

Hydrilla in the Connecticut River

Gregory J. Bugbee

Invasive Aquatic Plant Program

The Connecticut Agricultural Experiment Station

Hydrilla Survey Connecticut River

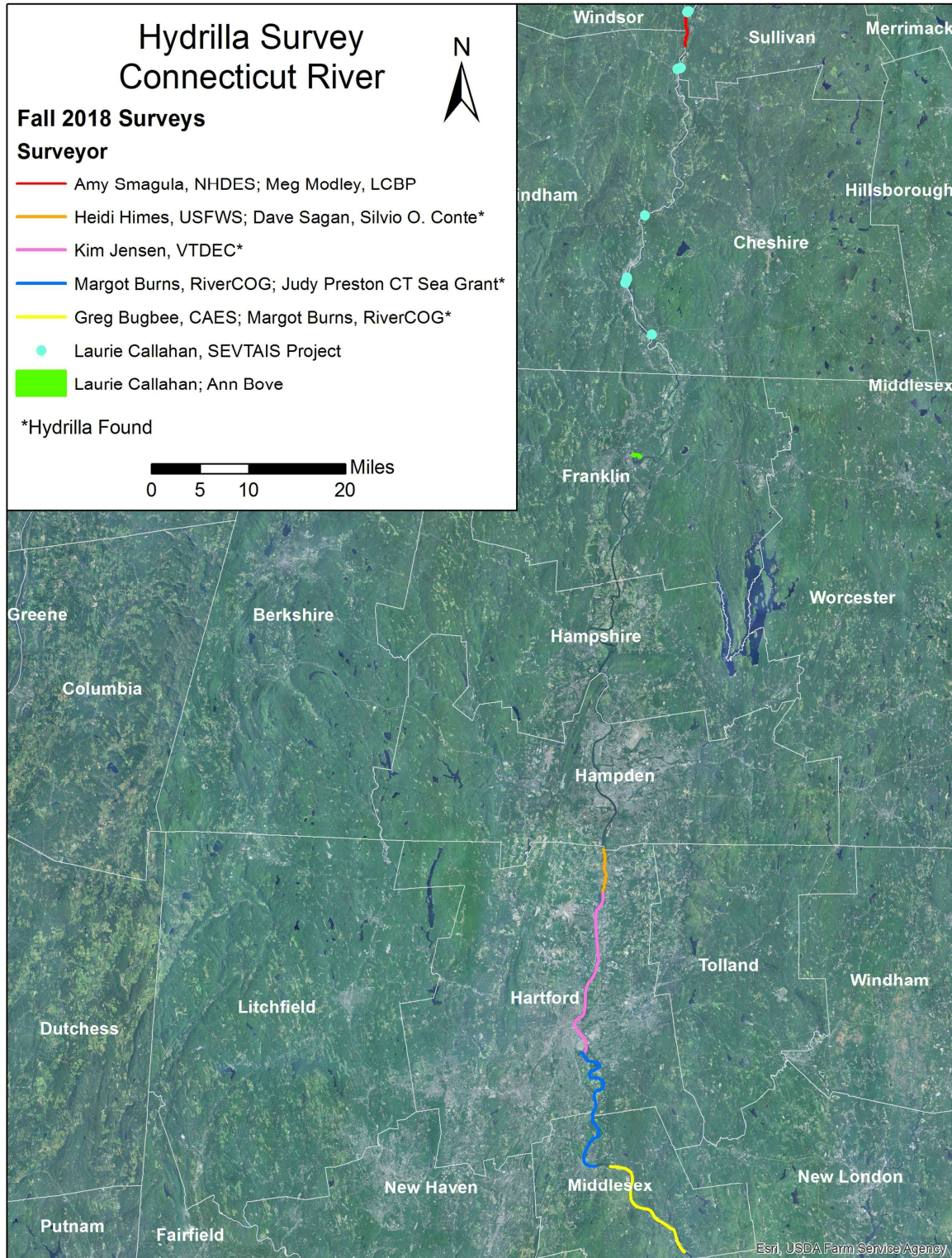
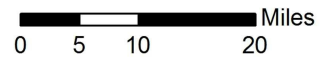


Fall 2018 Surveys

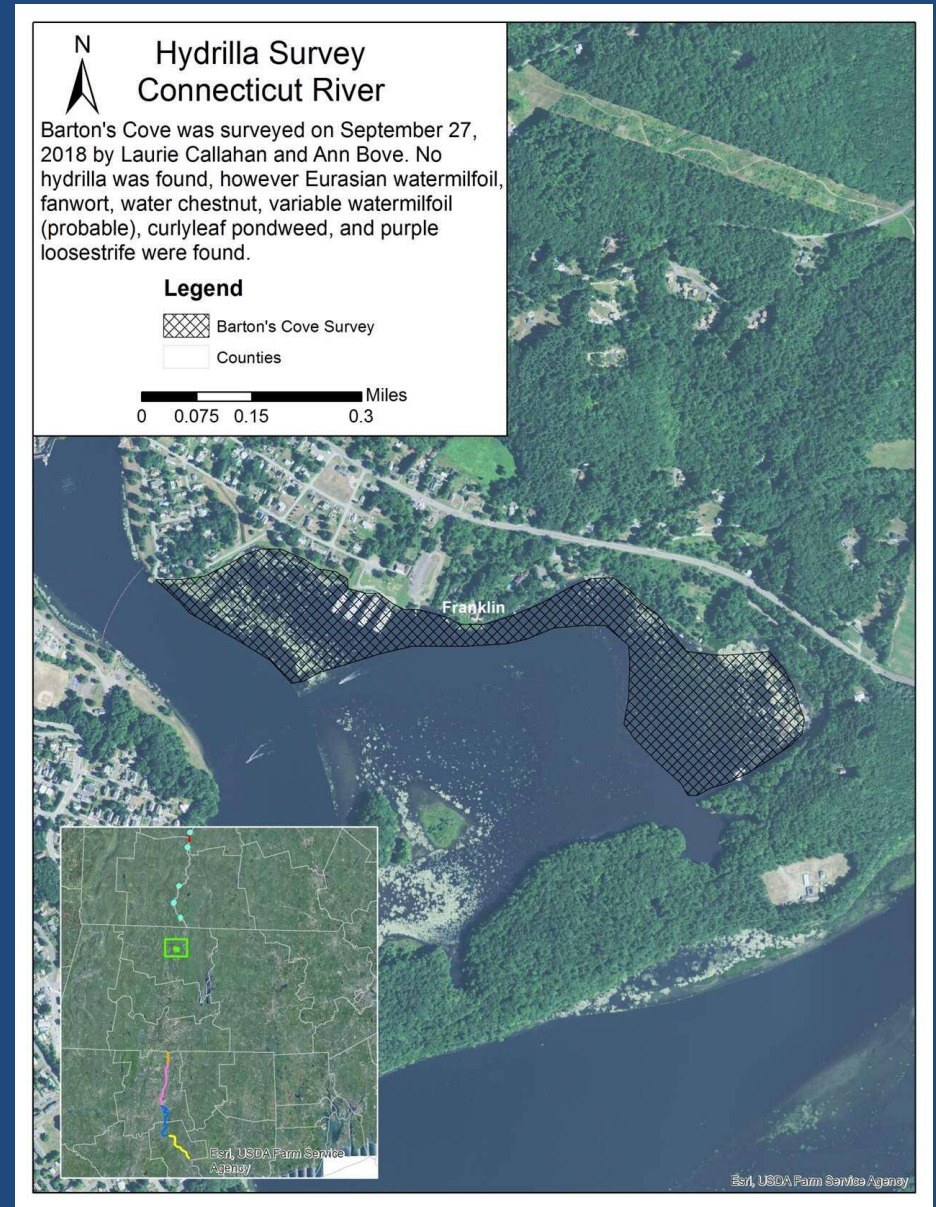
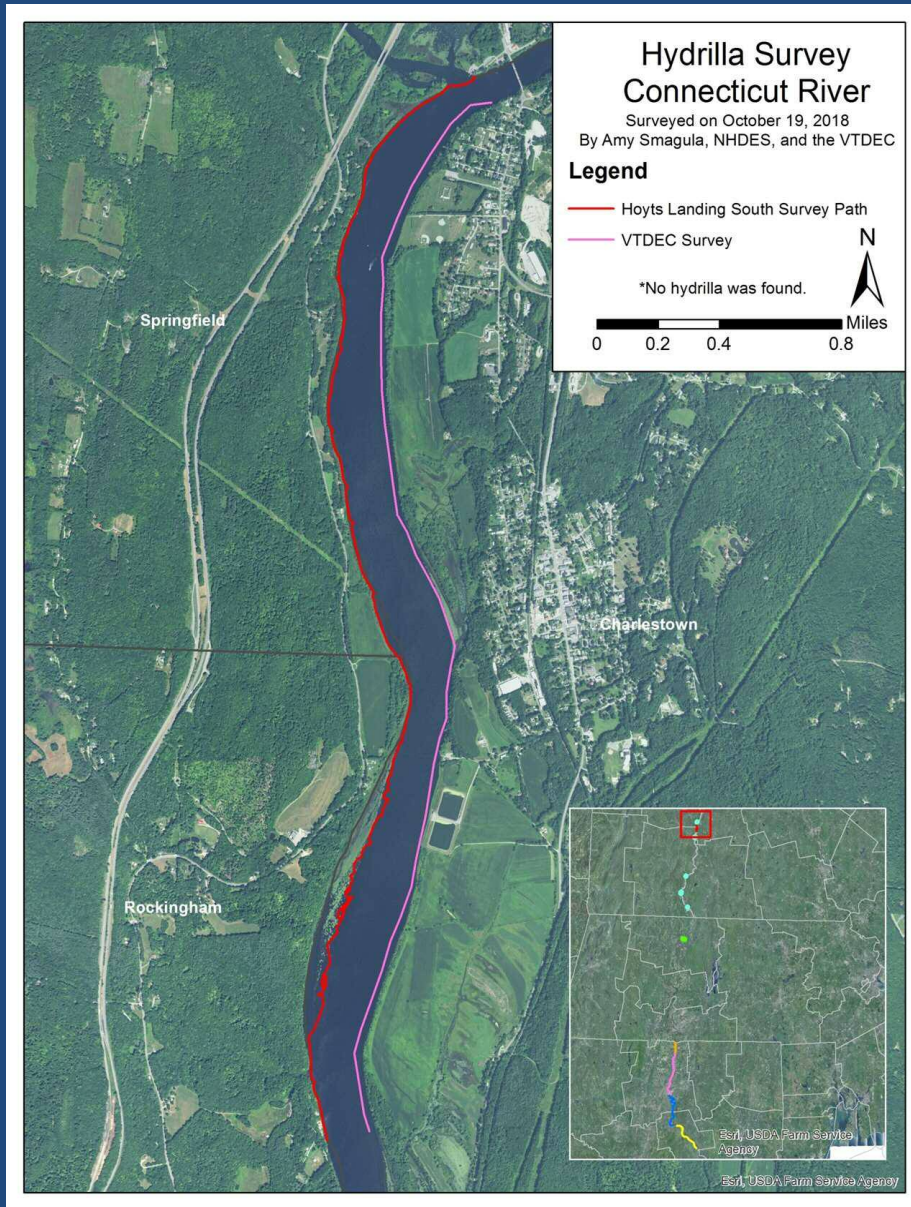
Surveyor

- Amy Smagula, NHDES; Meg Modley, LCBP
- Heidi Himes, USFWS; Dave Sagan, Silvio O. Conte*
- Kim Jensen, VTDEC*
- Margot Burns, RiverCOG; Judy Preston CT Sea Grant*
- Greg Bugbee, CAES; Margot Burns, RiverCOG*
- Laurie Callahan, SEVTAIS Project
- Laurie Callahan; Ann Bove

*Hydrilla Found



No hydrilla found in New Hampshire or Northern Massachusetts



Hydrilla Survey Connecticut River

Surveyed on September 27, 2018
By Heidi Himes, USFWS
and Dave Sagan, Silvio O. Conte Refuge

Legend

 Cities

Hydrilla Abundance

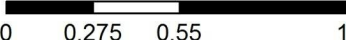
× 0: Zero

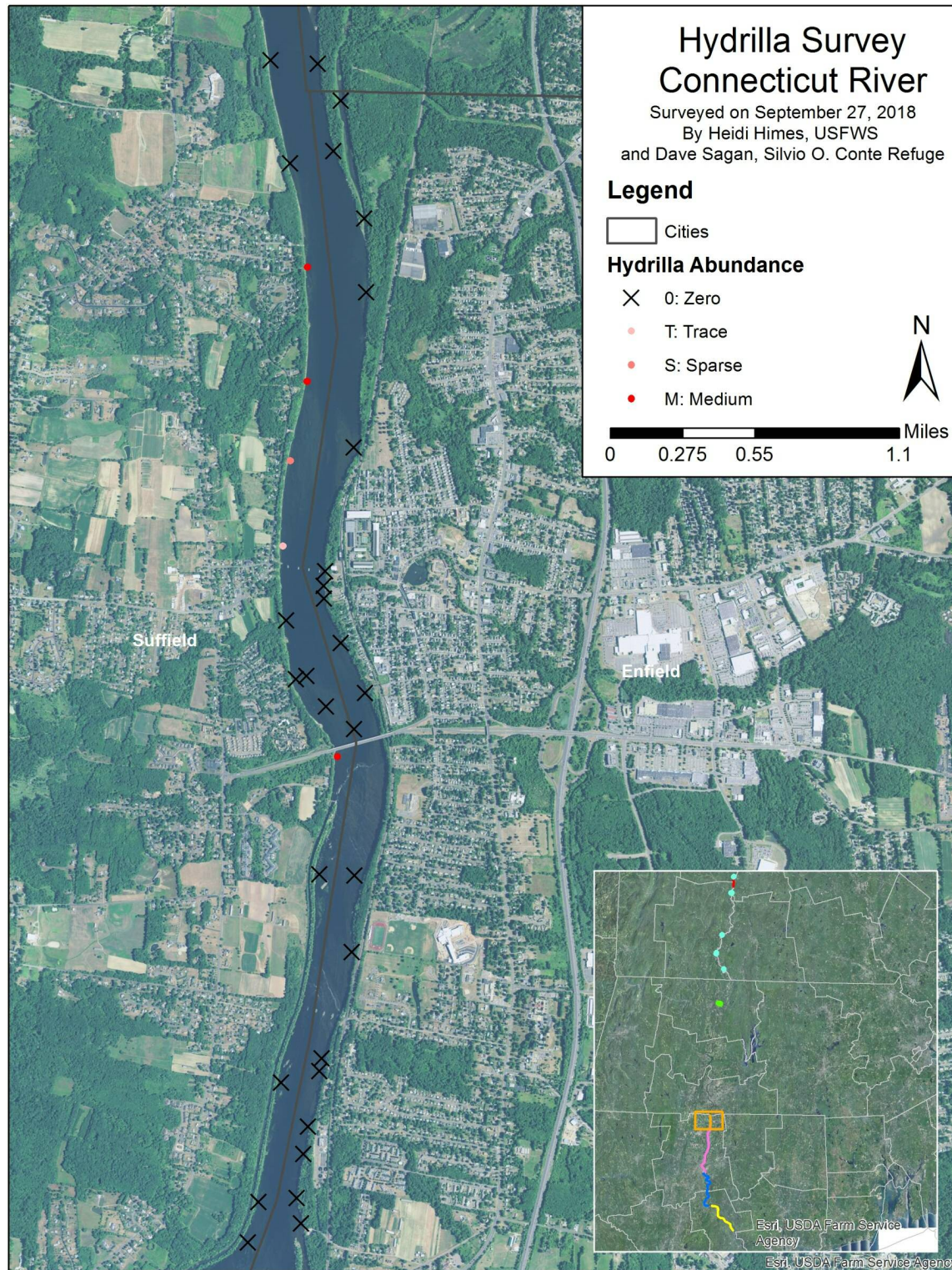
• T: Trace

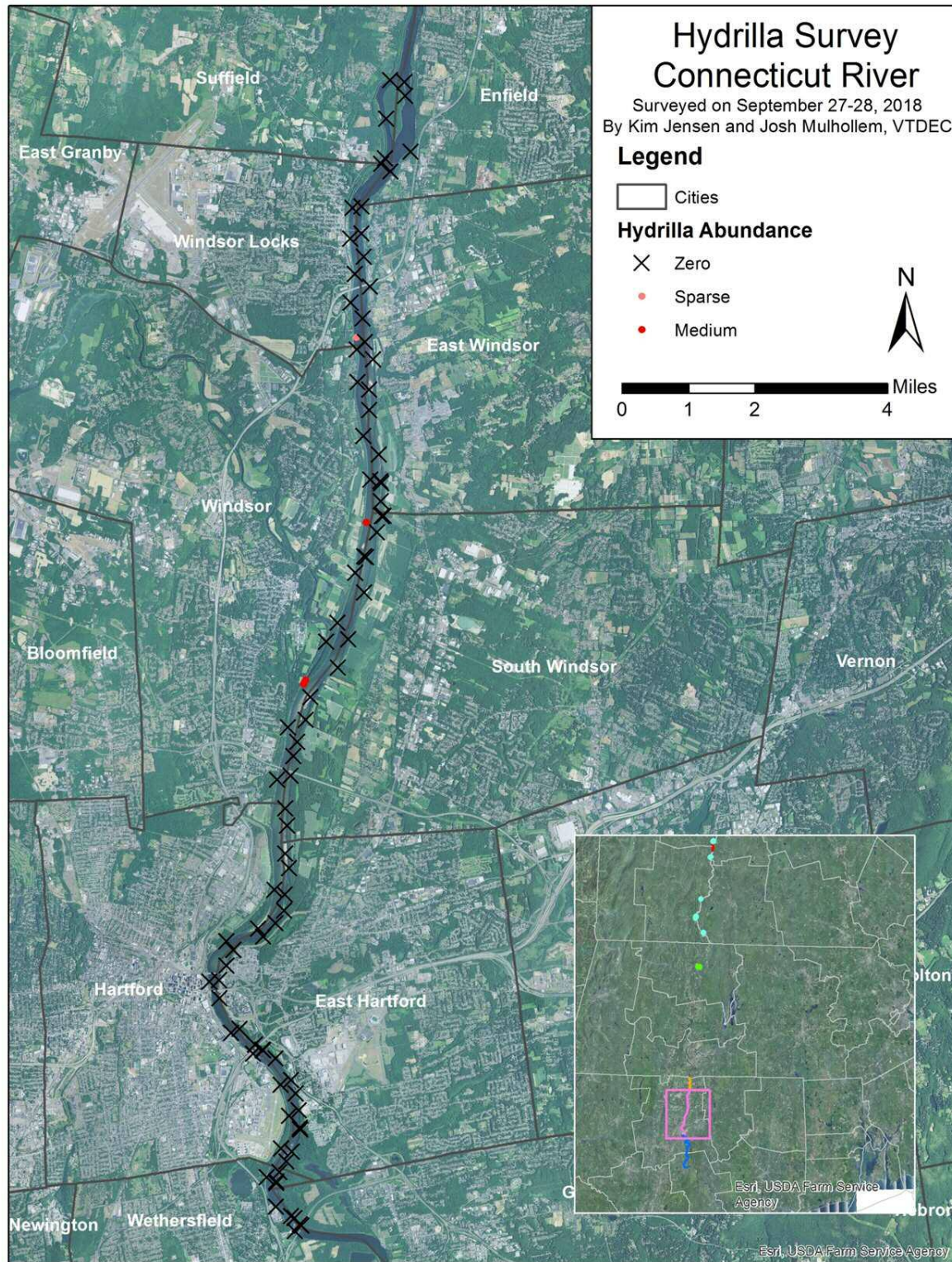
• S: Sparse

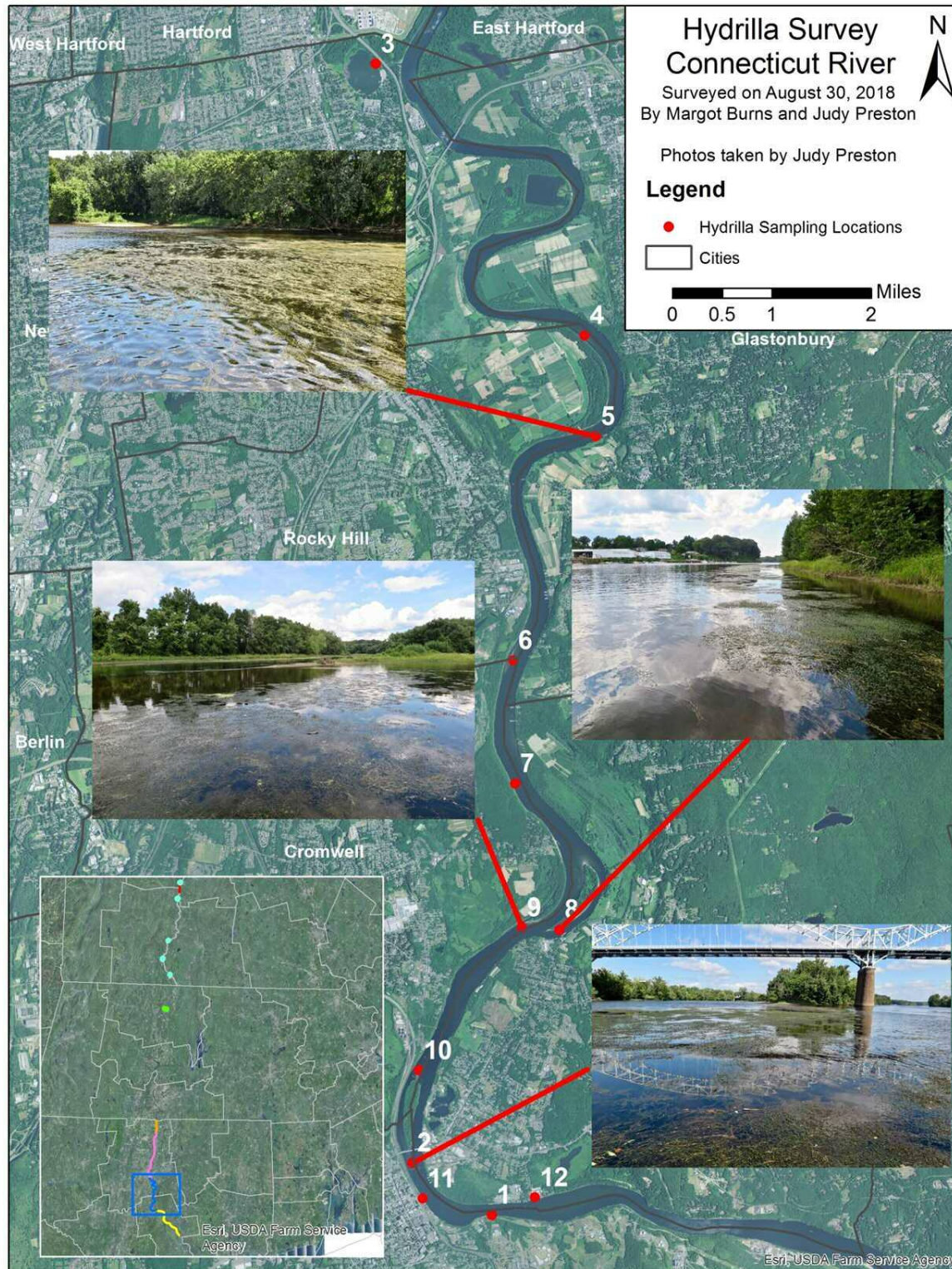
• M: Medium



 Miles
0 0.275 0.55 1.1







Keeney Cove - East Hartford, CT

Laurie Callahan, 6/26/18



Hydrilla Survey Connecticut River

Surveyed on October 1-2 and 31, 2018
By Greg Bugbee, Margot Burns,
Summer Stebbins, and Riley Doherty



Legend

▲ Collection Point

□ Cities

Hydrilla Abundance

× Zero

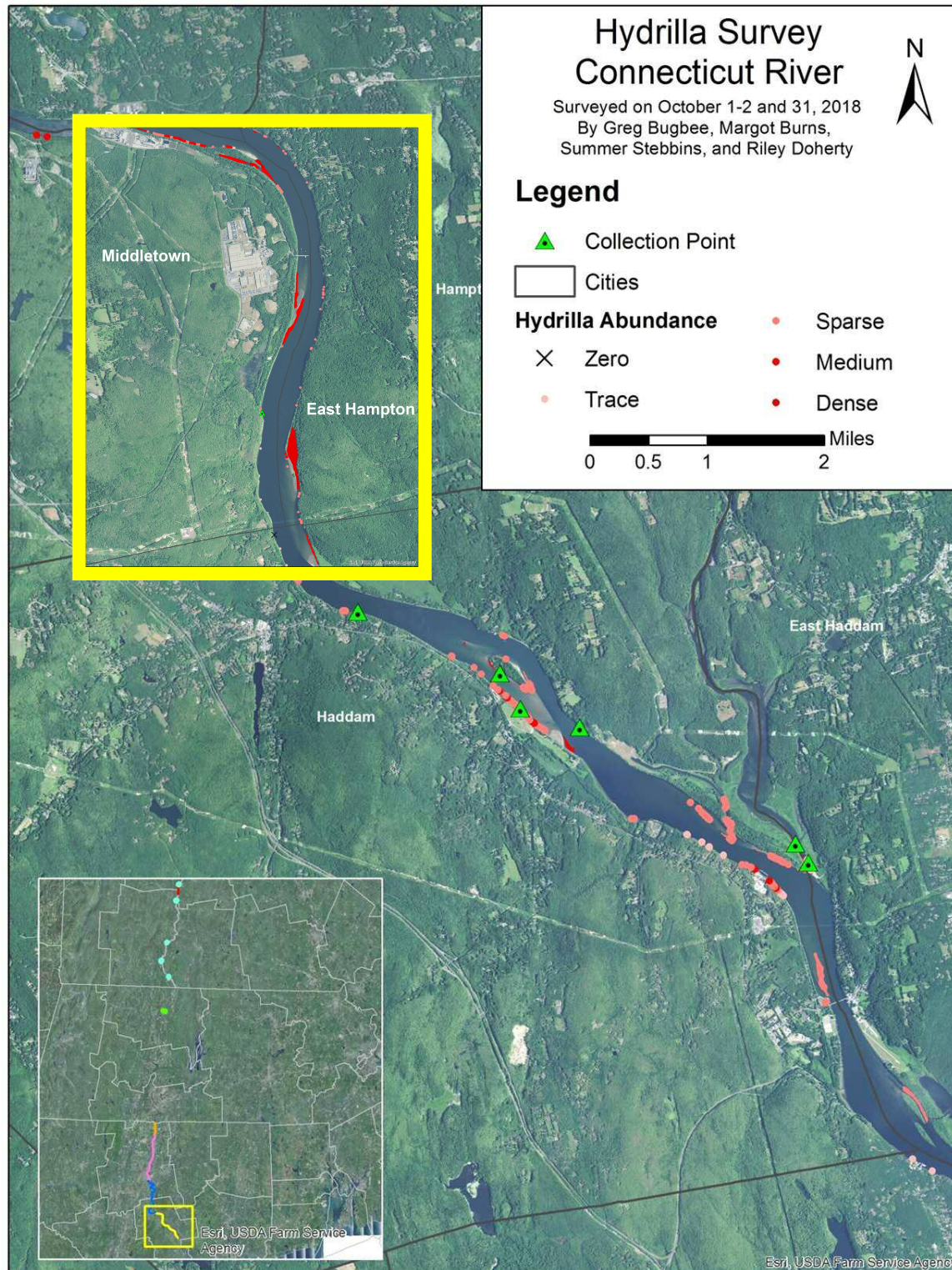
● Trace

● Sparse

● Medium

● Dense

0 0.5 1 2 Miles



East Hampton, CT



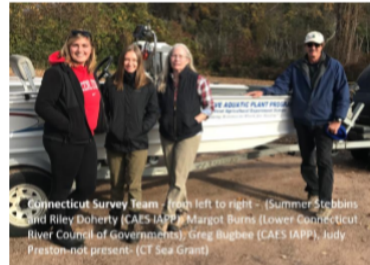
Molecular Identification

- 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



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

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.

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.



(photo courtesy of Judy Preston, CT Sea Grant)

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.