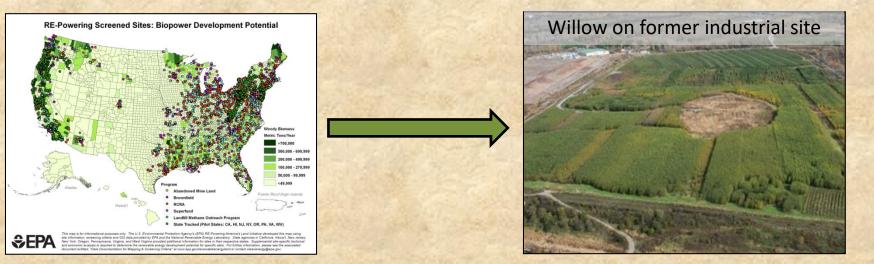
Integrating shrub willow crops into the landscape to address environmental and community challenges while producing bioenergy and bioproducts

> T.A. Volk, J.P. Heavey, M. Eisenbies, K. Hallen SUNY ESF, Syracuse, NY Bio-Restore Workshop, Sept, 25 – 26, 2019

Challenges to Opportunities



Hundreds of thousands of hectares of former industrial land where perennial crops could help protect human health and the environment and produce biomass.



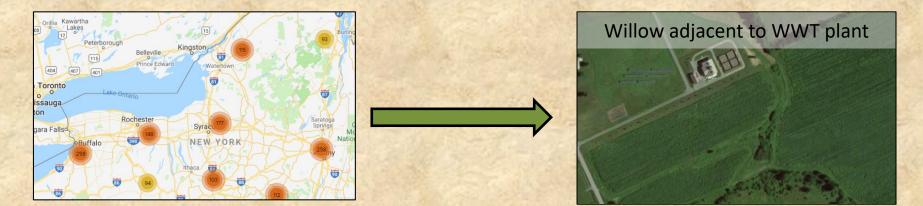
Harvestable willow buffers could be used to address HABS, which have impacted over 70 lakes in NY alone. Riparian buffers are a key part of NYS plans to address HABS.

Challenges to Opportunities





Hundreds of thousands of hectares of rights of way where perennial crops could be grown and reduce blowing snow, glare from lights and maintenance while producing bomass.



Over 1,0000 waste water treatment systems in NY and willow could be used to remove nutrients and lower costs for communities while increasing biomass yields.

Implementation

- Engagement with stakeholders
- Overcoming the barriers to new ideas
- A consistent and reliable market
- Value for ecosystem services

 through support for installation or services
- Site by site variation
 - may require more custom planning and implementation than for agricultural land