LAKE ROESIGER INVASIVE AQUATIC PLANT PROGRESS REPORT

September 30, 2023

Snohomish County
Conservation & Natural Resources
Surface Water Management

SEASON PROGRESS

2023 - MILFOIL ACTIONS

CONTRACTED FOR 5 DAYS OF PROFESSIONAL DIVING

ENTIRE LAKE COVERED THANKS FOR REPORTING LOCATIONS!

ONLY 14 PLANTS FOUND AND REMOVED

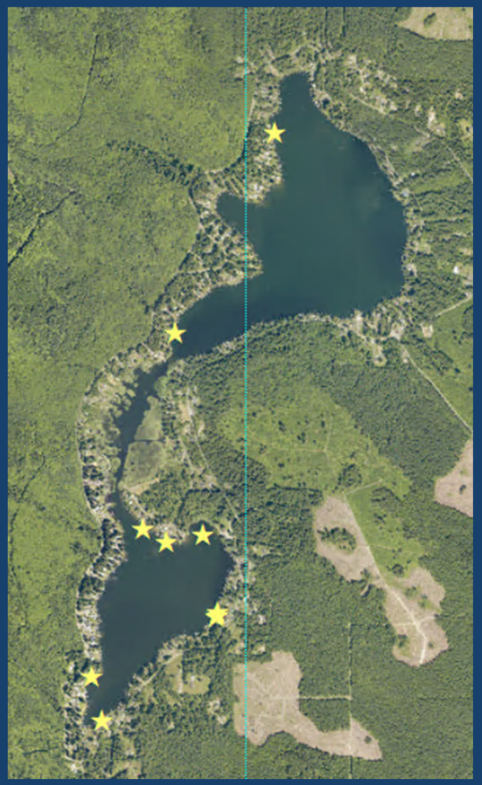
VOLUNTEER DIVERS MAY DO ADDITIONAL SURVEYS OF AREAS WITH PLANTS*

**Volunteer dive work is from individual community members and is not sponsored or initiated by the County*

Estimated Plan Cost: $22,000 2023 Contractor Cost: $16,372*

2023 PLANT LOCATIONS (ADDED TO ONLINE MAP)

Divers found 14 plants



HERBICIDE TREATMENT ISSUES

Airboat not in service for over a month – standard boat used for 1st treatment

- Entire east side middle basin could not be posted, so not treated
- Area by park not fully treated
- 3rd treatment may be required this year

Lower water levels from dry spring/summer

- Shallow shoreline areas could not be accessed for treatment
- Lilies brown earlier than any other area in county and if too brown cannot be treated
- Treatment date will be scheduled earlier next year – early July for Roesiger or last week in June

HERBICIDE TREATMENT #1

- August 10th was first treatment
- 9.9 acres of treatment
- All areas of North and South Basin – except large shallow area by park
- Middle basin – approximate area shown in map

Conractor Cost: $5,300.59 (9 acres)

**Not including project management*

HERBICIDE TREATMENT #2

- September 14th was second treatment
- Approximately 12.6 acres treated
- Awaiting treatment map and invoice
- Middle Basin:
  - East side central corridor; no shallow areas
  - Cleanup of west side
- South basin
  - Treat shallow area in park that was not previously successful

Actual Cost: Awaiting invoice (estimated cost $6,400)

HERBICIDE TREATMENT EFFICACY CONCERNS

- Heard from residents concerned that herbicide didn't make any change
  - Imazamox is a **Slow-Acting** herbicide
  - It is a systemic herbicide – takes longer than a contact herbicide like Roundup
  - It will stop growth immediately but takes 3-5 weeks for effects to show
  - Same herbicide as used on the knotweed last summer
- Cannot assess efficacy until spring
  - County will conduct pre-season survey
  - Adjustments can be made if necessary

SLENDER ARROWHEAD

39.8 acres – dense
5.5 acres - sparse

Committee identified priority as boat launch and shallow channel areas which are the areas where plant would most likely to be caught on boats and carried to other lakes

2023 ARROWHEAD CONTROL - DASH

- Contracted Lake Defense Force
- 6 days completed
- 107 bags removed
- ~0.5 acre removed
- Slower progress near boat launch due to extensive fishing line clogging pumps

Estimated Plan Cost: $22,000 2023 Estimated Contractor Cost: $19,987*

Awaiting last invoice

THANKS KRISTINE FOR DOCK STAGING LOCATION – SAVED NEIGHBORS LOTS OF $$$

Overnight boat docking location

Plant storage

NEXT STEPS FOR SLENDER ARROWHEAD – DASH EVALUATION

- Efficacy
  - Was selected as best potential method at time of plan given lack of research on this plant
  - Initial survey shows highly effective with 100% removal
  - Plant does have tubers that may not have been removed
  - Survey required in spring to ensure plants do not re-emerge
- Cost Effectiveness
  - Rate of removal lower than hoped
  - Progress faster away from public launch with less fishing line
  - Efficiency may improve with experience

2023 INVASIVE SHORELINE PLANT ACTIONS

- Knotweed
  - 2022 – County treated 8 properties
  - 2023
    - County contacted 12 properties; 3 properties responded
    - Treated 3 properties
    - 8 properties have eradicated or nearly eradicated
  - 2024 - Will continue efforts in 2024
- Loosestrife
  - 24 properties in 2021
  - Few new properties identified
  - Landowners appear to have eradicated on some - Keep up good work!
- Iris – did not track – outreach will be focus next year

2023 Actual Cost: Still in progress – only County funds used for knotweed

2023 ACTIONS – INVASIVE SPECIES PREVENTION

- Signs posted (2022)
- Outreach
  - Included “Clean, Drain, Dry messaging” on all communication with community
- Community-led workshop – August 5th
- Major focus for 2024 and topic for next advisory board meeting

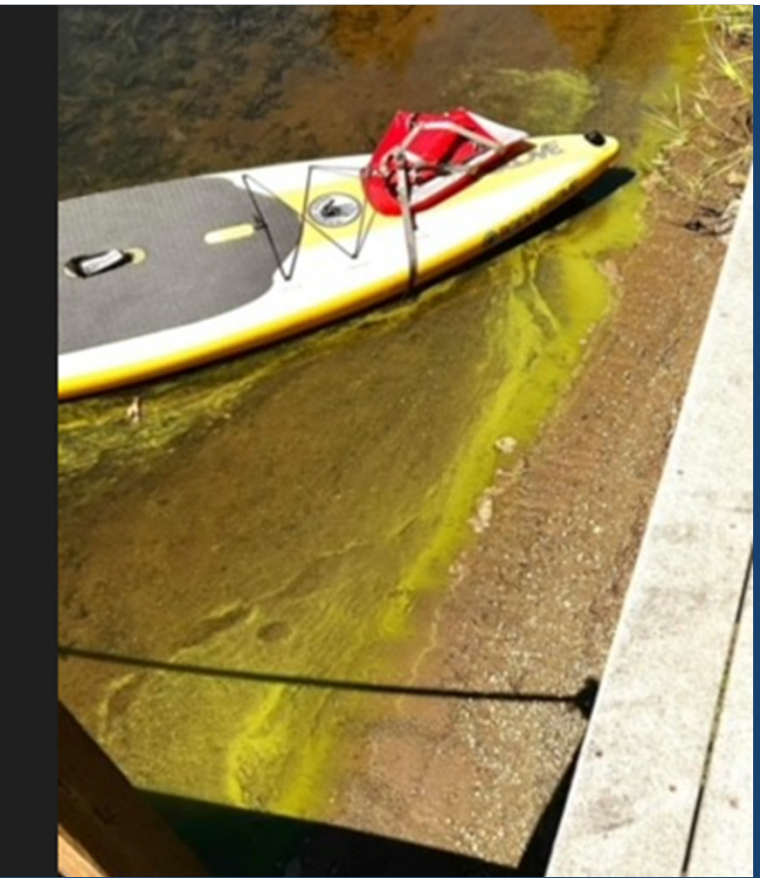
BUDGET & EXPENSES

2023 ESTIMATED & ACTUAL PROJECT EXPENSES (TO DATE)

Element	Estimated Cost (from plan)	Cost (through Aug 2023)
EWM	$22,000	$16,372
Water Lily Treatment	$34,000	$11,700 (estimated)
Prevention Outreach	$3,500	$0
Shoreline Plant Outreach & Treatment	$15,000*	TBD*
Arrowhead DASH	$22,000	$19,987 (estimated)
SWM labor (project management, community engagement, monitoring)	Embedded in estimated cost for each element*	$15,621*
Total	**~$66,000**	**~$50,000**

*Paid for by County funds

TOXIC ALGAE BLOOM QUESTIONS



- What happened?
  - Light algae scum found in north basin (moves with wind)
  - Looked similar to pollen floating on water
  - Type of algae can produce toxins
  - Testing showed no toxins present – YAY!
  - Dissipated over the week
  - Blooms also found in Roesiger in 2016
- What caused bloom?
  - Blooms triggered by:
    - Sunlight
    - Warm temperatures
    - Phosphorus
  - See what you can do to reduce nutrients and prevent blooms – www.lakewise.org.

THANK YOU FOR HELP