Valley County Waterways Advisory Committee

Payette Lake – Eurasian Watermilfoil

Technical Advisory Group

5-year Adaptive Management Plan

Adaptive Management Framework Overview

Thank you to the Community Driven Technical Advisory Group for their time and effort on the development of the Eurasian watermilfoil plan for Payette Lake. This plan establishes an adaptive, data-driven approach for controlling Eurasian watermilfoil in Payette Lake. This framework emphasizes the initial reduction of large established infestations using herbicides followed by annual surveys and targeted control using the most appropriate integrated methods based on the infestations size and density. This plan is intended to achieve Eurasian watermilfoil reduction in 5 years, but the plan can be adapted to address recurrence issues beyond the 5-year initial period.

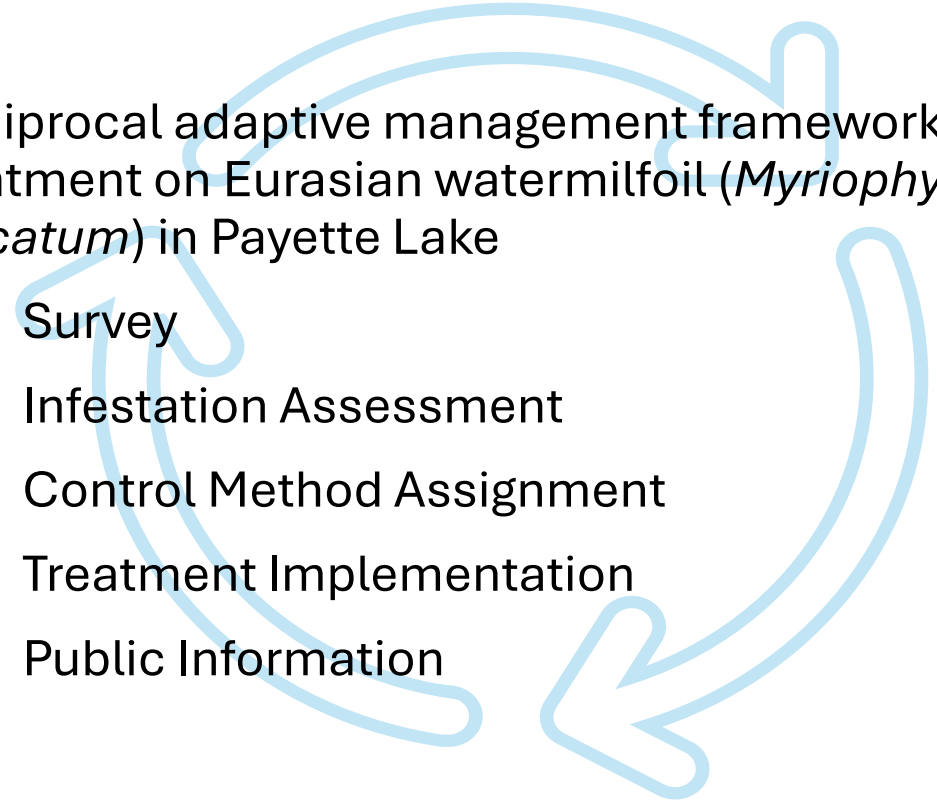
<u>Payette Lake Eurasian watermilfoil Technical Advisory Group:</u>

Big Payette Watershed Advisory Group
Big Payette Lake Water Quality Council
City of McCall
Idaho Department of Agriculture
Idaho Department of Environmental Quality
Idaho Department of Lands
Idaho Fish and Game
Ponderosa State Park
Valley County
Valley County Waterways Advisory Committee
Valley Soil and Water Conservation District

Adaptive Management Framework Overview

Reciprocal adaptive management framework for treatment on Eurasian watermilfoil (*Myriophyllum spicatum*) in Payette Lake

1. Survey
2. Infestation Assessment
3. Control Method Assignment
4. Treatment Implementation
5. Public Information



1. Survey

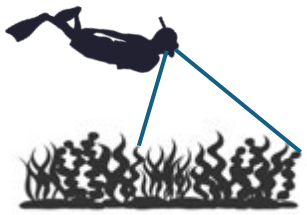
- ISDA conducts full littoral surveys annually to evaluate current infestation presence and expansion/retraction.
- Typically, this has been conducted in July or based on current weather conditions and biological progression of the Eurasian watermilfoil
- Survey methods:
  - Watercraft rake-toss survey
  - Snorkel in-water surveys
- Information on survey methods is available at invasivespecies.idaho.gov/treatment-plans

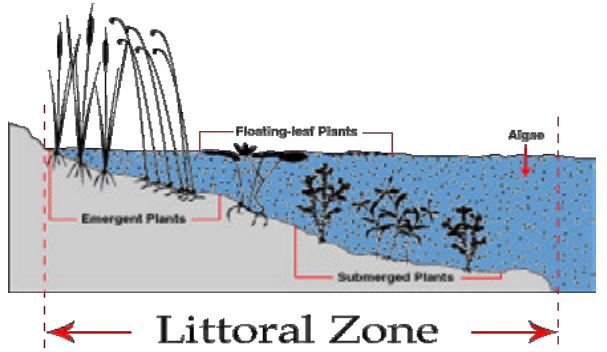
0: 0% target species

1: 1%- 25% target species

2: 25% - 75% target species

3: 75% and up target species





ANNUAL AQUATIC TREATMENT AND SURVEY PLANS

The Idaho State Department of Agriculture coordinates a statewide aquatic invasive species management and control program, acting to protect the integrity of the state's water bodies from the biological degradation caused by invasive aquatic plants and pests.

By achieving this goal, the economic, recreational and aesthetic uses of water bodies are protected, water quality is maintained, and natural aquatic systems are not impaired.

FOR SPECIFIC INFORMATION ON TREATMENT AND SURVEY ACTIVITIES IN YOUR AREA, PLEASE CLICK ON THE FOLLOWING LINKS:

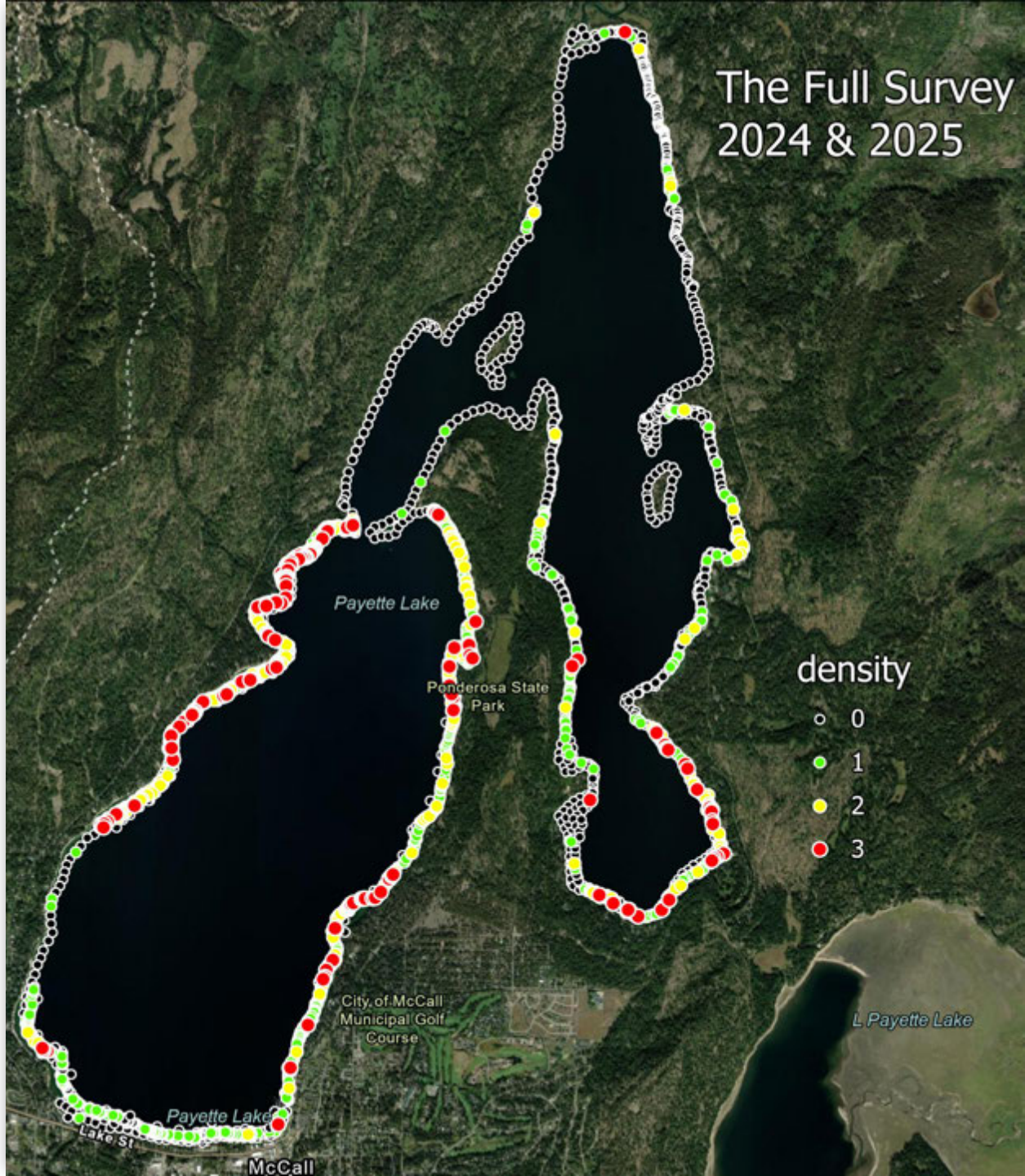
WATERWAYS SURVEY SOP

TREATMENT MAP

SURVEY DASHBOARD

2. Infestation Assessment

- By utilizing the base set of infestation data that is current from 2025 we will be able to assess Eurasian watermilfoil advancement/retraction in a more analytical analysis of annual progression.
  - Review of prior year infestations in previously treated areas.
  - Evaluation of total biomass of Eurasian watermilfoil as a metric.
  - Infestation trends in areas of the lake and potential prioritization based on size and potential for spread.



3. Control Method Assignment

Mechanical

Statewide Diver Contract

- Suction harvest or hand pull
- Best for low target aquatic weed population density areas
- No water use restrictions
- No notice requirements

Primary goal – management and prevention of low-density infestation expanding

Herbicide

Statewide Herbicide Applicator Contract

- Surface or subsurface delivery
- Best for high target aquatic weed population density areas
- Water use restrictions vary by product labeling and permit
  - Selection based on statewide contract
  - Additional limitation may apply based on land ownership and permit restrictions
- Notices required based on permit, product label and statewide contract

Primary goal – rapid reduction of biomass and containment

Other Treatment Methods Considered

- Benthic barriers – have been used on Payette Lake previously. They are not the best tool for large infestations. When benthic barriers are used on large infestations, they are a very non-selective tool. Killing all vegetation, including beneficial native plants, below the mats and then once removed they are the areas that invasive plants will grow first because there is no competition.
- Mechanical harvester – this method has been used in other waterbodies and has been demonstrated to remove large amounts of plant biomass. However, the cutting takes place above the root crown or the growing part of Eurasian watermilfoil. This cutting is the same as mowing a lawn, it does not outright kill the plant and allows it to grow back. Also of concern with this control method is the number of fragments it creates as Eurasian watermilfoil spreads easily through floating fragments.
- Biocontrol – there are some native species of insects that do opportunistically feed on Eurasian watermilfoil causing minor damage. There is no designated or approved biological control agent for EWM at this time.

4. Treatment Implementation

Treatment Area Prep

- Collecting additional water column profile and site-specific information
- Ensuring application method and timing fit target species growth stage
- Consult with application area partners on plan
- Providing all treatment information to contractors for scheduling and logistics

Notifications

- ISDA sends water right notifications for all herbicide treatments, regardless of active ingredient, 14 days in advance of treatment to all IDWR registered water rights holders.
- Herbicide contractor posts 24-hour dockside notices prior to treatment start to all docks within a quarter mile of application area

Notification for municipal water providers

- In addition to notifications sent to all registered water rights holders, additional email notifications will be sent to the following municipal drinking water providers:
  - City of McCall Water Department
  - Ponderosa State Park

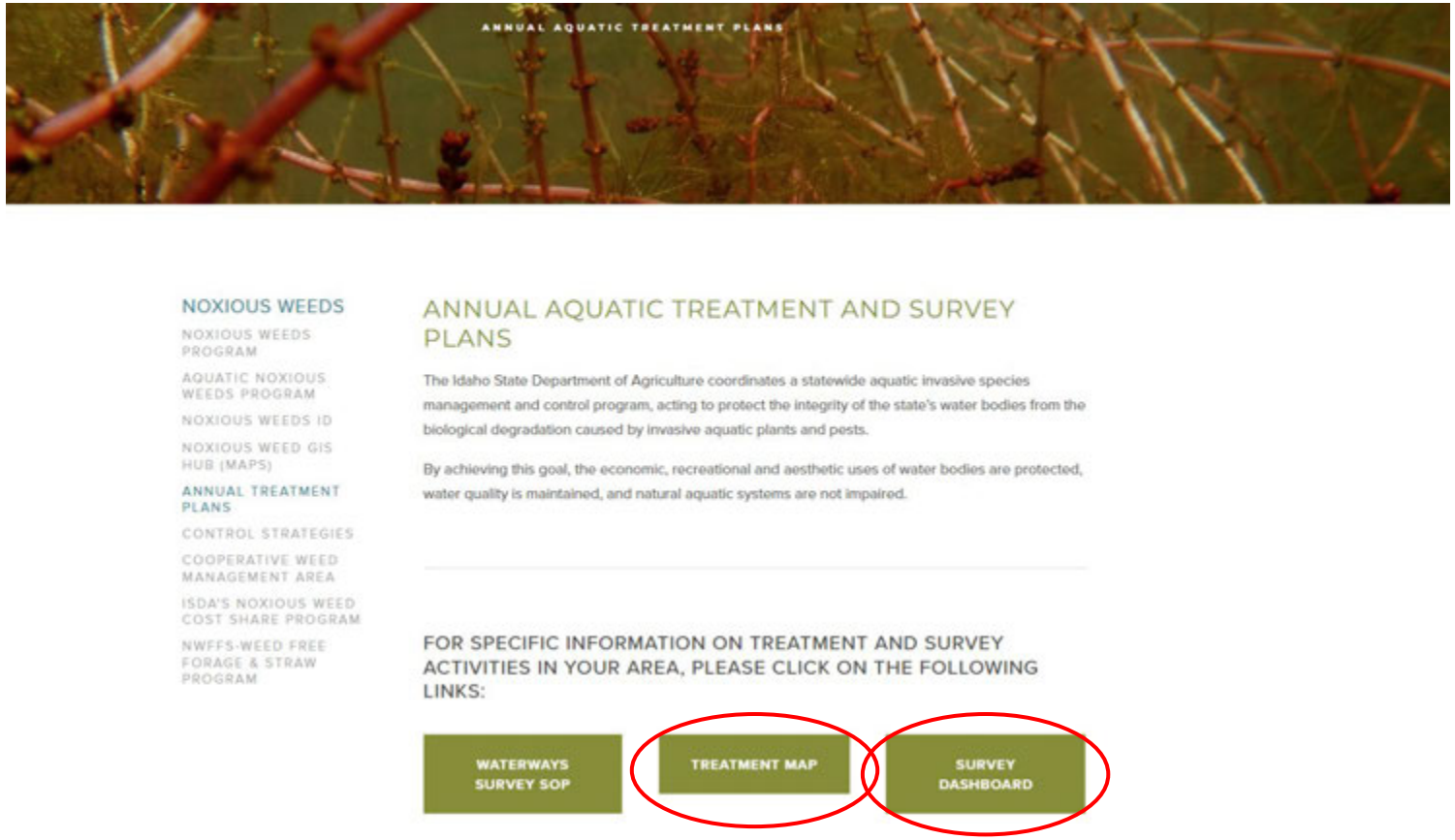
Treatment

Post Treatment Monitoring

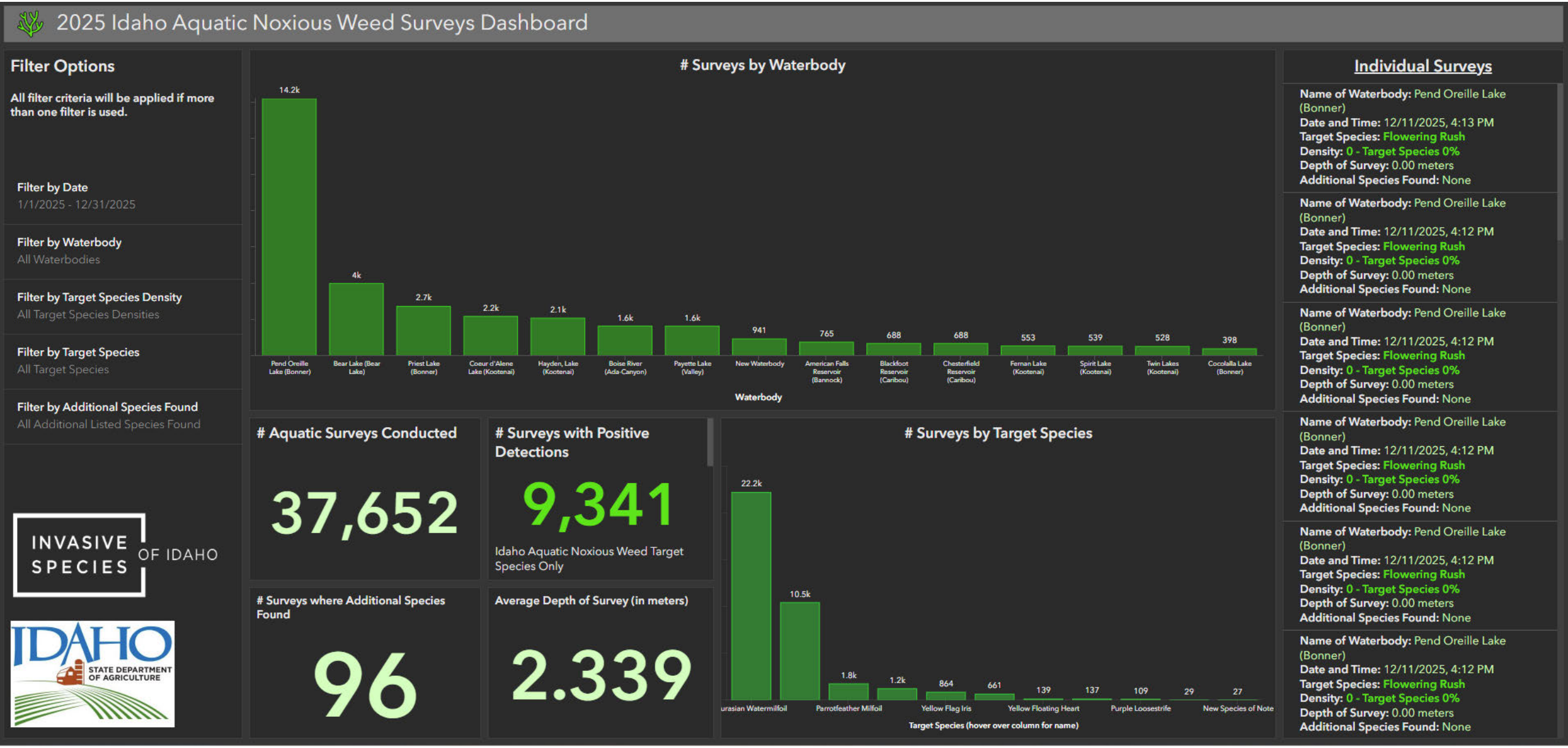
- Product dependent for herbicides:
  - Time after application to first sample
  - Threshold for level to release any restrictions
  - Time before symptoms of control become evident
- For diver work:
  - Observation during to ensure proper removal and disposal
  - Typically occurs after completion of all dive operations
- For all treatments:
  - Success is usually determined 1 year after treatment. Timed during the following survey event and assessment.

Public information

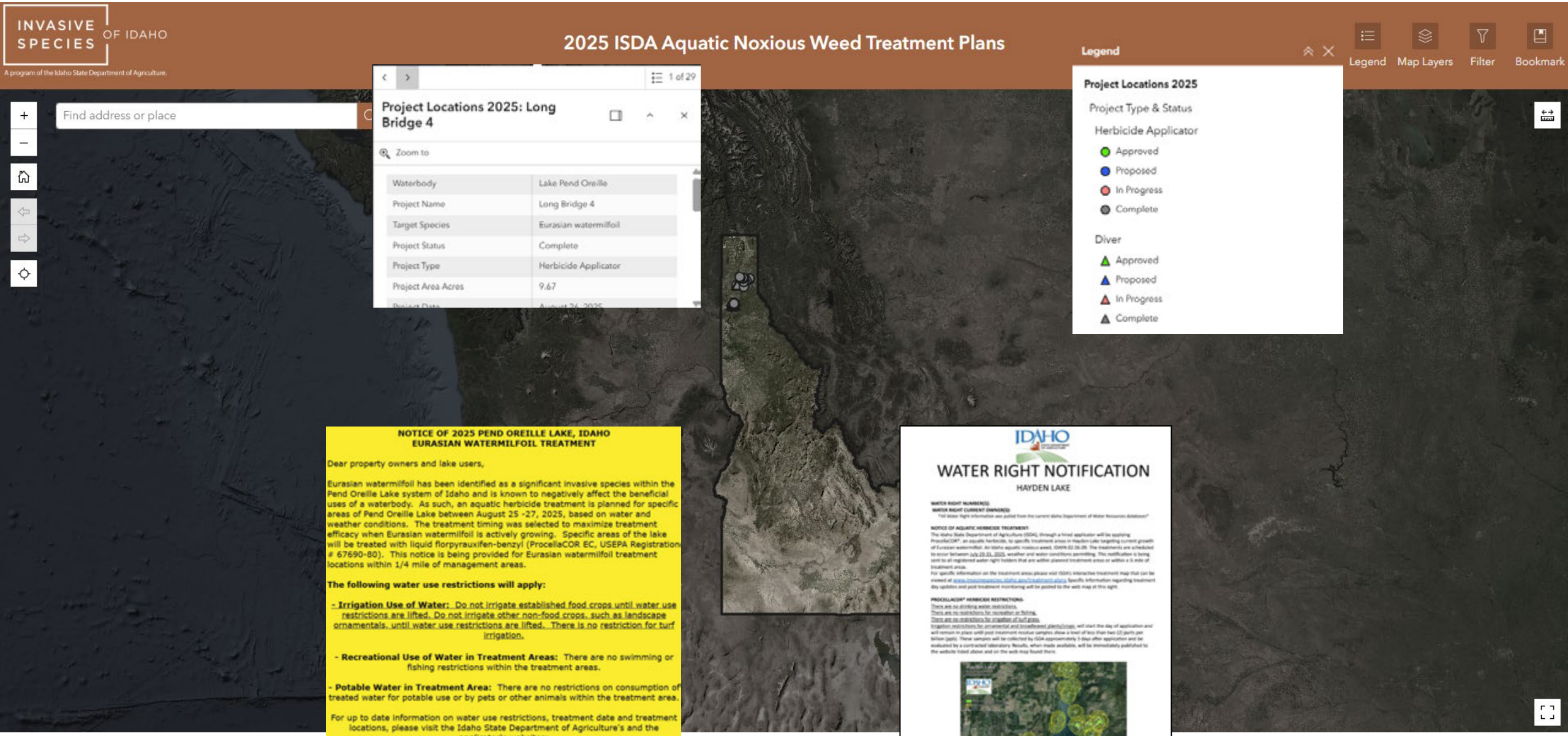
- Information is available for public use at https://invasivespecies.idaho.gov/treatment-plans



Example of survey dashboard available on website



Example of Treatment map available on website



NOTICE OF 2025 PEND OREILLE LAKE, IDAHO
EURASIAN WATERMILFOIL TREATMENT

Dear property owners and lake users,

Eurasian watermilfoil has been identified as a significant invasive species within the Pend Oreille Lake system of Idaho and is known to negatively affect the beneficial uses of a waterbody. As such, an aquatic herbicide treatment is planned for specific areas of Pend Oreille Lake between August 25 -27, 2025, based on water and weather conditions. The treatment timing was selected to maximize treatment efficacy when Eurasian watermilfoil is actively growing. Specific areas of the lake will be treated with liquid florpyrauxifen-benzyl (ProcellaCOR EC, USEPA Registration # 67690-80). This notice is being provided for Eurasian watermilfoil treatment locations within 1/4 mile of management areas.

The following water use restrictions will apply:

- **Irrigation Use of Water:** Do not irrigate established food crops until water use restrictions are lifted. Do not irrigate other non-food crops, such as landscape ornamentals, until water use restrictions are lifted. There is no restriction for turf irrigation.

- **Recreational Use of Water in Treatment Areas:** There are no swimming or fishing restrictions within the treatment areas.

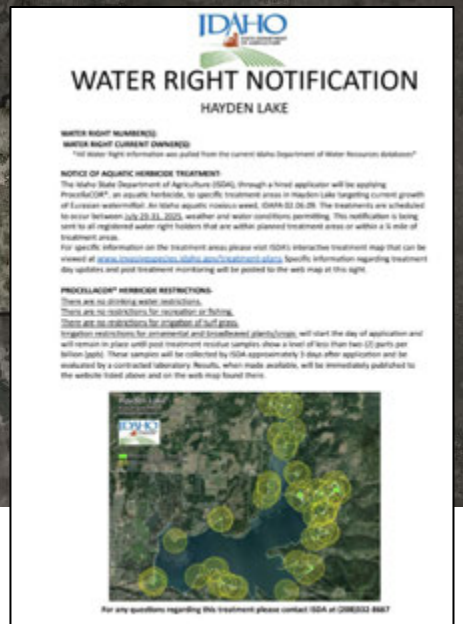
- **Potable Water in Treatment Area:** There are no restrictions on consumption of treated water for potable use or by pets or other animals within the treatment area.

For up to date information on water use restrictions, treatment date and treatment locations, please visit the Idaho State Department of Agriculture's and the applicator's websites:

www.invasivespecies.idaho.gov/treatment-plans

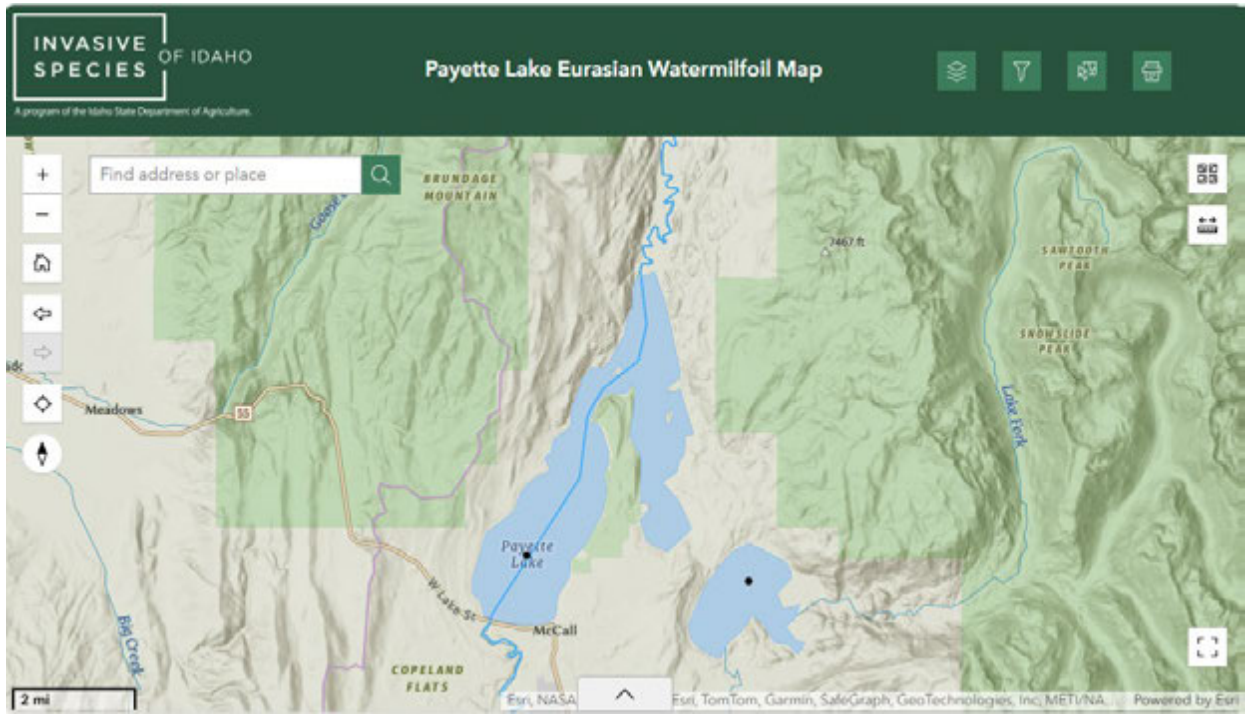
http://www.cleanlake.com/2025pendoreillelake.html

Please contact Tom Moorhouse, Aquatic Pest Control Adviser with Clean Lakes, Inc.,



Payette Lake specific survey map

- This map will be made available to stakeholders around the lake to view year by year survey data for Eurasian watermilfoil on Payette Lake.
- Payette Lake Weed Survey App



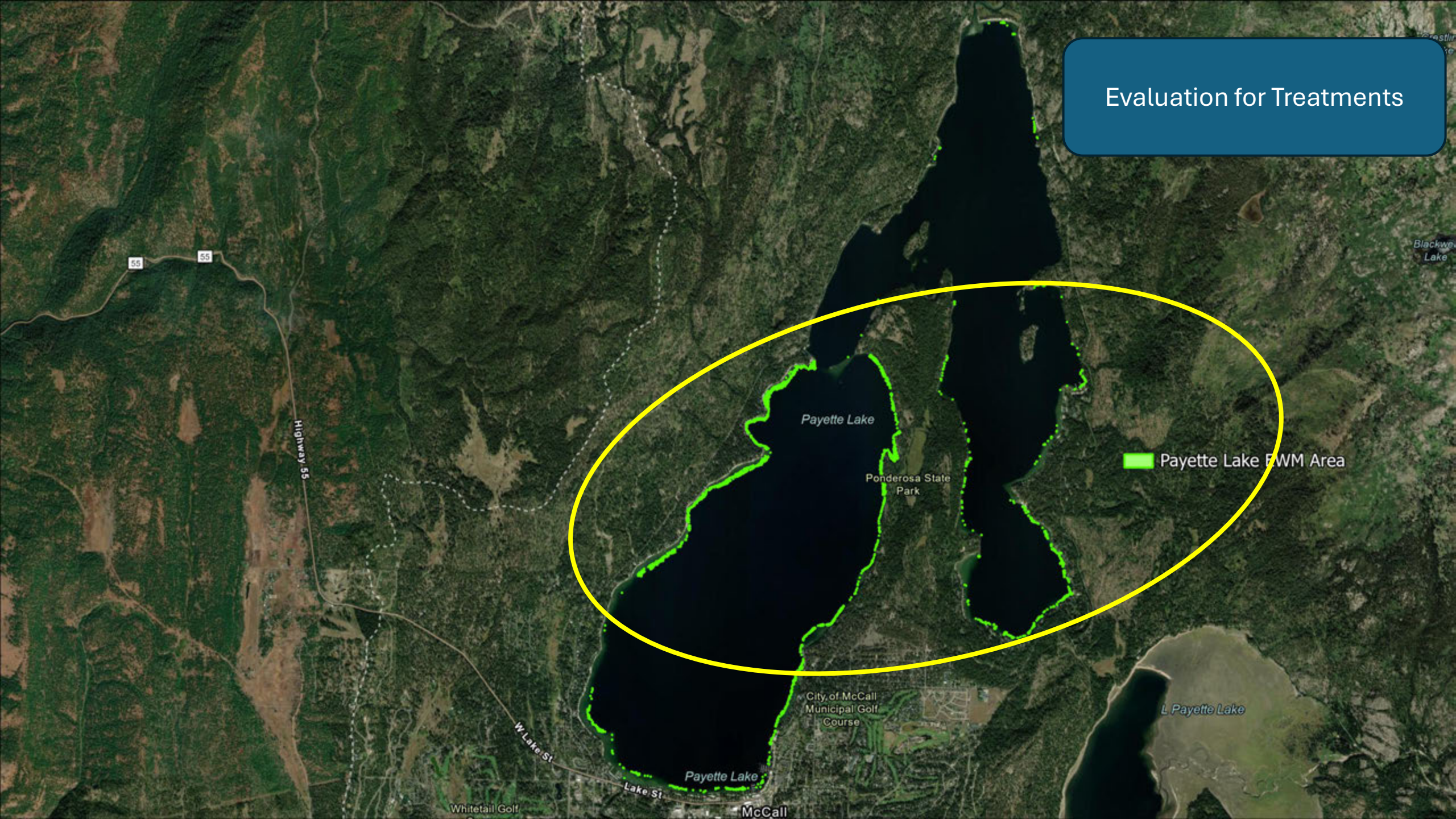
Payette Lake 5-year Adaptive Management Plan

Year 1- 2026

2026- Year One

- Survey- A full littoral zone survey will occur utilizing both watercraft and snorkel survey methods, approximately the month of July, plant growth & weather dependent.
  - When new growth of Eurasian watermilfoil has reached a height of at least 8-12 inches.
- Primary focus will be in 3 primary areas survey first based on previously recorded infestation data to better assess potential treatment areas with remaining areas surveyed after.
  - Pilgrim Cove
  - Ponderosa State Park
  - Wagon Wheel Bay

Evaluation for Treatments



Surveys to target high density areas first

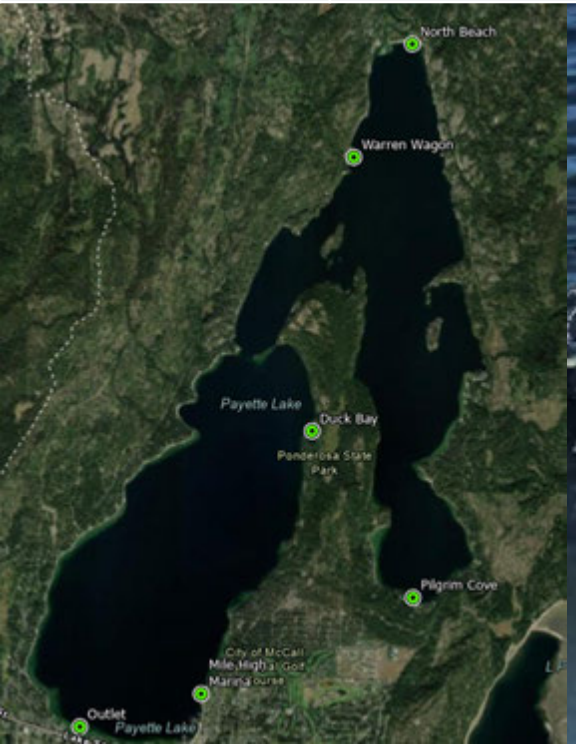
Survey information to be collected for each high priority area include:

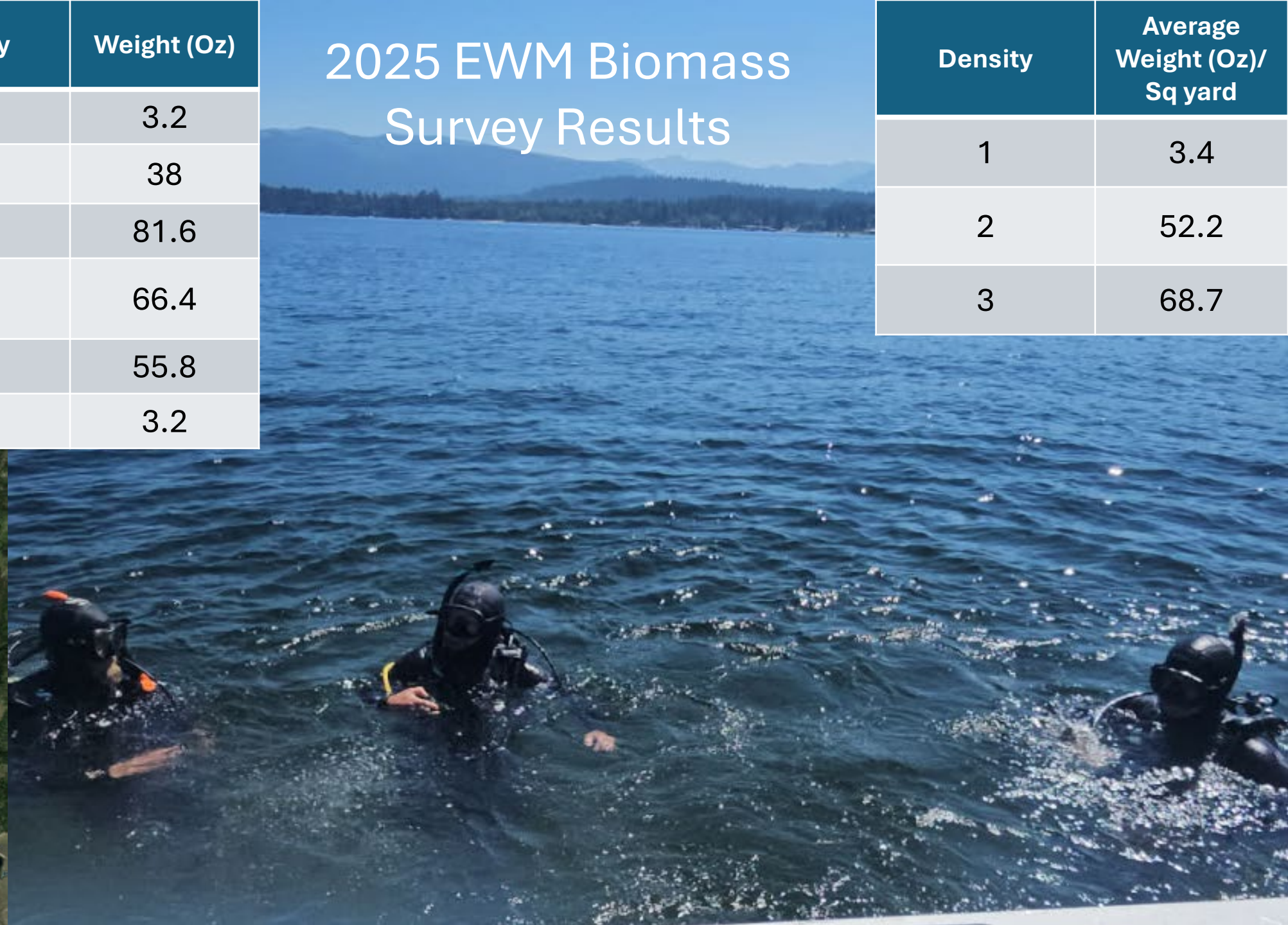
- Confirmation of infestation viability
- Updated location and density information
- Depth of plants
- Repeat of density-weight survey

2025 EWM Biomass Survey Results

Location	Density	Weight (Oz)
Outlet	1	3.2
Warren Wagon	2	38
Pilgrim Cove	3	81.6
Mile High Marina	2	66.4
Duck Bay	3	55.8
North Beach	1	3.2

Density	Average Weight (Oz)/ Sq yard
1	3.4
2	52.2
3	68.7





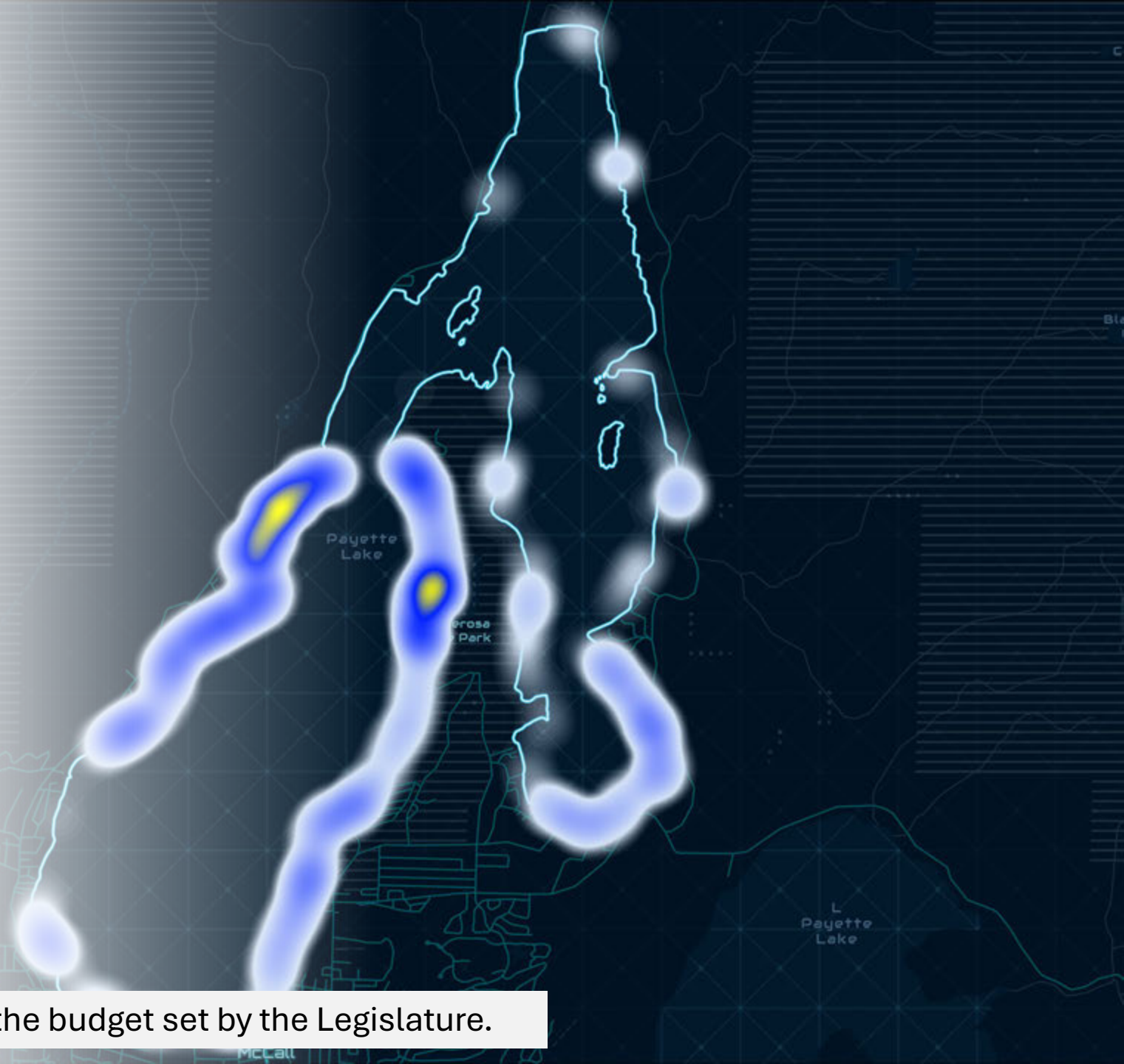
Infestation Assessment

Based on initial survey information, treatment area locations will be determined based on density, potential for spread (boat ramps- docks).

Update base infestation data to evaluate rate of spread +/- estimation of total volume of Eurasian watermilfoil present in Payette Lake. Will be used in post treatment monitoring.

Control method assignment

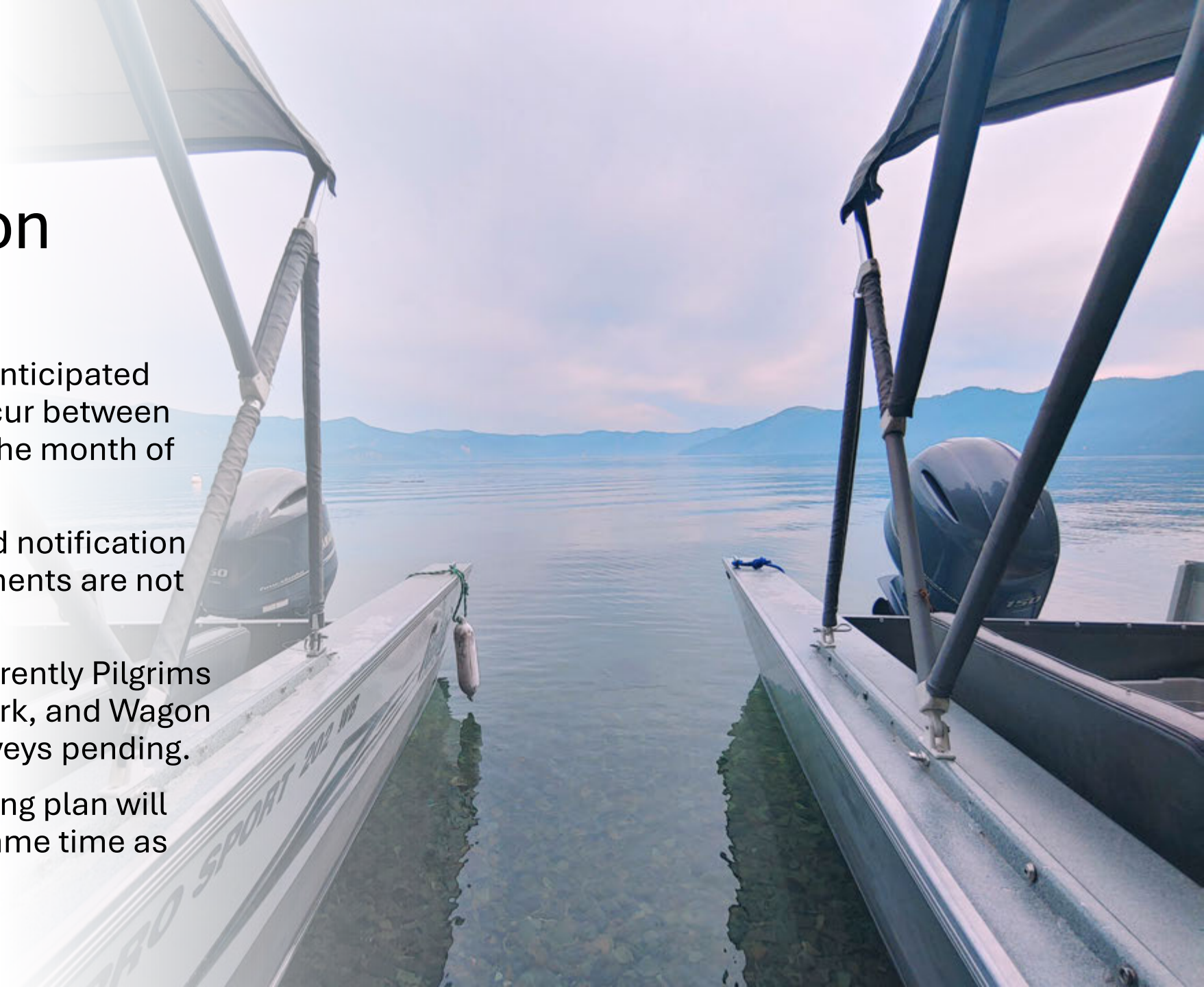
- In the first year ISDA will apply herbicides to ~25-50 acres of Eurasian watermilfoil
  - Cost between $123k - $237k*
- The herbicide of choice is ProcellaCOR (EPA Reg. No. 67690-79).
- Opportunistic diver removal will occur at public ramps to prevent spread outside of Payette Lake



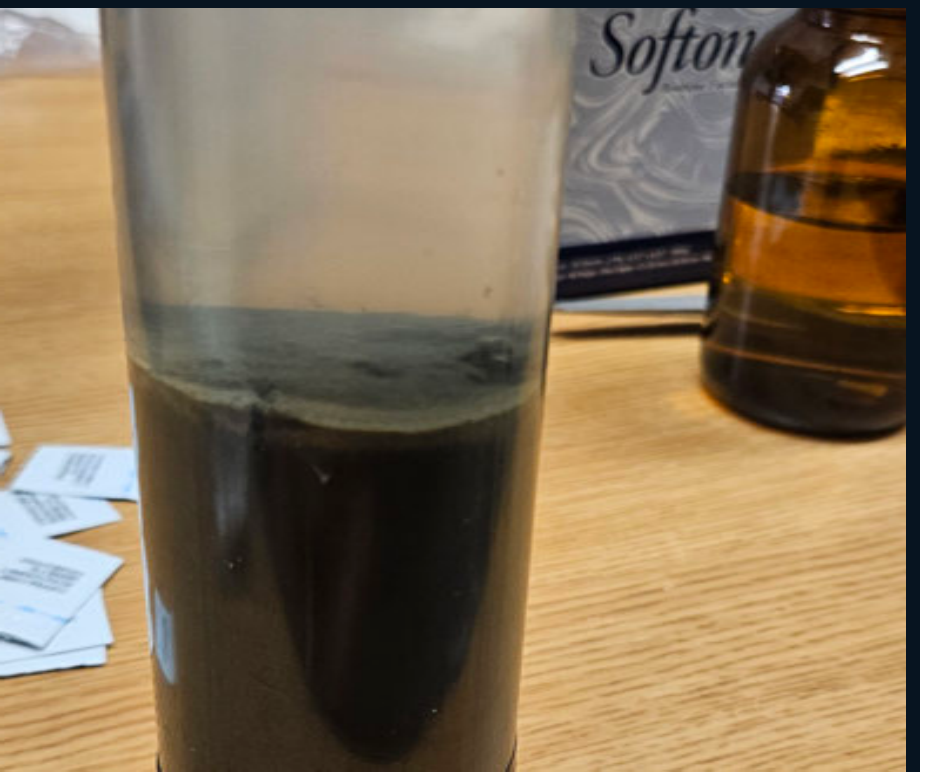
*This amount is subject to change based on the budget set by the Legislature.

Treatment Implementation

- After surveys in July, it is anticipated that treatments could occur between the last week of July and the month of August.
- Exact treatment areas and notification zones for herbicide treatments are not yet known.
- High priority areas are currently Pilgrims Cove, Ponderosa State Park, and Wagon Wheel Bay with other surveys pending.
- A post treatment monitoring plan will also be designed at the same time as the treatment plan.



Post Treatment Monitoring



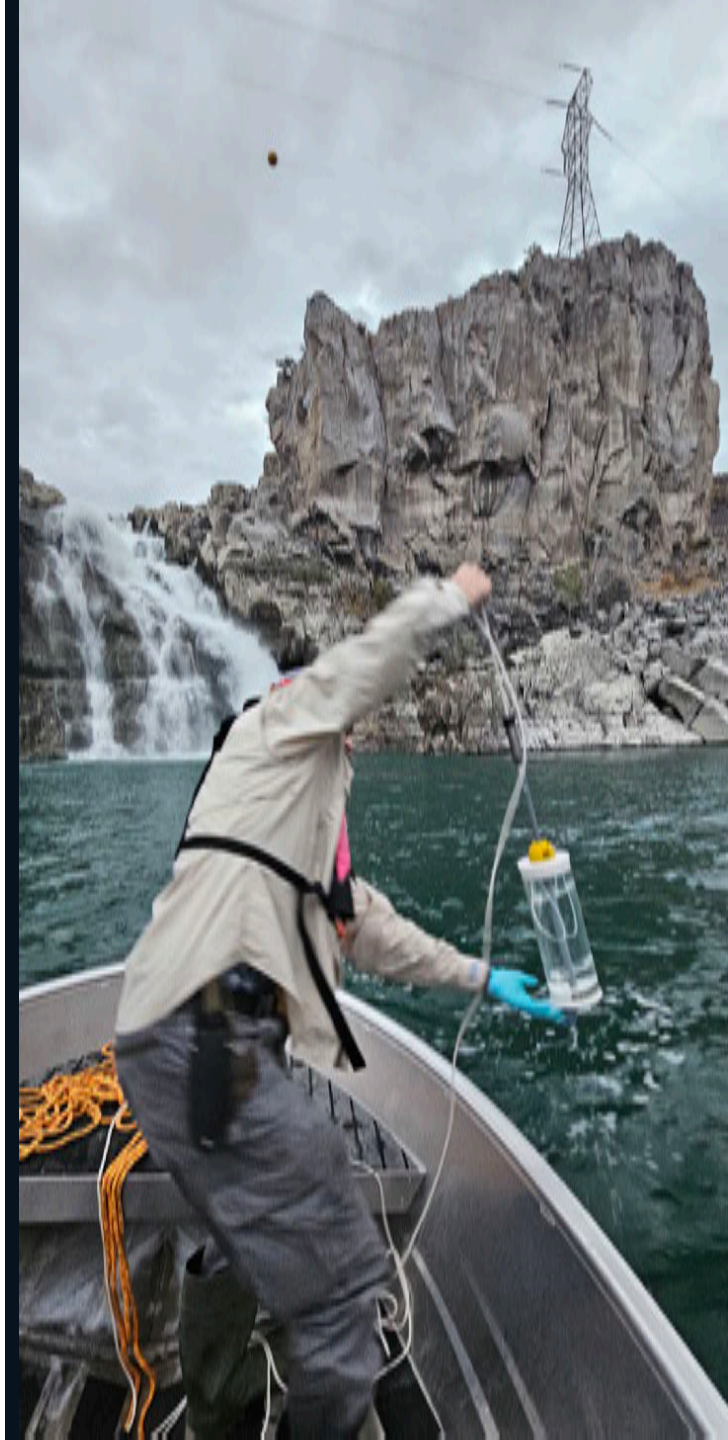
In addition to monitoring the impacts of the treatments to Eurasian watermilfoil, ISDA will conduct post treatment monitoring to evaluate fate of herbicide application:

Water – 3 days after treatment, ISDA will collect water samples (minimum of 1 sample for every 5 acres treated) to be evaluated by a contracted lab. These tests usually take 48 hours. ProcellaCOR will be monitored until they fall below 2 parts per billion, at which point all water restrictions will be lifted as per product labeling.

- Any samples that come back from this initial sampling above the 2ppb level will be immediately resampled until found below this level.

Sediment – ISDA will take a minimum of 3 sediment samples to evaluate the degradation process of ProcellaCOR. These results will be used as additional information for planning additional herbicide treatments in Payette Lake. The benthic sediment samples will occur at the following sampling intervals:

- Pre-treatment
- 30 days
- 90 days
- 1 year after treatment



Public Information

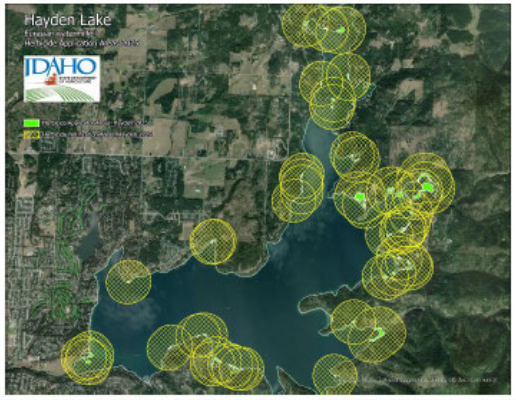
WATER RIGHT NOTIFICATION

HAYDEN LAKE

WATER RIGHT NUMBER(S):
WATER RIGHT CURRENT OWNER(S):
All Water Right information was pulled from the current Idaho Department of Water Resources databases

NOTICE OF AQUATIC HERBICIDE TREATMENT-
The Idaho State Department of Agriculture (ISDA), through a hired applicator will be applying ProcellaCOR®, an aquatic herbicide, to specific treatment areas in Hayden Lake targeting current growth of Eurasian watermilfoil. An Idaho aquatic noxious weed, IDAPA 02.06.09. The treatments are scheduled to occur between July 29-31, 2025, weather and water conditions permitting. This notification is being sent to all registered water right holders that are within planned treatment areas or within a ¼ mile of treatment areas.
For specific information on the treatment areas please visit ISDA's interactive treatment map that can be viewed at www.invasivespecies.idaho.gov/treatment-plans Specific information regarding treatment day updates and post treatment monitoring will be posted to the web map at this sight.

PROCELLACOR® HERBICIDE RESTRICTIONS-
There are no drinking water restrictions.
There are no restrictions for recreation or fishing.
There are no restrictions for irrigation of turf grass.
Irrigation restrictions for ornamental and broadleaved plants/crops: will start the day of application and will remain in place until post treatment residue samples show a level of less than two (2) parts per billion (ppb). These samples will be collected by ISDA approximately 3 days after application and be evaluated by a contracted laboratory. Results, when made available, will be immediately published to the website listed above and on the web map found there.



For any questions regarding this treatment please contact ISDA at (208)332-8667

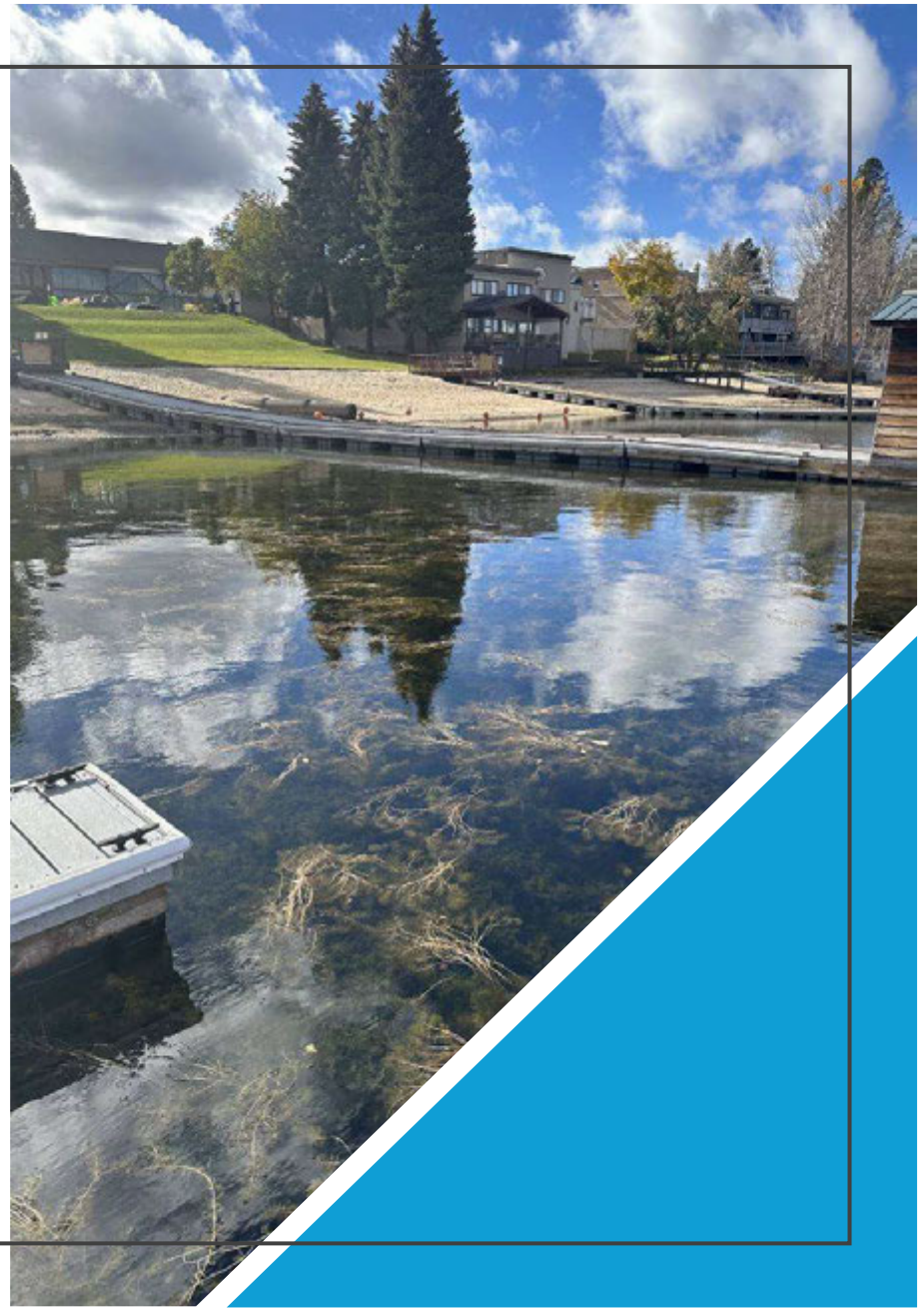
ISDA will provide treatment plans and the following information once current surveys are complete:

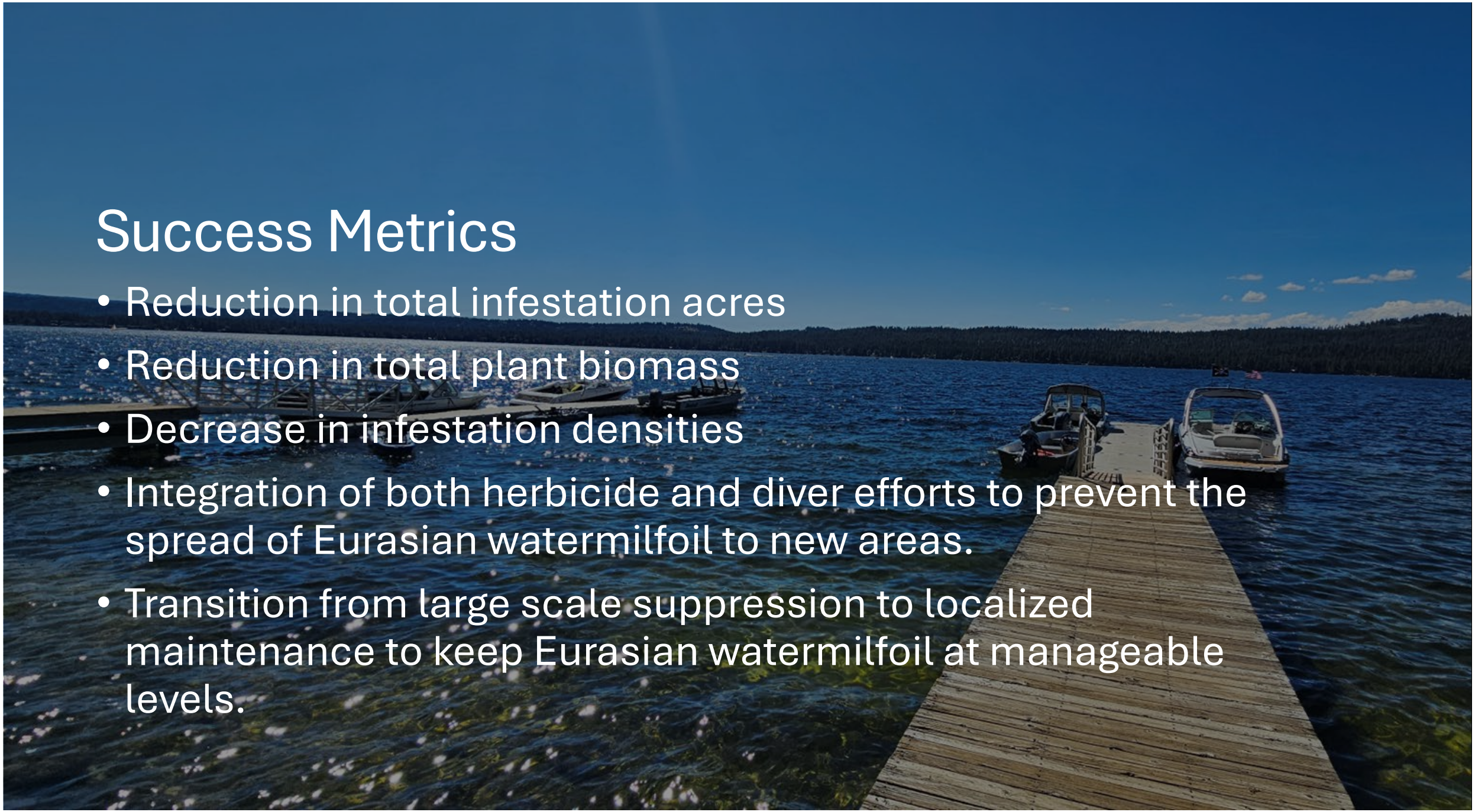
1. Notification to stakeholder entities: DEQ, Ponderosa State Park, IDFG, Valley County, City of McCall, and technical advisory groups. This notification is intended to be informational as plans develop
2. Notifying HOA and Municipal water providers in direct proximity to treatment areas
3. Notification to all registered water rights holders within treatment notification zones (1/4 mile from treatment areas) 14 days in advance of treatment.
4. Notification to all Public swim areas or beaches within notification zones 14 days in advance of treatment
5. Dock notification to occur at all docks 24 hours prior to treatment start

All Information to be made available on interactive treatment map at https://invasivespecies.idaho.gov/treatment-plans

2027-2030 Years 2-5

1. Survey
2. Infestation Assessment
3. Control Method Assignment
4. Treatment Implementation
5. Public Information



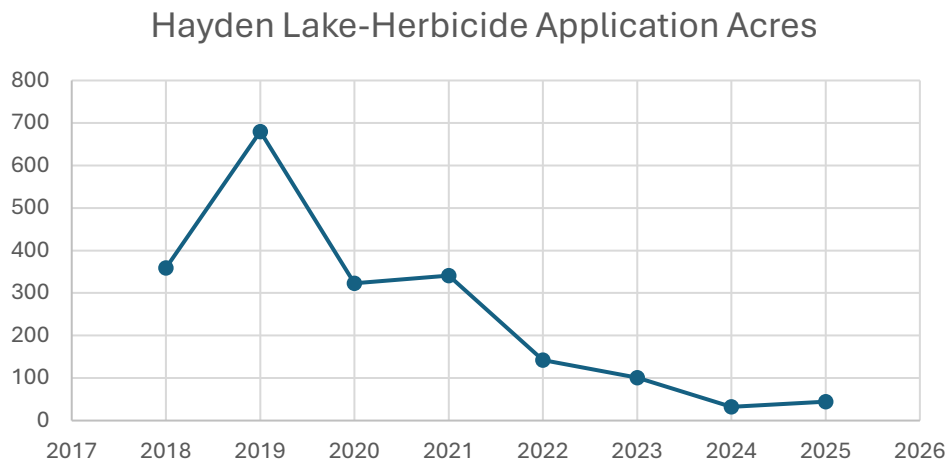


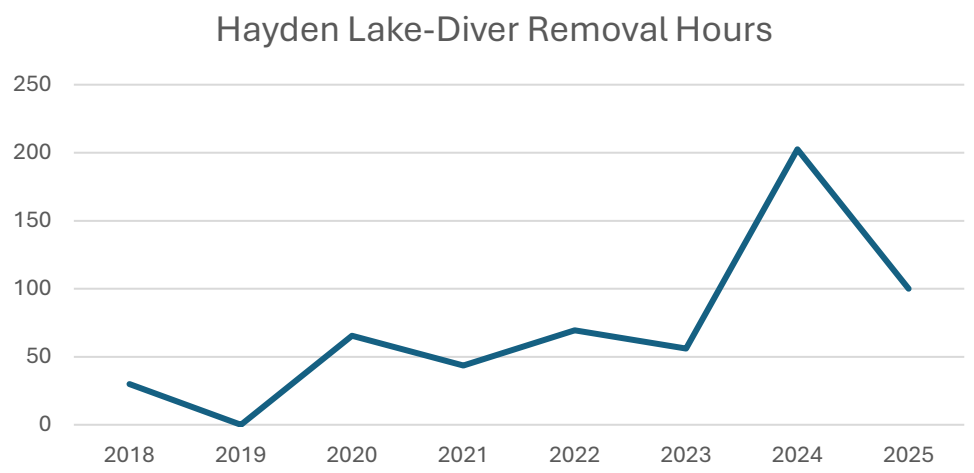
Success Metrics

- Reduction in total infestation acres
- Reduction in total plant biomass
- Decrease in infestation densities
- Integration of both herbicide and diver efforts to prevent the spread of Eurasian watermilfoil to new areas.
- Transition from large scale suppression to localized maintenance to keep Eurasian watermilfoil at manageable levels.

Effectiveness Example – Hayden Lake

- Hayden Lake, 3,800 Surface Acres – Payette Lake, 4,987 Surface Acres
- Management efforts in Hayden Lake have included both herbicide treatments and diver removal. As selective herbicide treatments have reduced EWM populations, more localized diver efforts have increased.
- By utilizing both in an integrated approach EWM infestations have declined from hundreds of acres to a more manageable and reduced localized presence.





Other efforts outside the 5-year plan

- Eurasian watermilfoil management has been conducted annually on Payette Lake by Valley County Noxious Weed program for the past 21 years. Typically, this has been Diver Assisted Suction Harvesting with a crew that starts in July and works through until approximately the end of September.
- On average this effort remove about 8,000 lbs. of Eurasian watermilfoil per season. The county's efforts will continue to work towards the effective management of Eurasian watermilfoil on Payette Lake in coordination with ISDA.

Preventative Efforts on Payette Lake outside of Eurasian watermilfoil management plan

In looking at the future of the potential of helping Payette Lake waters continue to improve for lake homeowners, recreators, and citizens. The following groups will be guiding this conversation:

- Big Payette Watershed Advisory Committee
- Valley County Waterways Committee

Valley Soil & Water Conservation District – Valley County Waterways Advisory Committee

Payette Lake – Eurasian Watermilfoil

Technical Advisory Group

5-year Adaptive Management Plan