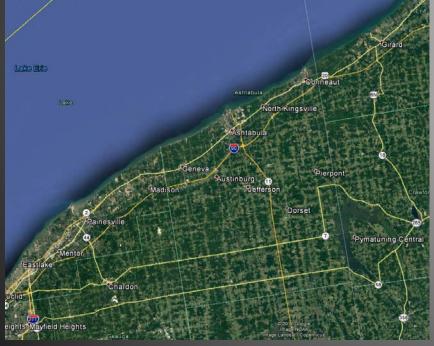


## Update on Hydrilla Management at >>> Pymatuning Reservoir



## Pymatuning Reservoir



Google Earth Image

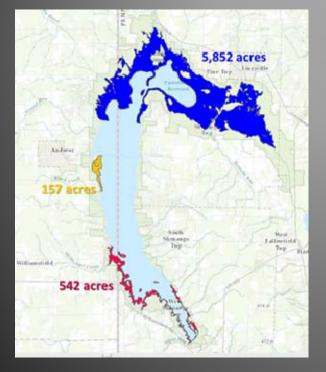
- 17,088 acre reservoir
   Average depth ~15ft
- Max Depth ~ 30ft
- PFBC Linesville State Fish Hatchery
- ODNR and DCNR
   Pymatuning State
   Park
- PGC Pymatuning
   Wildlife Management
   Area

## Significance of Pymatuining Reservoir

- 3.1 million visitors annually
- Top 10 Family Fishing
   Destination Game and Fish
   magazine
- Top 100 Best Bass Lakes 2014 Bassmasters.com
- Highest Revenue producer of PA State Parks system
  - visitors spending more than \$83.8 million in 2010 spending that directly resulted in more than \$78.3 million in commercial sales, creation of 1,178 jobs – "Economic Significance and Impact of Pennsylvania State Parks"
- Approximately 20 miles from Lake Erie.



## What is the potential impact?

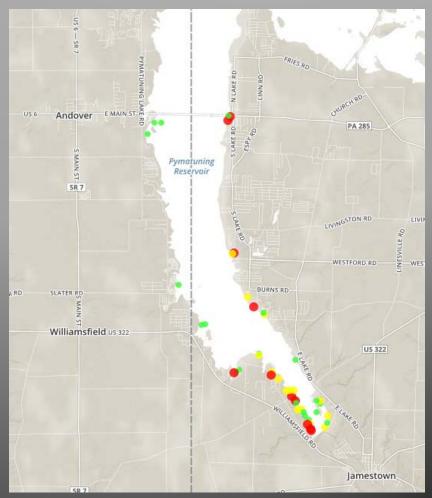


Courtesy of Dr. Mark Heilman-SePro Corporation

- Worst case scenario ~6000 acres of infestation.
- Loss of boating access and recreational opportunities.
- Potential reduction or loss of PFBC hatchery operations.
- Potential economic harm, both state and local.
- Potential source of infestation for the Great Lakes

## **Background** on infestation

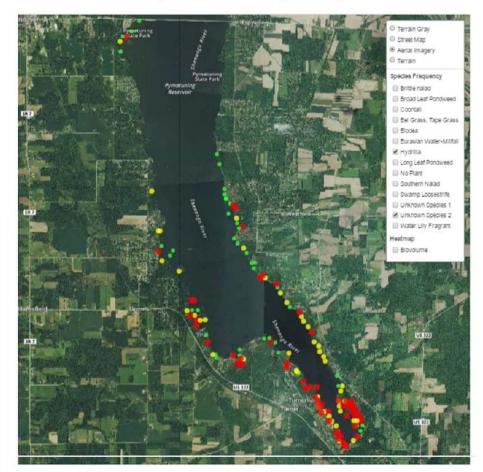
- Hydrilla discovered during a routine aquatic plant survey in 2010.
- Noticeable expansion in 2014 prompted an effort to coordinate a response.
- First detailed survey conducted in August 2015.
- First coordinated treatments conducted by DCNR, ODNR, CCCD in 2016.
- Second survey conducted on the south end August 2016



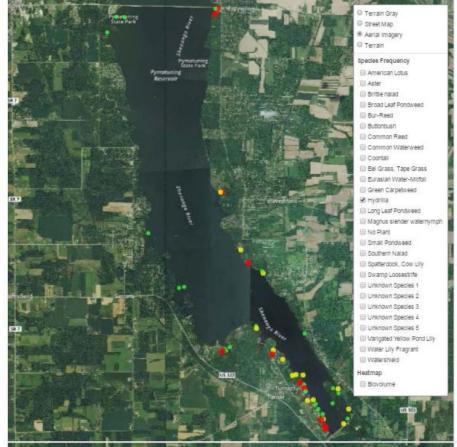
2015 Pymatuning hydrilla survey results University of Florida - Dean Jones

### Where are we now?

#### 2016 Hydrilla – Frequency 28.0%

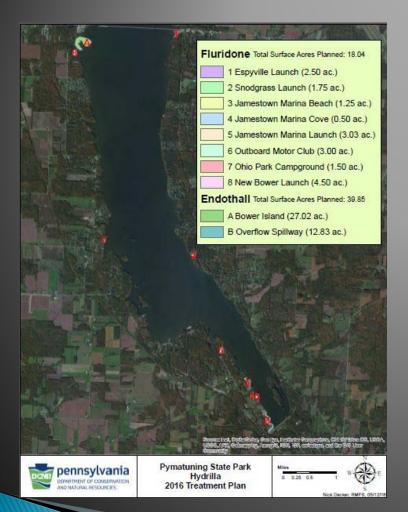


#### 2015 Hydrilla – Frequency 10.9%



Pymatuning hydrilla survey comparison University of Florida - Dean Jones

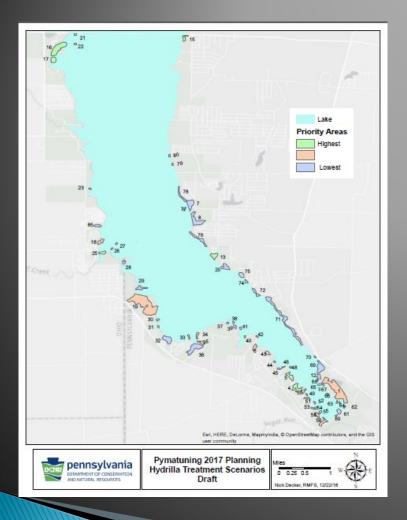
## **2016** Pymatuning Treatments



- 57.89ac treated in 2016
- Aquathol K (Endothall) and Sonar H4C (Fluridone) used.
- The results.... Mixed, effective in some areas and not in others.
  May of 2017 conducted a dye test

of representative treatment blocks.

### Future treatment potential



- Based on the 2016 survey there is a potential to treat up to 250 acres (if we had the funding and premiting approval).
- Results of 5/17 dye test were not encouraging. Flushing rate in most sample treatment blocks was much higher than expected.
- Helped explain our mixed 2016 treatment effectiveness
- Poses a challenge for 2017 and future treatments.

# 2017 and Beyond

- Flushing rates have caused us to regroup a bit for 2017
- Permitting roadblocks
  - Fluridone not approved for 2017
- Funding shortfalls
- Learning curve
- Manpower shortage



8/16 Pymatuning Reservoir Mooring area B

# Pymatuning SP Pilot Check Station Program



2016 Pymatuning State Park

Pilot

Invasive Species Courtesy Boat Inspection Stations



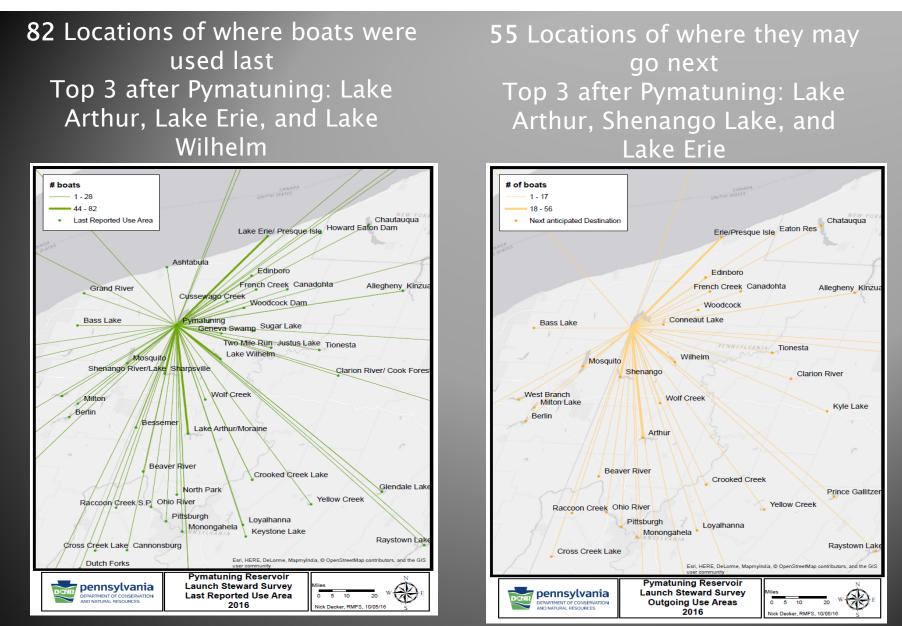
Handbook for Inspection Stewards

## First full season resulted in 2,181 Surveys

- Aquatic Species were removed from 148 boats (7% of those checked)
- Majority with species found were a split between motor and pontoon- 1 canoe and 1 kayak
- Species removed-Eurasian Watermilfoil, Elodea, Curly-leaf Pondweed, Vallisneria, Zebra Mussels\*, and Cabomba\*

 Stacie Hall-PA DCNR

\*not currently found in Pymatuning



Inspected boats were registered to: Florida, Indiana, Kentucky, Louisiana, Michigan, Maryland, North Carolina, New York, Ohio, Pennsylvania, and West Virginia. Brian S. Pilarcik Watershed Specialist

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<u>www.palakes.org</u>



