



Honeoye Lake Aquatic Vegetation Management Program (AVMP)

**Betsy Landre
Ontario County Planning Dept.
July 2018**

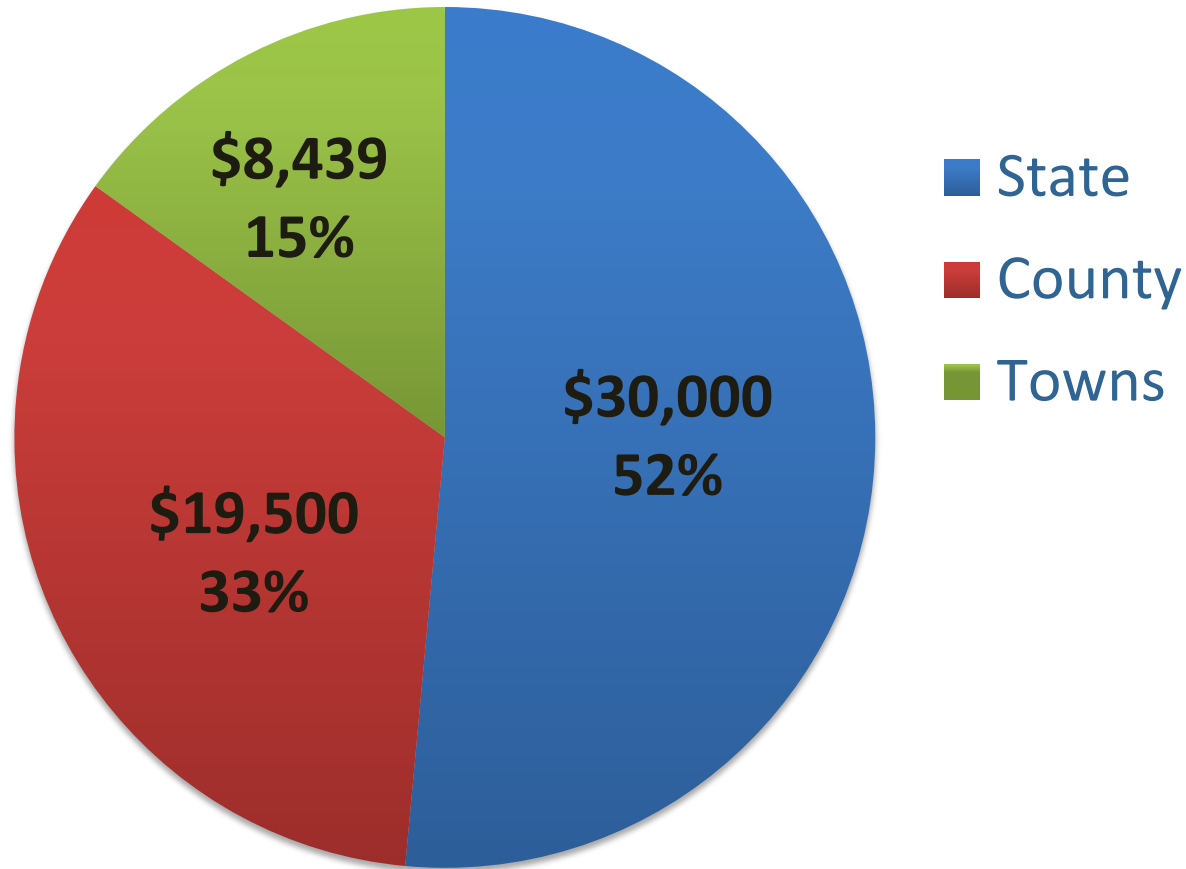
Aquatic Vegetation Harvesting

- Opens up areas for boating and recreation
- Removes phosphorus from nutrient-rich lake
- Harvested plant material composted at local farms and gardens
- Recommended practice in Honeoye Lake Watershed Management Plan (2008)



2017 Operations Cost-Share

\$57,939



2018 Dual Operations Pan

A. Harvesting

- Beginning June 27: By request/as needed
- July 5: No harvesting
- July 9 - Sept 13, regular operations
- M-TH, targeted approach
- Respond to requests



B. Shoreline Pickup

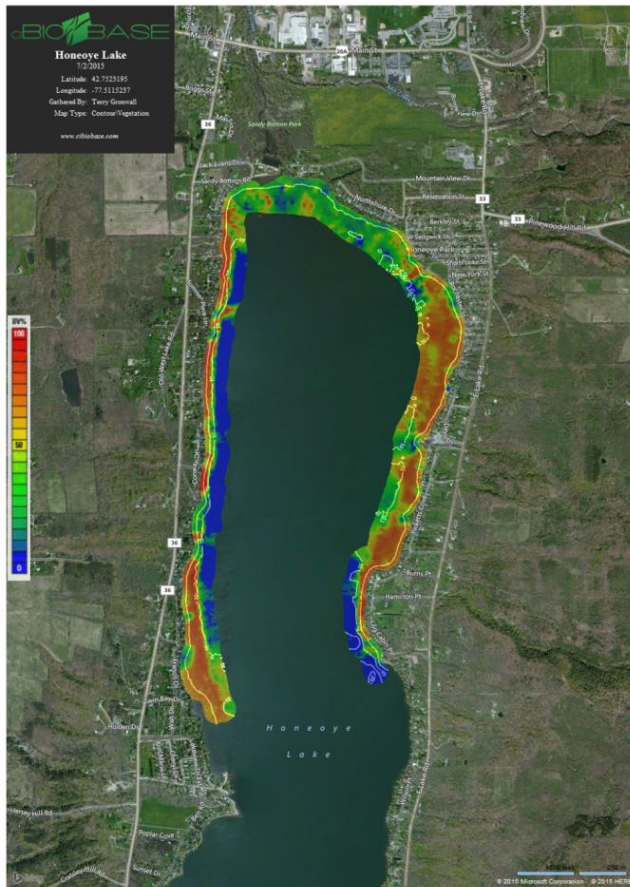
- June 27 to October 12
- Early morning pickup
- M-TH
- Work in harvested areas
- Respond to requests



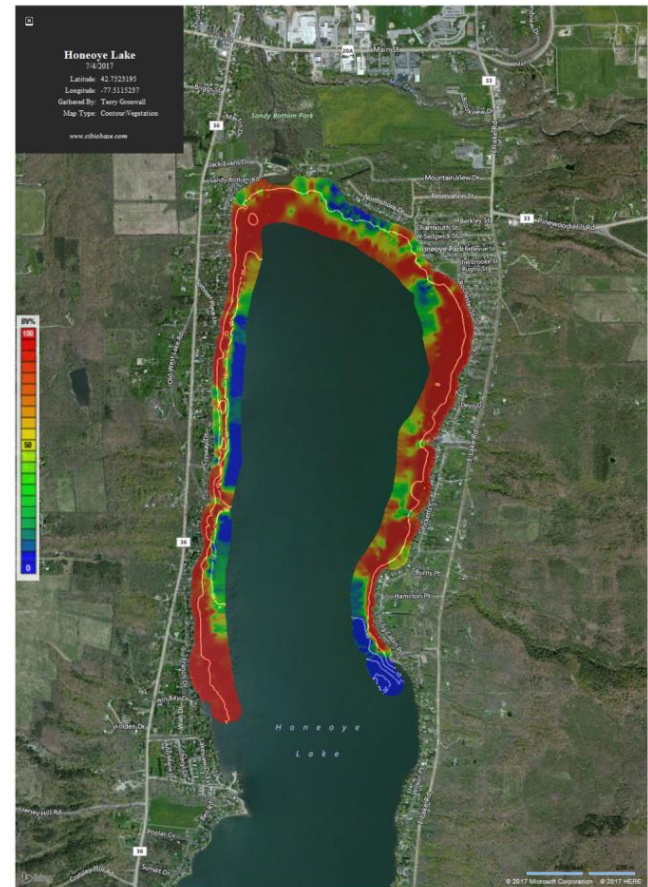
Targeted Harvesting using Vegetation Mapping Tool

Early season plant density distribution - North Basin

July 3, 2015

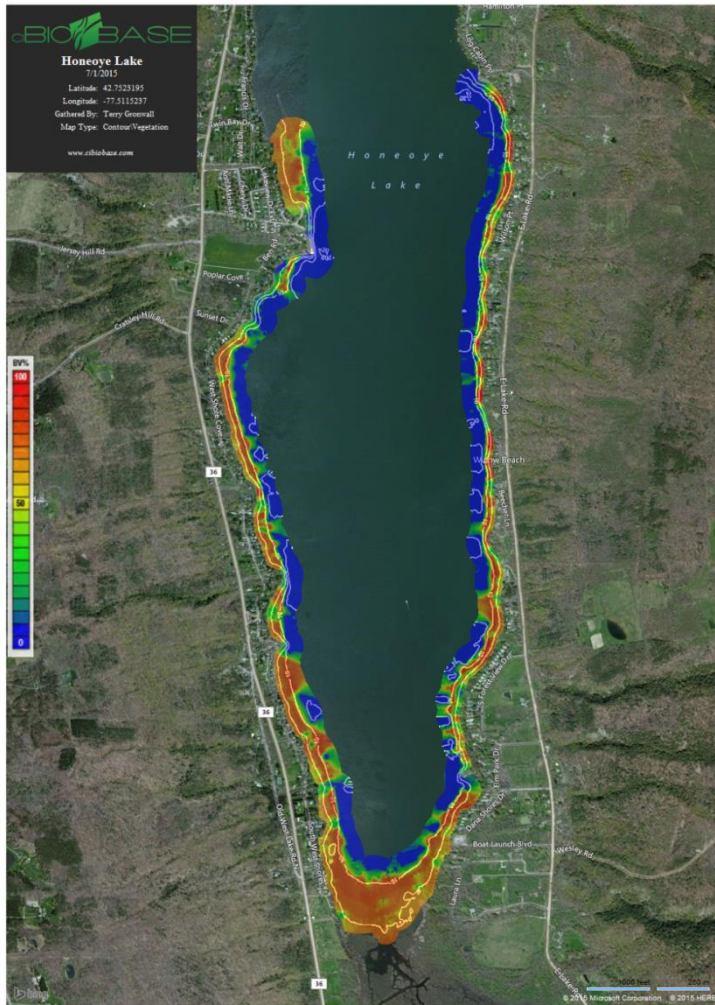


July 4, 2017

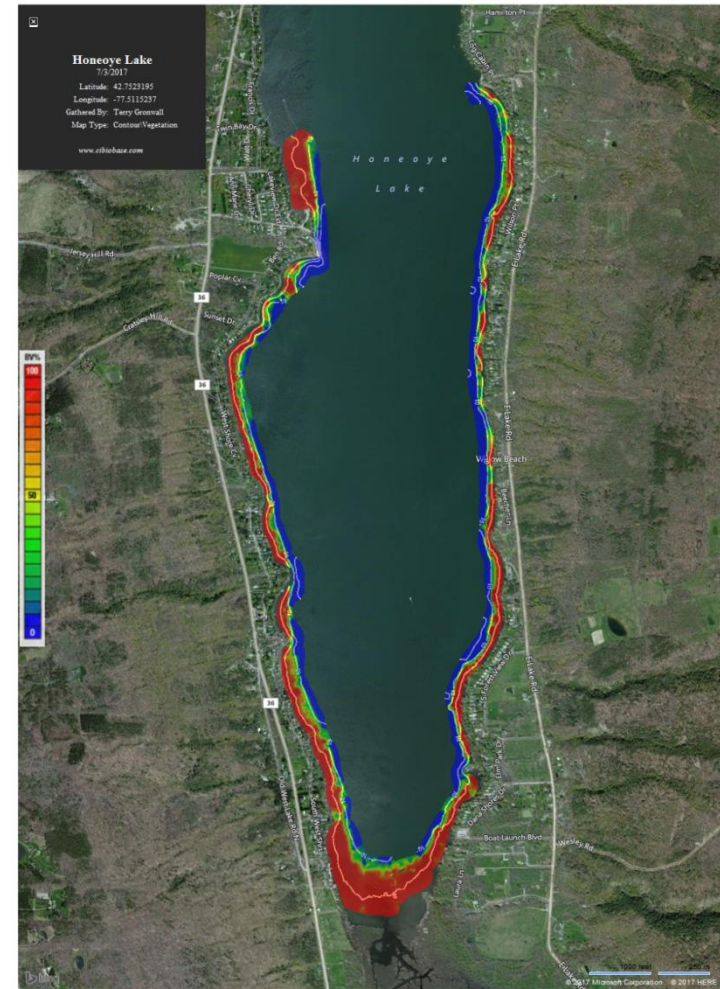


Plant density distribution – Early July, South Basin

July 2, 2015



July 4, 2017



Shoreline Pick Up – How Residents Can Help

- Rake fragments into piles or rows
- Place pile at end of dock if deep enough for harvester/barge access
- Coordinate with neighbors for efficiency
- Call, email, or talk to the crew in the field.



Teamwork: Many hands make light work.



**3 Guys. 3 Girls. Clean Beach. Fast.
Thank You North Shore Neighbors!**



Crew: Randy & Scott



Does Harvesting Promote Growth of Algae in Shallow Waters?

- 2016 Qualitative Observational Study: **No Observable Pattern in Water Clarity Post Cutting**
- 2017 Preliminary Sampling & Lab Analysis
 - Pre Harvest
 - Post Harvest (1 Hour Later)
 - 24 Hours Later

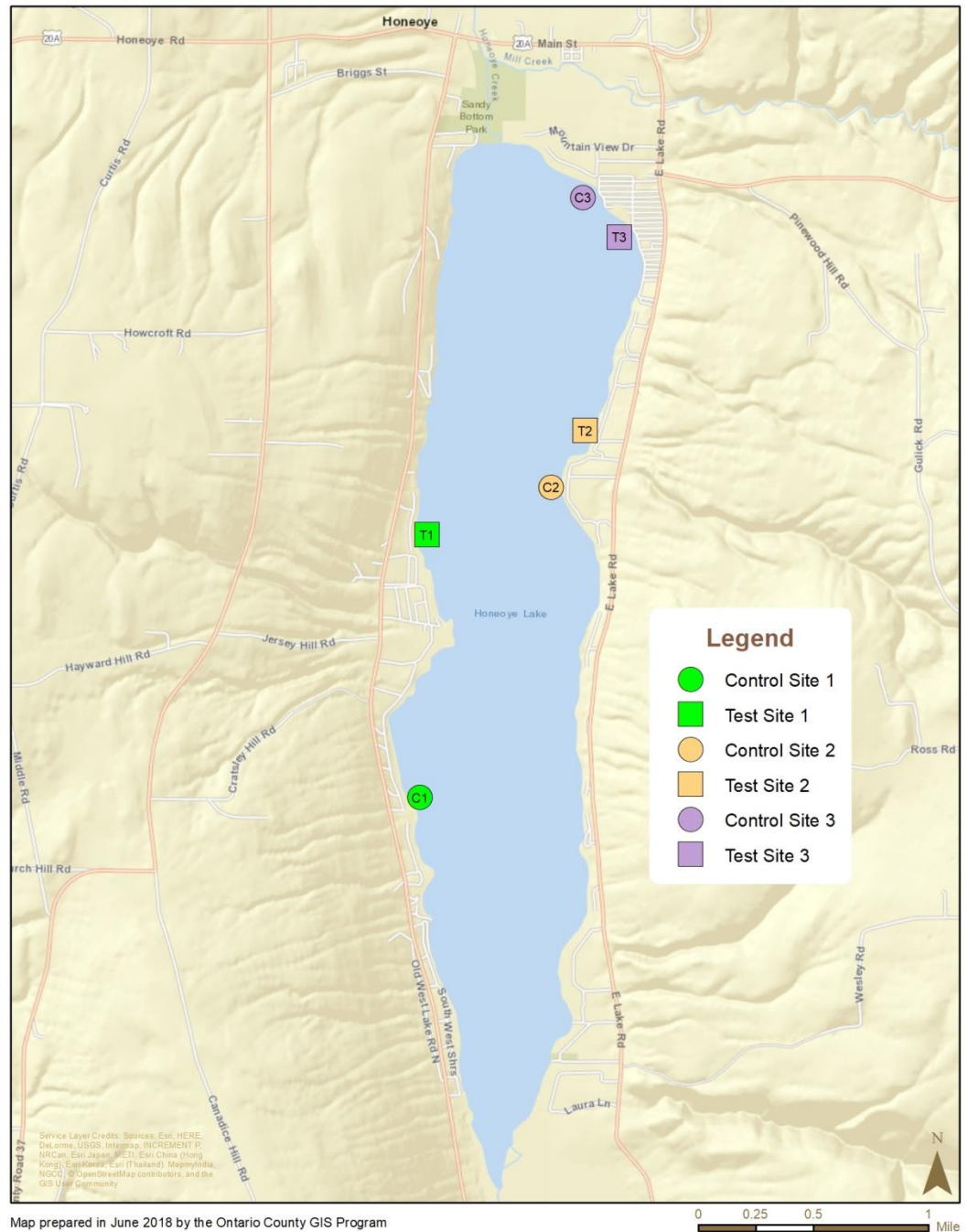
3 Test Events – mid-July, early Aug, mid-Aug

Each Event: Test Site & Comparison Site (“Control ”)
w/ similar conditions – depth, substrate, wind effect,
temperature, shoreline character.

Parameters

- Phosphorus
 - Nitrogen
 - Chlorophyll a
 - Secchi Disk - Clarity
-
- Coordinated with HLWTF sampling program.
 - All samples sent to independent, certified lab for analysis (Life Science Laboratories).

2017 Test Sites



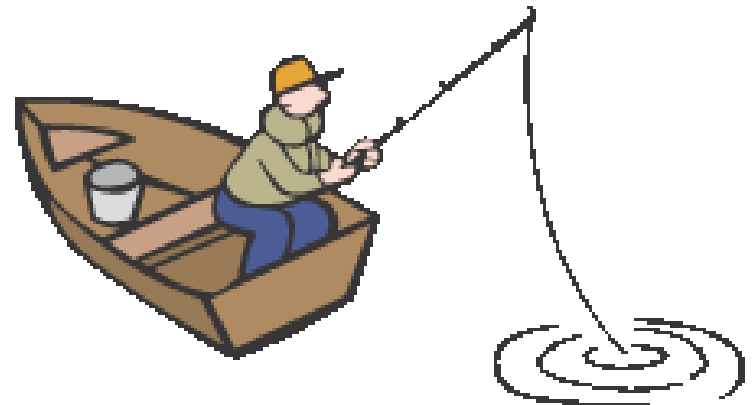
Potential Noise in the Data:

Forces that may disturb sediments or affect shallow waters.

Weather Effects



Boat Traffic, Pulling Anchors



Phosphorus Results for:

Total Phosphorus (TP)

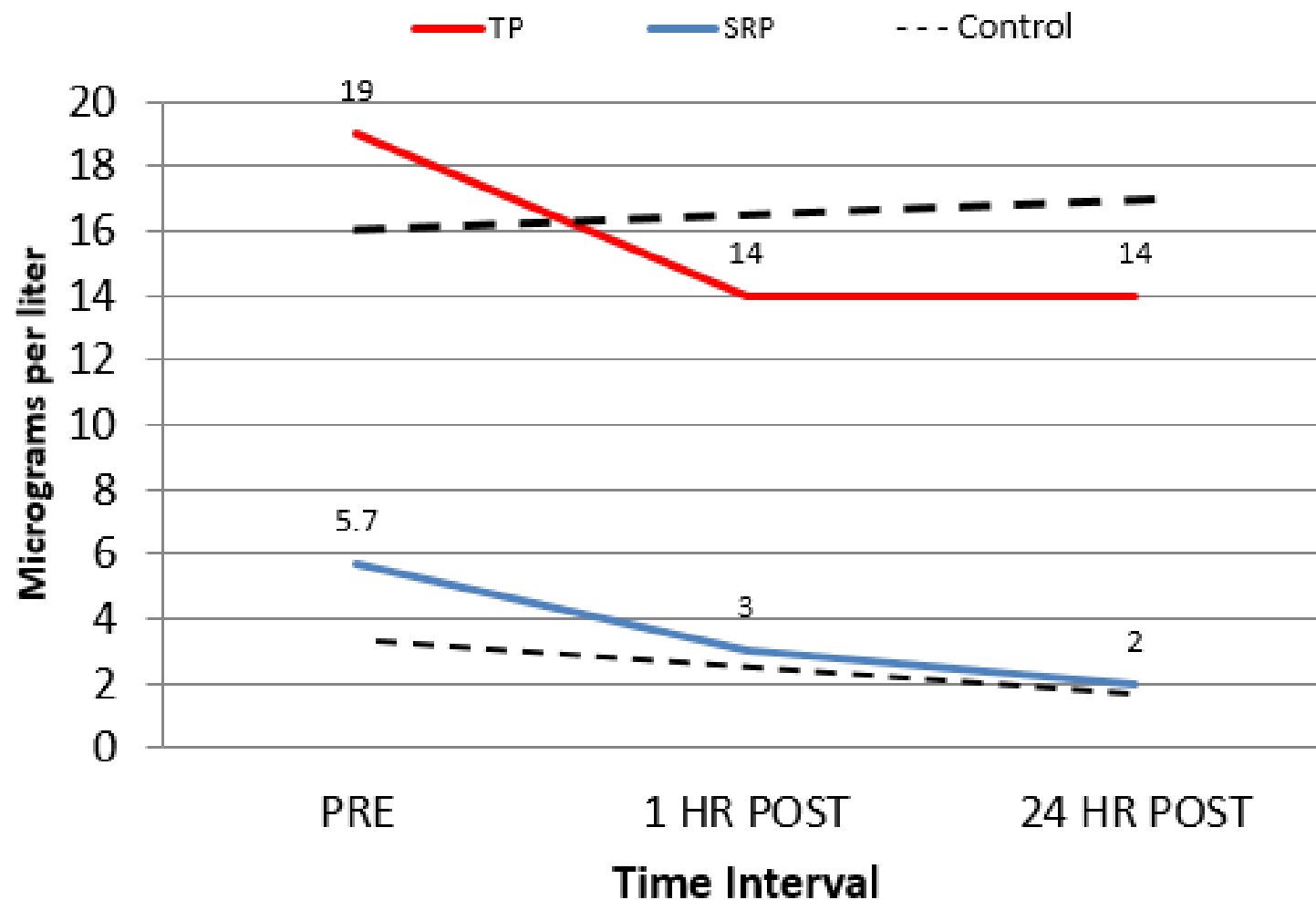
- Measure of multiple forms of phosphorus (organic and inorganic sources, in solution and in suspension)

Soluble Reactive Phosphorus (SRP)

- Phosphorus in solution, readily available
- One component of TP

Test Event 1: July 11-12, 2017

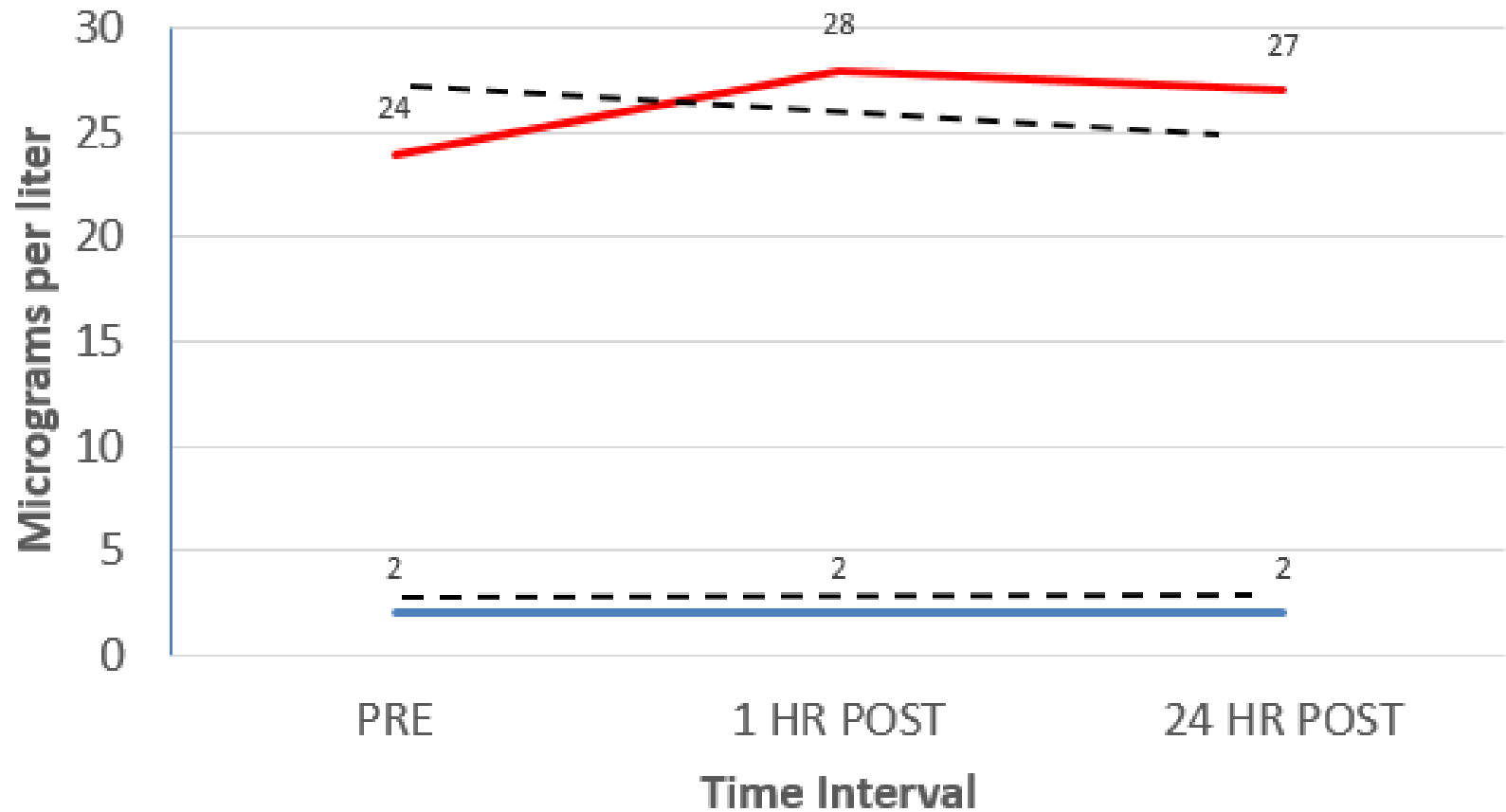
Test Site: Francis Shores



Test Event 3: Aug 15-16, 2017

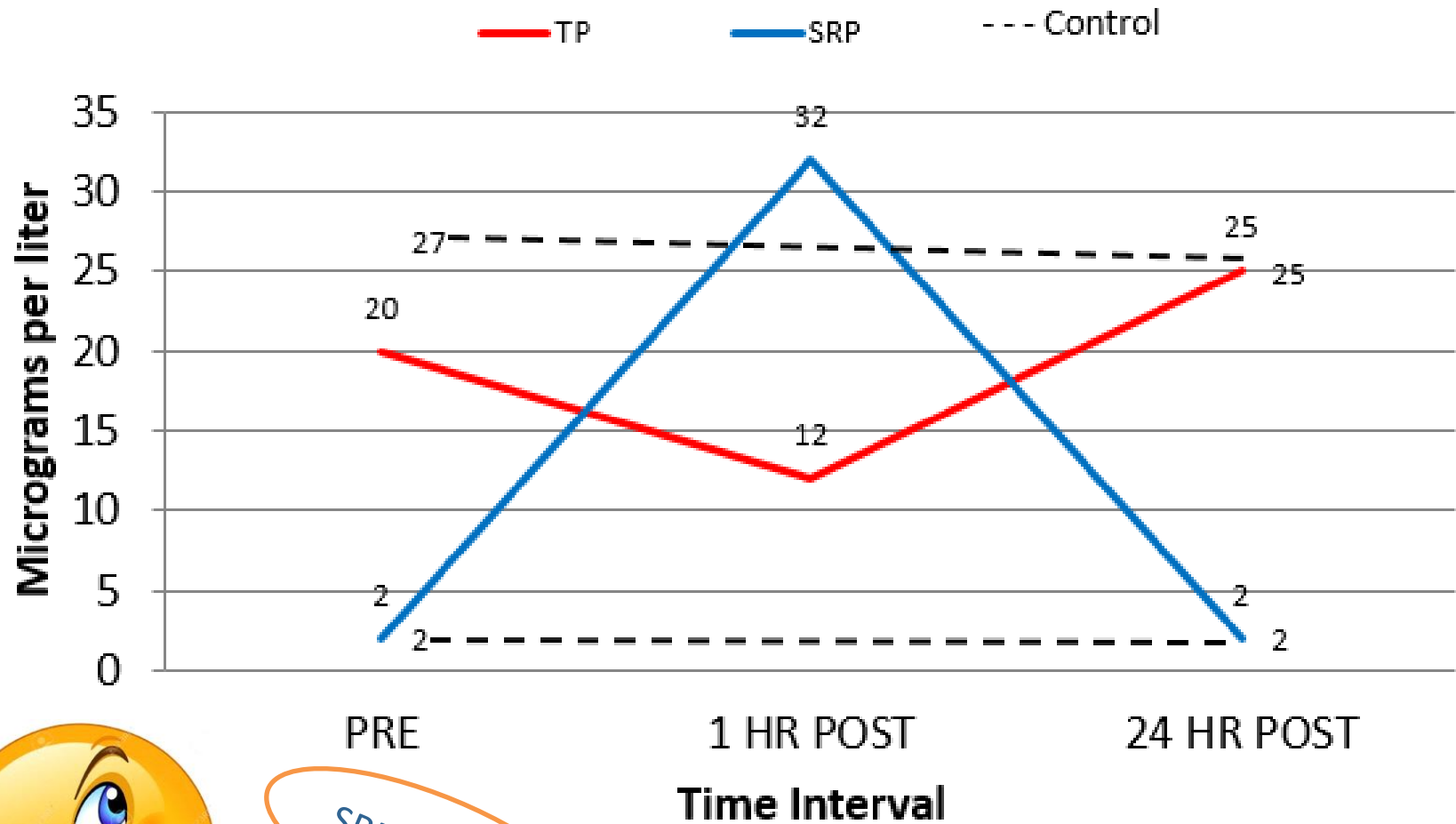
Test Site: Times Union

— TP — SRP - - - Control



Test Event 2: Aug 1-2, 2017

Test Site: Picketts Cove



SRP > TP???

Continue Preliminary Study

- Gather more data: 3 additional tests this summer
- Funding from Ontario County Water Resources Council - \$2,000 for lab fees
- In-Kind from HLWTF (3 tests = 6 trips on the water)
- Share info with experts to refine future work

Contact Information

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<http://www.co.ontario.ny.us/452/Aquatic-Vegetation-Management-Program>



Thank You!

Municipal partners, NYS Parks,
HLWTF, HVA,
lake residents,
DEC, Finger Lakes-Lake Ontario
Watershed Protection Alliance &
dedicated volunteers.