Tonawanda Creek/Erie Canal Hydrilla Control Demonstration Project

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US Army Corps of Engineers
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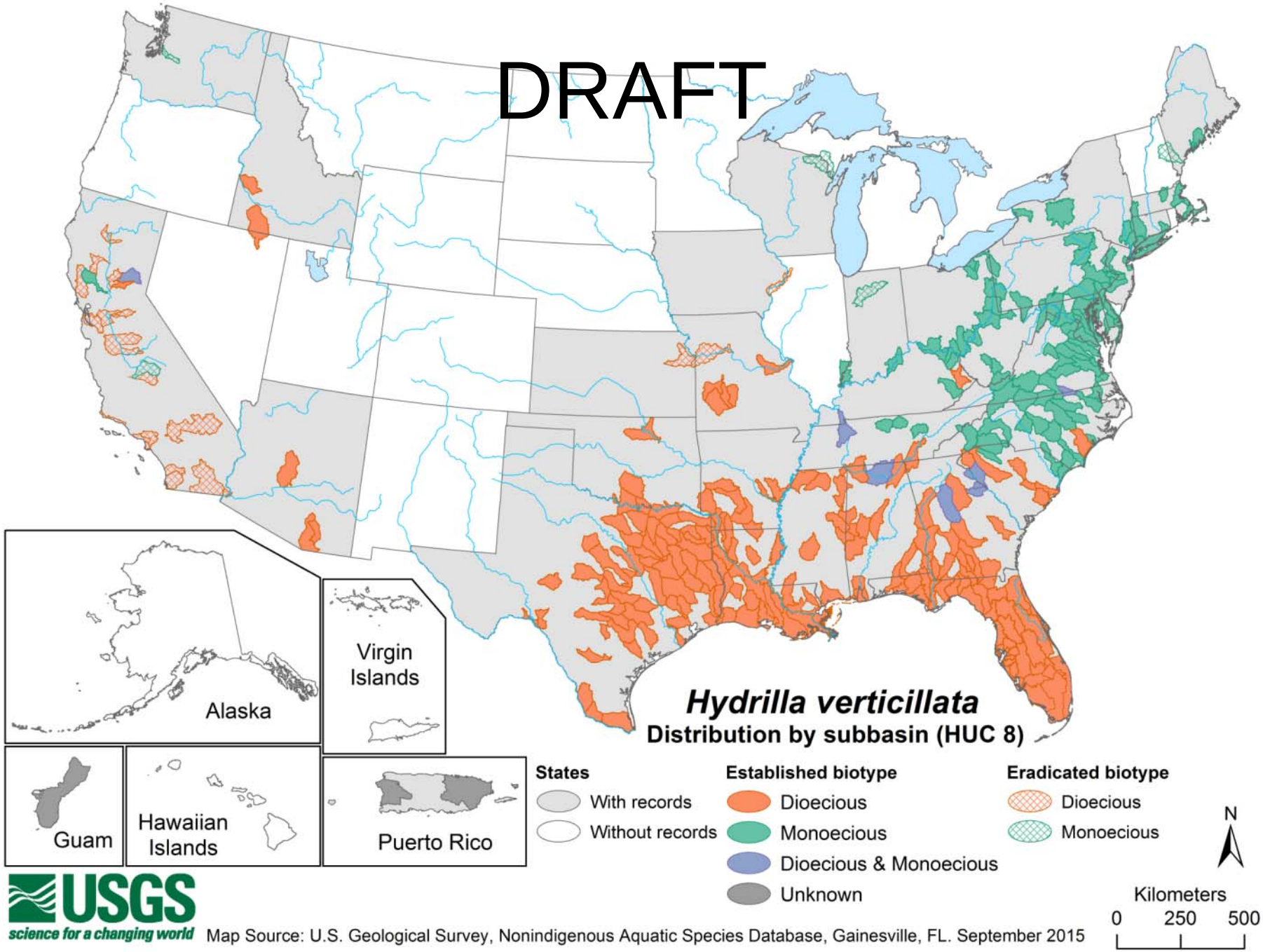
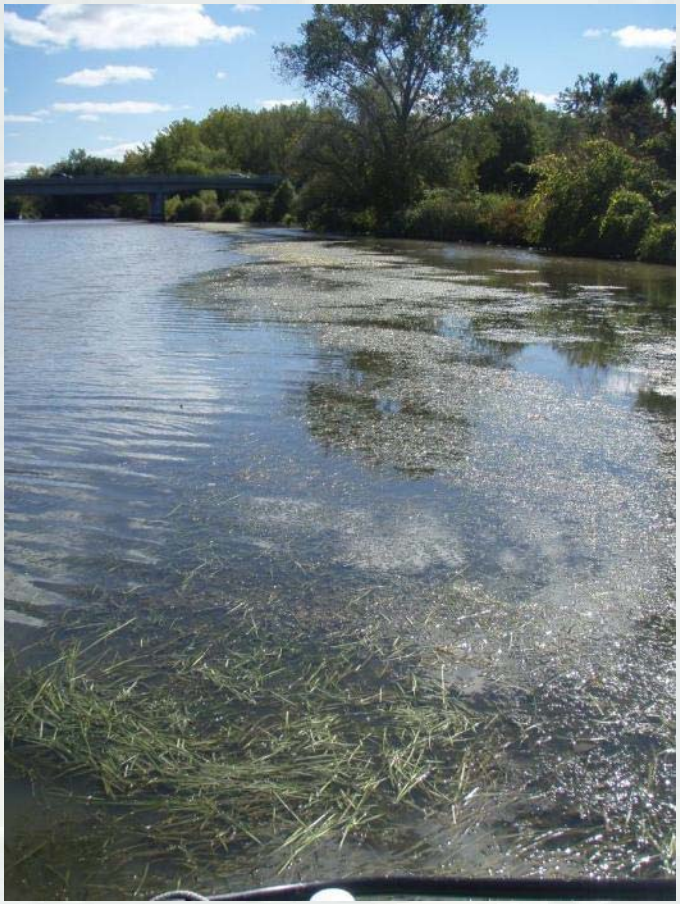

DRAFT
Alaska
Virgin Islands
Guam
Hawaiian Islands
Puerto Rico
Hydrilla verticillata
Distribution by subbasin (HUC 8)
States
With records
Without records
Established biotype
Dioecious
Monoecious
Dioecious & Monoecious
Unknown
Eradicated biotype
Dioecious
Monoecious
N
Kilometers
0 250 500
USGS
science for a changing world
Map Source: U.S. Geological Survey, Nonindigenous Aquatic Species Database, Gainesville, FL. September 2015

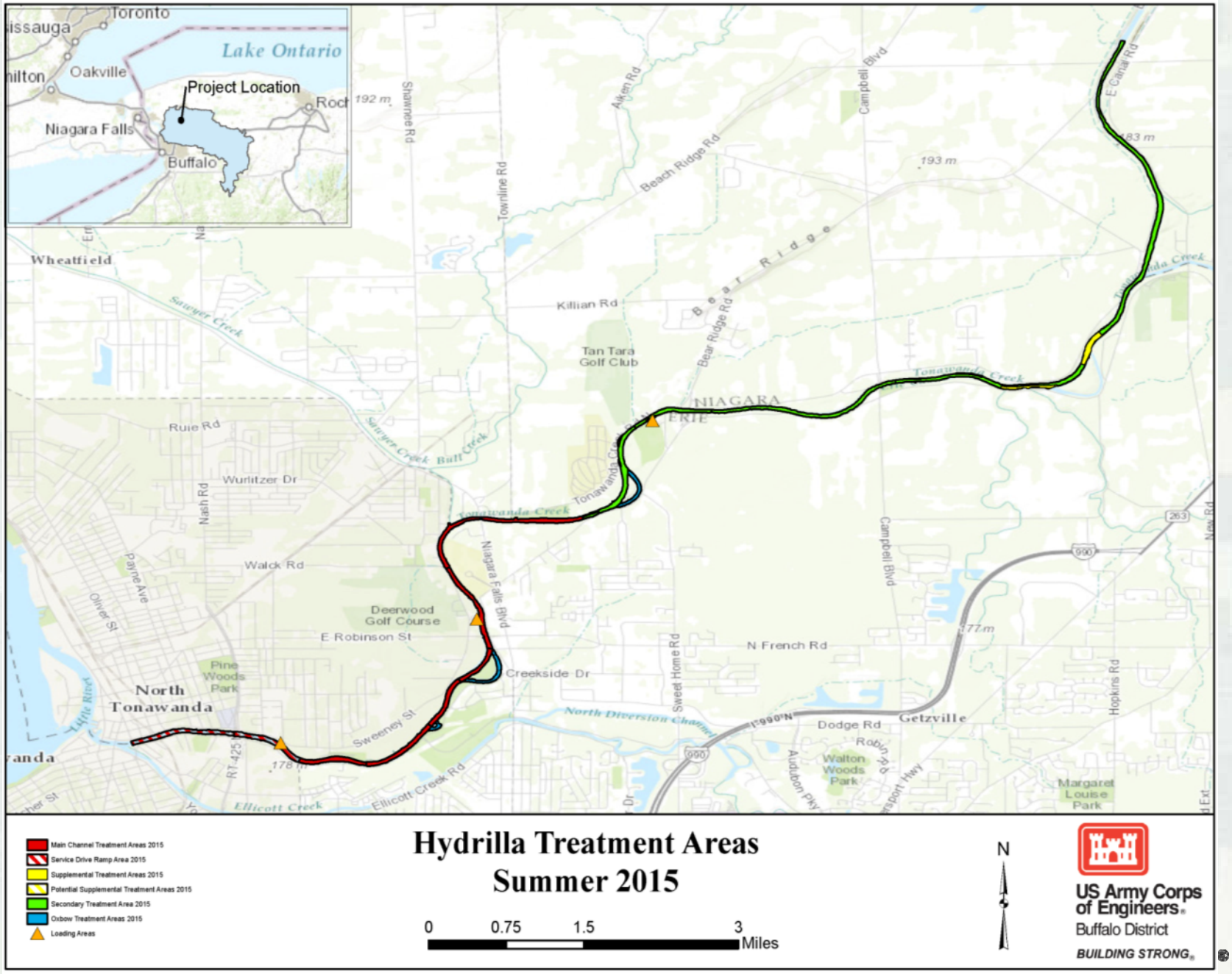
Project Area

(Erie Canal Website: http://www.eriecanal.org/index.html)

Hydrilla can be found in patchy large beds along the canal banks*



* 2014 Pre-treatment


Toronto
Lake Ontario
Oakville
Project Location
Niagara Falls
Buffalo
Wheatfield
Killian Rd
Tan Tara Golf Club
Bear Ridge Rd
Beach Ridge Rd
Townline Rd
Shawnee Rd
Aiken Rd
Campbell Blvd
E Canal Rd
Sawyer Creek
Ruie Rd
Wurlitzer Dr
Nash Rd
Walck Rd
Payne Ave
Oliver St
Deerwood Golf Course
E Robinson St
Niagara Falls Blvd
Creekside Dr
Pine Woods Park
North Tonawanda
Sweeney St
Little River
Ellicott Creek
Ellicott Creek Rd
Rt 425
Tonawanda Creek
Buffalo Creek
NIAGARA
ERIE
N French Rd
Sweet Home Rd
North Diversion Channel
Dodge Rd
Getzville
Walton Woods Park
Audubon Pkwy
Transport Hwy
Hopkins Rd
Margaret Louise Park
990
263
Main Channel Treatment Areas 2015
Service Drive Ramp Area 2015
Supplemental Treatment Areas 2015
Potential Supplemental Treatment Areas 2015
Secondary Treatment Area 2015
Oxbow Treatment Areas 2015
Loading Areas
Hydrilla Treatment Areas
Summer 2015
0
0.75
1.5
3
Miles
N
US Army Corps of Engineers
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Hydrilla patch outside of main treatment area, identified Aug 25

Spot herbicide application Sep 8 & 9

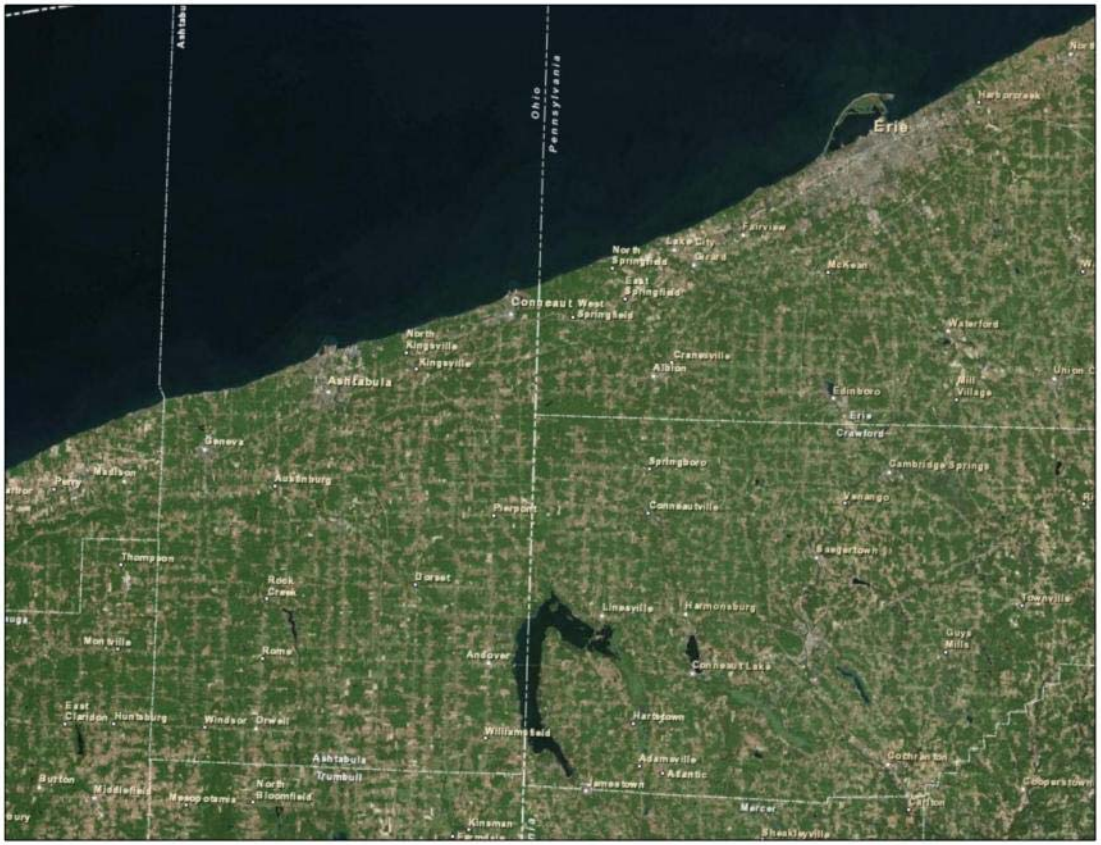
Preliminary 2015 Results

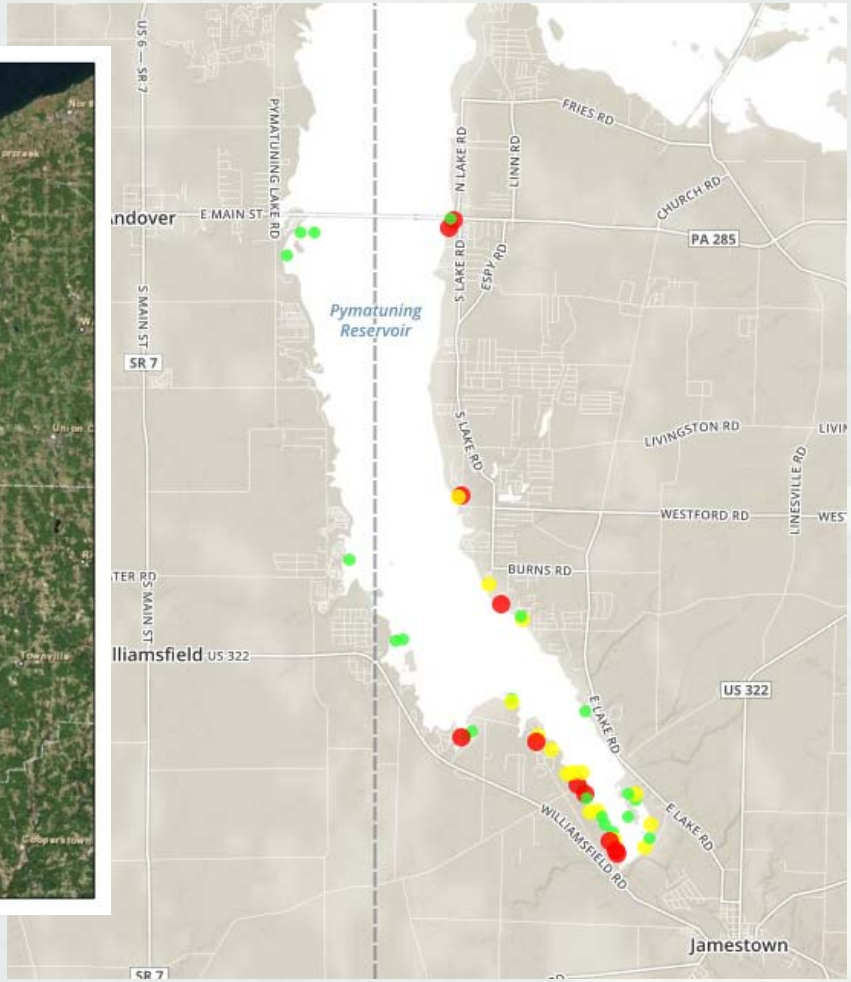
- Overall hydrilla frequency in canal was reduced from 33% to 4%
- Overall hydrilla tuber densities were reduced by >90% in yrs 1 and 2.
- Significant decrease in hydrilla frequency has greatly reduced the number of fragments observed floating in the canal

Preliminary 2015 Results

- Achieved excellent control of hydrilla in the area near the Service Drive ramp in 2015, was not controlled in 2014
- Several of the key native species remained much more stable following the 2015 large-scale application as opposed to 2014
- Strategies in 2016 may change to more specifically target hydrilla beds (versus the entire canal) from mid-July to mid-August

Pymatuning Reservoir





Risk Assessment

- Will result in a Great Lakes specific assessment of hydrilla
- Risk = probability of establishment + consequence of establishment
- Will include plant biology and ecology studies necessary to support risk assessment, modeling, and reduce uncertainty