

# POTTAPAUG POND: INVASIVE AQUATIC PLANT UPDATE

*Discovery and actions steps*



*Quabbin Watershed Advisory Committee Meeting*

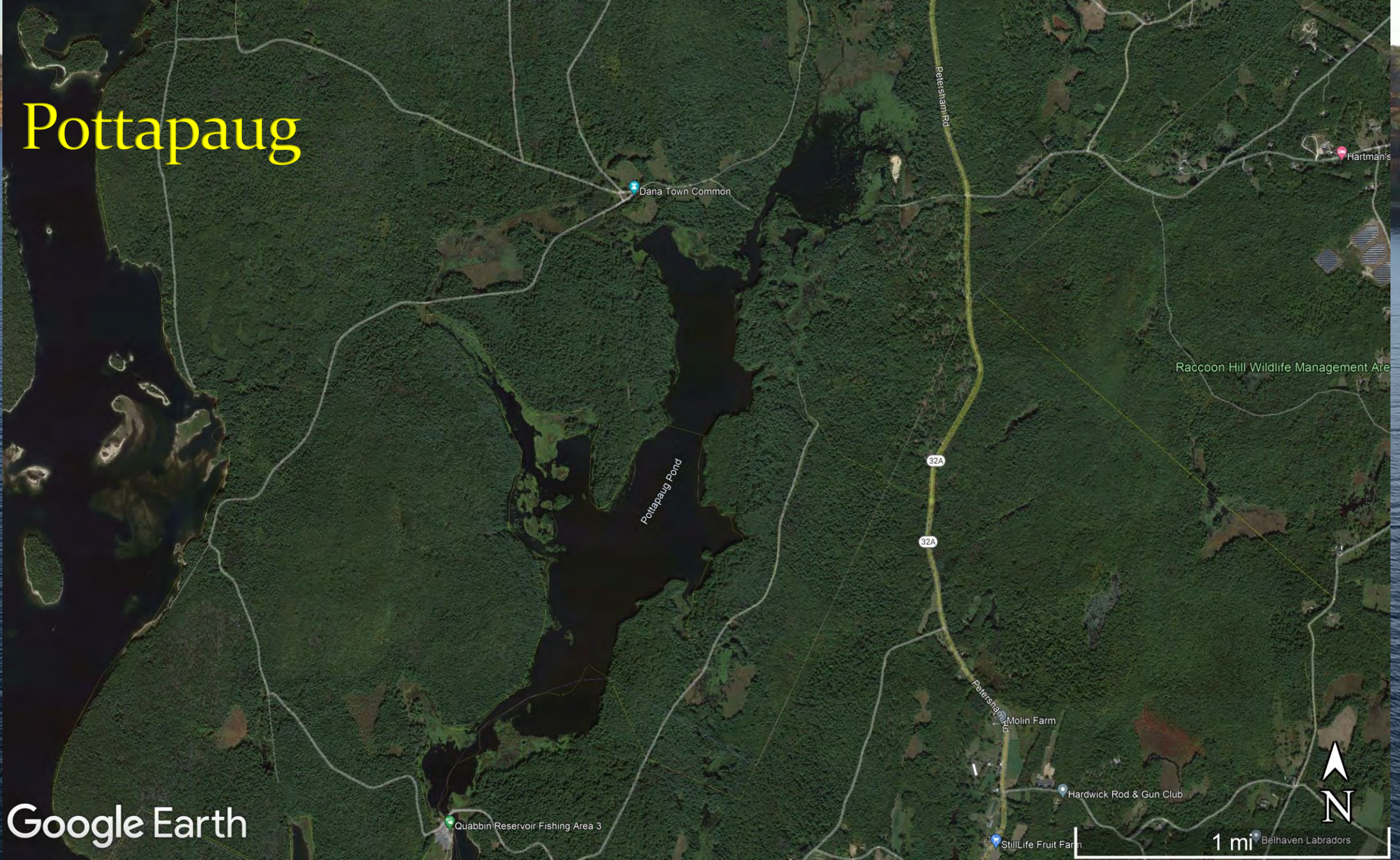
*September 18, 2023*





# Pottapaug

Google Earth





Google Earth

Dana Rd

Dana Rd

Dana Rd

Quabbin Reservoir Fishing Area 3



400 ft





# Discovery:

- Since 2010, pond surveyed annually by contractors in August; no invasives detected
- Routine fragment barrier inspection on 5-26-2023 discovered suspect invasive plant
- Plant identification confirmed by DCR-Wachusett Aquatic Biologists and follow-up investigation happened on 6-5-2023
- Plant identified as swollen bladderwort (*Utricularia inflata*)



# Plant Biology

- Rootless plant; can form dense mats
- Flowers in early spring
- Native to Southern U.S. – not native to MA
- Prefers lakes and ponds
- Reproduces through seeds and vegetatively
- Stem fragments can re-sprout
- Impacts:
  - Dense mats can impede boaters, fishing
  - Increase sediment levels
  - Deplete oxygen
  - Reduce native vegetation



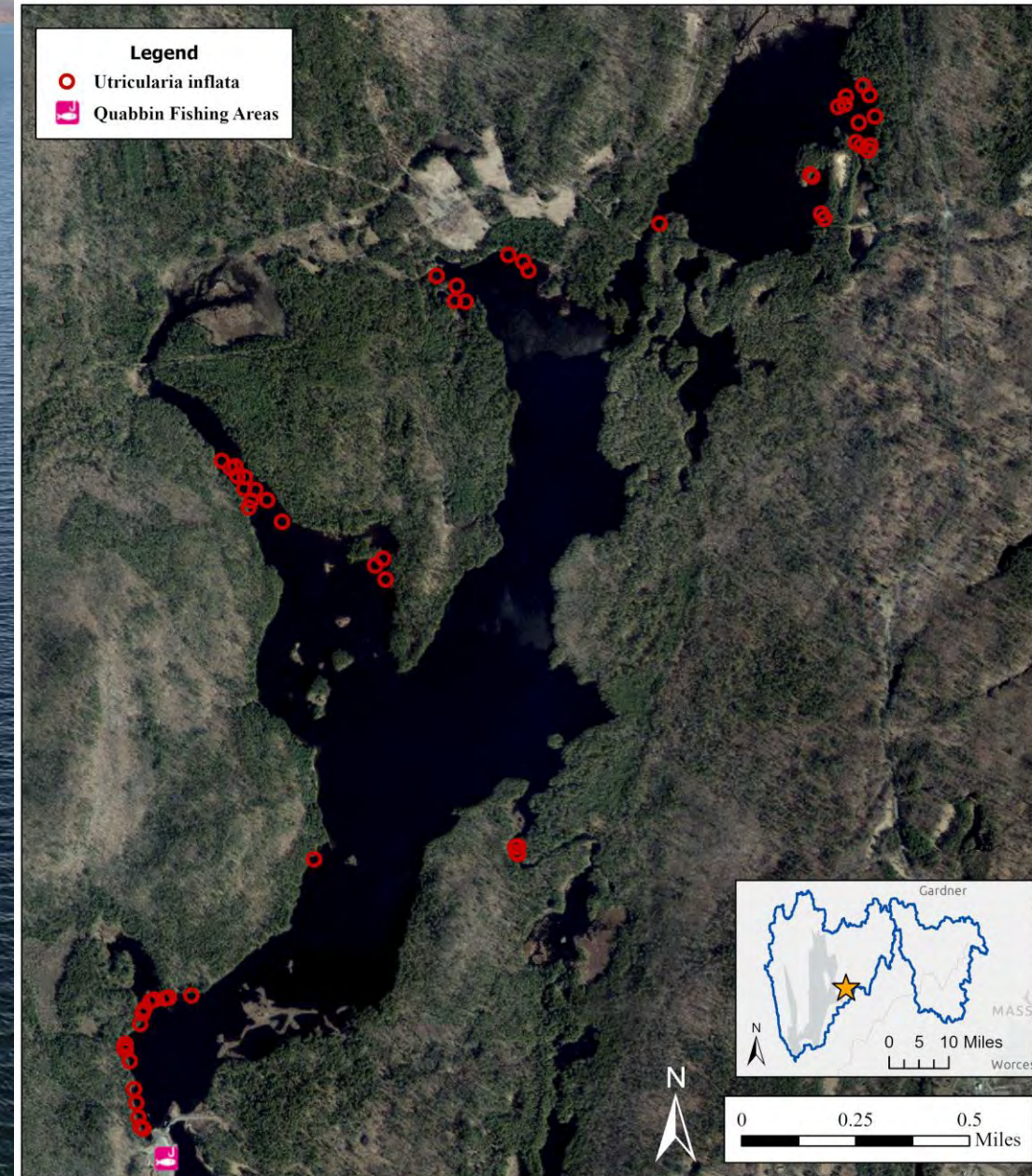




# Action Steps

- Partial pond survey on 6-5-2023
- Shoreline survey completed on 6-21-2023
- Documented along shallow areas throughout pond
- Pottapaug closed private boats on 6-7-2023
- DCR staff began removal efforts on 6-12-2023: 2 days of hand harvesting

## 2023 U. Inflata Investigation on Pottapaug Pond





# Removal

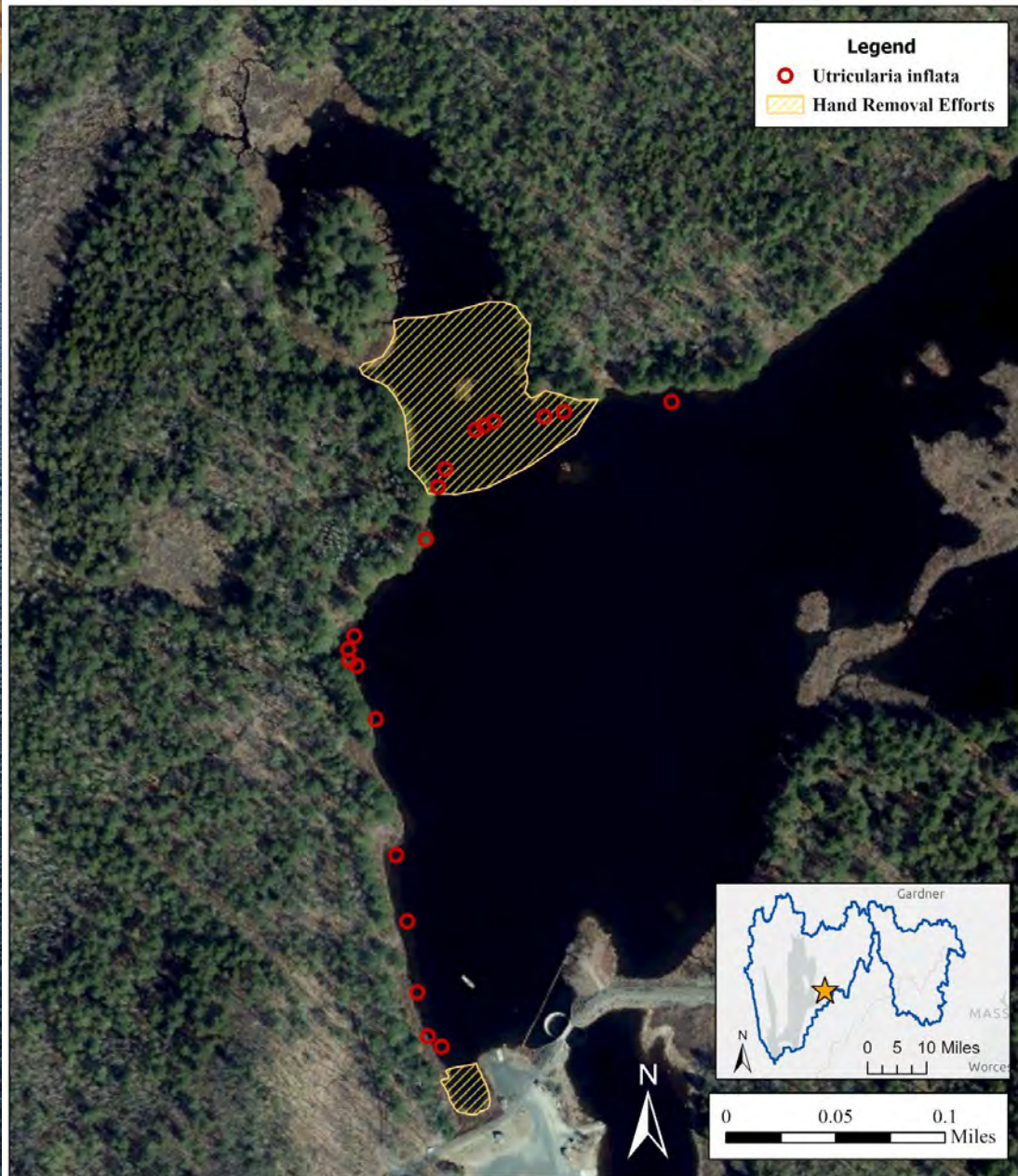
- Removal began on 6-12-2023
- 2<sup>nd</sup> day of removal on 6-15-2023
- Removal focused on first and second cove along western shore
- Plant still in bloom, but also degrading
- 73 gallons removed







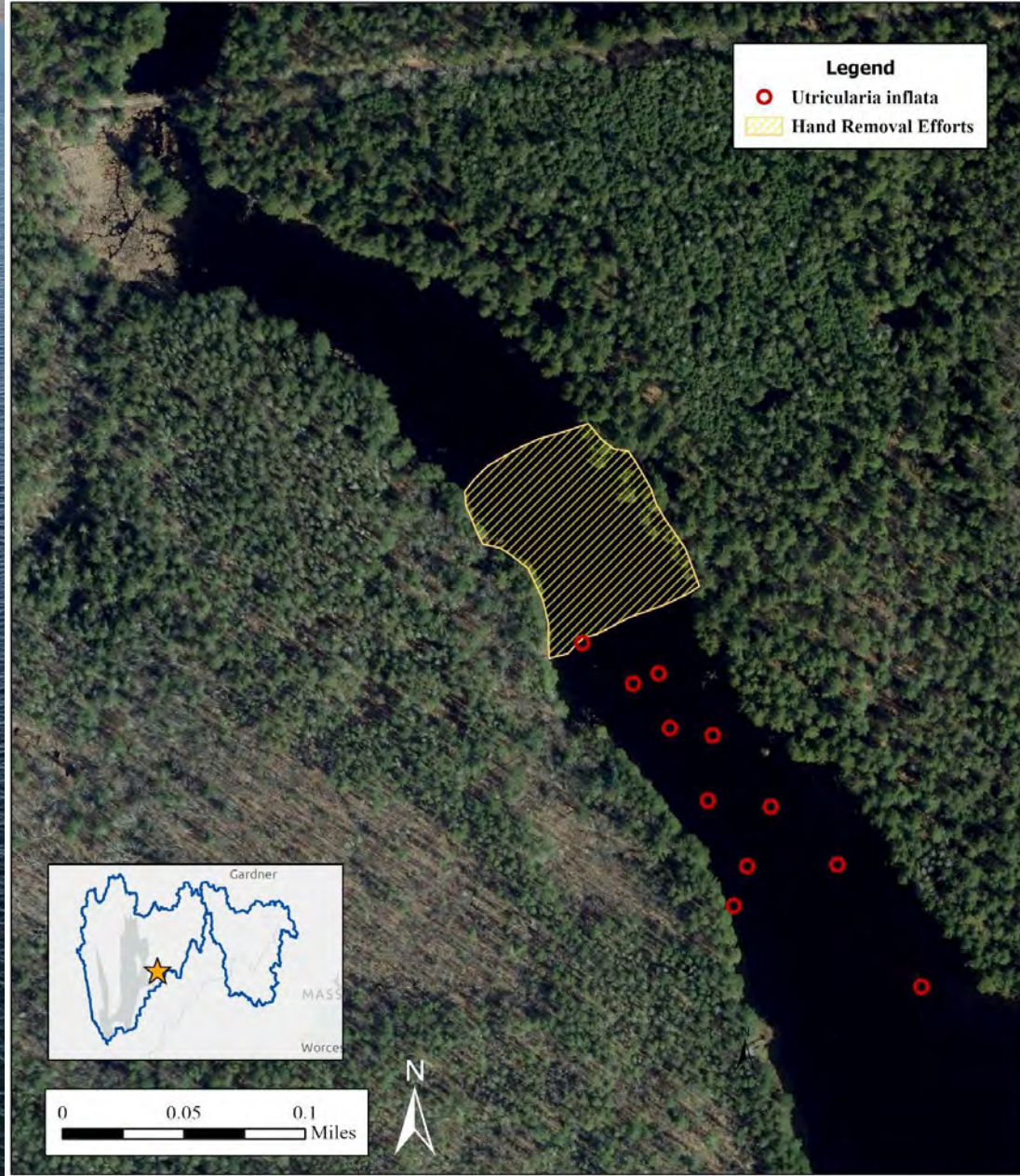
## 6/12/2023 U. Inflata Removal on Pottapaug Pond



Map Created by: Tayelor Gosselin, Aquatic Biologist 1 - 6/14/2023



## 6/15/2023 U. Inflata Removal on Pottapaug Pond



Map Created by: Tayelor Gosselin, Aquatic Biologist 1 - 6/16/2023



# Removal

- MWRA notified of the plant on 6-6-2023 and assistance requested
- MWRA sent their contractor – Solitude – to the site on 7-6-23 and 7-7-2023 to hand pull
- 48 gallons removed
- Plant flowering subsiding – impossible to identify

FIGURE 1: Inflated Bladderwort Hand-pulling Locations  
July 6 & 7, 2023



Pottapaug Pond  
Petersham, MA

Pottapaug Pond  
0 500 1,000 2,000 Feet  
1:21,347



Map Date: 7/10/2023  
File: QuabbinRes23  
Prepared by: KV  
Office: Shrewsbury, MA



# Future Plans

- MWRA contractor to return in spring 2024 as soon as flowering occurs
- Continued hand-pulling
- Ongoing monitoring
- BLA 3 reservoir surveys
- No private boat launching at Pottapaug until:
  - Plant eradicated
  - New policies developed to prevent spread to Reservoir

