

# Asylum Lake Monitoring Data (7-15-19 Update)

Date	Total Phosphorus - TP (ppb)	Soluble Reactive Phosphorus - SRP (ppb)	Total Suspended Solids - TSS (ppm)	Secchi Depth (ft)	Turbidity (NTU)
7/26/76 <sup>a</sup>	"Non-detect"	--	--	11.5 - 16.5	--
8/9/06 <sup>b</sup>	13 - 22	2 - 3	<4	12.5	
6/21/19 <sup>c</sup>	30 - 110	--	7 - 20	2.8 - 3.8	23 - 35
7/2/19 <sup>c</sup>	30 - 80		5 - 24	--	
7/9/19 <sup>c</sup>	<10 - 50	<i>pending</i>	<3 - 16	10.5 - 11	23 - 24.5

↑ Historic  
↓ Recent

<sup>a</sup> Engemann, E. (circa) 1977. "Observations on Asylum Lake, Kalamazoo, Michigan." unpublished. (NOTE: Bottom water TP in Sept. 1976 was 1,500 ppb.)

<sup>b</sup> Kieser & Associates, LLC. (K&A) 2008. "Water Quality Evaluation of Asylum Lake and Little Asylum Lake with Management Recommendations." Prepared for WMU Asylum Lake Policy and Management Council, May 5, 2008, 194pp. (NOTE: Bottom water TP in Aug. 2006 was 565 ppb; SRP was 334 ppb.)

<sup>c</sup> K&A preliminary monitoring results following the BTR2 erosion discharge to Asylum Lake.

# Arsenic Water Sampling in Asylum Lake (7-15-19 Update)

Date	Water Sampling Location	Arsenic Concentration (ppb)
6/21/2019	S1	3
6/21/2019	S2	3
6/21/2019	S3	2
6/21/2019	S4	<2 (non-detect)
7/2/2019	S1	<2 (non-detect)
7/2/2019	S2	<2 (non-detect)
7/2/2019	S3	<2 (non-detect)
7/2/2019	S4	<2 (non-detect)
7/9/2019	S1	<2 (non-detect)
7/9/2019	S2	<2 (non-detect)
7/9/2019	S3	<2 (non-detect)
7/9/2019	S4	<2 (non-detect)

## Water Quality Criteria for Comparison:

Criterion Value (ppb)	Category	Definition
10	HNV-Drink	Human non-cancer value, includes drinking water exposure
280	HNV Non-drink	Human non-cancer value, does not include drinking water exposure
10	HCV-Drink	Human cancer value, includes drinking water exposure
10	HCV-Non-drink	Human cancer value, does not include drinking water exposure
150	FCV	Final Chronic Value (aquatic life)
340	AMV	Aquatic Maximum Value (aquatic life)
680	FAV	Final Acute Value (aquatic life)