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Conservation

Hydrilla in the Connecticut River: An Update

Northeast Aquatic Nuisance Species Panel Meeting
May 18, 2021

Background

Hydrilla verticillata discovered in the Connecticut River in 2016

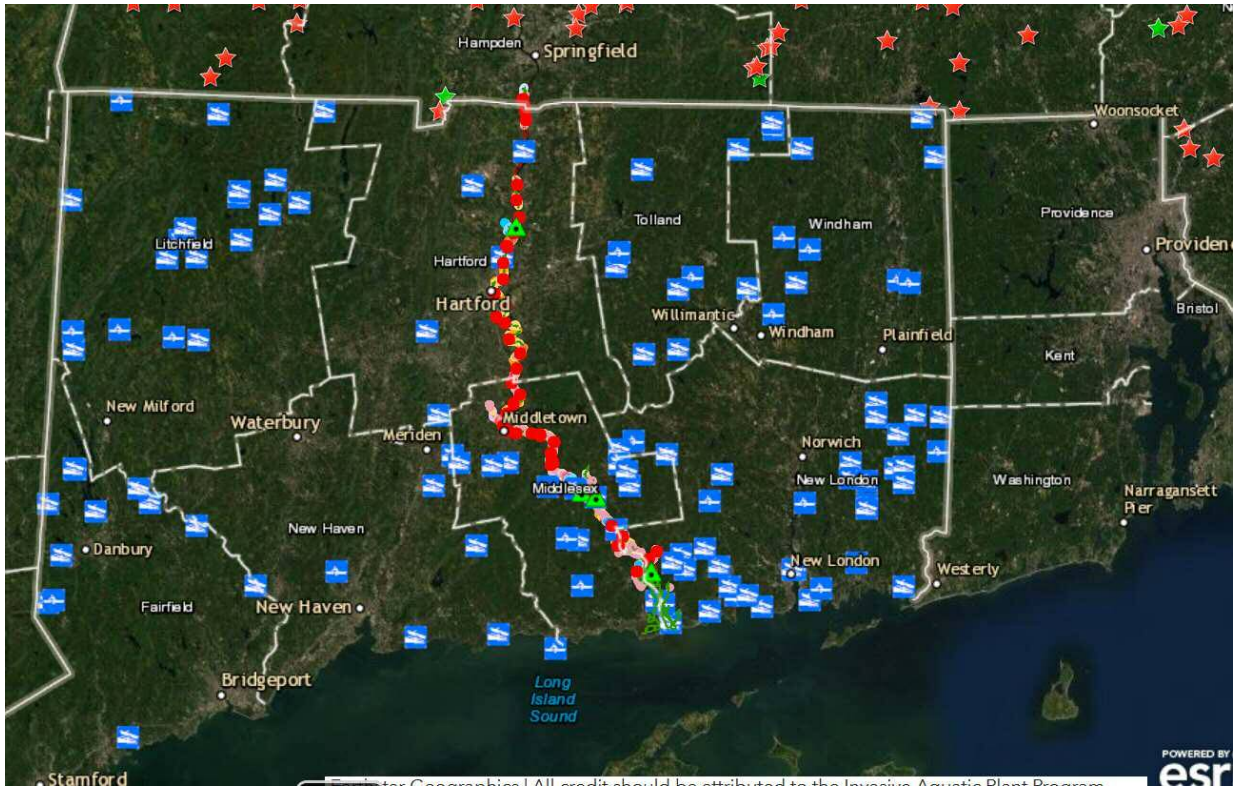
- Cynthia Boettner, USFWS, starts working group
- Working group in-person meeting at NEAPMS 2017
- NEANS Panel hosts June 2019 workshop dedicated to education and outreach about hydrilla and its management
- NEANS Panel distributes of hydrilla ID cards, signs, and key floats in June 2019

Biotype

- Research has confirmed that the monoecious hydrilla found in the Connecticut River is a distinct genotype

- USACE & NEANS Panel are collaborating with collection and analysis of genetics of select populations across Northeast

Delineation 2018-2020



- CAES conducted surveys 2018-2020
- 2019 MA Dept. of Conservation and Recreation Lakes and Ponds Program

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Hydrilla Task Force

- Connecticut River Conservancy
- Connecticut Sea Grant
- Lower Connecticut River Valley Council of Governments
- Northeast Aquatic Nuisance Species Panel

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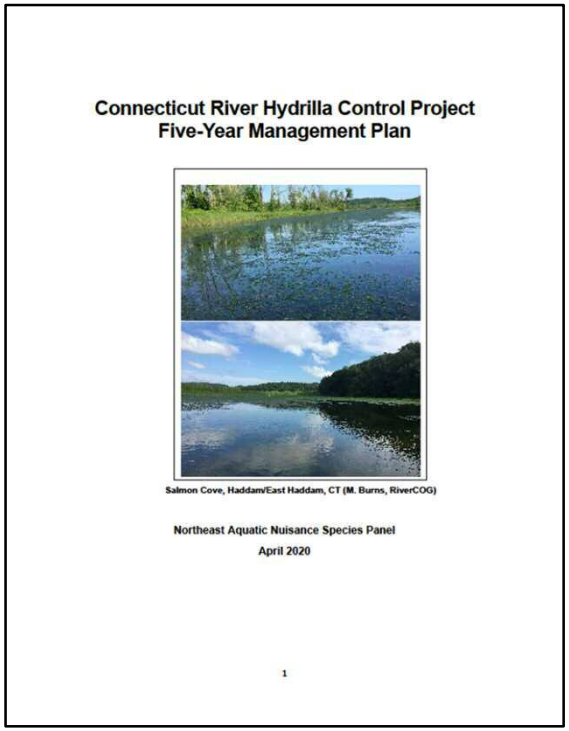
Management Plan


Connecticut River Hydrilla Control Project
Five-Year Management Plan

Salmon Cove, Haddam/East Haddam, CT (M. Burns, RiverCOG)

Northeast Aquatic Nuisance Species Panel
April 2020

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https://www.northeastans.org/wp-content/uploads/2021/02/CT-River-Hydrilla-Project-Five-Year-Management-Plan-FINAL.pdf

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Research

Concern about impacts of herbicide treatment on native water celery (*Vallisneria americana*)

- Increases dissolved oxygen in water
- Provides important habitat for young-of-year fish
- Source of food for waterfowl
- Offers shelter for invertebrates


Maryland Biodiversity Project: Josh Emm

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UMCES/UMD: Water celery

- 8 distinct genotypes indicate high genetic diversity

- UMCES propagated plants from each genotype

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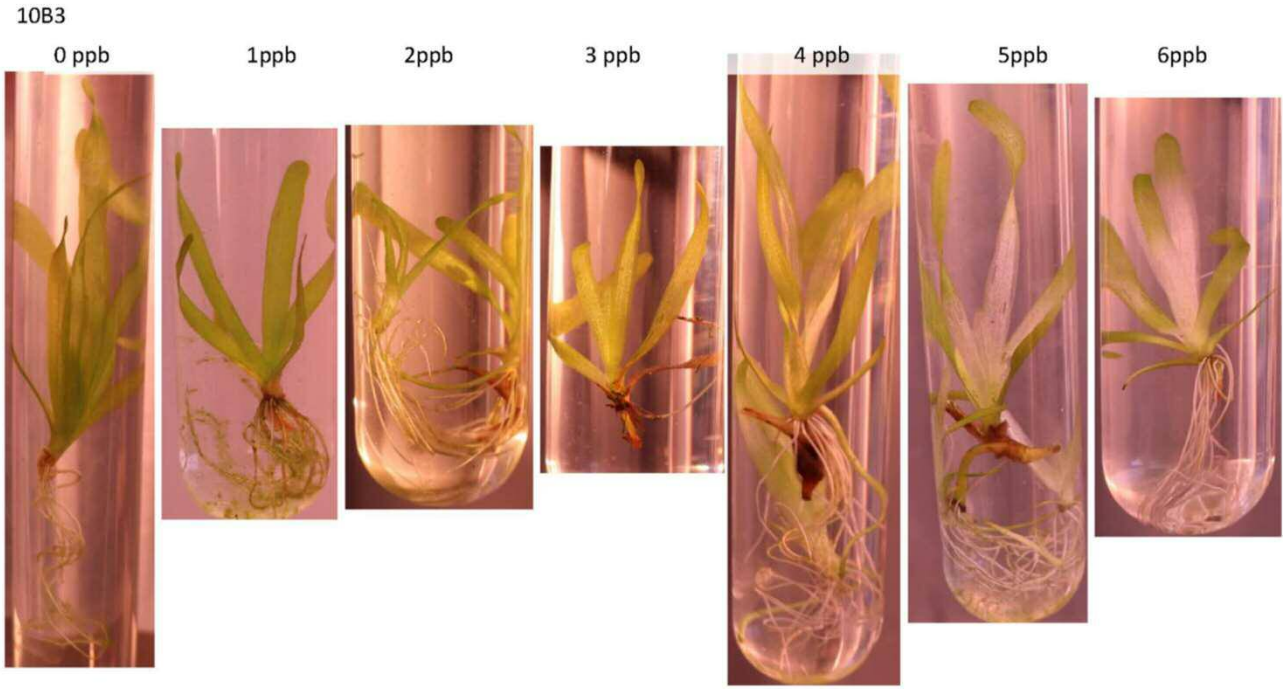
Water celery sensitivity to fluridone



- No plants died
- Plants show impacts to fluridone at 4-6 ppb
- Each genotype x concentration combo replicated 10 times

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Research

NC State University

- Sensitivity of hydrilla genotype and water celery to fluridone
- Checking with Jens Beets about his research

2021

- Two stewards dedicated to CT River locations in CT
- NEANS Panel reaches out to the Coalition of NE Governors
- Potential CT AIS Coordinator
- Potential source of continued funding through legislature
- Pilot study

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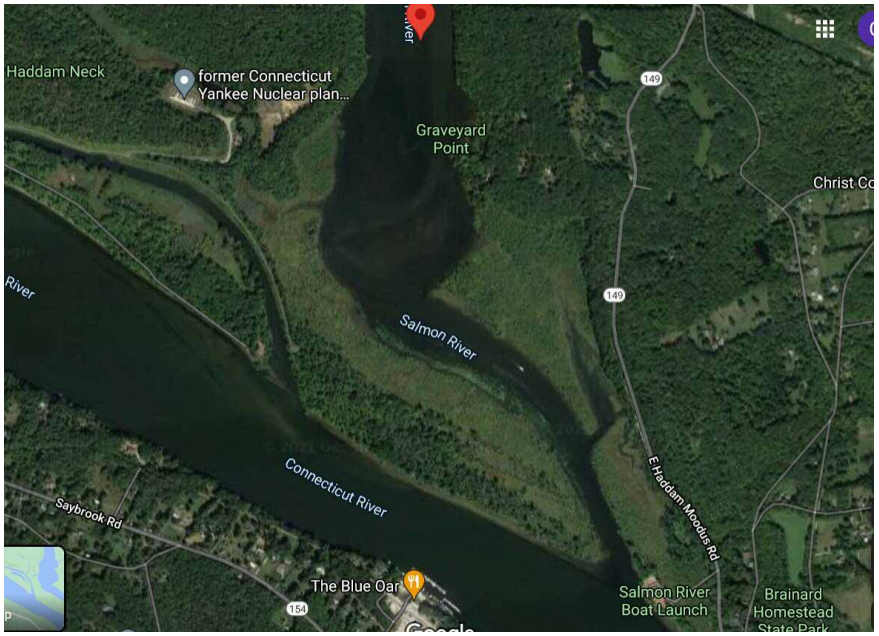
Pilot Study

- Herbicide: florpyrauxifen-benzyl and fluridone
- Inlets or coves
- Permits
- Species of concern
- Team building



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Next steps

- Additional education/outreach
- Expansion of boat steward program
- Use pilot study data to inform control and management efforts for 2022

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Thank you!

Cathy McGlynn
Meg Modley

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