

Hydrilla in the Connecticut River

Gregory J. Bugbee
Invasive Aquatic Plant Program
The Connecticut Agricultural Experiment Station

Hydrilla Survey Connecticut River



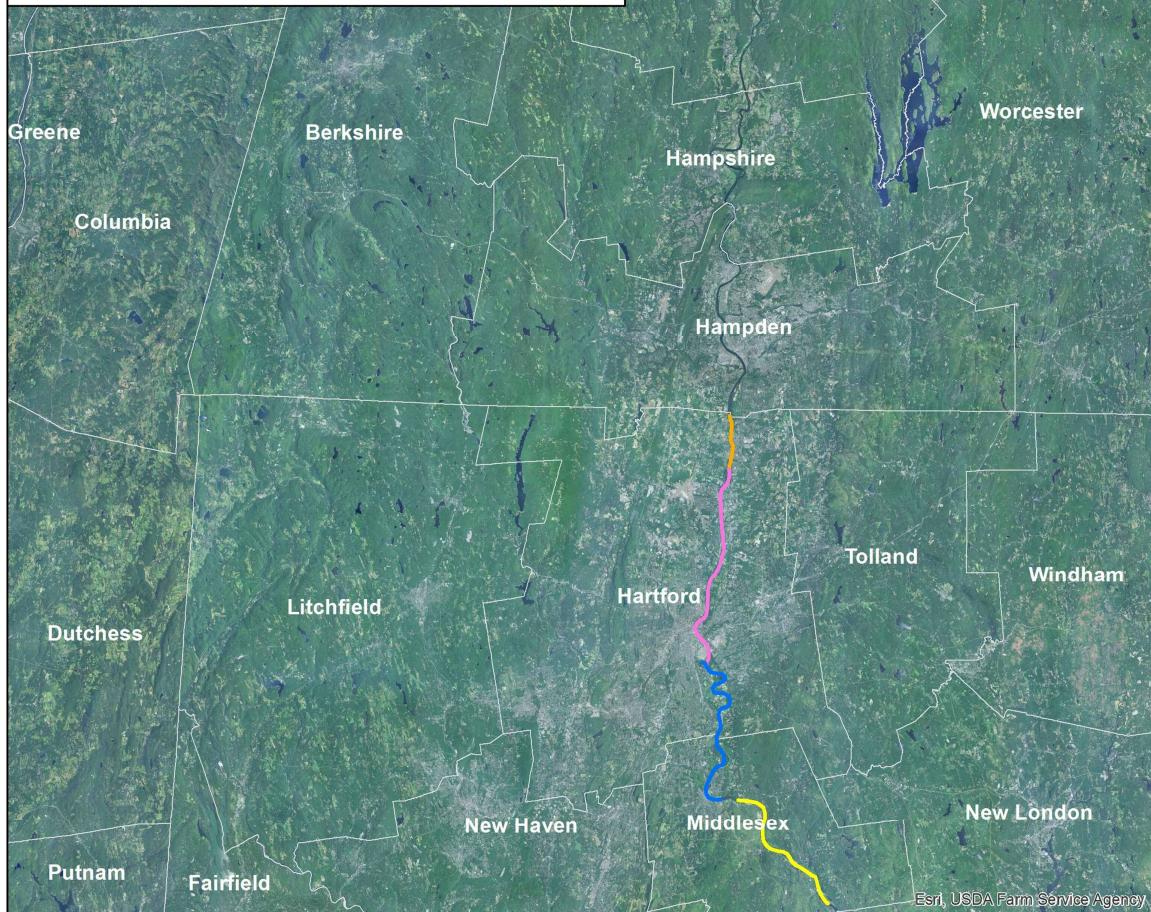
Fall 2018 Surveys

Surveyor

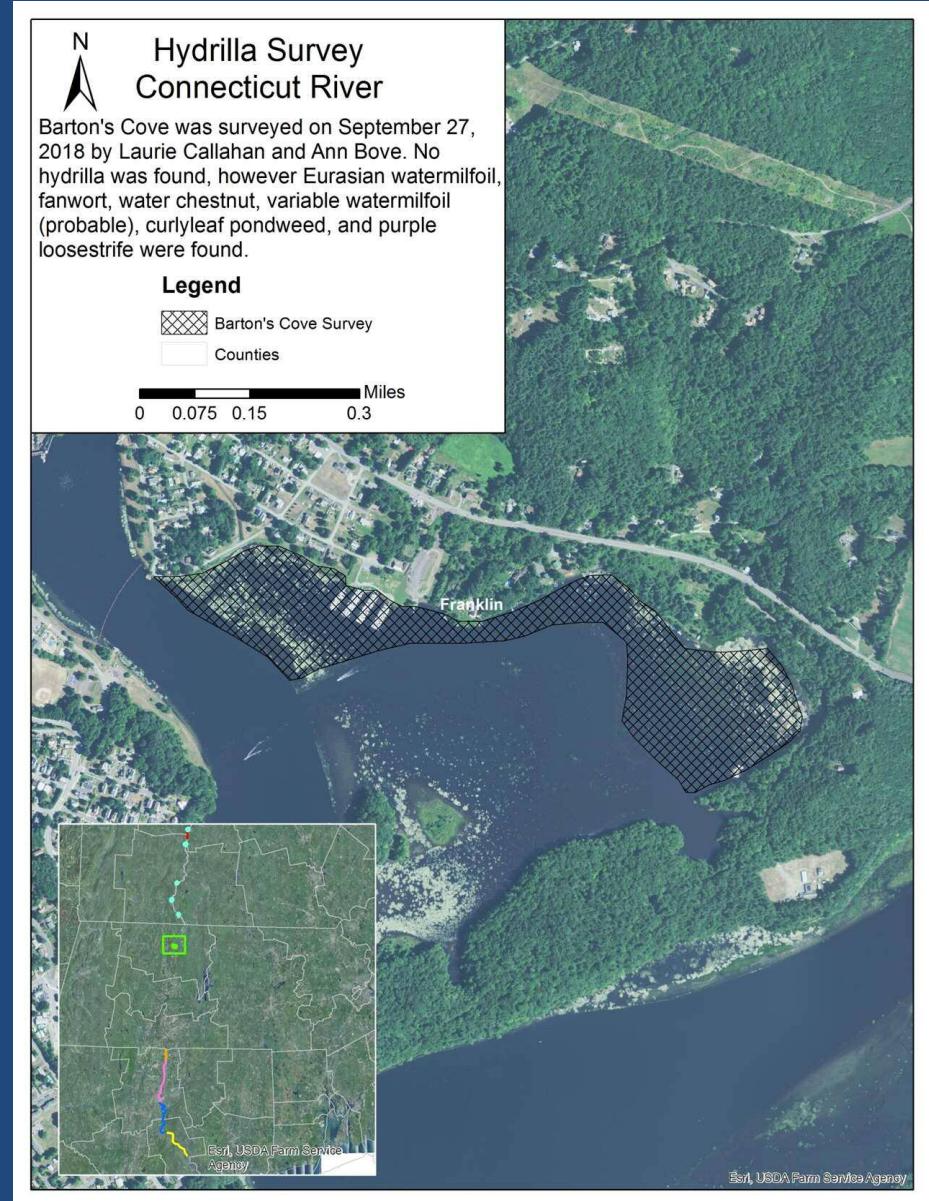
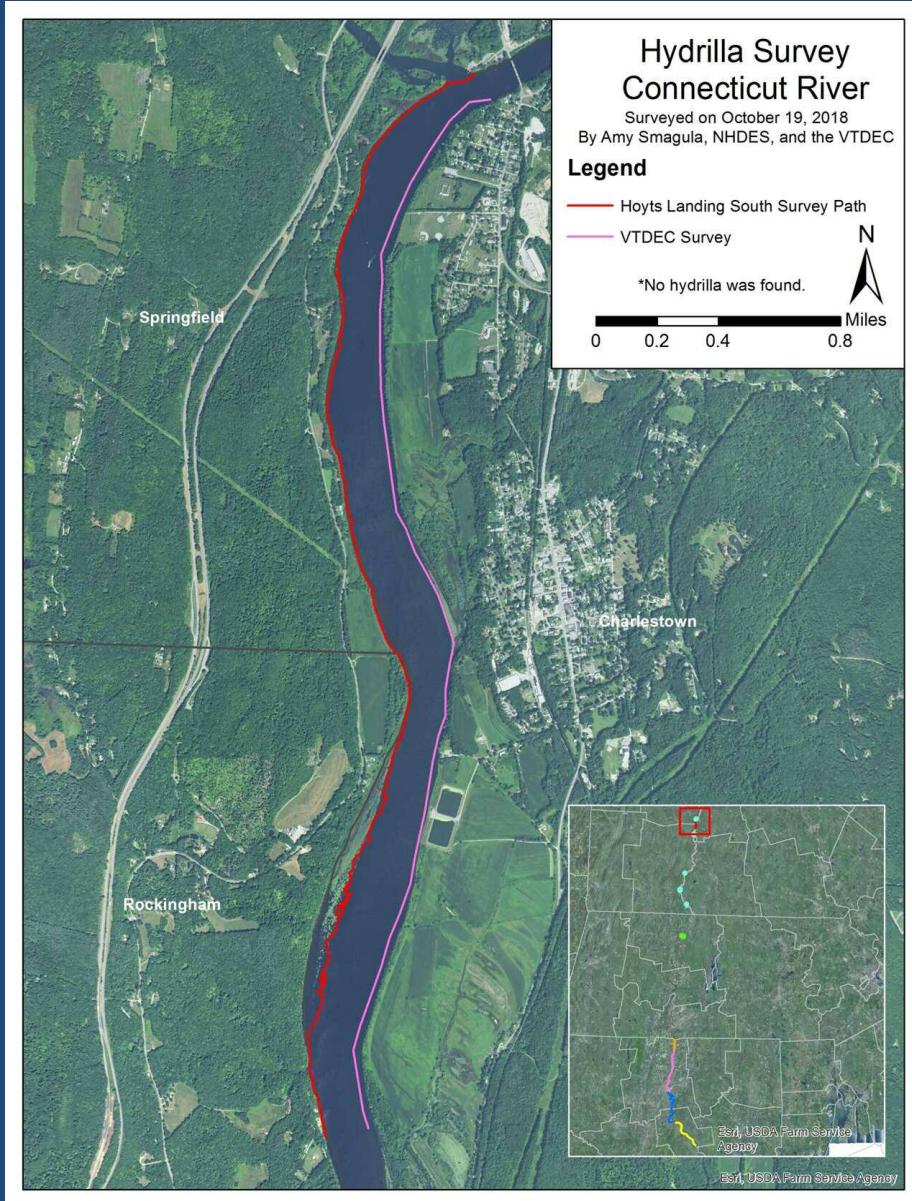
- Red line: Amy Smagula, NHDES; Meg Modley, LCBP
- Orange line: Heidi Himes, USFWS; Dave Sagan, Silvio O. Conte*
- Pink line: Kim Jensen, VTDEC*
- Blue line: Margot Burns, RiverCOG; Judy Preston CT Sea Grant*
- Yellow line: Greg Bugbee, CAES; Margot Burns, RiverCOG*
- Green dot: Laurie Callahan, SEVTAIS Project
- Green box: Laurie Callahan; Ann Bove

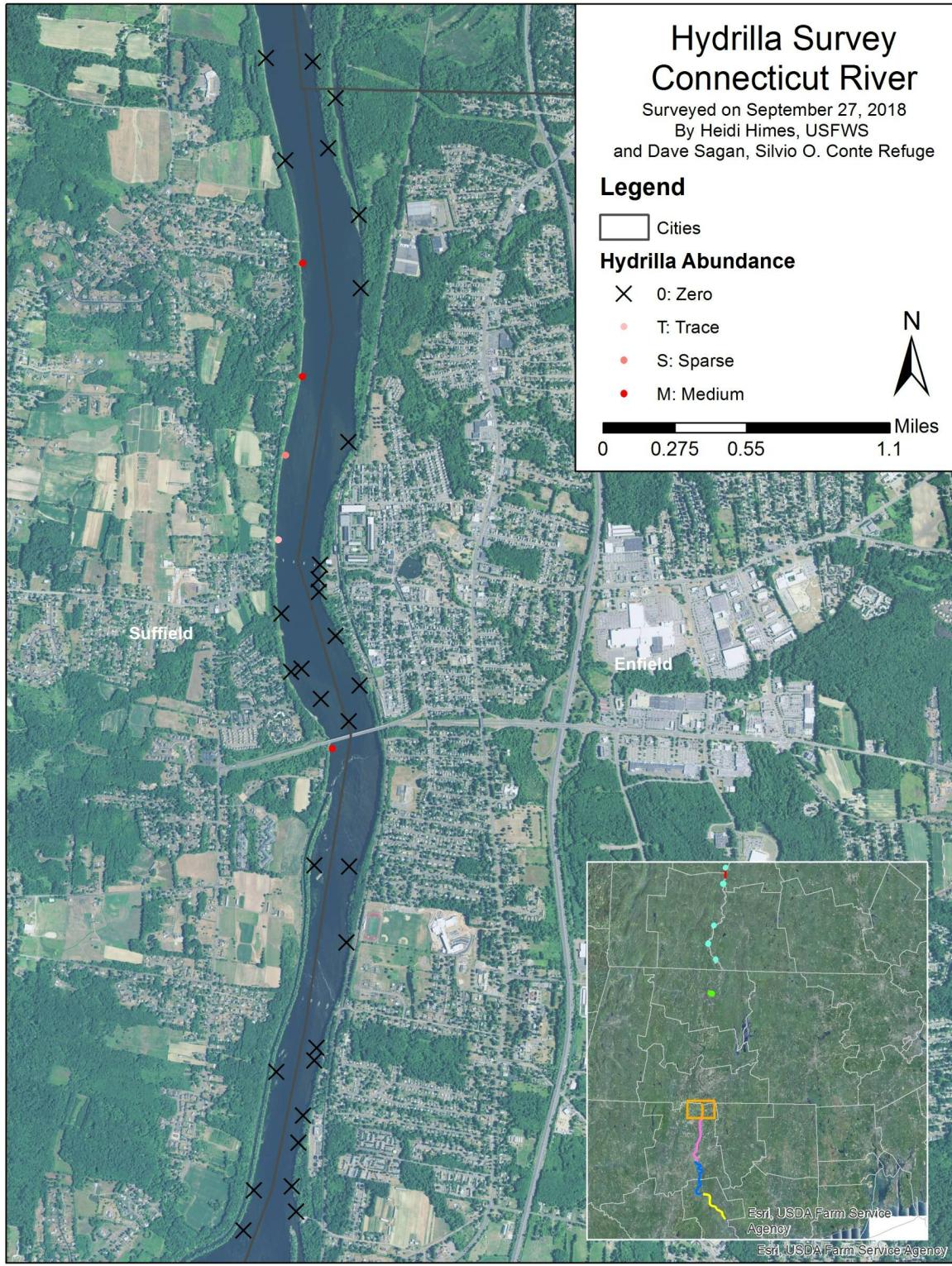
*Hydrilla Found

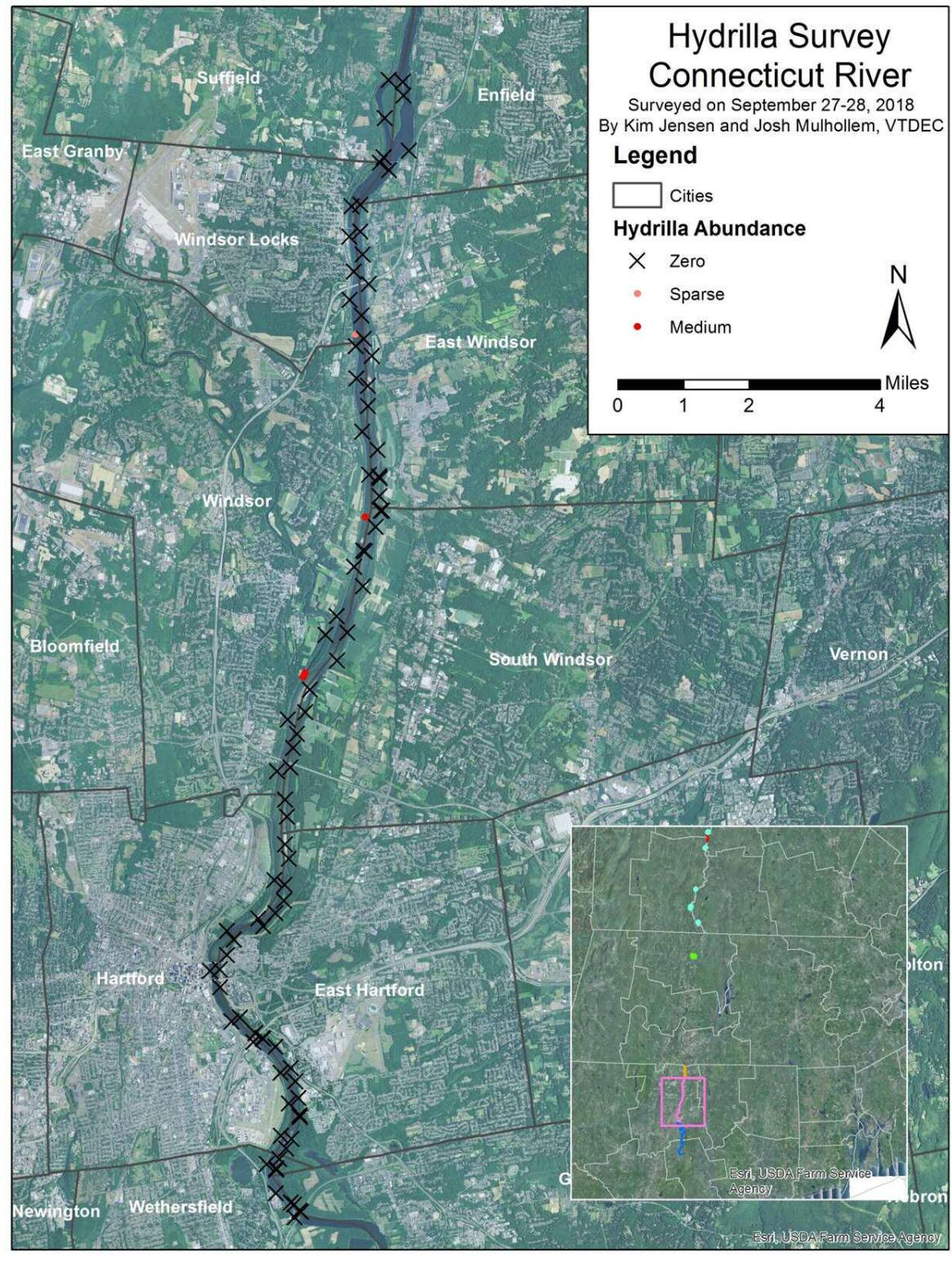
0 5 10 20 Miles

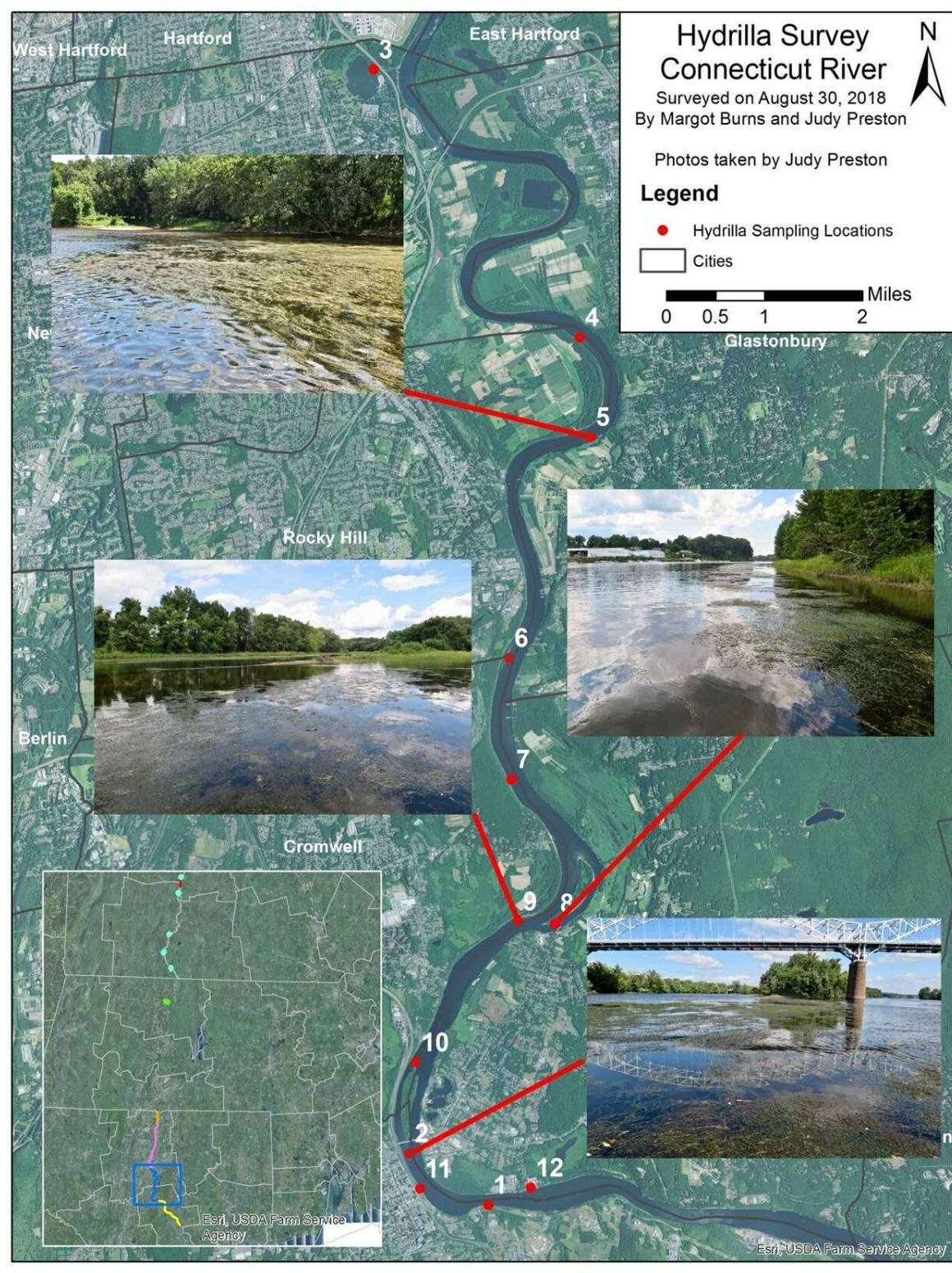


No hydrilla found in New Hampshire or Northern Massachusetts





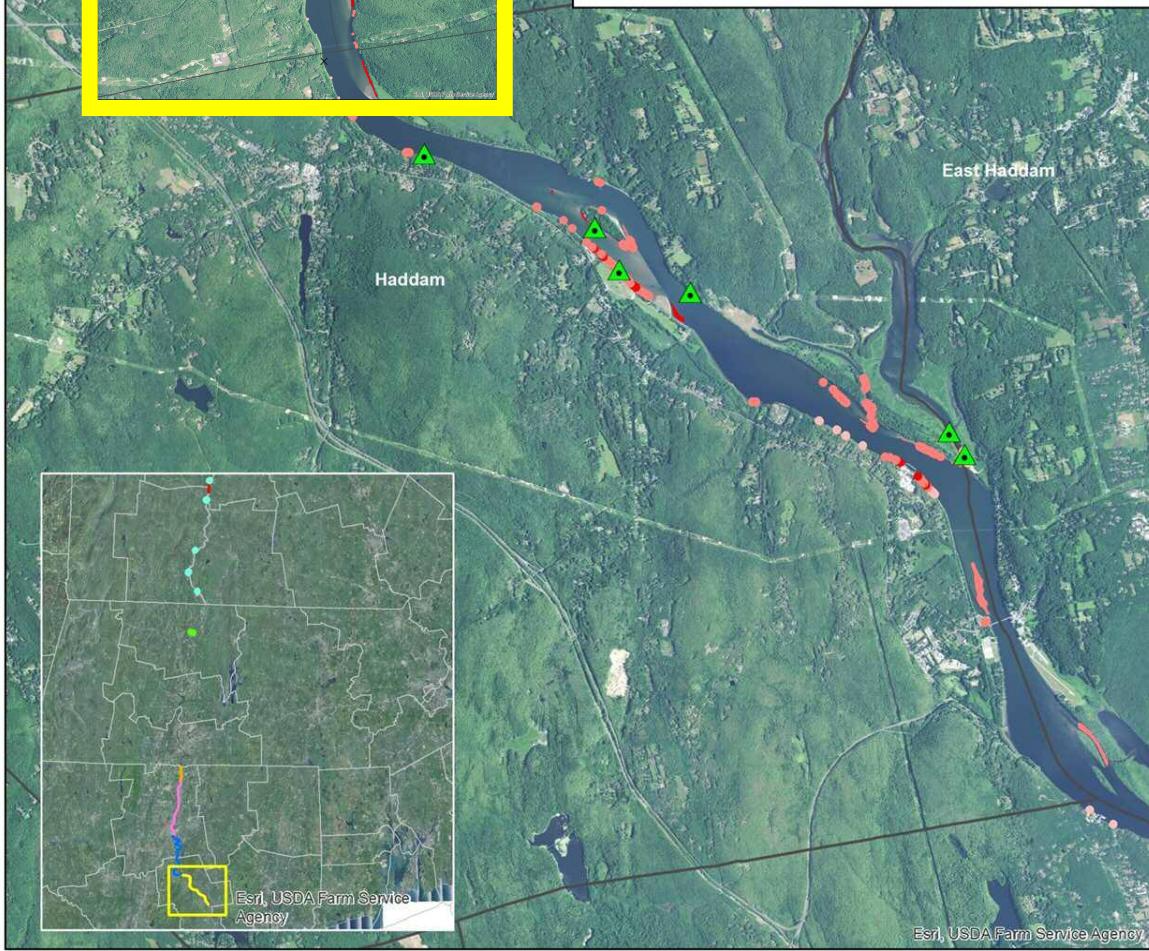
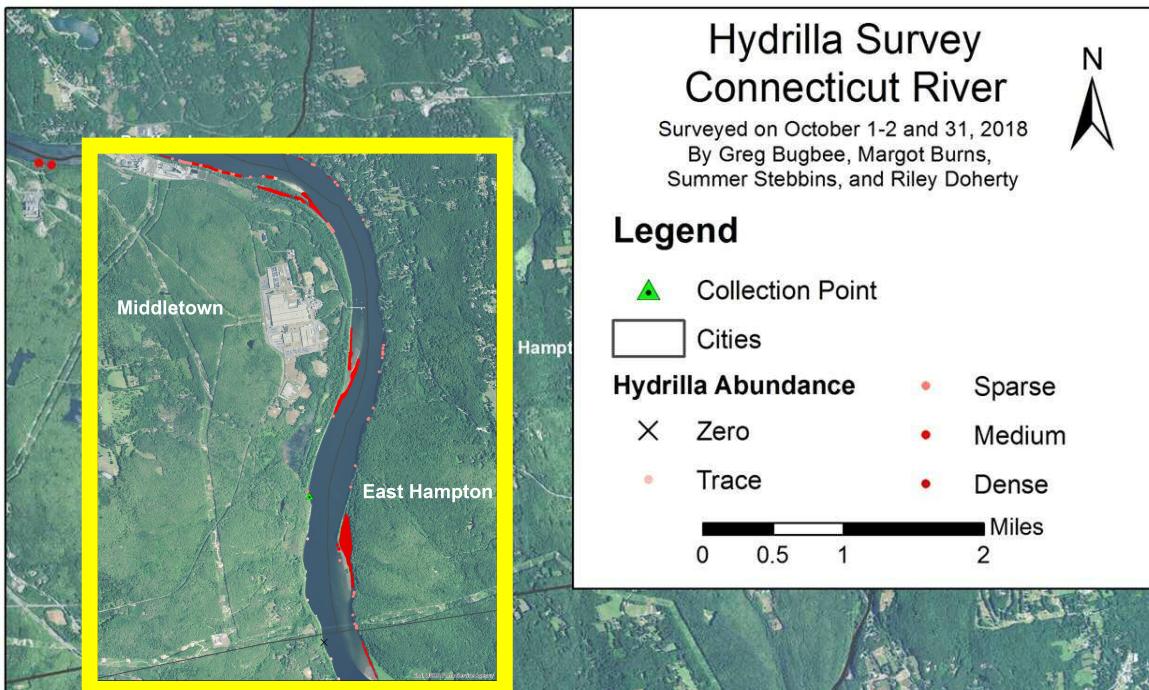




Keeney Cove - East Hartford, CT

Laurie Callahan, 6/26/18





East Hampton, CT



Molecular Identification

- Nic Tippery is running sequences to determine source
- Seeking help from others such as Lori Benoit

Press Release

Task Force Finds Alarming Population of Invasive Hydrilla in the Connecticut River

Hydrilla (*Hydrilla verticillata*) is the most troublesome invasive aquatic plant in Florida and many other southern states. It forms dense stands that crowd out native vegetation, destroy fisheries, limit recreation, impede navigation and reduce property values. Following reports of this plant occurring in the southern portion of the Connecticut River, an investigative task force led by the Connecticut Agricultural Experiment Station Invasive Aquatic Plant Program (CAES IAPP) was formed. Comprising over 30 experts from throughout the northeast, the task force surveyed the river from central Vermont to southern Connecticut in 2018. The Connecticut portion of the river was

presumed to be "ground zero" for the infestation and received the majority of the effort. Helping the CAES IAPP staff in the State were volunteers from CT Sea Grant, Lower Connecticut River Council of Governments, Silvio Conte Wildlife Refuge, US Coast Guard, US Fish and Wildlife Service, and Vermont Department of Environmental Conservation.



Connecticut Survey Team - from left to right - (Summer Robbins and Riley Doherty (CAES IAPP), Margot Burns (Lower Connecticut River Council of Governments), Greg Bugbee (CAES IAPP), Judy Preston - not present- (CT Sea Grant)

Lower Connecticut River Council of Governments, Silvio Conte Wildlife Refuge, US Coast Guard, US Fish and Wildlife Service, and Vermont Department of Environmental Conservation.

No hydrilla was reported in the Massachusetts, New Hampshire and Vermont portions of the river. Travelling south from the Connecticut/Massachusetts border, hydrilla became common. Portions of the river and its coves from Hartford to East Haddam were alarming choked with the weed. Although hydrilla was found along the shore, the densest beds occurred on shallow shoals and in protected coves. In some coves, hydrilla spread out over the surface making access by survey boat impossible.

Finding such dense stands this far north of the southern states is alarming. CAES IAPP has found small populations in Coventry Lake, Held Pond in Weston, and two small ponds in Mystic but these do not compare to the extensive areas in the CT River. Furthermore, the CT River hydrilla is far more robust than that seen elsewhere in the State. This robustness could be a result of river flow, nutrients or genetics. Hydrilla samples are undergoing DNA analysis to determine if they differ genetically from plants from other parts of the State.

Controlling hydrilla is extremely difficult as it spreads by propagules called turions and tubers that fall to the sediment and remain viable for many years. Fragments also spread the plant, and the CT surveyors witnessed large quantities of hydrilla fragments floating downstream. Of great concern is the potential for propagules to be transported by boat trailering and wildfowl to nearby lakes and ponds. Another concern is the cost of hydrilla management. Coventry Lake is currently using a management strategy including aquatic herbicides costing in excess of \$100,000 per year. CAES is working closely with the Northeast Aquatic Nuisance Species Panel and other stakeholders to find management strategies.



(photo courtesy of Judy Preston, CT Sea Grant)