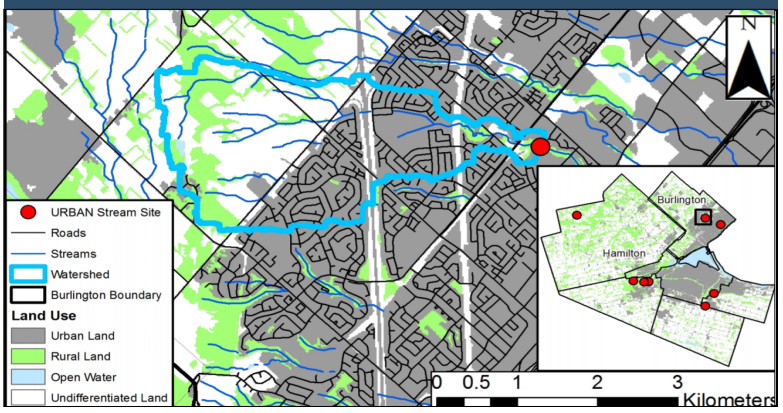
Report Card: Palmer Park

Site Information

Stream	Tuck Creek, Burlington
Land Management	Halton Region Conservation Authority (HRCA)
URBAN Monitoring	Sampled May 2012, 2013, 2014, 2017
Urban Land Use	**31.8%** in watershed
Road Density	**54.1 m/ha** in watershed
Ecological Importance	Urban stream in public park

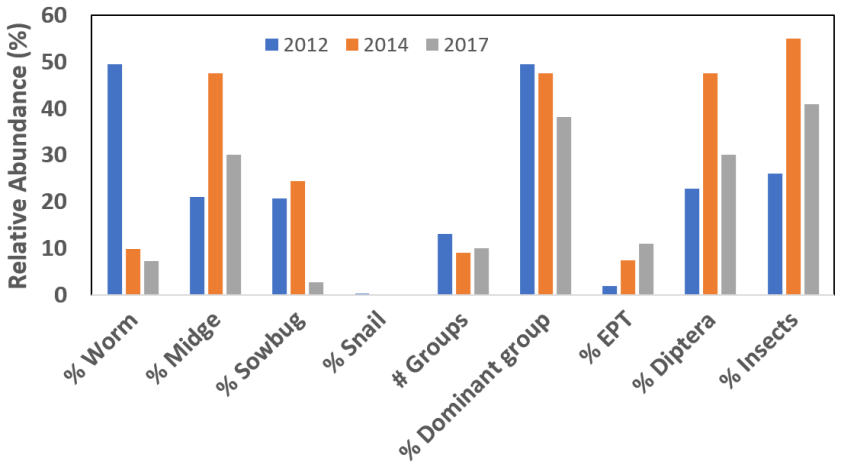
Site Map



Results

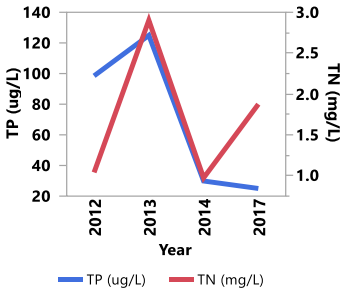
Stream Benthic Invertebrates

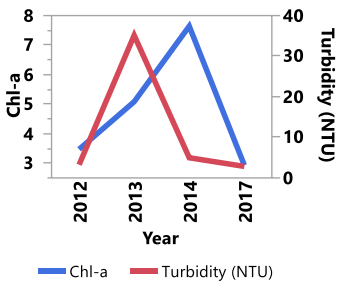
Indicator	Score		
	2012	2014	2017
Total Abundance	311	82	550
Species Richness	13	9	10
% EPT	1.93	7.32	10.909
% Worms & Midges	70.4	57.32	37.27
HBI	7.5	7.16	6.4

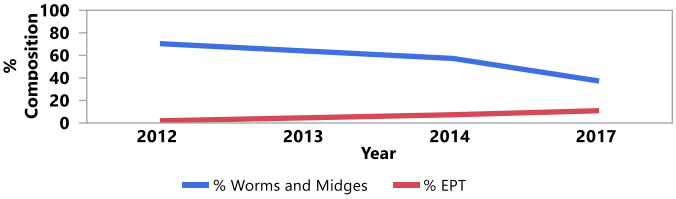


Water Quality

Parameter	Score				Parameter	Score			
	2012	2013	2014	2017		2012	2013	2014	2017
Total Phosphorus (ug/L)	98.5	124.97	29.87	24.99	**Chlorophyll-α (ug/L)**	3.47	5.08	7.64	2.93
Total Nitrogen (mg/L)	1.04	2.90	0.973	1.88	**Turbidity (NTU)**	3.25	35.13	4.97	2.84
Conductivity (mS/cm^3)	499	662	920	1035	**pH**	7.74	7.1	—	7.9







Site Summary

- Nitrogen and phosphorus levels are quite high; this is largely a reflection of the highly urbanized surroundings
- Chlorophyll values remain relatively high as well; this corresponds with the high phosphorus loading in the stream
- The stream is dominated by pollution-tolerant worms and midges, though they appear to be declining as EPT numbers (pollution-intolerant mayflies, caddisflies and stoneflies) rise
- Conductivity has been rising, reflecting greater inputs of suspended solids and road salts
- Water quality and benthic community remain degraded

Overall Status 2017: Impaired