Tonawanda Creek/Erie Canal Hydrilla Control Demonstration Project

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Hydrilla verticillata

- Extensive point intercept sampling used to determine frequency and distribution
- Extensive sediment core samples used to determine size of tuber bank, sprouting, and new tuber production
2014 Pre-treatment
Initial Response 2014

- Large scale application of endothall (Aquathol K™) across the project area in July
  - ~7 miles @ 1.5 mg/L
- Reapplication in western 2 miles of project area in September due to poor initial control
  - Significant reduction in hydrilla biomass with the exception of the Service Dr. boat ramp reach (89% reduction in frequency, 90% reduction of tubers)
  - Noticeable impact on native SAV
2015 Summary

- Similar large scale application of endothall across the project area in July
- Reapplication in the western section 24 hrs later to increase contact time
  - Significant reduction in hydrilla biomass including Service Dr. boat ramp reach (nearly 100% reduction in frequency, 98% reduction of tubers)
  - Native SAV stabilized
  - Located 1 patch outside of the project area near the confluence of the Niagara River
Hydrilla patch outside of main treatment area 8/25/15
Preliminary 2016 Results

- Tuber population reduced by >99%
- Observed hydrilla frequency in August 0.01%
- ~50% reduction in the use of endothall
- Native SAV species continue to rebound
- Demonstrated efficacy of burlap as a benthic barrier
Concluding Thoughts

- With respect to monoecious hydrilla, we have many tools and techniques available to address infestations early.
- Early detection and rapid response are key to successful control.
- The biggest obstacle to rapid response is availability of $.
Pymatuning Reservoir, OH/PA

2016 Hydrilla – Frequency 28.0%

2015 Hydrilla – Frequency 10.9%