

# Agency Collaboration for Fragrant Water Lily Management on Holland Lake



# Presentation Outline

Fragrant Water Lily  
& Management in Missoula  
County

Holland Lake Context

Stakeholders and FWL  
population on Holland Lake

Tabletop Activity

Macrophyte Survey &  
Herbicide Sampling

Rhodamine Dye study &  
Public engagement

# Fragrant Water Lily (*Nymphaea odorata*)

- Introduced perennial flowering plant
- Typically grows in 3-6 feet of water
- Lily pad has a red underside
- White flower with pointed leaves
- Creates large rhizome mats
- Can look Similar to Yellow Pond Lily



(Fragrant Water Lily)



(Yellow Pond Lily)

- Listed as a Noxious weed in Missoula County in 2020
- Large populations of Fragrant Water Lily on the clearwater chain of lakes and on Holland Lake



# Management of FWL in Missoula County

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- Fragrant Water Lily monitoring and research
- Effects of algae
- Pulling small populations
- Mapping



# Holland Lake

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- High use recreation area
- Headwaters for the Swan river
- Several larger populations of Fragrant Water Lily
- High public visibility
- Many different stakeholders



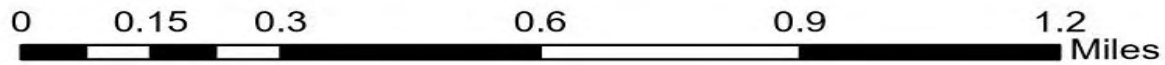


Mapbox



FWL

# Fragrant Water Lily on Holland Lake (2022)



# Stakeholders of Holland Lake

Missoula  
County

Tourism based  
businesses

MT FWP

Forest Service

Local community

Landowners

DNRC

# Tabletop Activity

- On April 21<sup>st</sup> 2023, partnering agencies came together to determine an actionable management plan for FWL on Holland Lake

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## Goals of the tabletop activity:

- Determine current and future FWL management strategies
- Figure out needs for each management initiative
- Determine agency roles
- Establish individuals as leads for different aspects of the project
- Propose or establish funding sources





# Since the tabletop activity

- Continued hand pulling of FWL in areas where it is applicable
- Macrophyte survey
- Continuing to map FWL populations
- Creating a community folder where all partners can share information
- Creating protocol for Rhodamine dye study
- Herbicide sampling

# Macrophyte Survey

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- Macrophyte surveys were done in both Evil and in Scirpus Bay.
- Eight transects in each bay, each emergent stem was identified.
- One species of concern, Water Bulrush, *Schoenoplectus subterminalis*, was found just outside of Scirpus Bay.





Water  
Bullrush

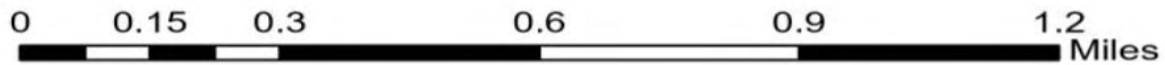


Whisper



FWL

# Fragrant Water Lily on Holland Lake (2022)



# Herbicide Sampling

- Gain an understanding pre-existing herbicides in the system.
- We have found herbicides pre-treatment in previous Fragrant Water Lily management on other lakes.



# Public Engagement



Questions?

