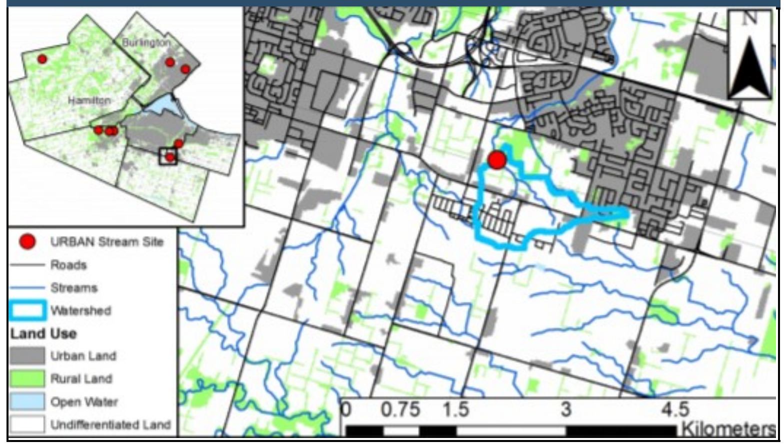
Report Card: **Eramosa Karst Conservation Area**

Site Information

Stream	Potruff Spring
Land Management	Hamilton Conservation Authority (HCA)
URBAN Monitoring	Sampled in: May 2010-2012, 2017
Urban Land Use	14.7% in watershed
Road Density	77.4 m/ha in watershed
Ecological Importance	Area of natural and scientific interest; upcoming urban development nearby

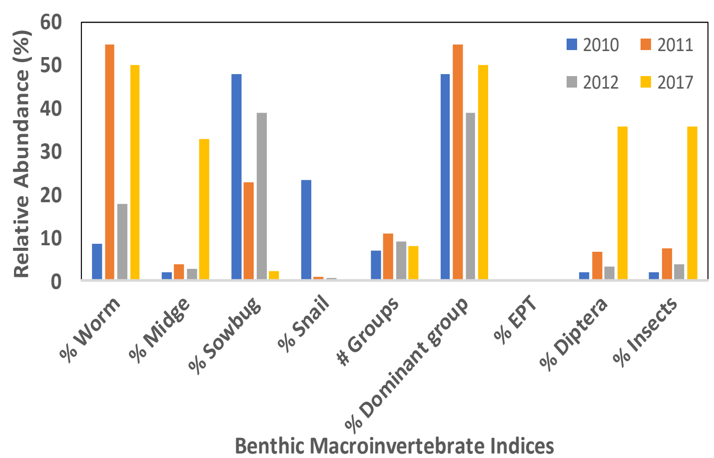
Site Map



Results

Stream Benthic Invertebrates

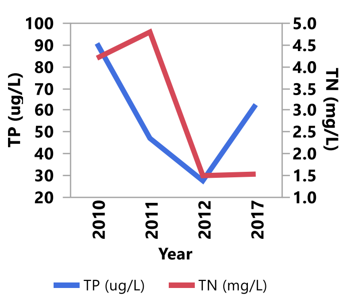
Indicator	Score 2010	Score 2011	Score 2012	Score 2017
Total Abundance	293	259	334	1400
Species Richness	7	11	9	8
% EPT	0	0	0	0
% Worms & Midges	10.6	58.7	20.4	82.86
HBI	7.71	7.68	7.2	7.33

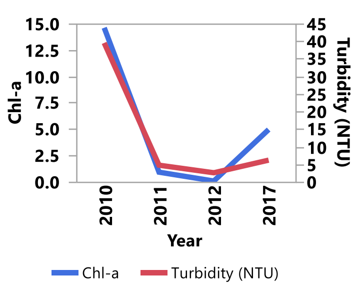


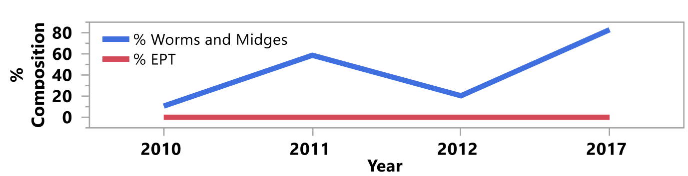
Water Quality

Parameter	Score 2010	Score 2011	Score 2012	Score 2017
Total Phosphorus (ug/L)	90.74	47.16	27.67	62.62
Total Nitrogen (mg/L)	4.2	4.8	1.5	1.54
Conductivity (mS/cm^3)	1001	701	622	780

Parameter	Score 2010	Score 2011	Score 2012	Score 2017
Chlorophyll-α (ug/L)	14.66	0.97	0.13	2.67
Turbidity (NTU)	39.67	4.89	2.74	6.33
pH	7.34	7.11	6.99	7.34







Site Summary

- Nitrogen and phosphorus levels are high and unstable; no clear trends since 2010
- The uptick in phosphorus inputs in 2017 contributed to higher chlorophyll and turbidity values
- There are still no pollution intolerant mayflies, caddisflies or stoneflies (EPT) in this stream
- Water quality conditioned appeared to be improving for a time but more recent data indicates a lack of clear trends; the dominance of pollution tolerant taxa indicate an impaired system

Overall Status 2017: Impaired