

2025 Lake Housatonic Weed Treatment Program

Date: 07/28/2025

Hello All,

I wanted to give you an update on our Lake Housatonic weed treatment program. I wanted to thank all the individuals at the State Agencies, CT DEEP, and Solitude for their help in this effort. I would also like to thank First Light for their cooperation with flow control during these treatments. As many of you know, I have been around this river for nearly 58 years now (wow time fly's) with the shared mission of making it a better place every year for the community.

The treatment of weeds is no easy feat, with no one-sized fits all solution as well as it being a moving target year over year. If there are any questions or concerns, please reach out to me personally and I am happy to discuss.

Executive Summary

- The Lake Housatonic weed treatment program, now in its 8th year, continues its collaborative efforts with CT DEEP, Solitude Lake Management, OAIS, and First Light to manage invasive and nuisance aquatic plant species.
- Utilizing biannual surveys to guide treatments, the program has seen notable success reducing invasive Eurasian milfoil, while ongoing challenges persist with non-invasive species like Eelgrass, which cannot be treated as aggressively due to state limitations.
- Despite a targeted Eelgrass herbicide application planned for August 11th, substantial Eelgrass growth is expected through ~~mid~~-August, prompting continued evaluation of alternative solutions to support the river's ecological health and usability for the community.

What/How

- We utilize the services of the State Office of Aquatic Invasive Species (OAIS) to do an extensive aquatic vegetation survey bi-annually each June (pre-treatment) and September (post-treatment). The June survey is used to plan and target for the present year's treatments.
- The OAIS survey tracks 21 plant species within the river, in which most of these plants promote a healthy lake ecosystem. This year (like past years) we will target 3 total plant species, the two invasive species, Eurasian milfoil and Curly leaf pondweed, which occurred on July 17th and the second phase on August 11th for the non-invasive specie, Eelgrass.

- To treat the river, Solitude Lake Management conducts targeted herbicide treatments with short residual products to minimize adversely affecting nontarget organisms. It's a contact kill so treatments are very targeted based on the yearly survey.

2025 Summary

- We work closely with State Agencies, Solitude and DEEP through a rigorous permit process for approval to treat two invasive species this year, Eurasian milfoil and Curley leaf pondweed. When we started the weed treatment program eight years ago in 2017, Eurasian milfoil was the most problematic species covering ~139 acres across the total 328 acres of the river. Over the course of our yearly treatments, it has significantly decreased. See table at bottom and at the very bottom you will see our program around invasive species brought last year to the best year ever. We additionally will treat one non-invasive species this year, Eelgrass.
- The challenge we have now is with non-invasive species with a few of them being a significant nuisance. Eelgrass is the main problem and as you can see from survey/table, we ended the year last year with the worst position so far. We are limited with what the state will allow us to treat as its non-invasive. I heard comments about the last treatment being a 'fertilizer' as after treating, weeds started growing more. The fact is that the first treatment targets the invasive as they come in earlier. What is now growing is the Eelgrass and a few other non-invasive species (which come in later).
- We are only allowed 10 acres of Eelgrass treatment, which did not yield the needed results last year. We are continuing to work with all agencies to evaluate options but do plan to do a targeted treatment for Eelgrass on August 11th.
- If trend continues as I expect it will, we will end the season with a substantial and very noticeable amount of Eelgrass across our river late August. I will continue to work with OAIS, Solitude and the state to evaluate alternative options for our Eelgrass problem.

We have posted the full 2024 Monitoring report conducted by the OAIS and am including the Frequency of Occurrence (FOQ) chart below which provides helpful insights on the presence of weeds at various years within the river (page 8 from full survey).

Table 2. Frequency of occurrence (FOQ) of aquatic plants on transects in Lake Housatonic 2005 -2024.

Native Species	2005	2017	2022	2023	2024
Arrowhead (<i>Sagittaria</i> species)	—	1%	1%	—	—
Bur-reed (<i>Sparganium</i> species)	—	2%	—	—	—
Clasping-leaf pondweed (<i>Potamogeton perfoliatus</i>)	0%	3%	10%	4%	1%
Coontail (<i>Ceratophyllum demersum</i>)	9%	33%	5%	14%	15%
Eelgrass (<i>Vallisneria americana</i>)	8%	25%	22%	26%	29%
Flat-leaf pondweed (<i>Potamogeton zosteriformis</i>)	—	19%	—	1%	4%
Great duckweed (<i>Spirodela polyrhiza</i>)	—	7%	—	3%	—
Horned pondweed (<i>Zannichellia palustris</i>)	0%	—	—	—	1%
Illinois pondweed (<i>Potamogeton illinoensis</i>)	—	—	1%	4%	—
Large-leaf pondweed (<i>Potamogeton amplifolius</i>)	—	3%	—	—	0%
Leafy pondweed (<i>Potamogeton foliosus</i>)	—	—	—	5%	3%
Long-leaf pondweed hybrid (<i>Potamogeton x assidens</i>)	0%	3%	7%	5%	10%
Pondweed species (<i>Potamogeton</i> species)	—	4%	—	—	—
Primrose-willow (<i>Ludwigia</i> species)	—	—	—	—	2%
Slender naiad (<i>Najas flexilis</i>)	—	—	—	—	3%
Small pondweed (<i>Potamogeton pusillus</i>)	0%	37%	19%	13%	—
Southern naiad (<i>Najas guadalupensis</i>)	0%	4%	—	—	—
Variable pondweed (<i>Potamogeton gramineus</i>)	1%	—	—	—	1%
Water stargrass (<i>Zosterella dubia</i>)	—	25%	18%	10%	8%
Western waterweed (<i>Elodea nuttallii</i>)	3%	23%	15%	14%	6%
Invasive Species	2005	2017	2022	2023	2024
Curlyleaf pondweed (<i>Potamogeton crispus</i>)	0%	17%	19%	21%	1%
Eurasian watermilfoil (<i>Myriophyllum spicatum</i>)	6%	52%	12%	17%	4%
Minor naiad (<i>Najas minor</i>)	1%	9%	—	—	2%

^a "—" = Species not found in Lake Housatonic; 0% indicates found in the waterbody but not on any transect points

Jim Olson – LHA Weed Abatement Program