



# Bear Lake Eurasian Watermilfoil

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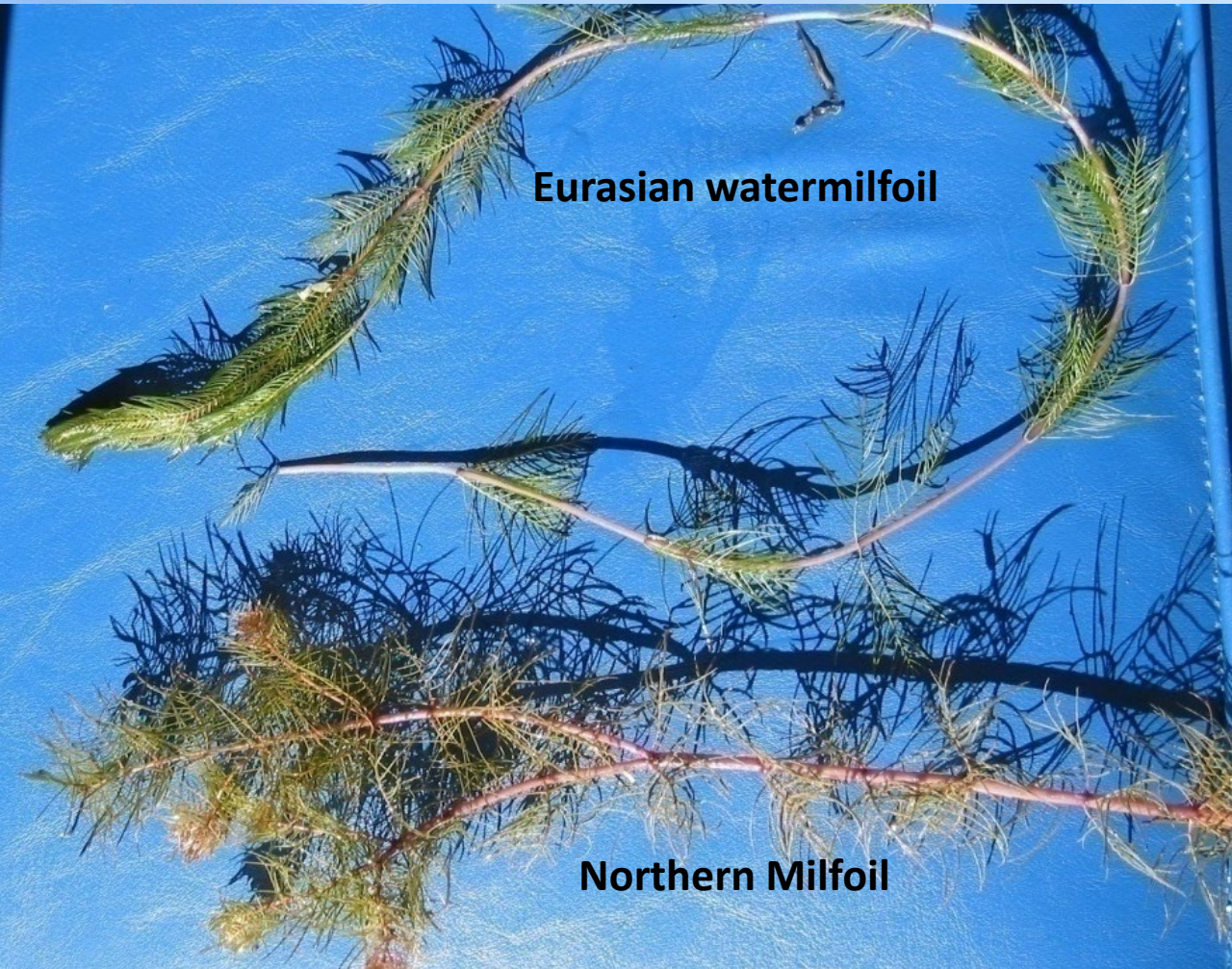
2019 and 2020 survey and treatment plans

# Eurasian watermilfoil (*Myriophyllum spicatum*)

- Perennial submerged species
- Spreads by seeds, rhizomes, and fragments
- Whorls of 4 leaf (fern) like structures are typical (3-5 possible)
- 12 or more leaflet pairs on each leaf structure
- Can hybridize with native Northern milfoil, blending characteristics and making treatment more difficult.



# Eurasian vs Northern milfoil



*Myriophyllum sibiricum*  
(Native Northern Milfoil)

*Myriophyllum spicatum*  
(Invasive EWM)



<10 pairs of leaflets



11-21 pairs of leaflets

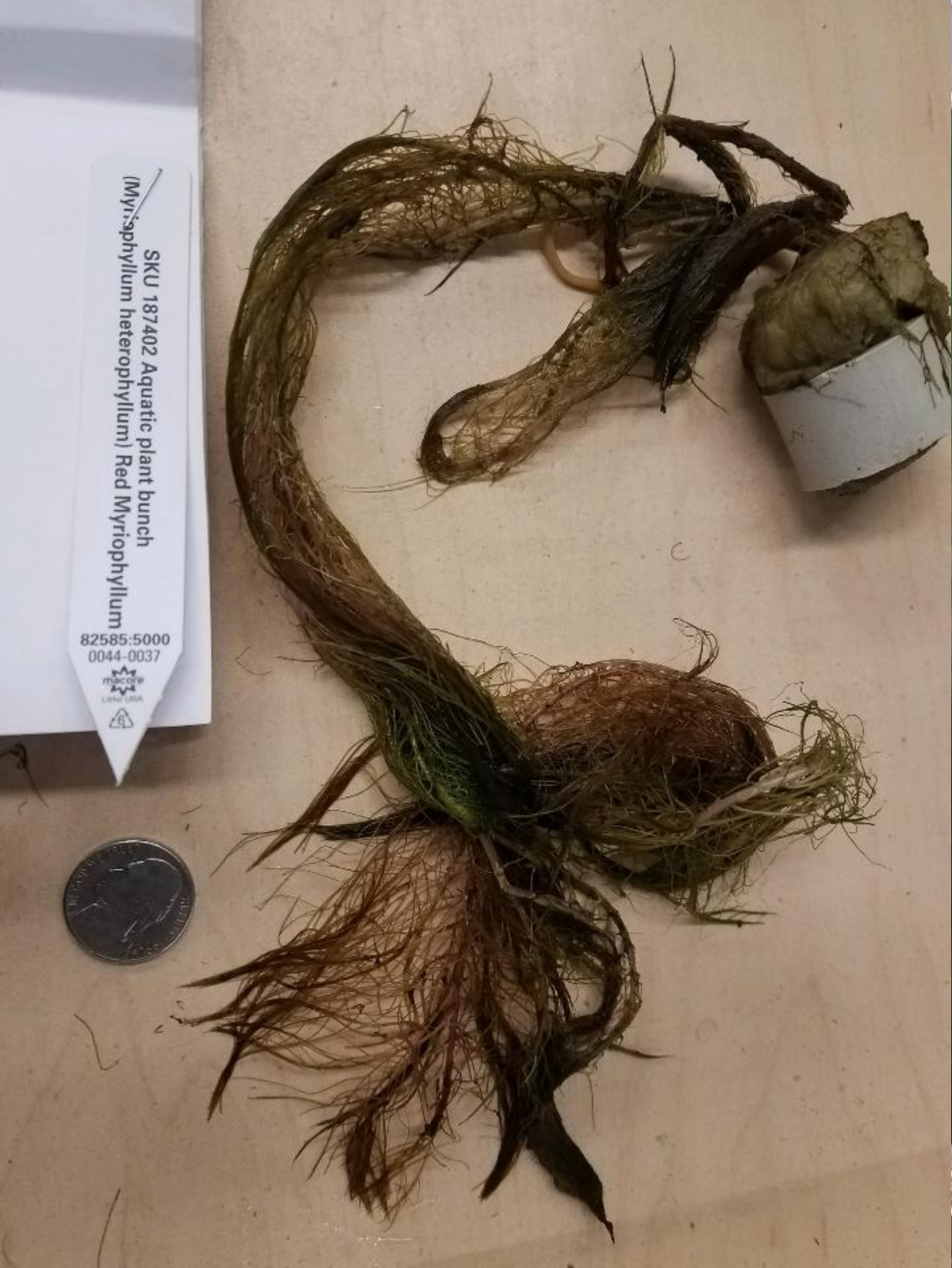
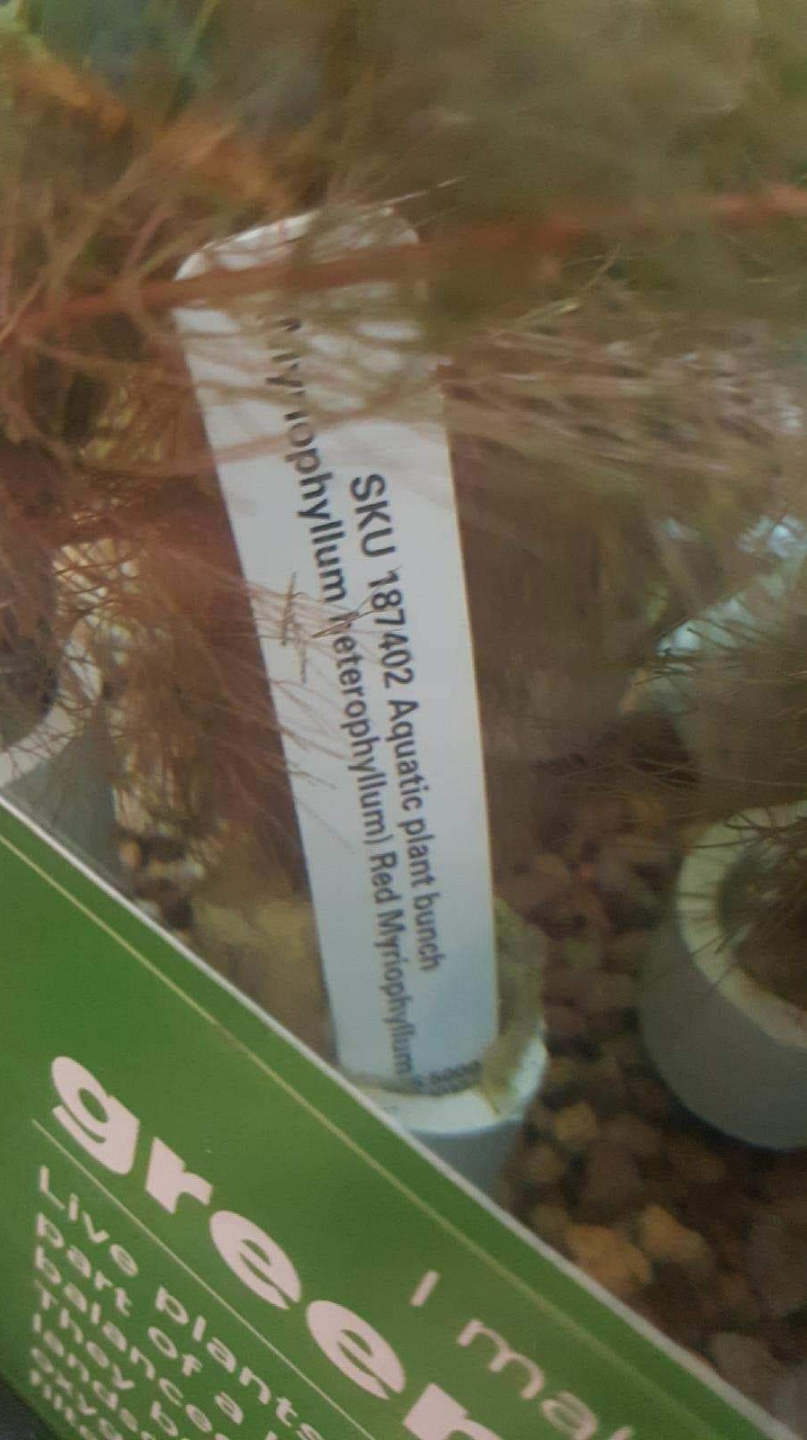
# How do these species spread?

- Hitchhiking on watercraft coming from infested water bodies
- Intentional release of aquarium species and ornamental ponds
- Most times this is preventable if everyone does their part.









SKU 187402 Aquatic plant bunch  
(Myriophyllum heterophyllum) Red Myriophyllum

82585:5000  
0044-0037

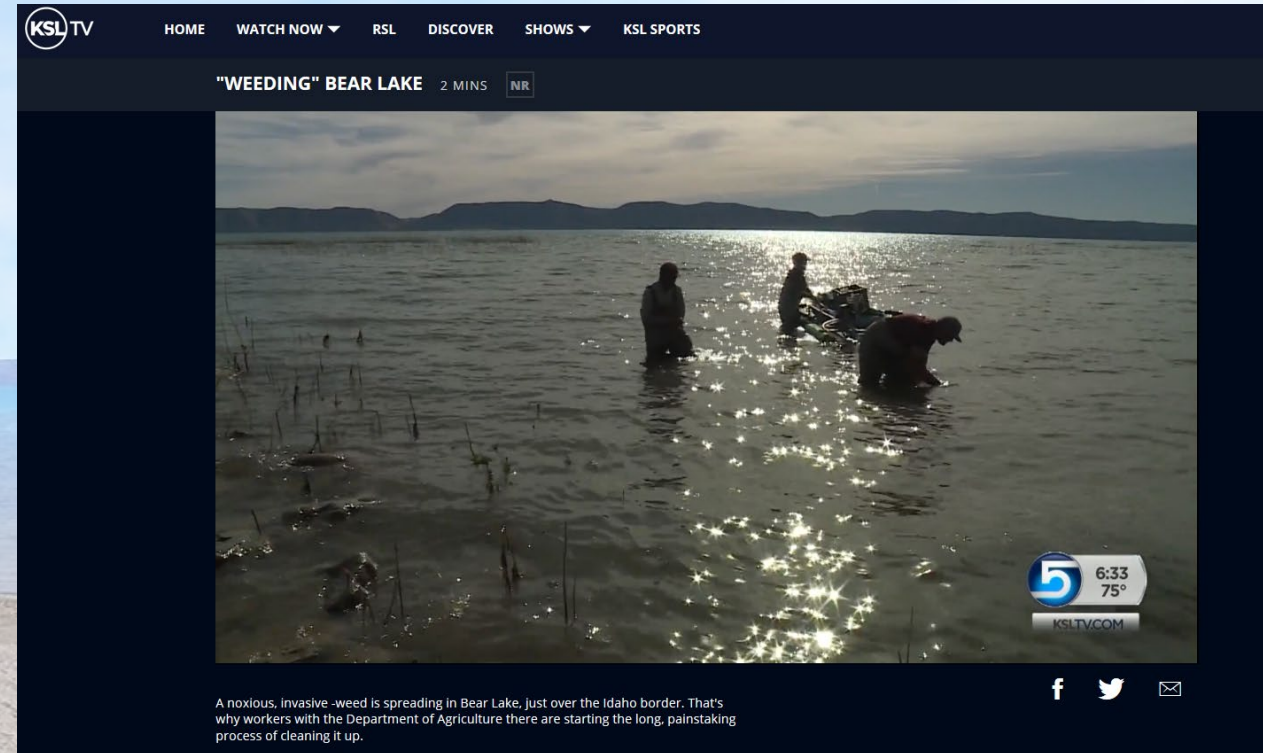


Green  
Live plants  
of sea  
water

AQUATIC BAMBOO COMBO  
2.99  
6.99

# Eurasian watermilfoil in Bear Lake

- Eurasian watermilfoil was first detected in late August 2019 and confirmed in September 2019.
- Mechanical removal project conducted by ISDA week of September 23, 2019
- Initial surveys completed by Utah Division of Forestry, Fire and State Lands and Utah Department of Agriculture in October 2019.

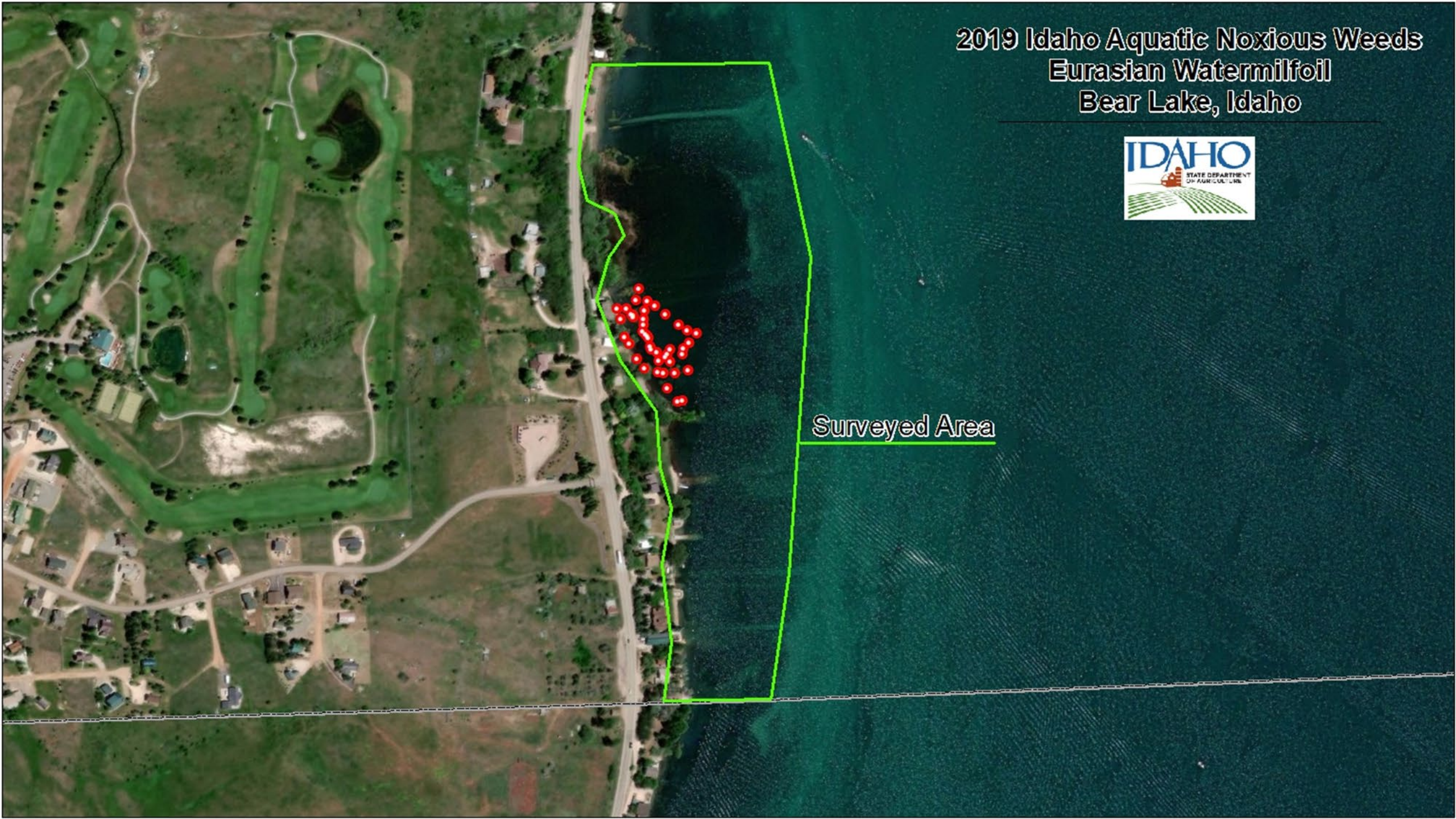




2019 Idaho Aquatic Noxious Weeds  
Eurasian Watermilfoil  
Bear Lake, Idaho



Surveyed Area



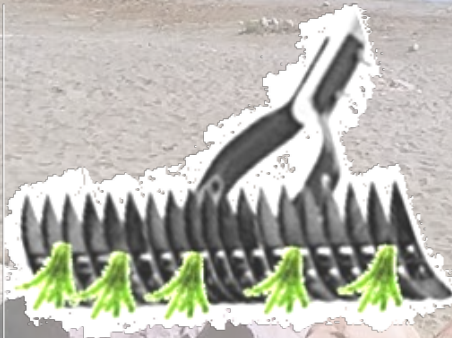


# Survey Methods

- Visual (Protocol 1)
- Random Point (Protocol 2)
- Systematic (Protocol 3)



0 – 0% target weed



1- 1%- 25% target weed



2- 25% - 75% target weed



3- 75% and up target weed



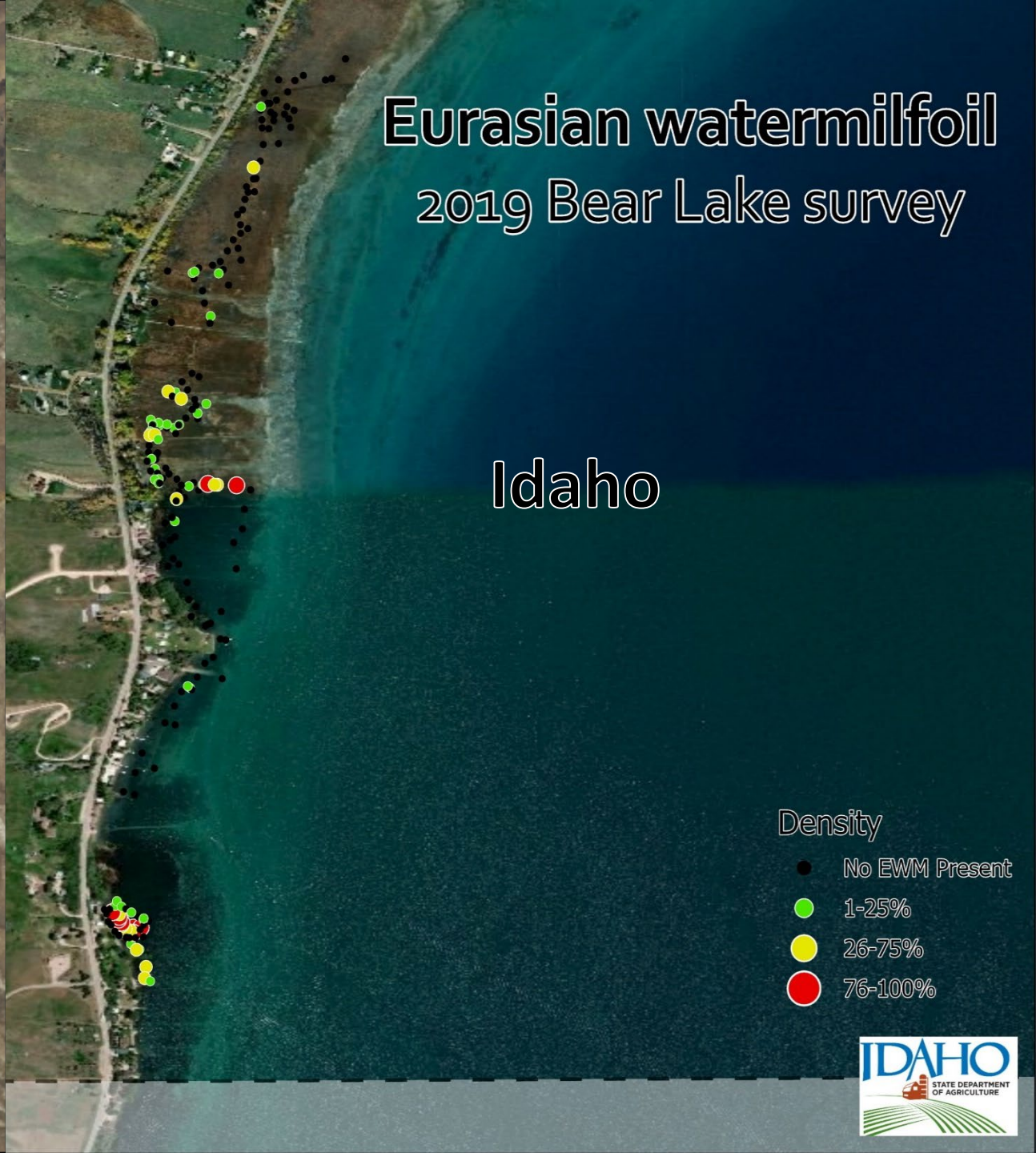
## Systematic Point

Eurasian watermilfoil  
1) 1-25%



Density & Depth





# Treatment Planning Process



Species/Waterbody  
priority

Initial Survey

Treatment Planning  
and Type

Treatment Area  
Evaluation and  
Assignment

Treatment

Follow Up Survey  
and Evaluation



# Treatment Types

## Mechanical Treatments

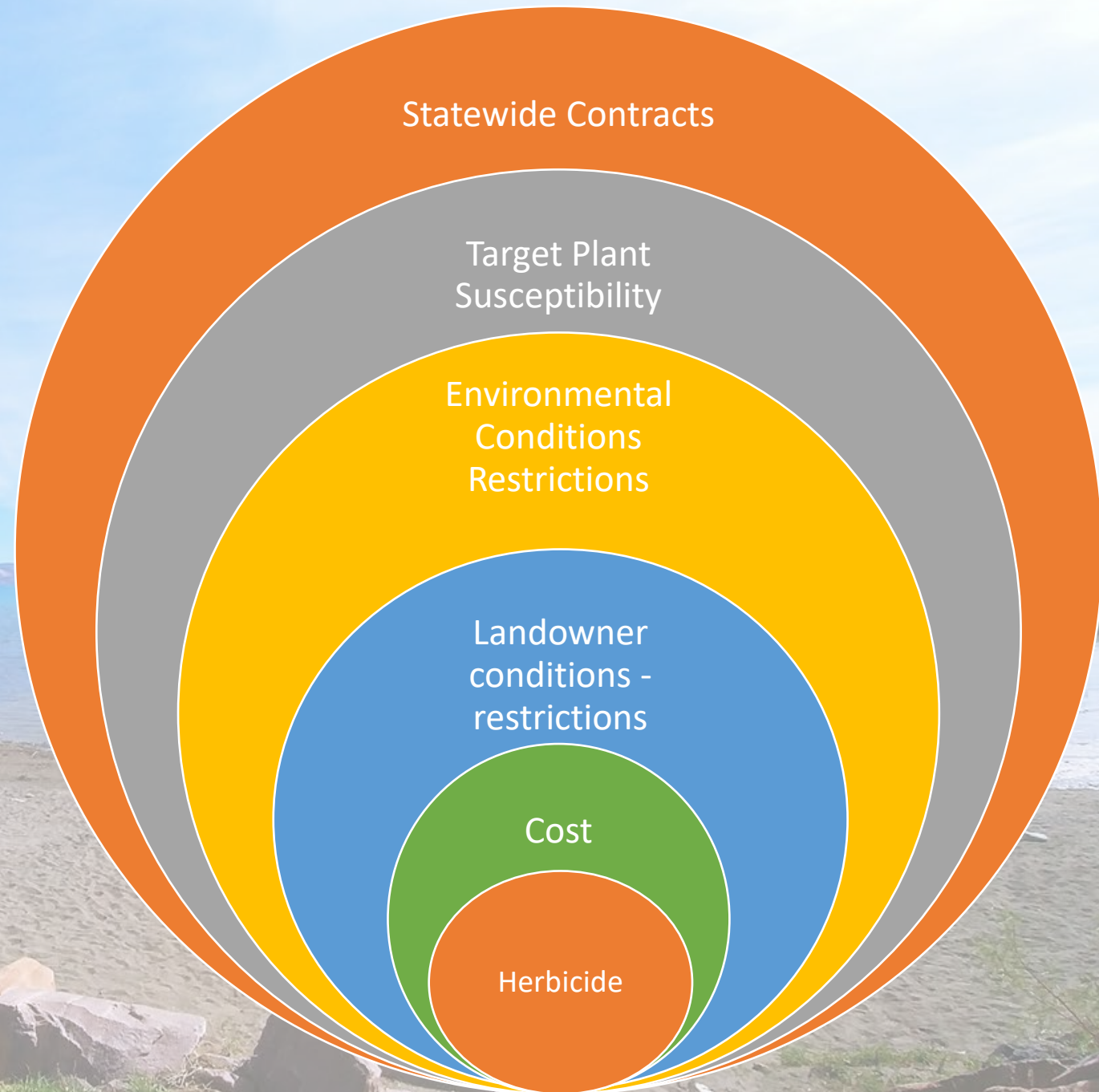
- Suction harvest/hand pull
- Best for low density areas
- No water use restrictions
- Notice given to landowner and partner agencies
- Very labor-intensive and costly.

## Chemical Treatments

- Surface or subsurface applications
- Best for high density areas
- Water use restrictions vary by product labeling and permit
- Notices required based on permit, product label and statewide contract
- Still costly...

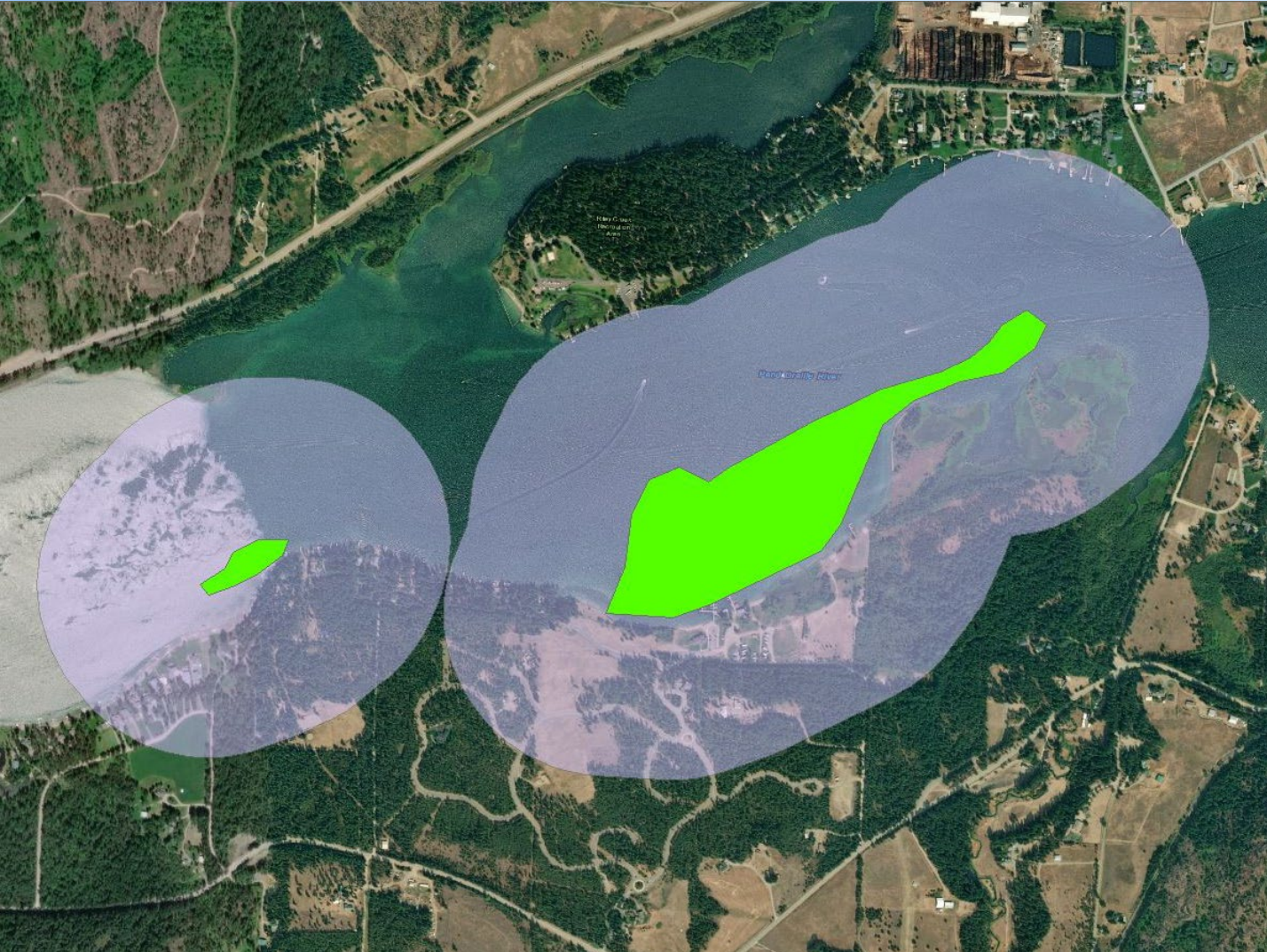
# Chemical treatments

- Chemicals on statewide contract are the only ones that can be utilized for the term of the contract.
- Chemicals must have target plant listed as a species controlled within EPA labeling
- Environmental conditions – restrictions include water use restrictions, water conditions, water exchange, water stagnation
- Landowner conditions – restrictions are those who have additional rules/regulations in addition to those already met by contract

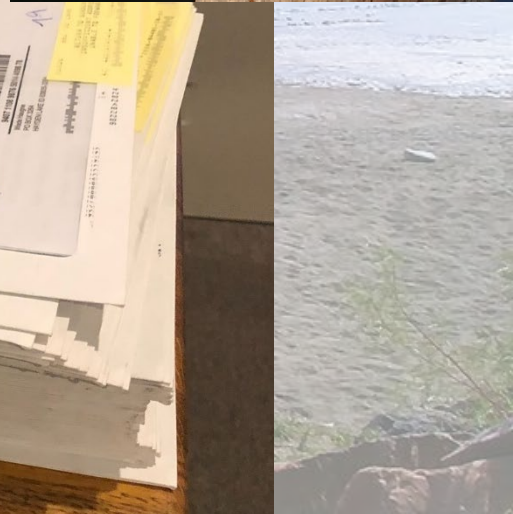




# Pre-Treatment Notifications



Notifications dictated by Statewide contract, Product Label and US EPA NPDES Permit





# Chemical Applications



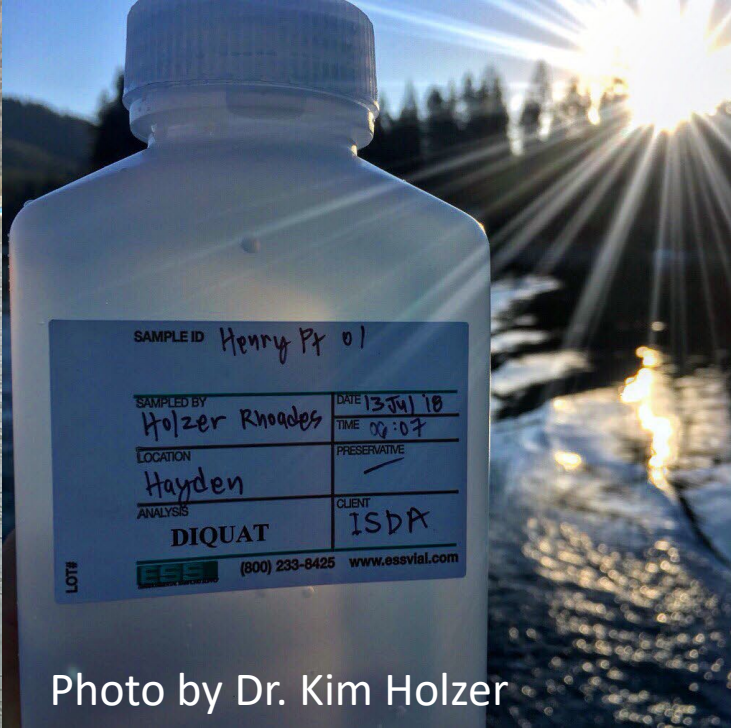


Photo by Dr. Kim Holzer



Photo by Dr. Kim Holzer



# Bear Lake 2020 Pre-treatment Surveys

- Primary objective is to refine areas for chemical or mechanical treatment
- Starting late June-early July 2020, as Eurasian watermilfoil emerges and plants are expected to be around 8-18 inches in length.
- Surveys will take place in targeted areas throughout the full littoral zone of the lake, approximately 40-45 feet in depth.



# 2020 Herbicide Treatments

- Active ingredient is Florpyrauxifen-benzyl
- No water use restrictions (Drinking, Recreation)
- Some irrigation restrictions
- Herbicides will be used on all dense (2-3 density) populations; based on 2020 pre-treatment survey results.
- Suction dredge/hand pull methods will be used in lower density areas.

## ProcellaCOR EC

A selective systemic herbicide for management of freshwater aquatic vegetation in slow-moving/quiescent waters with little or no continuous outflow: ponds, lakes, reservoirs, freshwater marshes, wetlands, bayous, drainage ditches, and non-irrigation canals, including shoreline and riparian areas in or adjacent to these sites. Also for management of invasive freshwater aquatic vegetation in slow-moving/quiescent areas of rivers (coves, oxbows or similar sites).

FLORPYRAUXIFEN-BENZYL GROUP 4 HERBICIDE

Produced for:  
SePRO Corporation  
11550 North Meridian Street, Suite 600  
Carmel, IN 46032, U.S.A.  
ProcellaCOR, Prescription Dose Unit, and PDU  
are trademarks of SePRO Corporation

SePRO

EPA Reg. No. 67560-85  
FPL20180228

### Active Ingredient:

Florpyrauxifen-benzyl: 2-pyridinecarboxylic acid,  
4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxy-  
phenyl)-5-fluoro-, phenyl methyl ester

2.7%

### Other Ingredients:

97.3%

### TOTAL:

100.0%

Contains 0.0052 lb florpyrauxifen-benzyl per Prescription Dose Unit™ (PDU™) or 0.21 lb florpyrauxifen-benzyl/gallon. 1 PDU is equal to 3.2 fl. oz. of product.

22 Days After Treatment



# Bear Lake

*Myriophyllum spicatum* - Eurasian watermilfoil

Treatments 2020

## Idaho



# Bear Lake

*Eurasian watermilfoil*  
Treatments 2020  
Utah



Potential Treatment Locations	Est. Acreage
Swan Creek / Lakota	0.75
Camp Hunt – Performance Rental	6.00
State Park Marina	15.00
Daisy Bay	7.00
Azure Cove Marina	1.50
Ideal Beach Resort	0.75
Gus Rich Point Marina	1.50
Ideal Beach RV Park	2.50
Rendezvous Beach / Big Creek	16.00
<b>TOTAL ACREAGE TO BE TREATED</b>	<b>51 .00</b>



# Thank you



Matthew Coombs  
Lands Coordinator – Bear River Area  
[mattcoombs@utah.gov](mailto:mattcoombs@utah.gov)  
(435) 752-8701 – Office  
(435) 890-8967 - Cell



Jeremey Varley  
Program Manager, Noxious Weeds  
[Jeremey.Varley@isda.idaho.gov](mailto:Jeremey.Varley@isda.idaho.gov)  
(208)332-8667 – Office  
(208)993-0950 – Cell