



A close-up, underwater photograph showing dense, green milfoil plants. The plants have thin, branching stems and small, feathery leaves. Some stems are red, while others are green. The water is slightly murky, and sunlight filters through the plants.

# Turee Pond Variable Milfoil Management

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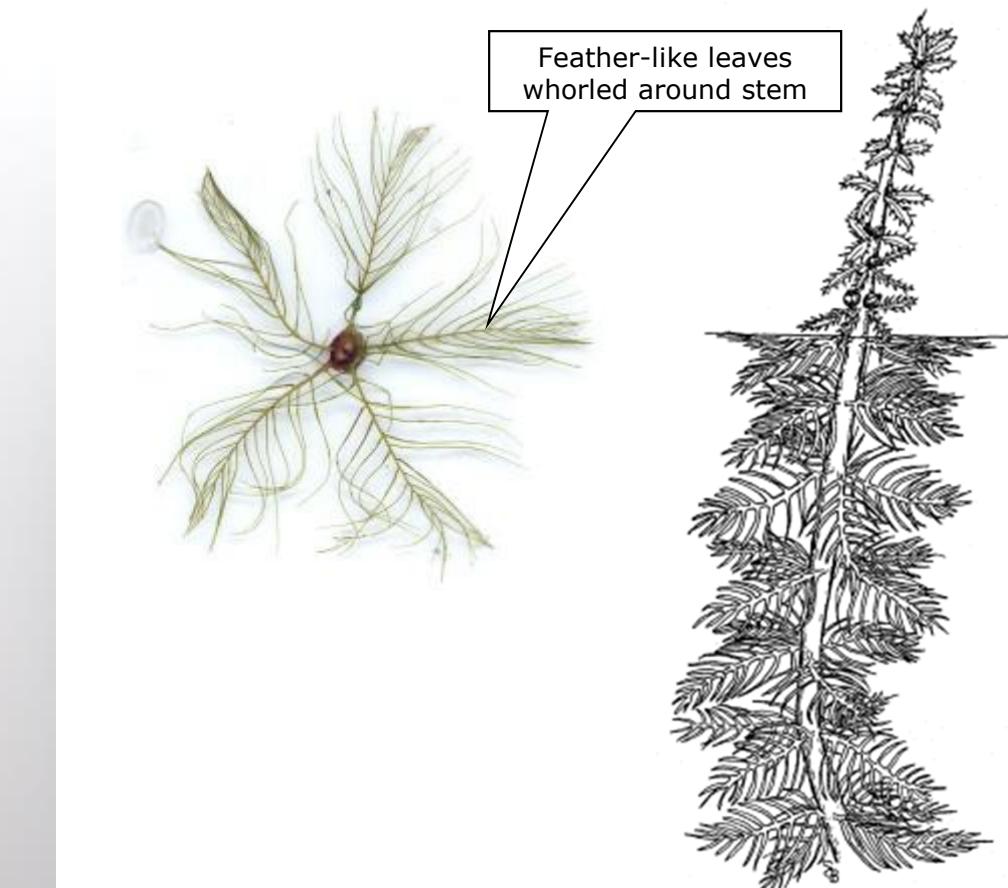
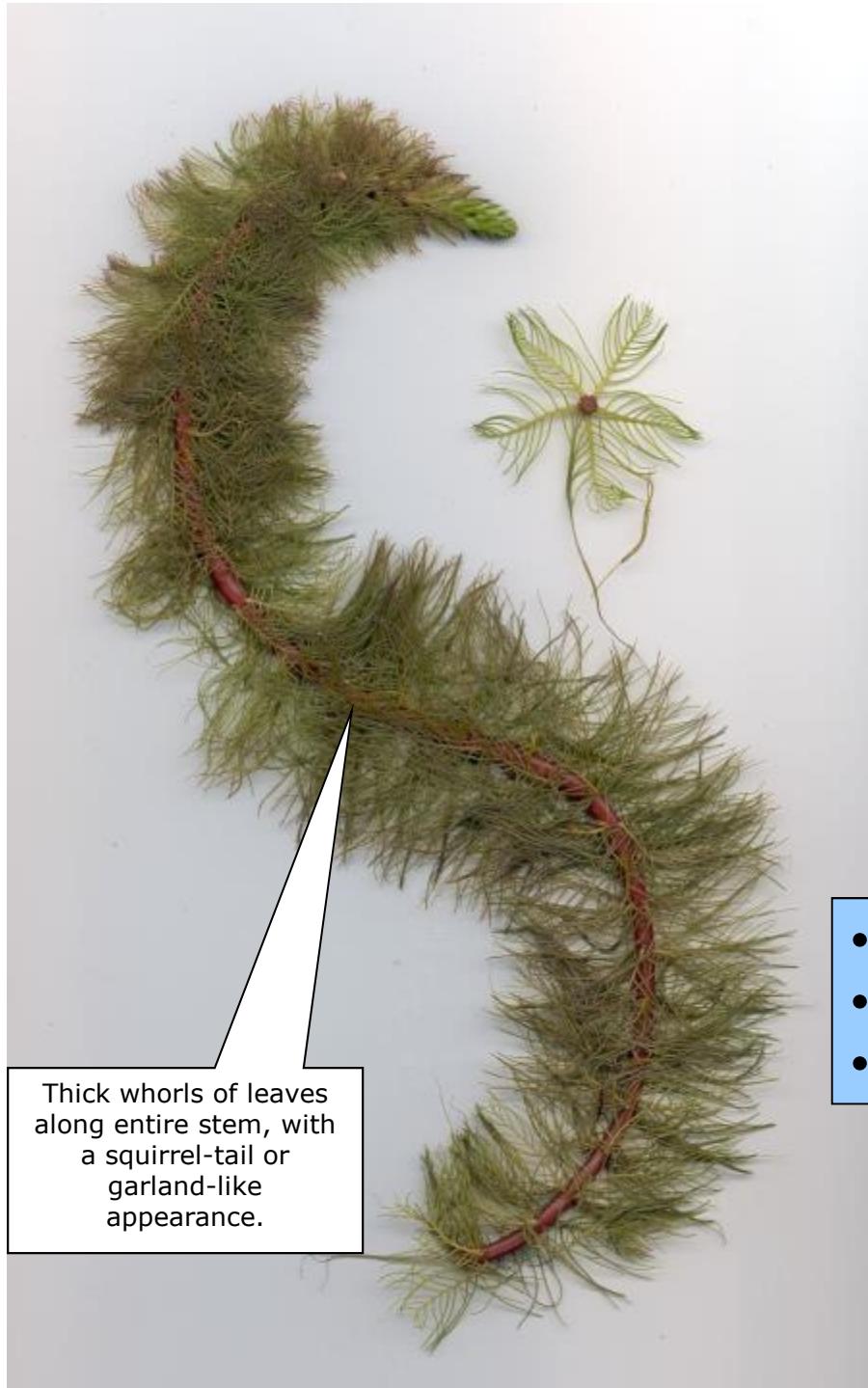
NH Department of Environmental Services

# Overview

- Variable milfoil
- Variable milfoil in Turee Pond
- Sources of Milfoil
- Management Options
- Long-Term Management Plan
- Next Steps



Variable milfoil in Turee Pond- May 10, 2016



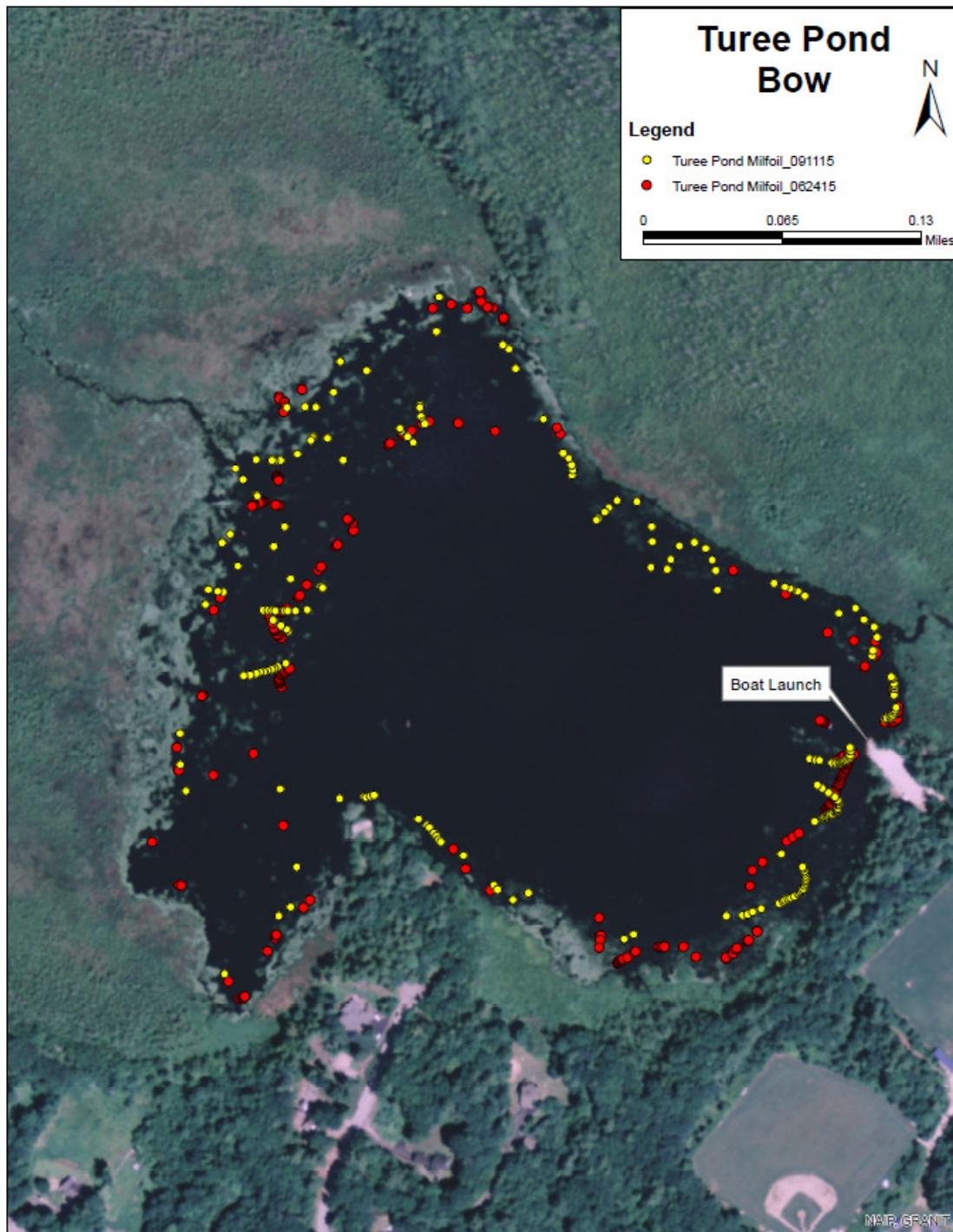
- Variable milfoil- *Myriophyllum heterophyllum*
- Native to southern and central U.S., not to NH
- In several waterbodies in NH

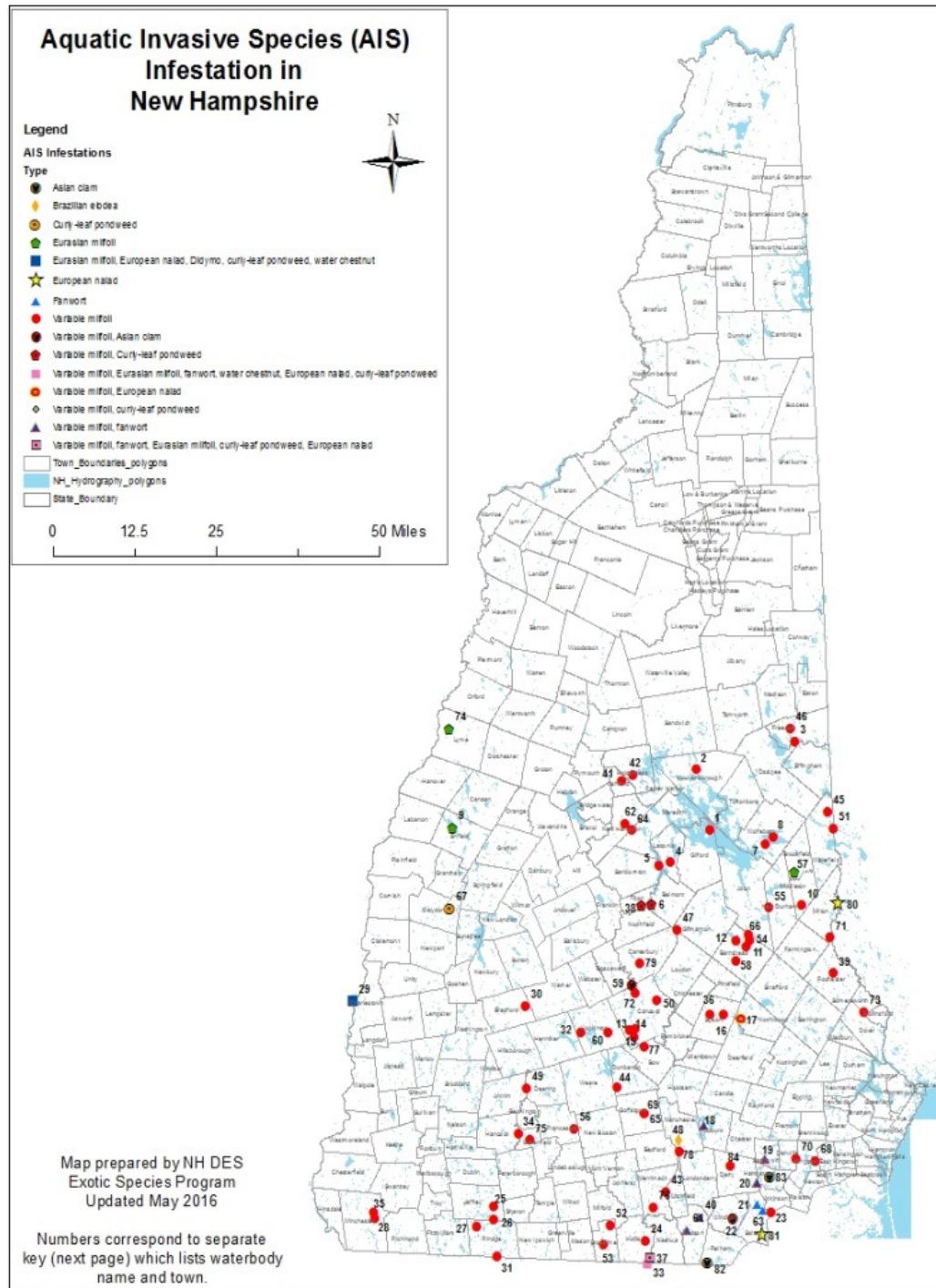


# Variable Milfoil in Turee Pond



- Variable milfoil first detected during summer 2015 by Sandy Crystal
- Reported to Amy Smagula who identified it as variable milfoil
- Sent for DNA analysis for verification
- Field survey in summer 2015
- Repeat survey in October 2015
- Winter 2015/spring 2016 planning, contracting





# Infestations

- 84 Infested Waterbodies
  - 72 variable milfoil
  - 6 Eurasian milfoil
  - 9 Fanwort
  - 5 European naiad
  - 2 Water chestnut
  - 5 Curly-leaf pondweed
  - 1 Brazilian elodea
  - 4 Asian clam
  - Many, many Chinese mystery snails (not shown on map)

# Invasive Species Mantra



- Prevention
- Early Detection
- Rapid Response
- Management

# Management Options



- **Physical control**
  - Hand removal
  - Diver-Assisted Suction Harvesting (DASH)
  - Drawdown
- **Mechanical control**
  - Dredging
  - Hydro-raking
  - Mowing/harvesting
- **Biological control**
  - Using an introduced species to control the milfoil (insect, fish, etc)
- **Chemical control**
  - Aquatic herbicide

# Recommended Milfoil Control Strategy for Turee Pond- 2016

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- A Long-Term Management Plan was developed for Turee Pond over the winter to guide management efforts
- Spring herbicide treatment using Navigate- June 2<sup>nd</sup>
  - 2,4-D ester formulation
  - Granular
- Follow-up diving for any regrowth or new growth
  - DES divers for now, contract divers likely in the future

# Turee Pond Bow

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## Legend

Turee Pond Phrag

Turee Pond 2016 Treatment Area- 30.05 ACRES

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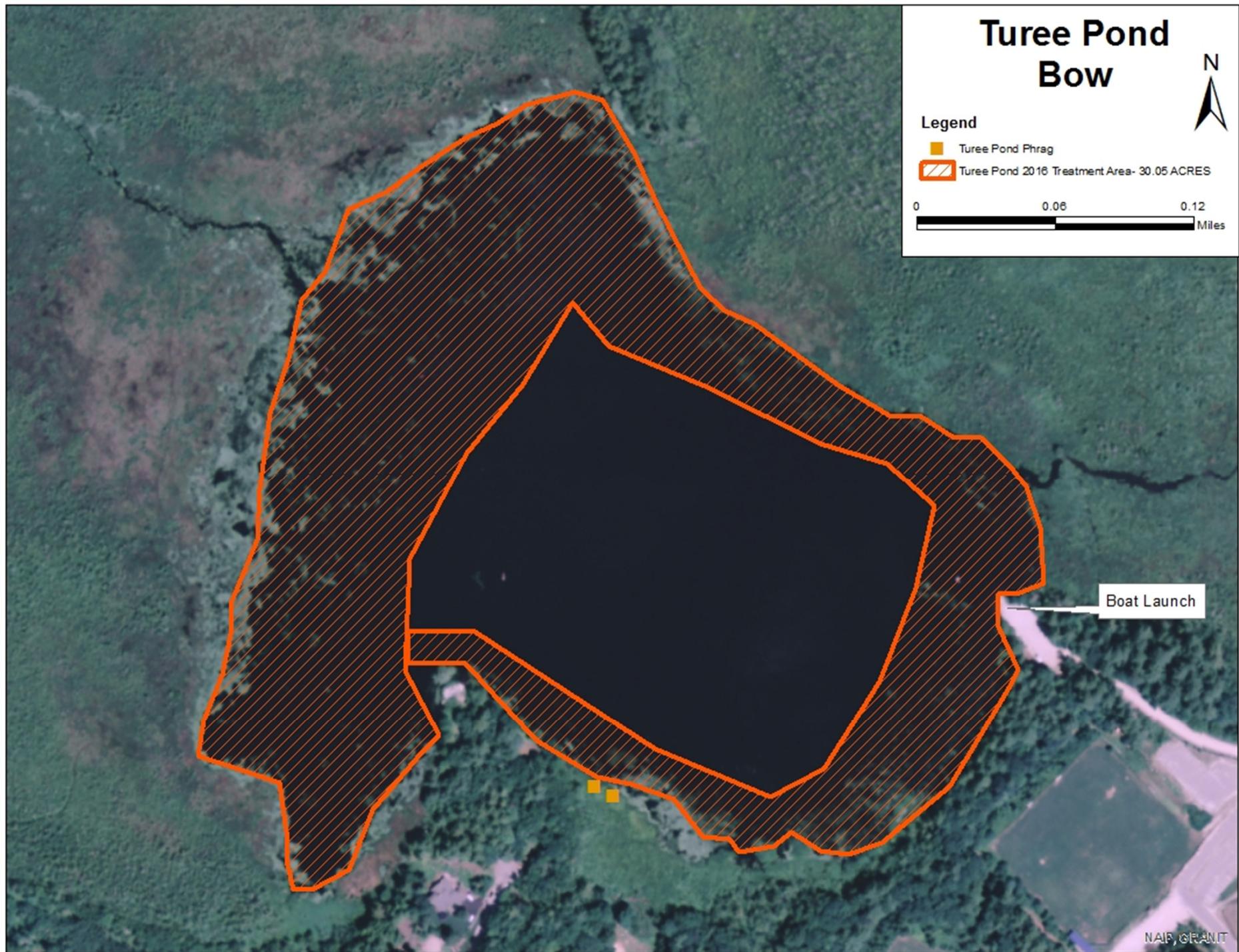
0.06

0.12

Miles

Boat Launch

NAP, GRANIT



# Additional Actions

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- Weed Watcher training
  - To increase volunteer survey efforts
- Lake Hosting
  - To prevent new infestations of other things, and keep your milfoil out of other lakes

## Coming Years



- Management is not a “one and done”
- Continued monitoring, management as needed, and prevention of future infestations
- Grant funds will be available, but only up to a 50% match level, some years less than 50%, so a local funding source will be needed
- DES will work with lake residents and town
  - Five year plan part of LTMP

Year	Action	Responsible Party	Schedule
2015	Variable milfoil growth verified in Turee Pond	DES	June 2015
	Survey and planning for summer/fall milfoil control actions	DES	May/June
2016	Herbicide treatment of areas outlined in 2016 Proposed Control Activities Map in Figure 1	SOLitude Lake Management	June
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need)	DES	June-September as needed
	Work with town and shoreline owners to form an invasive species group in the town	DES/local entities	Summer/Fall
	Survey and planning for next season's control actions	DES	September

2017	Weed Watcher training	DES/local entities	May/June
	Herbicide treatment of areas outlined in 2016 Proposed Control Activities Map in Figure 1	SOLitude Lake Management	June
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need)	Contract Divers	June-September as needed
	Survey and planning for next season's control actions	DES	September
2018	Weed Watching and marking/reporting of milfoil growth	Local Weed Watchers	Once a month from May through September
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need)	Contract Divers	June-September as needed
	Survey and planning for next season's control actions	DES	September

2019	Weed Watching and marking/reporting of milfoil growth	Local Weed Watchers	Once a month from May through September
	Survey and planning for summer/fall milfoil control actions	DES	May/June
	Diver/DASH work as needed and recommended (areas to be determined based on need and updated survey)	Contract Diver	June- September as needed
	Survey and planning for next season's control actions	DES	September
2020	Update and revise Long-Term Variable Milfoil Control Plan	DES and Interested Parties	Fall/ Winter

Thank you!  
Questions/Discussion

