

# Owasco Highway Department Wetland Remediation Project Town of Owasco, NY

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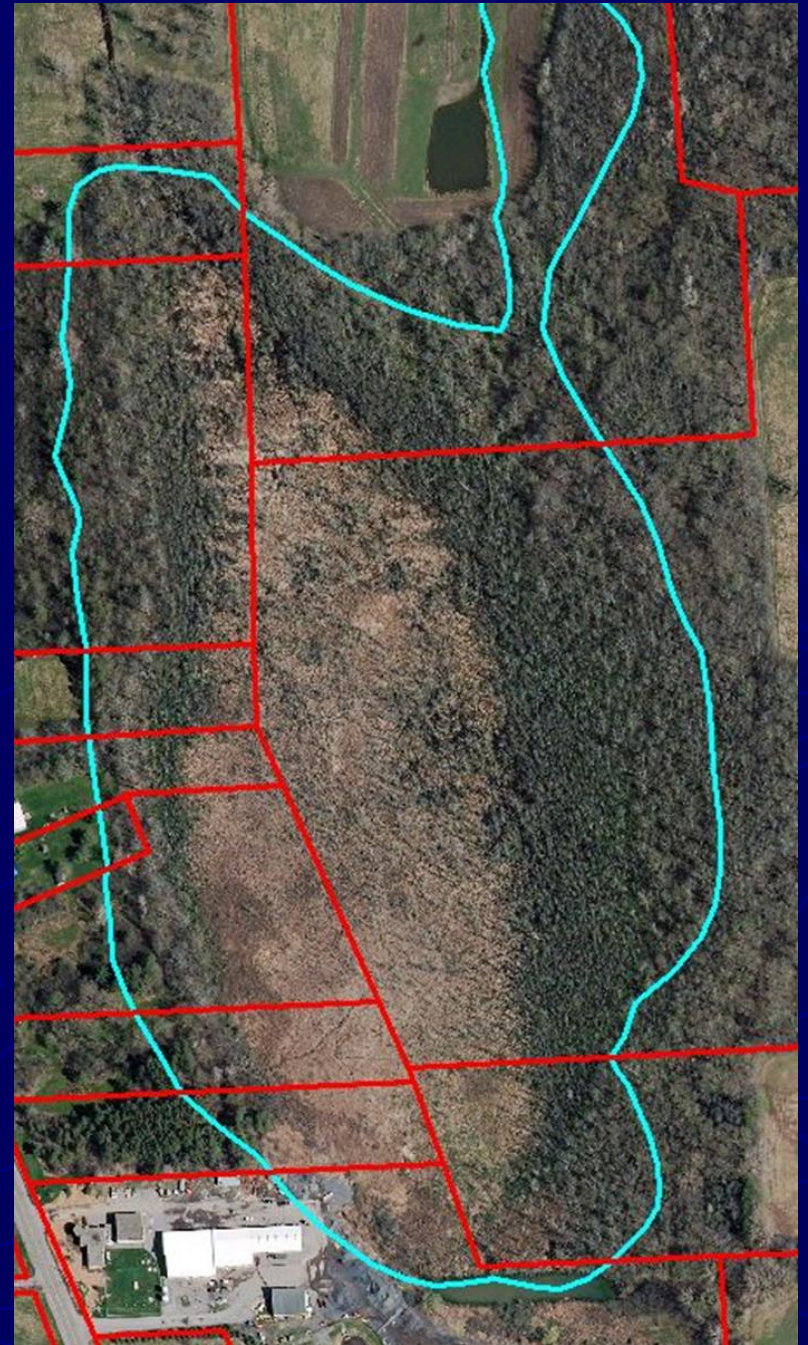


Drone pic by Drew Snell



# Wetland A-18

- ▶ 47.5 acres
- ▶ Seasonally flooded forested wetland
- ▶ Regulated by DEC
- ▶ Impacted sometime after 1989:
  - Fill: street millings, stone, culverts, block, bricks
  - Invasive plants





# Project View

GHD Consultants  
drafted remediation  
plan in 2019

Plan put into effect  
Spring 2020



# 2020 Project Requirements

- ▶ Remove fill and invasive plants:
  - Common reed, (*Phragmites australis*) and,
  - Japanese knotweed (*Fallopia japonica*).
- ▶ *Phragmites* removed to a storage bunker; knotweed taken to Auburn landfill.
- ▶ Site graded to native soil depth.
- ▶ Guard rail and signage installed.
- ▶ 45 species of native grasses, herbaceous plants, shrubs and trees planted.



# Phragmites



12 inches of stem  
growth in one week

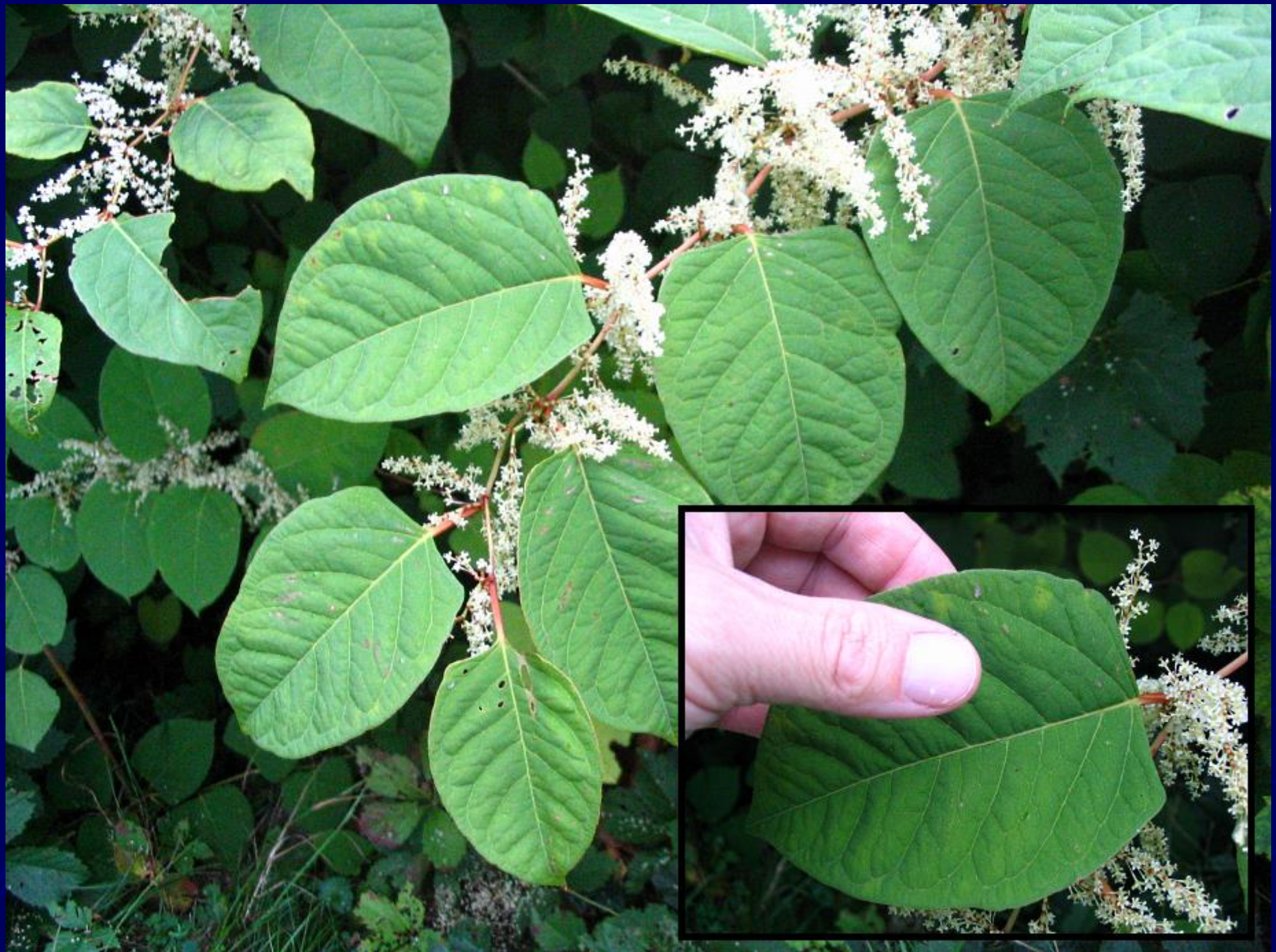
- ▶ Extensive and vigorous rhizomes
- ▶ Rapid growth
- ▶ Notoriously difficult to eradicate
- ▶ New science emphasizes management over eradication



# Japanese knotweed











Knotweed has underground stems called rhizomes. Near the surface they break off very easily and this is how the plant spreads.



But knotweed's rhizomes grow deep into the soil and can be difficult to kill / remove.







Cat 330 and Bulldozer essential for effective and efficient removal.

Drone pic by Drew Snell





Summer '20 challenge: Keeping equipment clean & free of plants









August: Installed two drainage channels





August: Guardrail installed





**SENSITIVE  
WETLAND AREA NO  
DUMPING, FILL, OR  
EQUIPMENT**

September: Signs up





### ▶ Planted:

- Pin and Swamp white oaks
- Sycamore
- Alder
- Red maple
- Black willow
- Silky willow, Gray birch, and viburnum





October: Deer protection





November: Hydro-seeding complete



# Future

1. Ambitious plant survival goals established for the next six years, so replanting as needed.
2. Schedule of compliance says: "Project areas shall not exceed greater than 10 percent aerial coverage of non-native or invasive species at any time for the 5-year monitoring period." So,
3. Town will apply for a DEC Wetland permit for herbicide control of Phragmites, and,
4. Install kill screening technique on knotweed.
5. Keep up deer exclusion.