Miner Lake Association
Fall 2024 Meeting

Aug 31, 2024

Agenda

- Approve Minutes from Spring Meeting
- Treasurer Report / Election of Officers
  - President and Assistant Sec/Treasurer
- Water Quality and Invasive Plant Treatment
- Feedback on 4th of July Activities
- Sewer Update

Treasurer Report

Balance 5/25/24		**$13,339.08**
Deposits		**$645**
Expense Detail	**Postage** **Water Quality** **MI 503(b)** **July 4th (Partial)**	**-$132.50** **-$345** **-$20** **-$60**
Expense Total		**-$557.50**
Balance 8/31/24		**$13,426.58**

MLPOA Officers

- President: Sam Martin - **Fall 2024**
- VP: Dee Mitchell - Fall 2025
- Treasurer: Tom Slocum - Fall 2025
- Asst. Secretary/Treasurer: Joyce Merril - **Fall 2024**

Election of Officers

- Positions requiring a vote
  - President - (Sam Martin)
  - Asst. Secretary/Treasurer - (Joyce Merrill)
- Call for nominations 2-year term Fall 2024 - 2026
- Vote

Local Water Quality Monitoring 2024

- Contract with ProgressiveAE continues
- Volunteer collection by **Frank and Kim Shelanskey** for Cooperative Lakes Monitoring Program (CLMP)

  - 200+ Michigan lakes
  - Training for volunteers to monitor lakes
  - Testing supplies
  - Published results

https://micorps.net/lake-monitoring/

https://www.micorps.net/wp-content/uploads/2024/04/CLMP-Miner-Allegan-030260.pdf

Local Water Quality Monitoring

- CLMP Year 1 (2023) included:
  - Secchi Disk Transparency (9+ times / summer)
  - Spring Phosphorus
  - Summer Phosphorus

- CLMP Year 2 (2024) inc Year 1 plus optional:
  - Chlorophyll
  - Dissolved Oxygen and Temperature
  - Exotic Plant Watch
  - Aquatic Plant Mapping
  - Shoreline Habitat Assessment

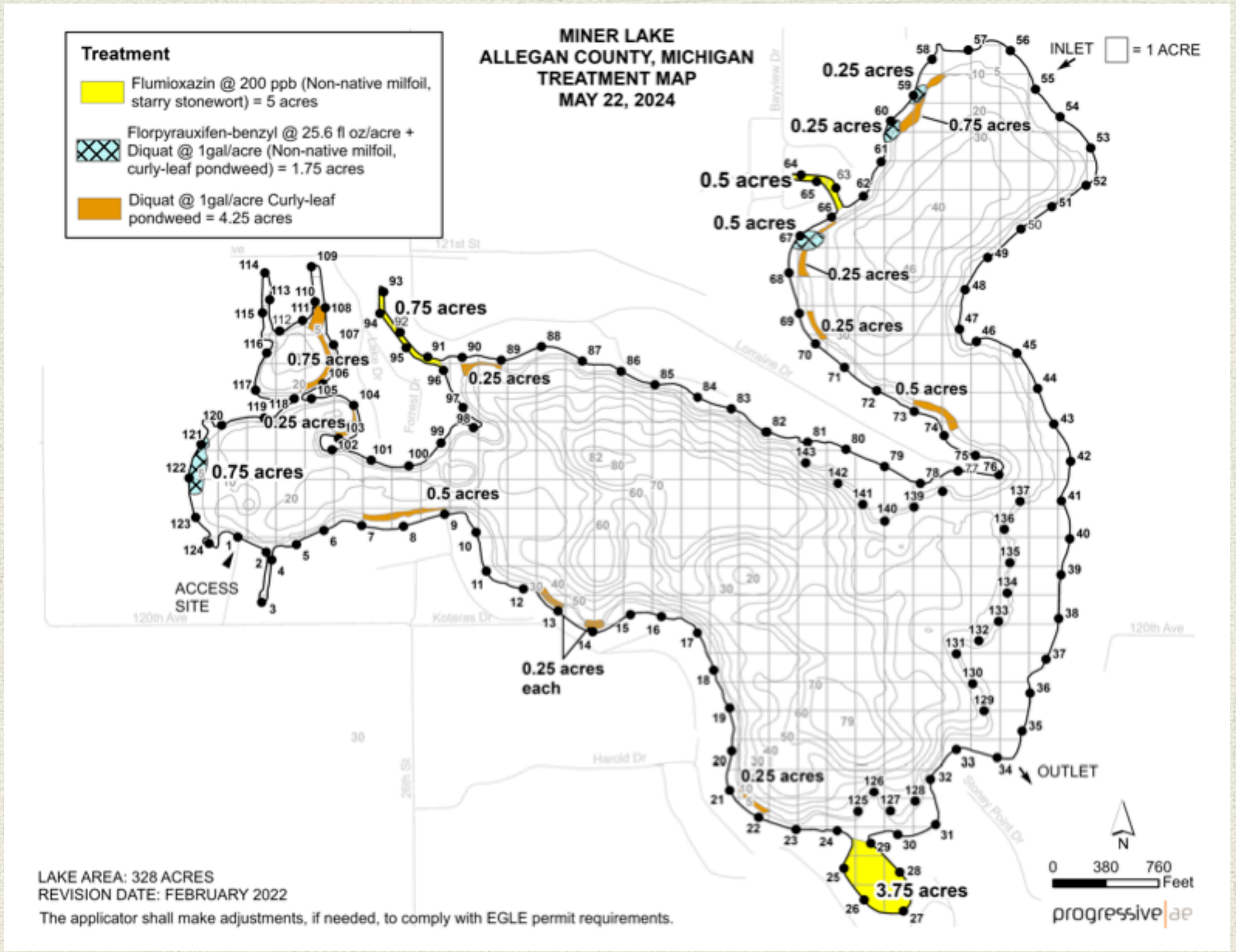
http://www.micorps.net/documents/CLMP_Parameters2015.pdf

2024 Invasive Treatment

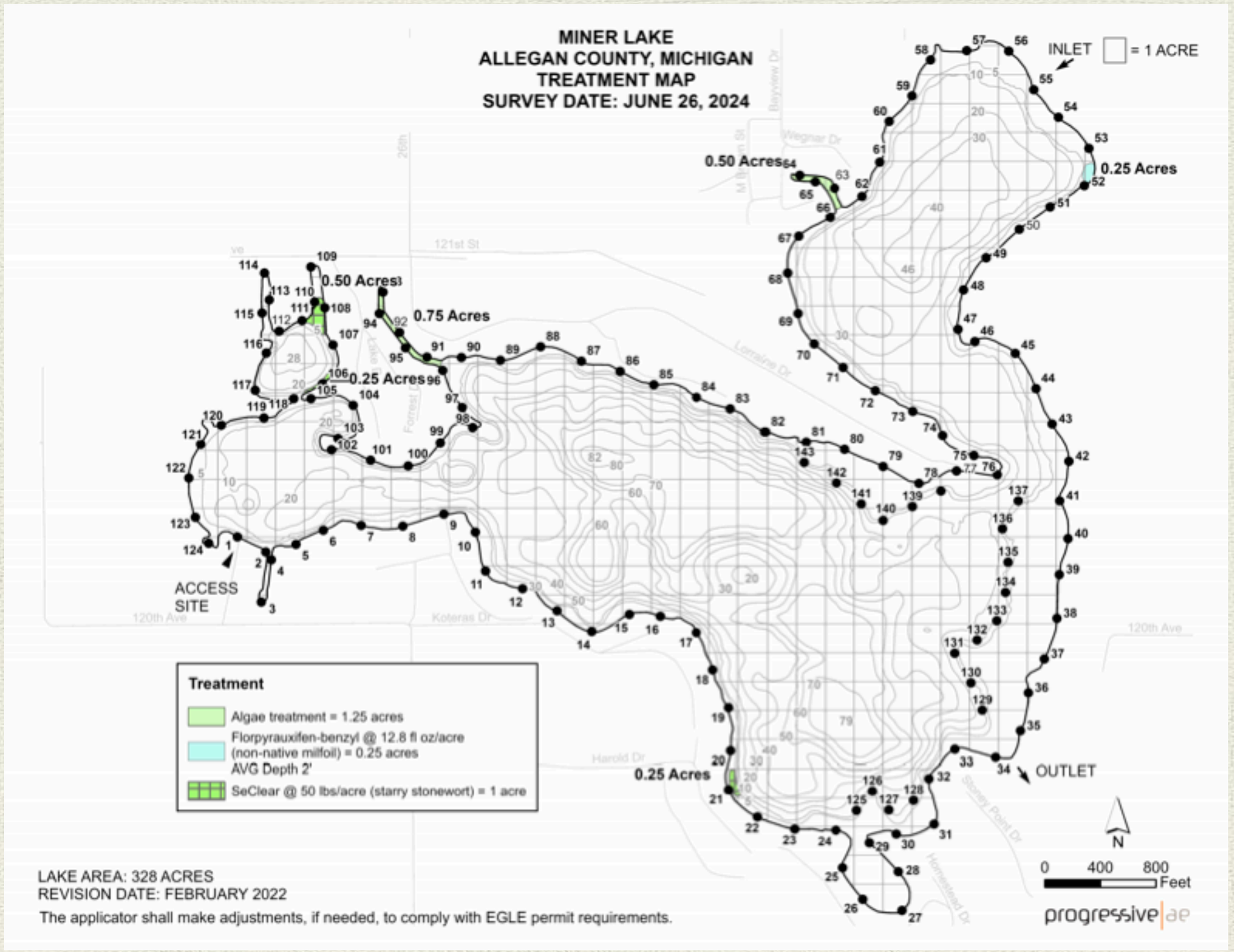
Treatment plan shifted to **Focused areas**
Avoided generalized or widespread application

- **Early June** - Main treatment ~10 acres (still smaller than previous years)
- **Early July** - Follow up ~2.5 acres
- **Late July** - Horseshoe Cove focus ~7.5 acres mostly Starry Stonewort
- **Late August** - Follow up ~2.25 acres

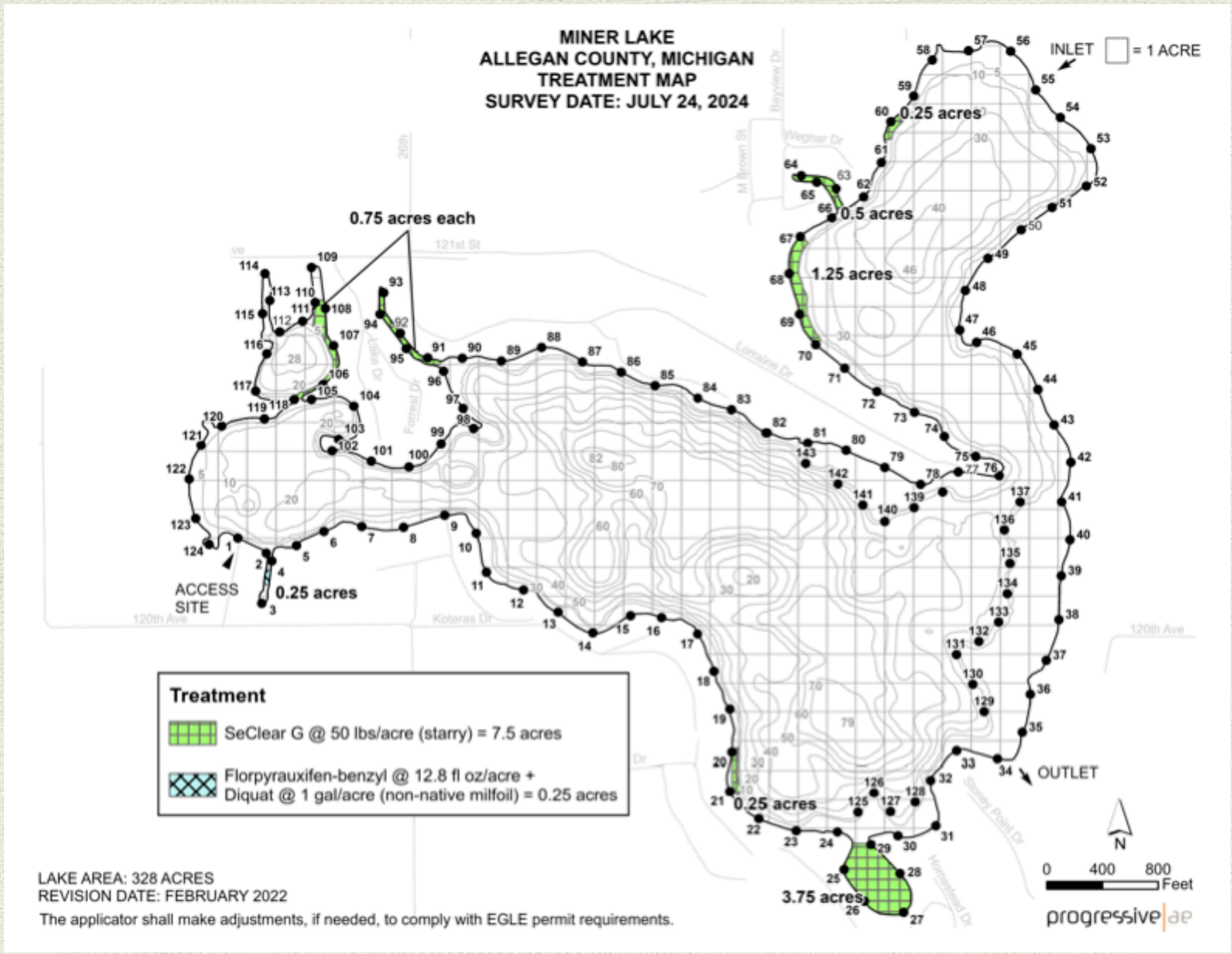
2024 - Early June Treatment



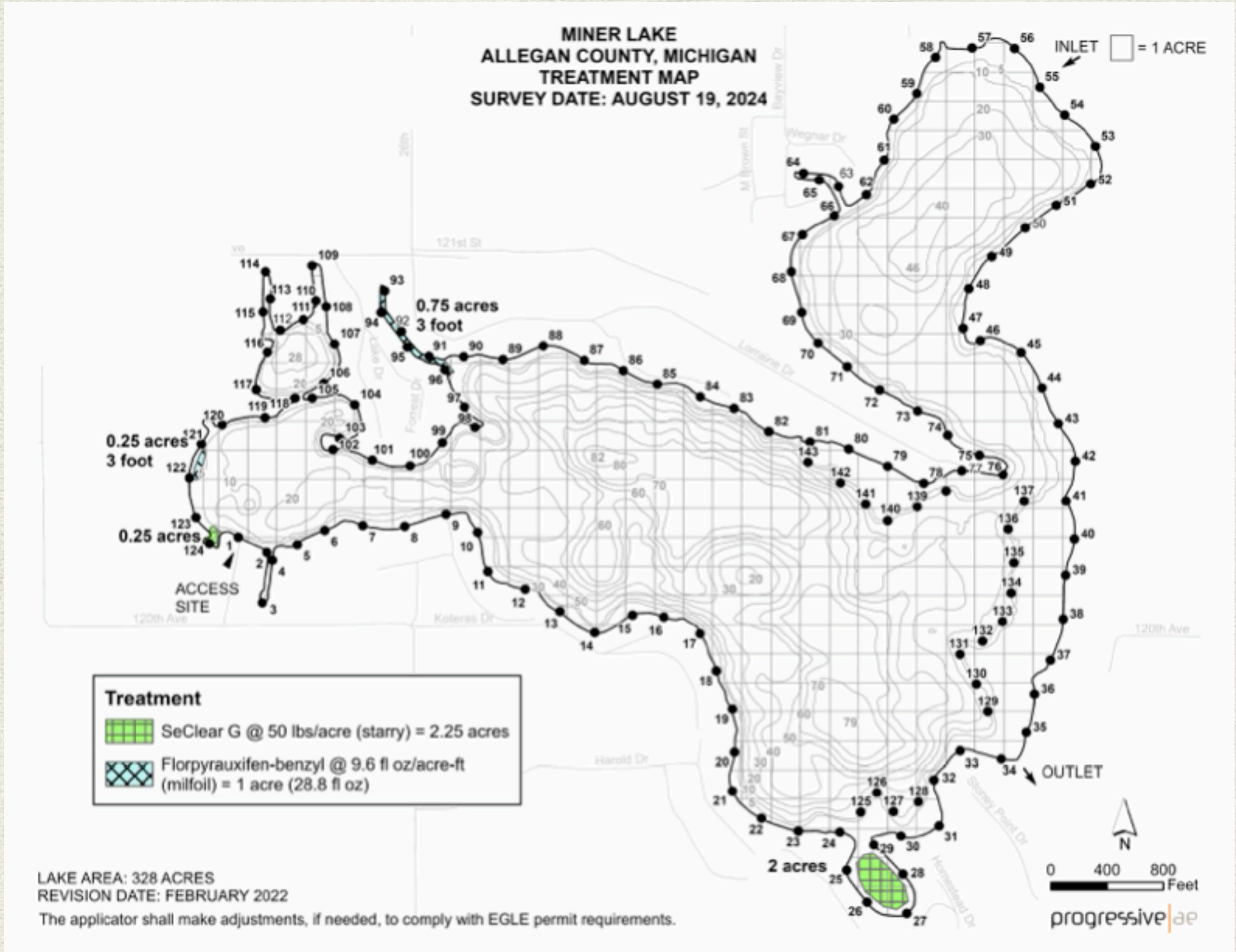
2024 - Early July Treatment



2024 - Late July Treatment



2024 - Late Aug Treatment



Invasive Treatment Summary

Program has been very successful

- Decreased treatment acres each year
- Shift to targeted areas is encouraging
- Monitor gains late 2024 and early 2025
- Looking for a tool to allow residents to report problem areas or questions

4th of July Activities - Parade

- Pontoon Parade
  - Great Participation 26 boats (16 last year)
  - Incredible Creativity
  - Prizes!

    First $100, Second $60, and Third $40
    Plus a traveling trophy for 1st place

  - Thoughts on the event and time of day?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MERCURY


2
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MILLENNIUM
MC 6596


S.S. MINNOW
3 HOUR TOURS
S.S. MINNOW


MERCURY


MERCURY
Bentley

4th of July Activities - Fireworks

- Fireworks
  - Thanks to Keith Norman and Huizinga's
- Donations: Venmo to @Keith-Norman-29
- Thoughts on the location?
- Please limit boat lighting next year

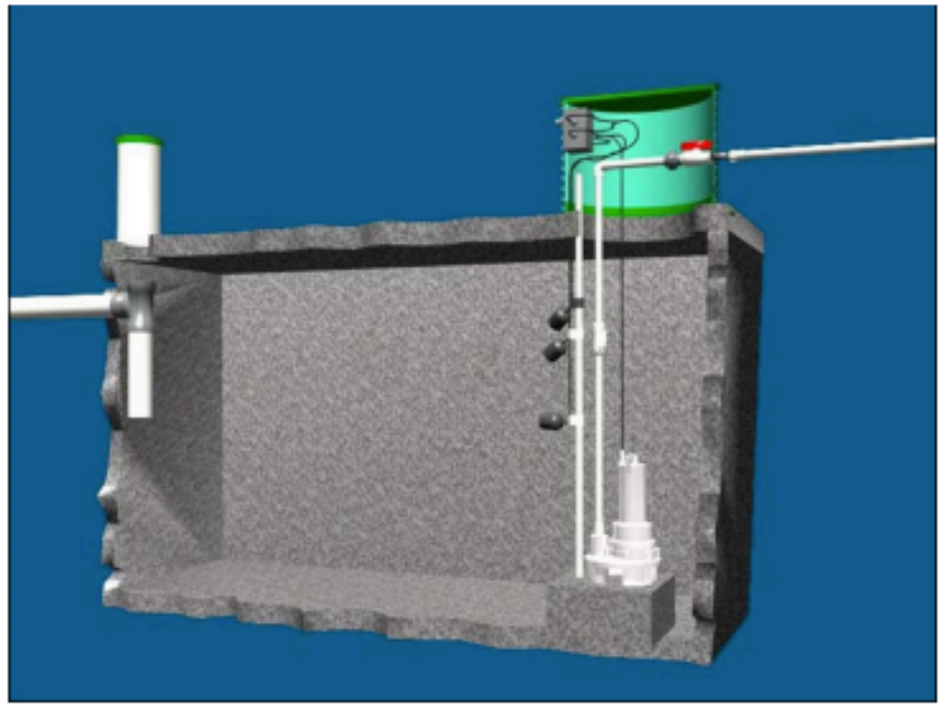
Sewer Update - Spring 2024

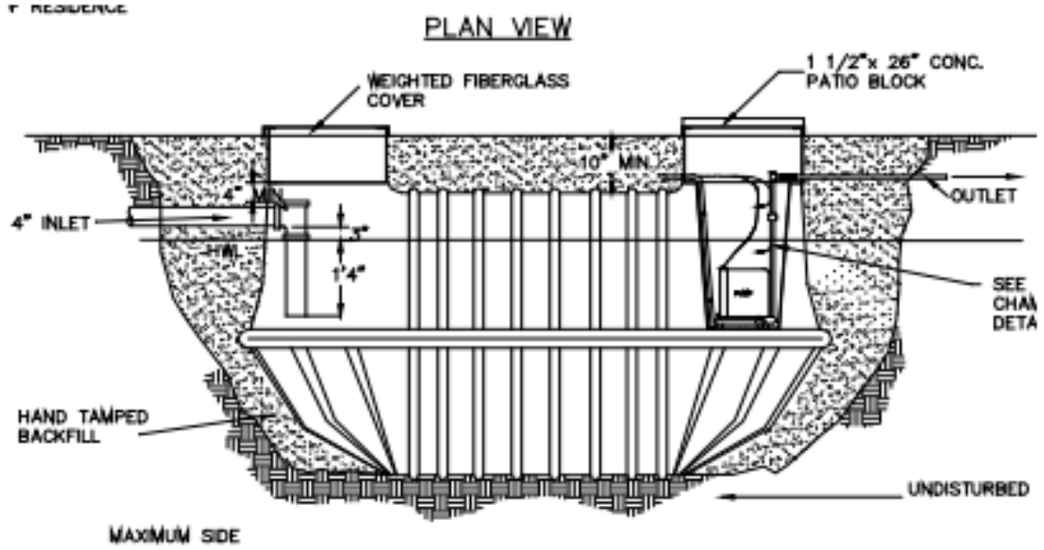
- 2020 Census - Allegan Township no longer qualifies for USDA Rural Development Program (no low interest rates or grants)
- Ongoing inflation and project / supply costs significantly impacted project estimates
- 3 Options Estimates ($14M - $17M+ project total)
- Requested time to explore additional treatment plans and funding options

Liquid-Only Sewer

Early STEP Systems

- Poor quality, leaking tanks
- “Pump-on-a-block” configuration
- “Pump-on-a-shelf” configuration
- Undersized, unbaffled tanks
- Low-head effluent pumps
- Little or no filtering
- “Frankenstein systems”





Source: Charlotte County Utilities FL Standard Details

1. *The Prelos Processor™ provides primary treatment, so only liquids are conveyed to the treatment facility*

2. *Our patented Biotube® Pump Vault filters out solids, and our pumps can last more than 25 years,[3] requiring minimal or no maintenance.*

3. *One-inch (25-mm) diameter service laterals can be easily installed with a trencher.*

4. *Small-diameter mainlines follow the contour of the ground, saving on excavation costs. No expensive manholes or lift stations are required.*

5. *Primary waste-water treatment provided by the Prelos Sewer can decrease the capital cost and operating cost of the wastewater treatment plant.[4]*

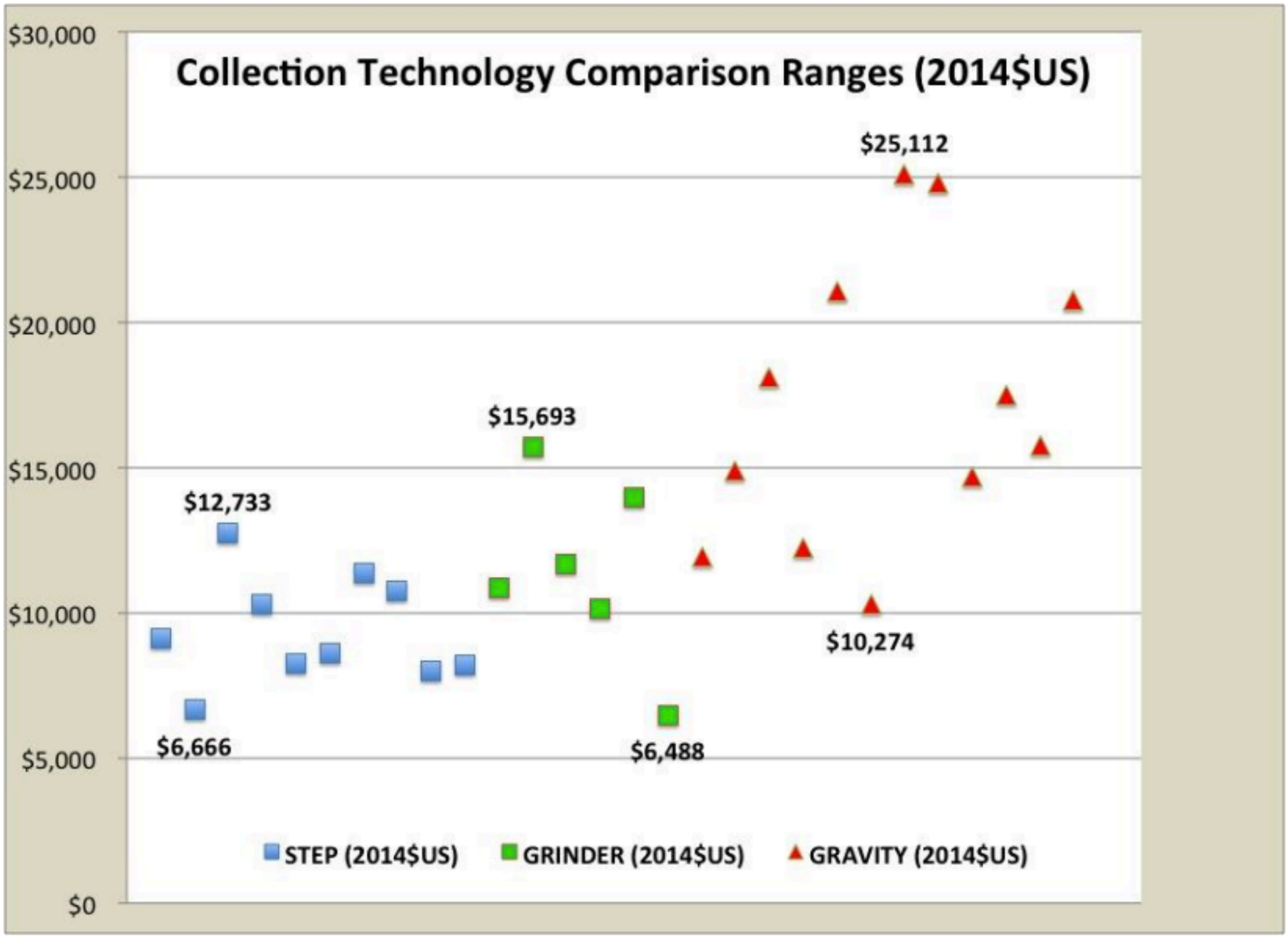
Construction Costs

Prelos lowers the cost of making sewer available by up to 90%[1]

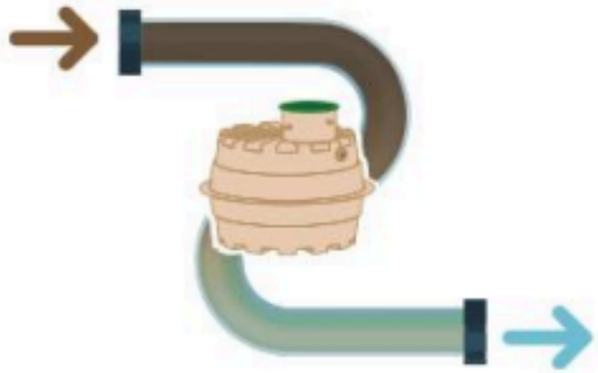
The cost of the Prelos Processor™ is deferred until it's connected

Prelos is cost effective in areas with low densities of existing homes

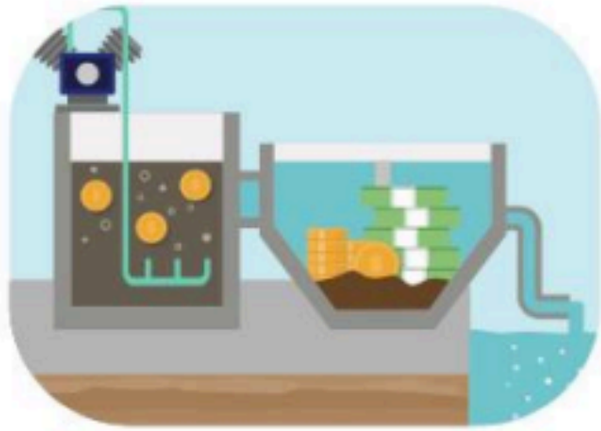
Collection mains can be surgically constructed when and where needed


Collection Technology Comparison Ranges (2014$US)
$30,000
$25,000
$20,000
$15,000
$10,000
$5,000
$0
$25,112
$15,693
$12,733
$10,274
$6,666
$6,488
STEP (2014$US)
GRINDER (2014$US)
GRAVITY (2014$US)

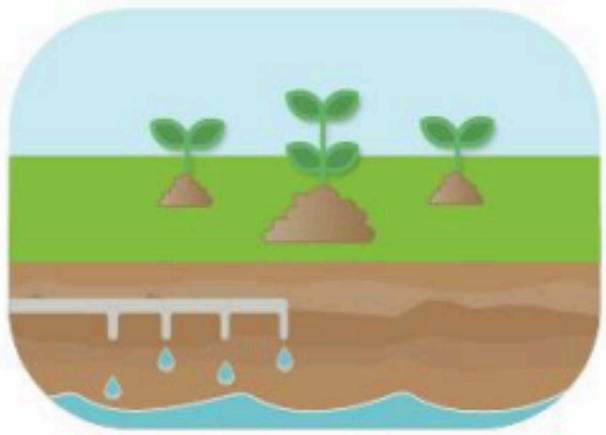
Treatment



Provides primary wastewater treatment at the source



Reduces costs at the wastewater treatment plant[1]



Promotes decentralized treatment options with beneficial reuse

Retains sewer-clogging materials at the source

Electrical Usage: Liquid-Only Sewer (LOS)

- All costs typically funded by homeowner

	Pump	Pump Run Time	Power Cost	Equivalent Monthly Costs ($/month/EDU)
LOS or Orenco Effluent Sewer	0.5 Hp, 115 VAC, 12 amps	20 mins/day	$0.10/kWh	**$1.38**

AX-Max

- Attached growth
- No open tanks
- Modular
- Low energy
- No headworks
- No clarifiers
- No aeration/no blowers

Treatment cost is typically 1/10 the cost of an activated-sludge plant

Summary

- Liquid-only sewer has been in use for almost 50 years
- Liquid-only sewer provides primary treatment, collection and conveyance
- Solids retention results in more efficient pumping, less costly treatment, and lower O&M costs
- There are different configurations of liquid-only sewer
- Liquid-only sewer provides a sustainable O&M cost
- Liquid-only sewer reduces initial capital costs

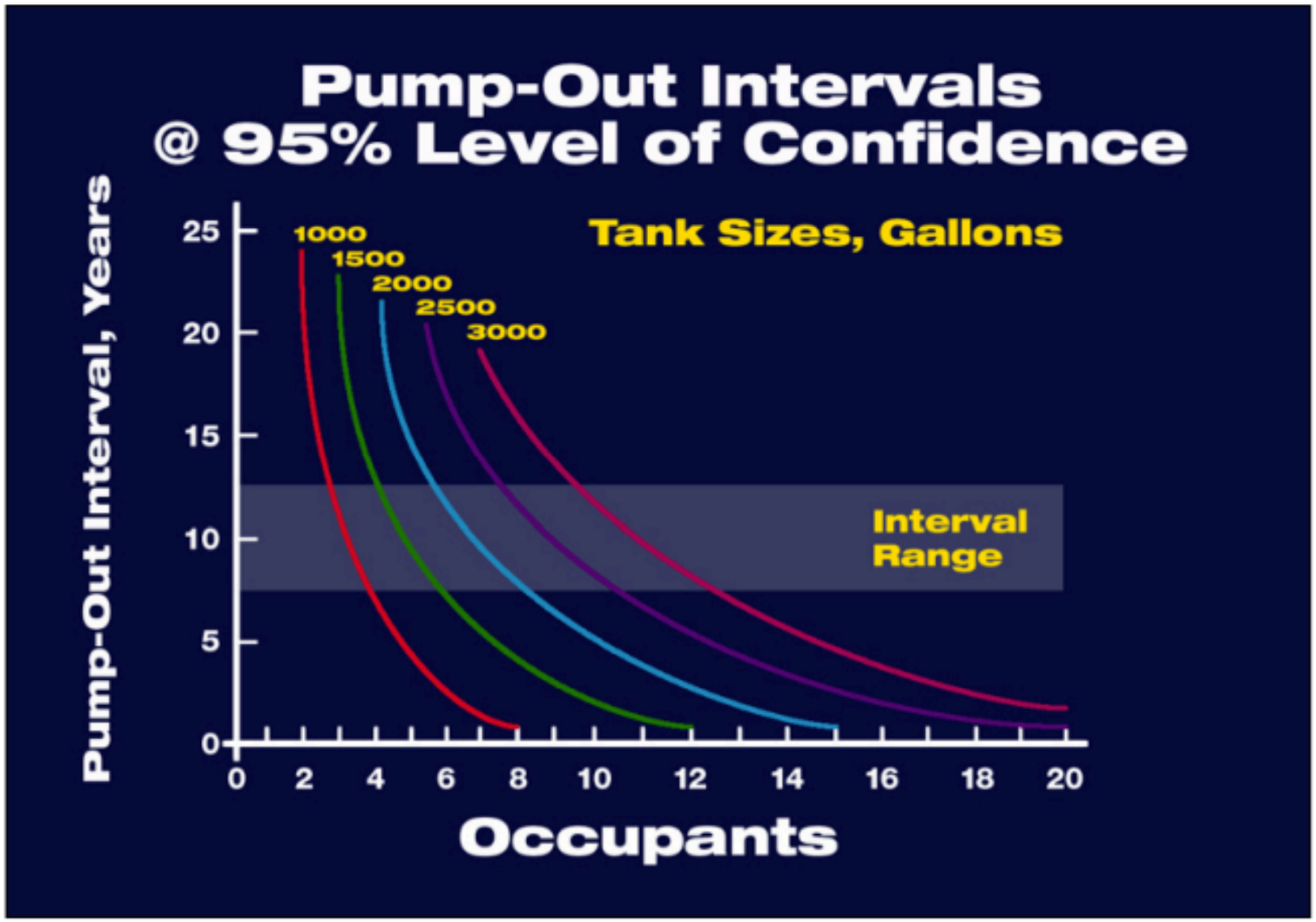
Next Steps

- Keep momentum going!!
- Reviewing recommended engineering firms
- Allegan Township to revisit plans and use funding
- Provide updates on www.sewer.minerlake.com
- Questions?

Thank You for Attending

Happy Labor Day!

Pump-Out Intervals



The pumping interval for properly sized and managed watertight tanks is about 12-20 years.

Source: Bounds, T., PE. (1995). *Septic Tank Septage Pumping Intervals* [PDF]. Sutherlin, Oregon: Orenco Systems, Inc.

08/30/2021 MLS

Wastewater Strength

Data from tables 4-12 and 4-16, Small and Decentralized Wastewater Management Systems, Crites/Tchobanoglous.

Data from tables 4-12 and 4-16, Small and Decentralized Wastewater Management Systems, Crites/Tchobanoglous.

MLS

Frequently Asked Questions

Liquid-only or "effluent" sewer systems have been in use for several decades. During that time, the technology has improved so dramatically that liquid-only sewers are highly recommended by the U.S. Environmental Protection Agency, as well as by engineers, academics, and public agencies.

Who takes care of the system?

The community or a utility will own the system and provide centralized maintenance. Orenco's VeriComm® Monitoring System can provide automated, round-the-clock, computerized supervision. Orenco provides training for system operators and engineers.

Will there be lots of service personnel on the property?

Service time per home is minimal. Utility meter readers come by far more frequently.

Do pumps have to be repaired or replaced frequently?

No. With normal maintenance and cleaning, our pumps can last more than 25 years.[11] Plus, the electricity to run them averages about $1.50 per month.[12]

Will the system smell bad?

No, not if properly designed and installed. Any wastewater collection system will smell if not properly designed and installed.

I've heard stories about these systems failing. Are they true?

Orenco liquid-only sewers work well. Solid engineering, proper equipment, and attention to detail ensure that. With any type of sewer system, poor engineering, substandard equipment, or sloppy installation can cause problems. These sewers have a well-documented track record of success.

Is the underground tank hard to take care of?

No. We require tanks that are designed to be watertight, and most need pumping only once every 10–12 years.[13] Otherwise, they're underground, out of sight, and out of mind.

What happens to the solids that accumulate in the tank?

Accumulation of solids occurs slowly because of the digestion process that takes place in the tank (which is designed to be watertight). In fact, the tank digests more than 80% of the biosolids.[14] Remaining solids are easily managed through planned pumping schedules.

What if something goes wrong with my tank?

Each property has a control panel with an alarm function. Your system's operator will be automatically notified of any alarms. And the 24-hour reserve space in your tank gives the operator time to have a problem checked.

If I have more questions, who can I call?

Call Orenco at 541-459-4449 or toll-free at 800-348-9843.

Centralized vs Decentralized