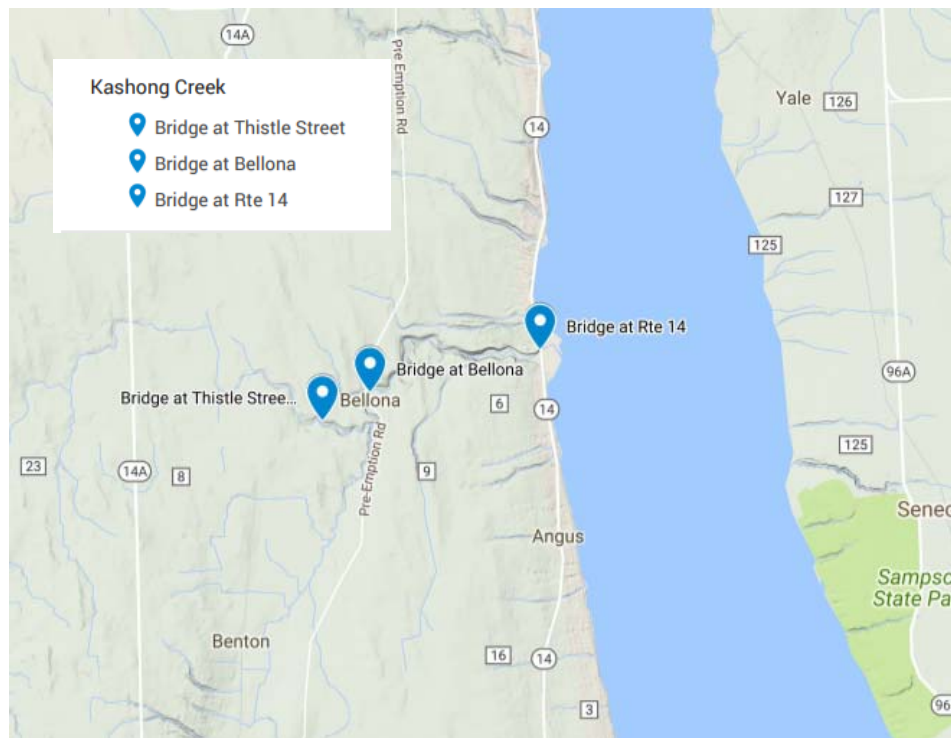


Description of Kashong Creek

Kashong Creek flows into the west shore of Seneca Lake about seven miles south of Geneva. It has a relatively large watershed area that makes up approximately 6% of the total Seneca Lake watershed area. Its watershed is roughly 83% agriculture and 15% forested land, and includes only very minimal residential or urban areas.

SPWA Water Sampling Locations

SLPWA, with assistance from its partner CSI, sampled and tested Kashong Creek at locations shown on the map below. SLPWA's monitoring of Kashong Creek began in the fall of 2016 so only a few results are available. Sampling is conducted at three locations, from upstream sites in Bellona to the Route 14 bridge near the mouth of Seneca Lake. This stream is highly variable in its normal annual flow cycle, with very high flows in the spring to a completely dry streambed in late summer.





Waterbody Classification and Contamination Sources

Kashong Creek is designated as a DEC Class C stream. Agriculture represents the majority of land use for this watershed, which can be helpful in learning the specific issue with runoff from farm fields.

Water Quality Summary

SLPWA conducts water quality testing at three creek locations, sampling approximately five times each year, spring through fall. Tests include bacteria (*E. Coli* and total coliform), nutrients (phosphorus and nitrogen), dissolved oxygen, and total suspended solids--a measure of water clarity. These tests provide information on the water quality status of the creek and how Seneca Lake might be affected. The table below provides parameters of particular concern and the compliance with established guidance or DEC limits.

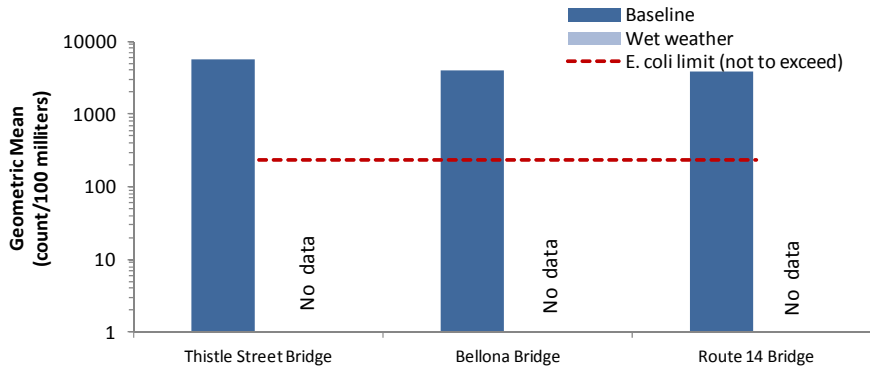
Parameter tested	Why is it measured?	% of water samples meeting guidelines in Kashong Creek	Is there a potential concern for Seneca Lake water quality?
Bacteria - <i>E. Coli</i>	To evaluate bacterial water quality impact of septic systems, wastewater treatment plants, and animal waste entering the creek	 <p>100% of samples fail to meet limits</p> <p>0% of samples meet limits</p>	Yes. While very few samples have been collected, all of the bacteria samples collected fail to meet the swimming limit.
Total Phosphorus	To evaluate the impact of agricultural and residential phosphorus runoff that can cause excessive algae growth.	 <p>100% of samples fail to meet limits</p> <p>0% of samples meet limits</p>	Yes. All of the samples collected to date have failed to meet the phosphorus guideline.
Dissolved Oxygen (mg/L)	To evaluate the impact of erosion, agricultural or residential runoff or algal growth that can increase oxygen demand, removing oxygen needed by fish and other wildlife.	No data for 2016	

Highlights of Monitoring Results

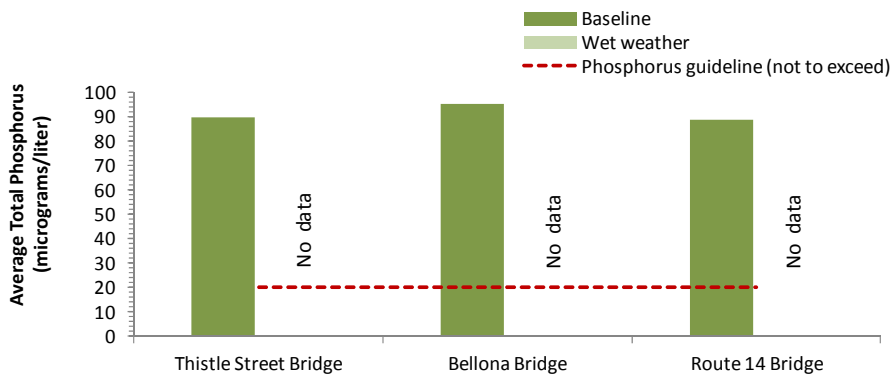
- Elevated results for phosphorus and bacteria are concerning, suggesting that creek discharges are potentially affecting Seneca Lake.

Kashong Creek Water Quality by Location, 2016

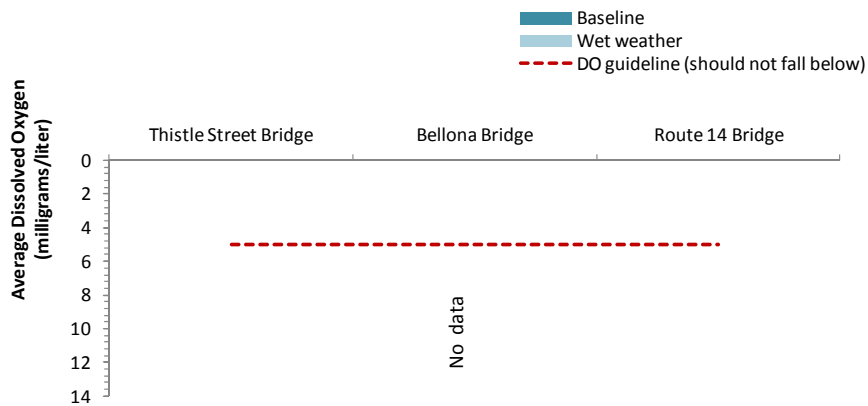
E. COLI BACTERIA (note log scale)



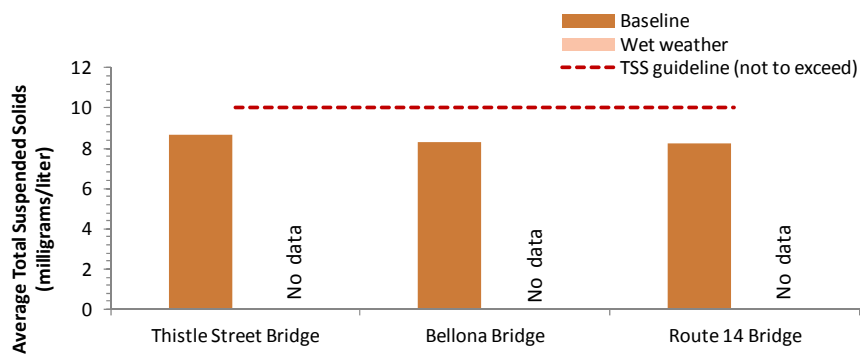
PHOSPHORUS



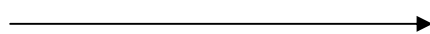
DISSOLVED OXYGEN



TOTAL SUSPENDED SOLIDS



Upstream



Downstream (near lake confluence)