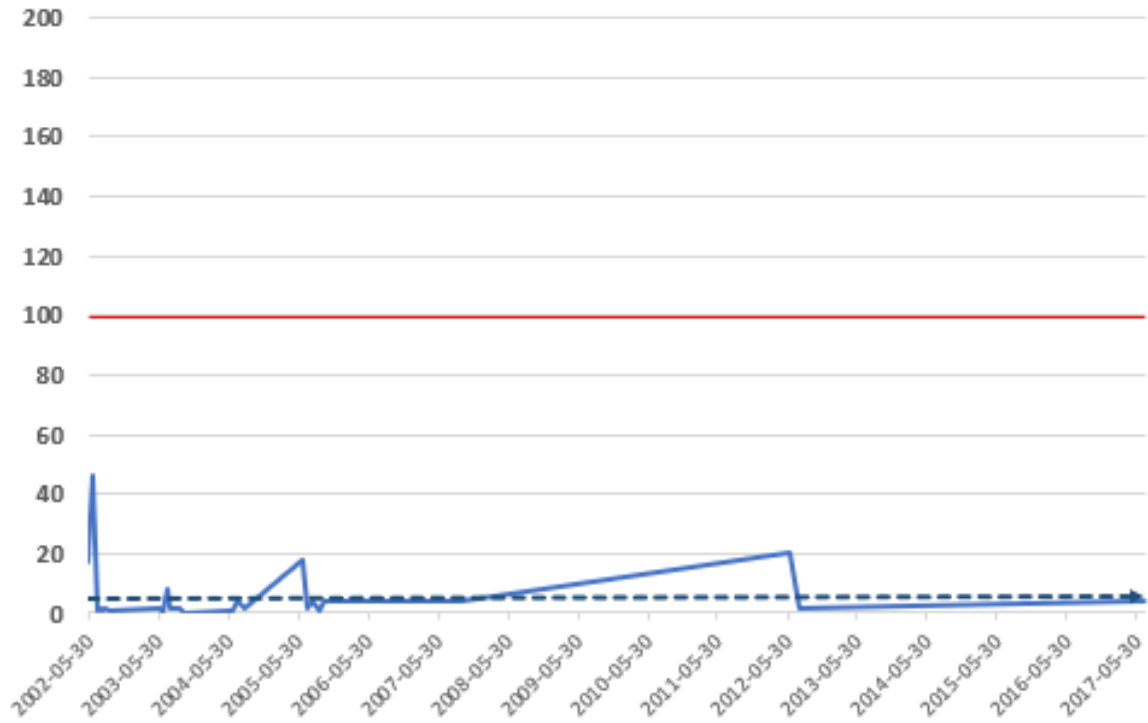
Black Lake Station B: Total Phosphorus (mg/L)



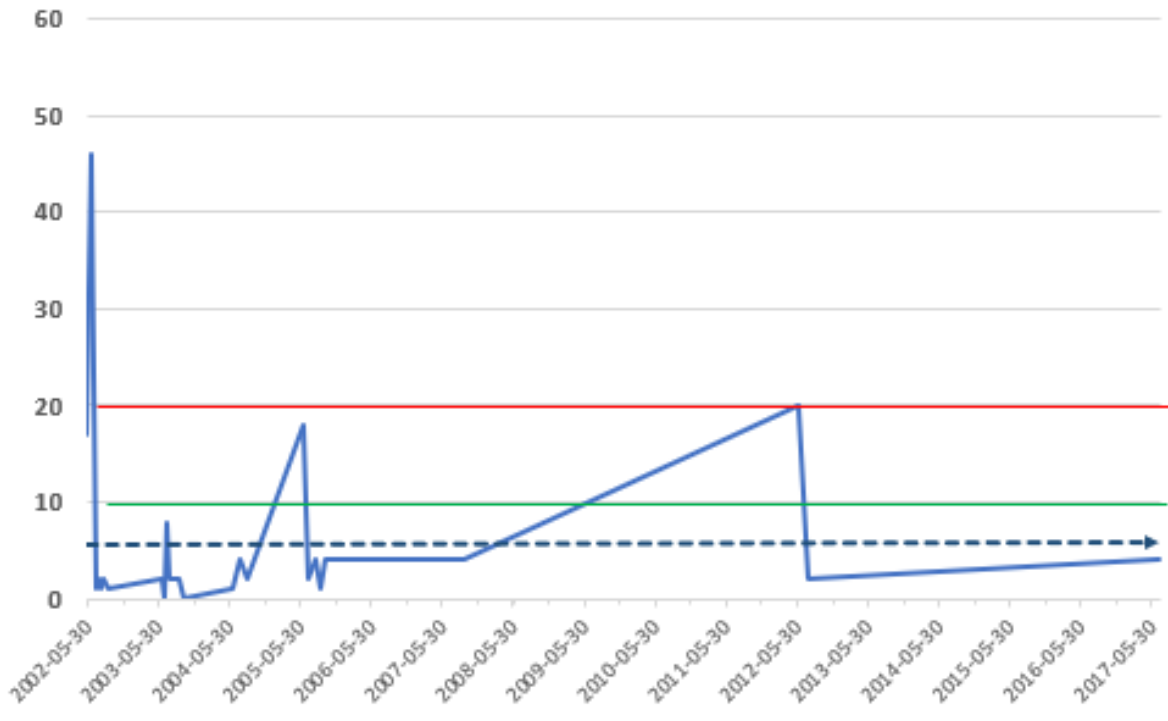
Black Lake Station B: Total Kjeldal Nitrogen (ug/L)



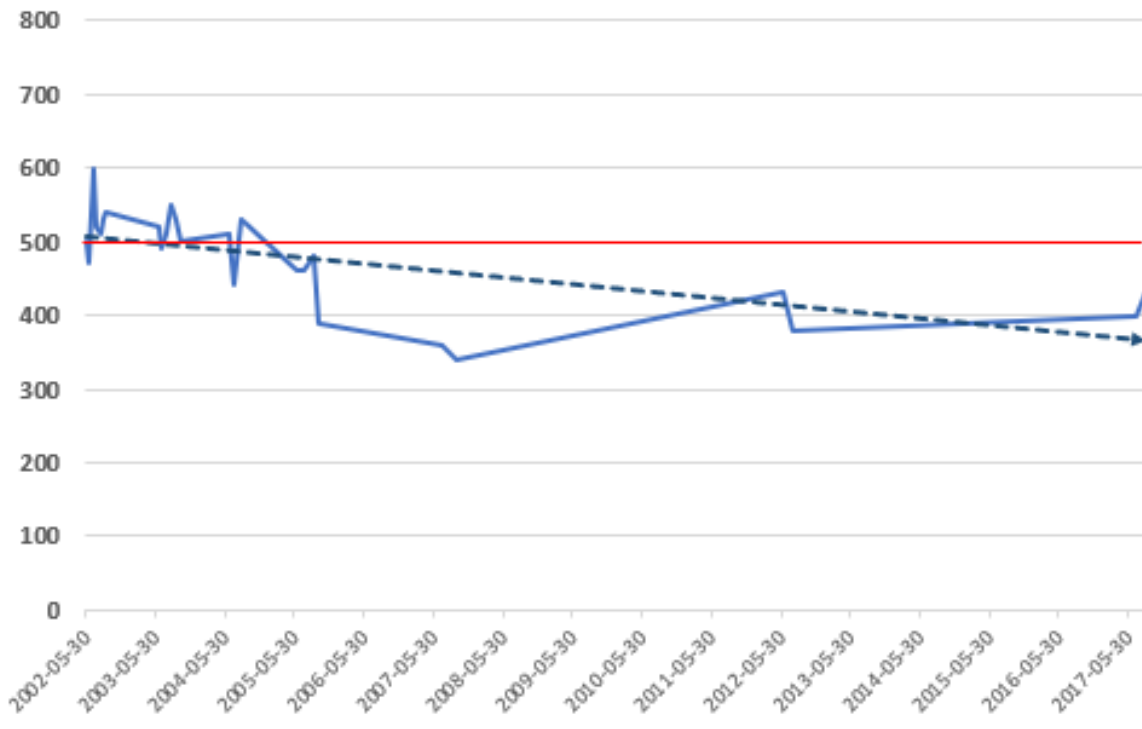
Black Lake Station C: E. Coli (cfa/mL)



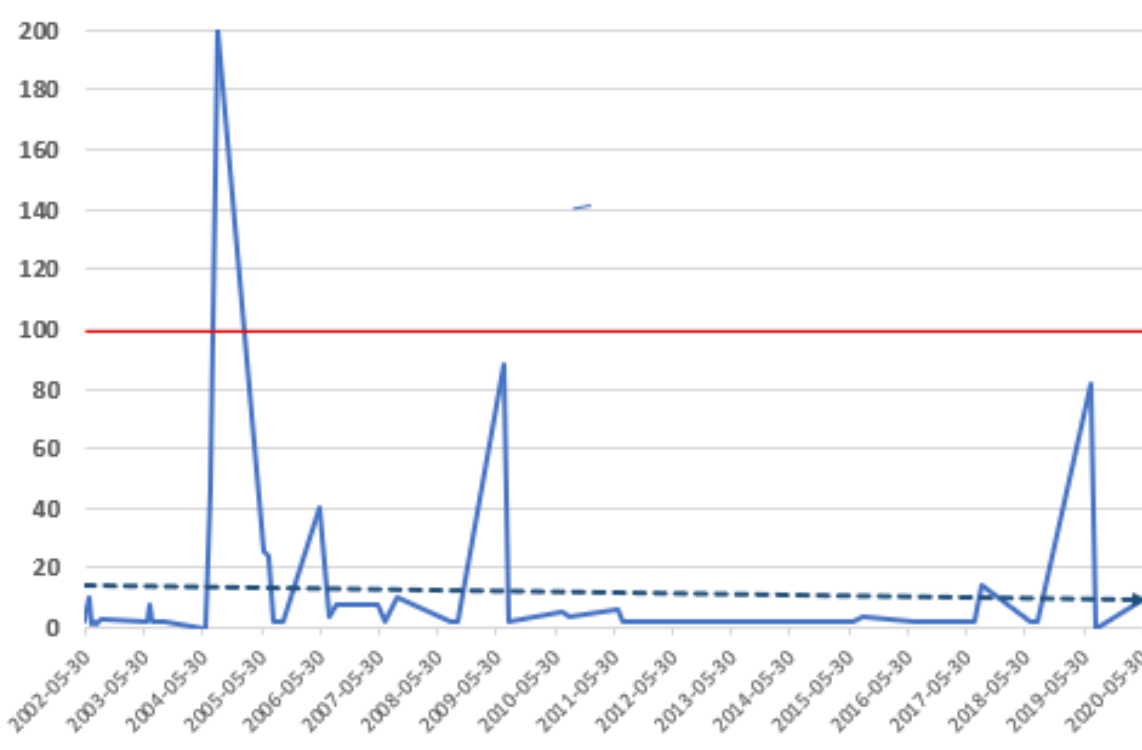
Black Lake Station C: Total Phosphorus (mg/L)



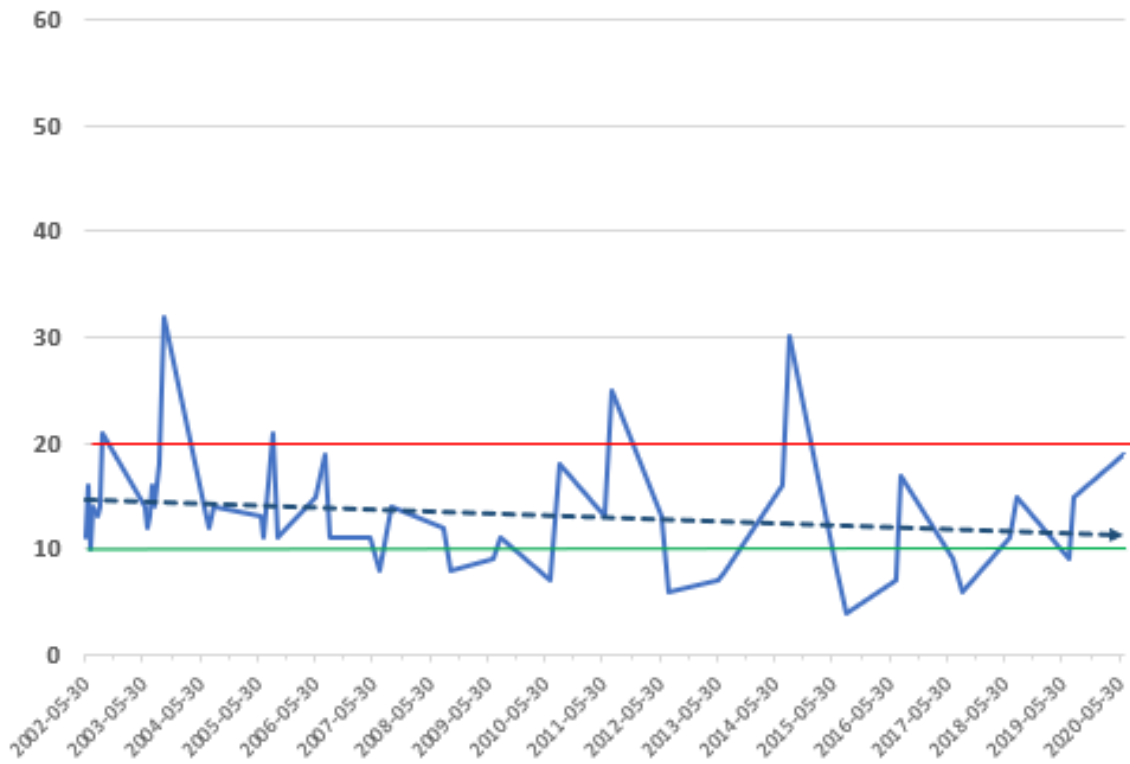
Black Lake Station C: Total Kjeldal Nitrogen (ug/L)



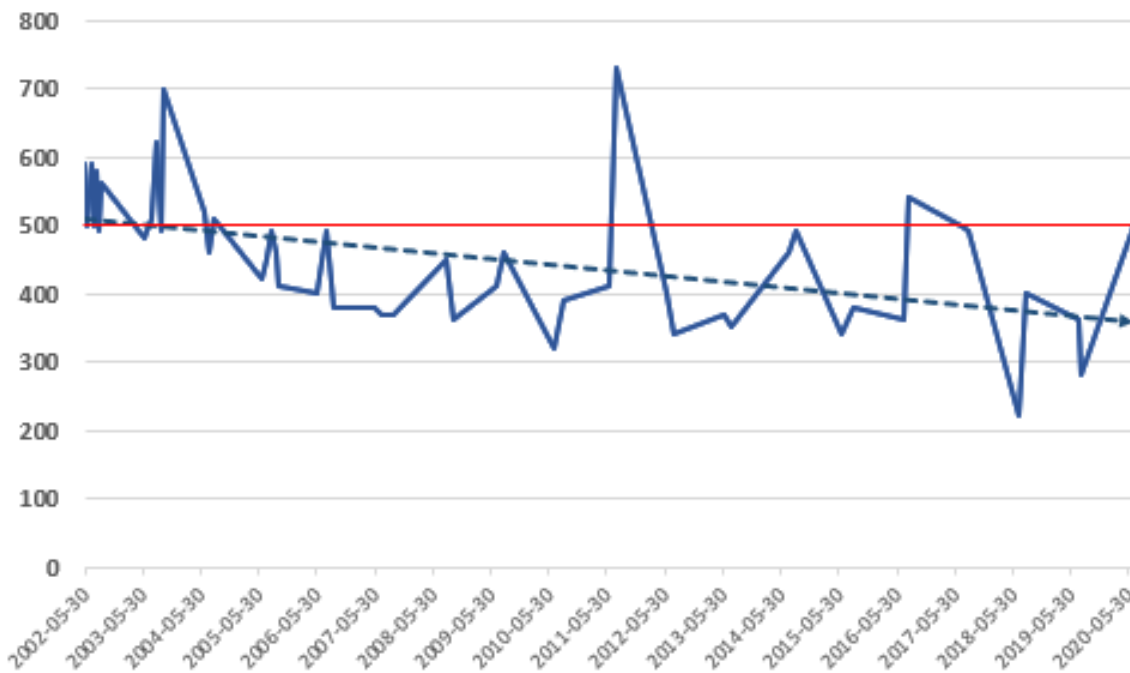
Black Lake Station F: E. Coli (cfa/mL)



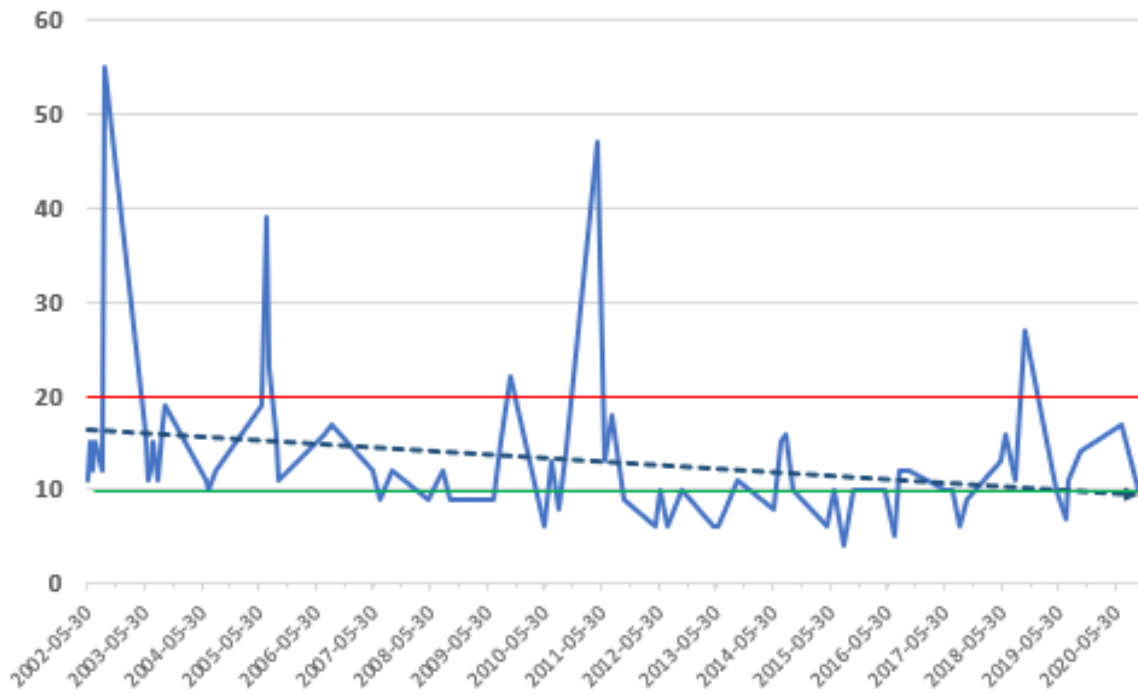
Black Lake Station F: Total Phosphorus (mg/L)



Black Lake Station F: Total Kjeldal Nitrogen (ug/L)



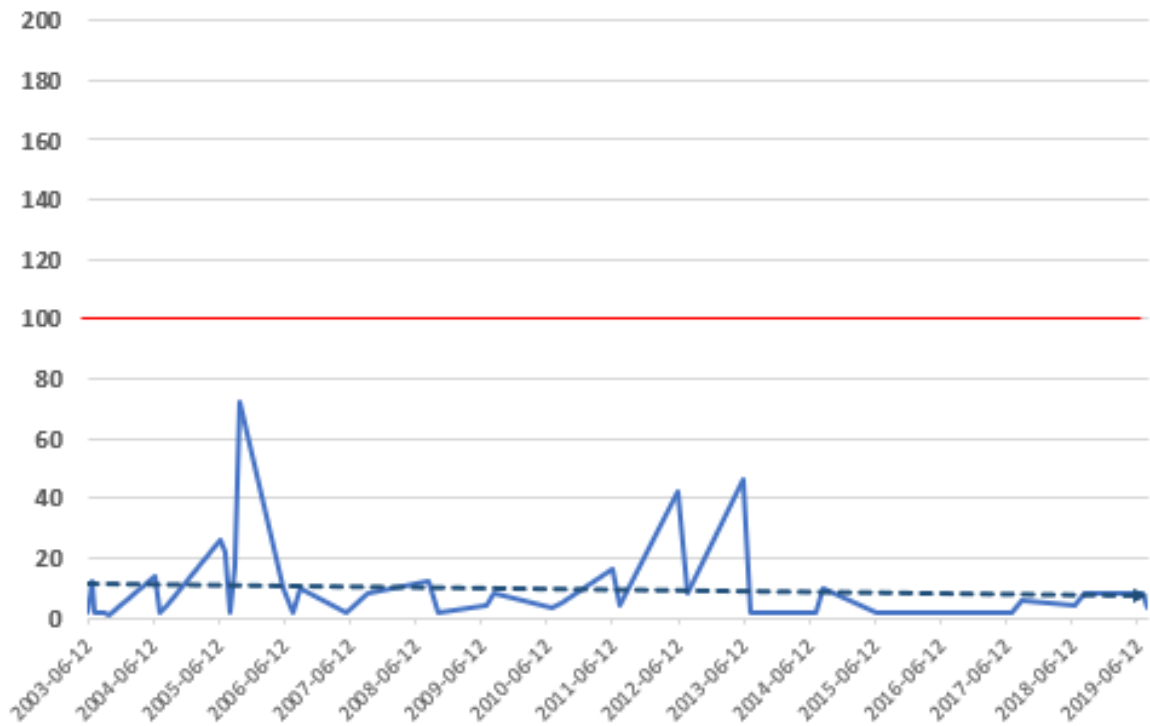
Black Lake Station DP1: Total Phosphorus (mg/L)



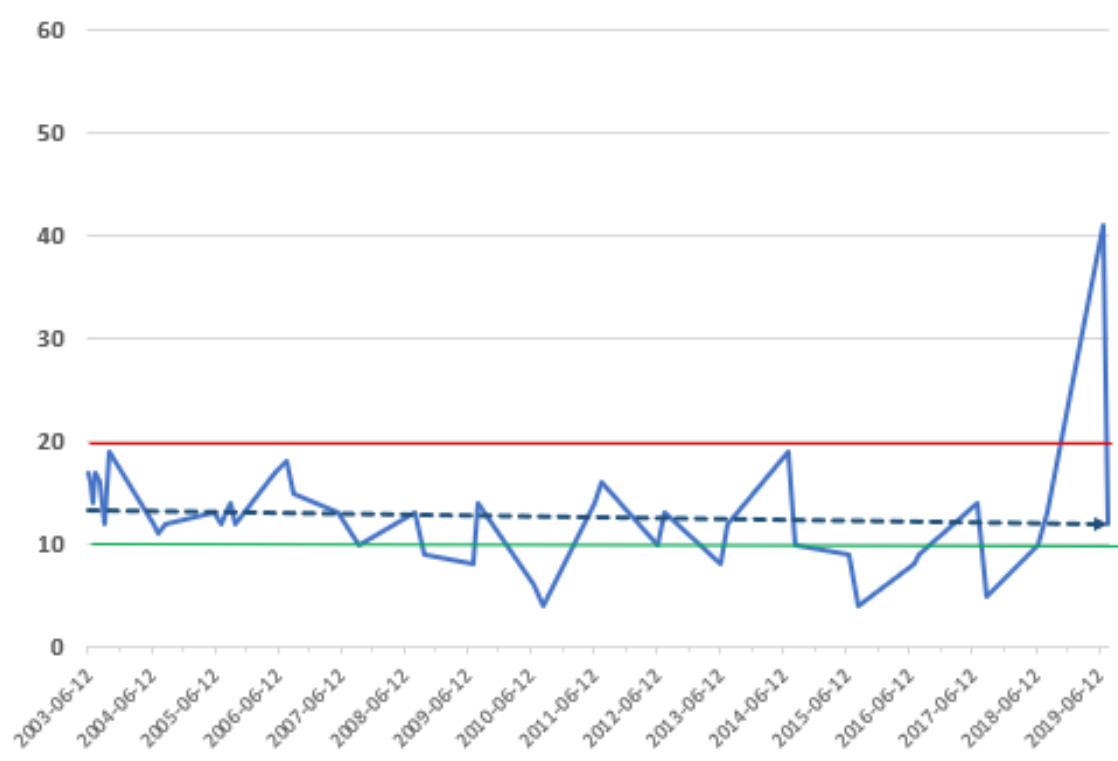
Black Lake Station DP1: Total Kjeldal Nitrogen (ug/L)



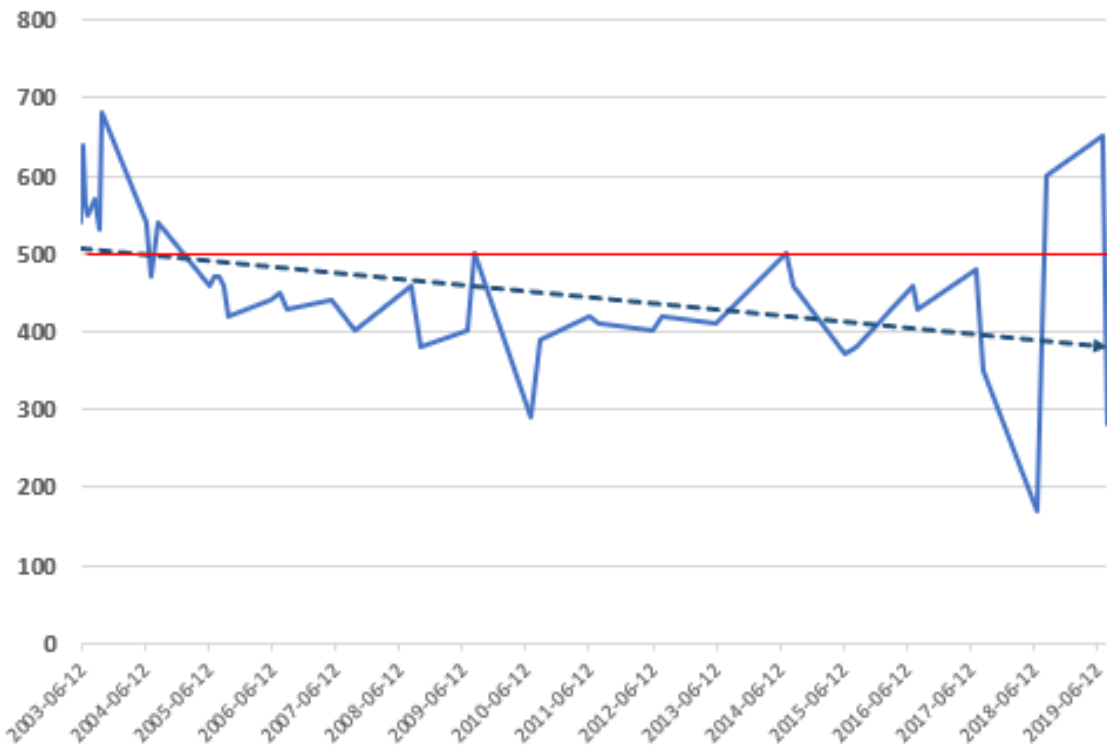
Black Lake Station K: E. Coli (cfa/mL)



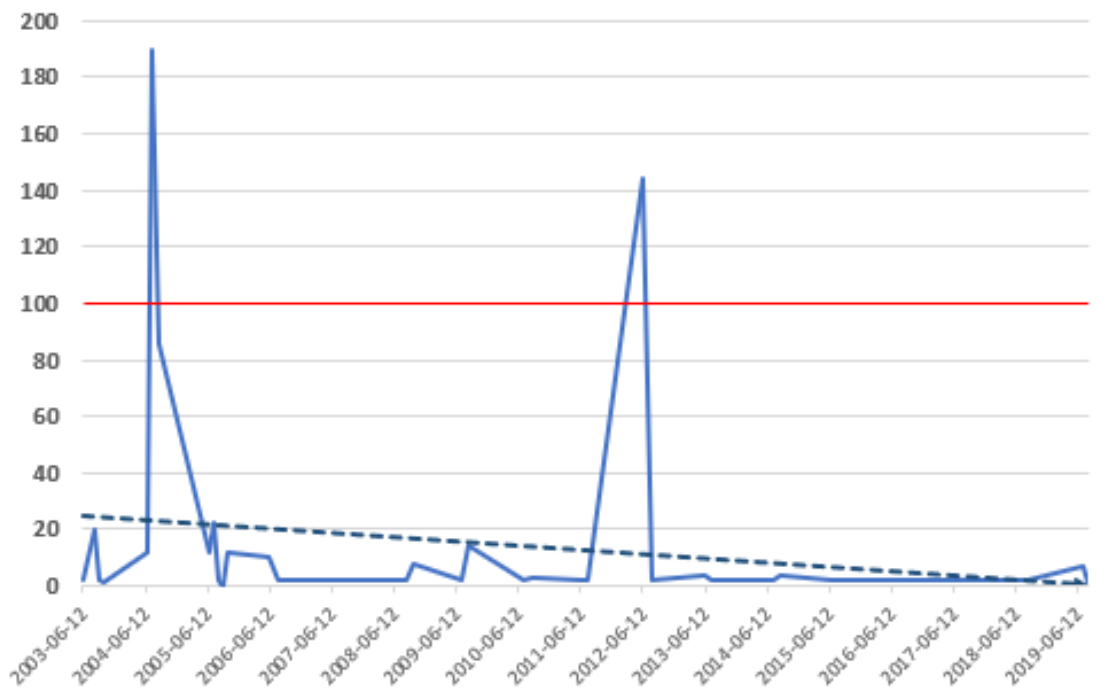
Black Lake Station K: Total Phosphorus (mg/L)



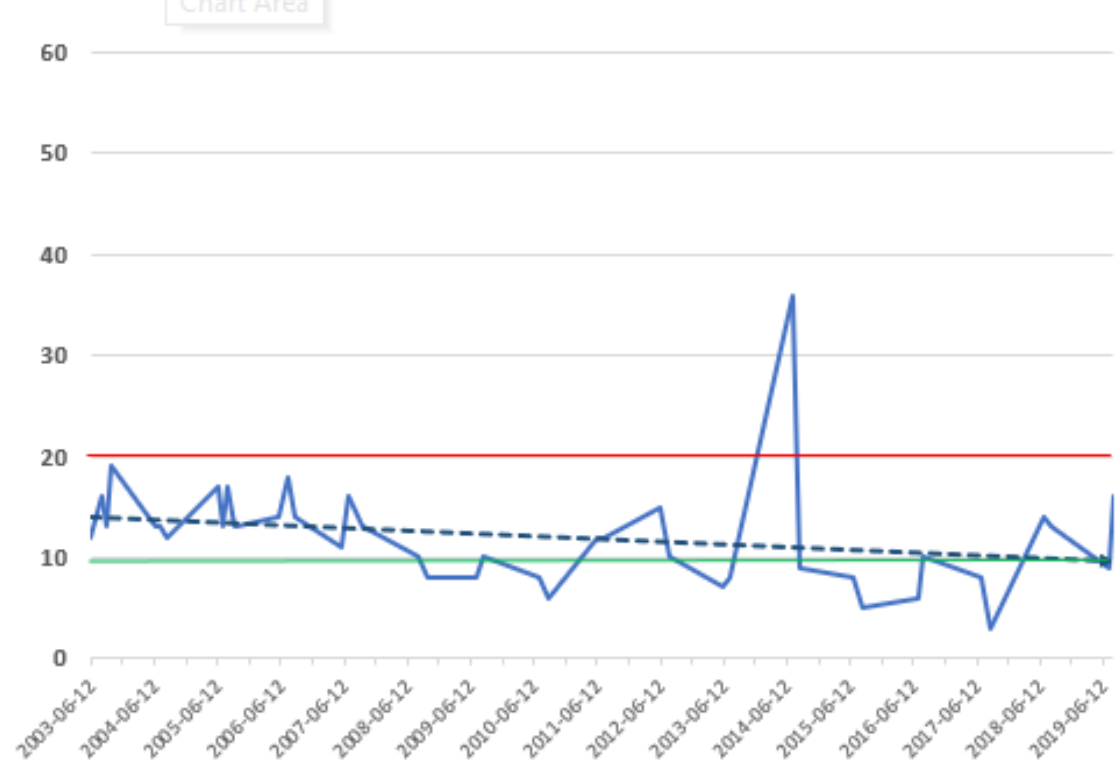
Black Lake Station K: Total Kjeldal Nitrogen (ug/L)



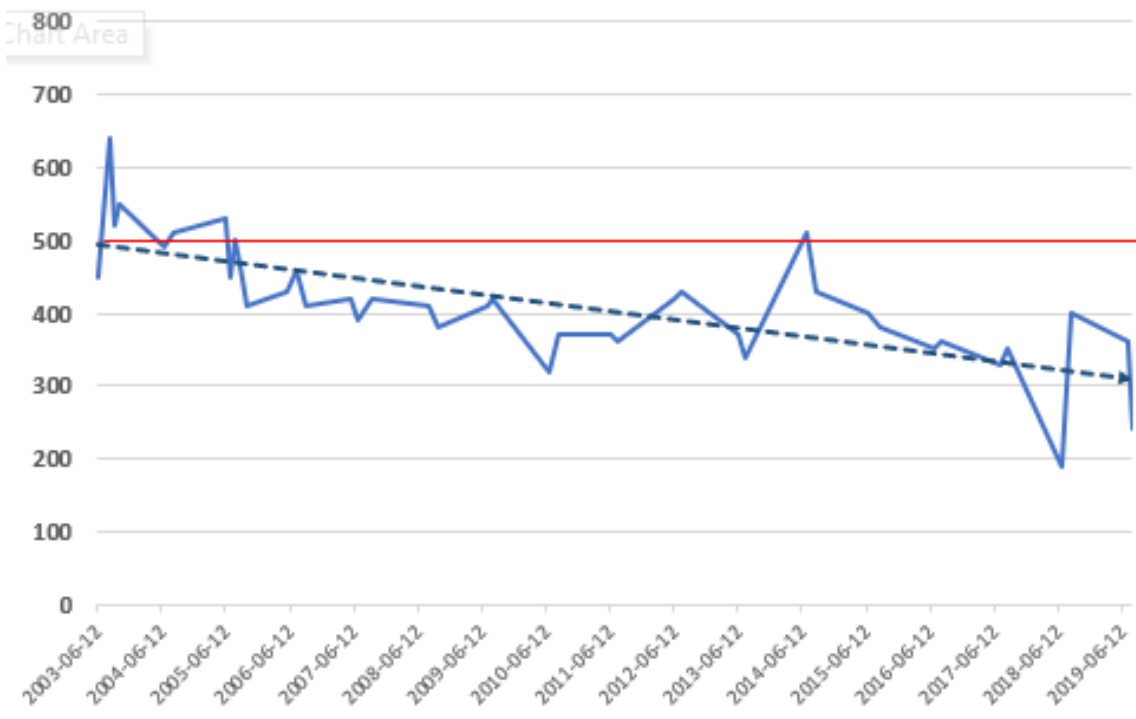
Black Lake Station L: E. Coli (cfa/mL)



Black Lake Station L: Total Phosphorus (mg/L)



Black Lake Station L: Total Kjeldal Nitrogen (ug/L)



Black Lake Station L: Water Clarity (Secchi Disk in Metres)

