Invasive Phragmites

Collaborating to Address the Threat and Restore Coastal Wetlands *and watersheds!*

Long Point Invasive Phragmites Project 2019 Update

Ontario Phragmites Working Group
Annual General Meeting
January 16, 2020

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Estimated Phragmites Australis Extent in the Long Point Region - 2015

Phragmites Australis - Long Point
1328.5 ha/3282.9 ac

Note – Phragmites extent is an estimate using available data sources and often significantly underestimates the actual coverage on the ground

N
W E
S

0 1 2 3 4 5
Kilometres

This map is illustrative only. Do not rely on it as being a precise indicator of privately-owned land, routes, locations of features, nor as a guide to navigation. This map may contain omissions or errors. Not survey grade.

Data Sources:
Nature Conservancy of Canada - Ontario Region, 2019
Canadian Wildlife Service, 2019
Ontario Ministry of Natural Resources and Forestry, 2019
ESRI, 2019

April, 2019

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Long Point Region Coastal Wetlands
What's the big deal?

- One of the few remaining coastal wetlands on Lake Erie with natural, hydrological connections and pulses
- Global, national and provincial designations (e.g. UNESCO Biosphere Reserve, Earth Science and Life Science Areas of Natural & Scientific Interest, Provincially Significant Wetland, RAMSAR Site, Important Bird Area, etc.)
- Provides habitat for a high number of wetland-dependent wildlife, including ~23 species at risk
- Internationally-recognized migratory waterfowl and shorebird stopover location at the convergence of Atlantic and Mississippi flyways
- High number of provincially rare species and vegetation communities
- Significant opportunity for landscape-scale impact

Tools of the Trade

Ground Treatment -
Species and Habitat Conservation Measures

- Follow PMRA label conditions (weather, wind speed, timing, PPE etc.)
- Two operators scanning for wildlife (driver and exterminator)
- Slow ‘move-stop-move’ method provides opportunity for wildlife observation and flee from vehicle path
- Single pass between Phragmites patches and avoiding existing paths where possible, limits opportunity for wildlife interaction
- Avoid habitat features such as rotting stumps, debris/rubble piles which may support thermoregulation or overwintering

Ground Treatment -
Species and Habitat Conservation Measures

- Use GIS info with onboard GPS-enabled tablet to avoid known values (SAR hot spots, known wildlife features, infrastructure etc.)
- Check equipment prior to (re) ignition to ensure no snakes present
- Apply herbicide to plants directly
- Use 100 micron filter to ensure mix water quality = high efficacy and minimized need for follow-up treatments
- Employ Clean Equipment Protocol for Industry

Ground Treatment -
Jon boat with Intelli-spray system

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Monitoring our work

- Drinking water quality – highest importance
- Efficacy – did it work?
- Fate of the herbicide – water and sediment sampling
- Impacts to aquatic organisms – confirm existing science
- Effects on fish and fish habitat
- Sensitive vegetation community response
- Benthic invertebrate monitoring as indicator species for reptiles and amphibians
- PAMF – Phragmites Adaptive Management Framework

IPM – Post-herbicide Treatment BMPs Roll, Cut and Prescribed burn

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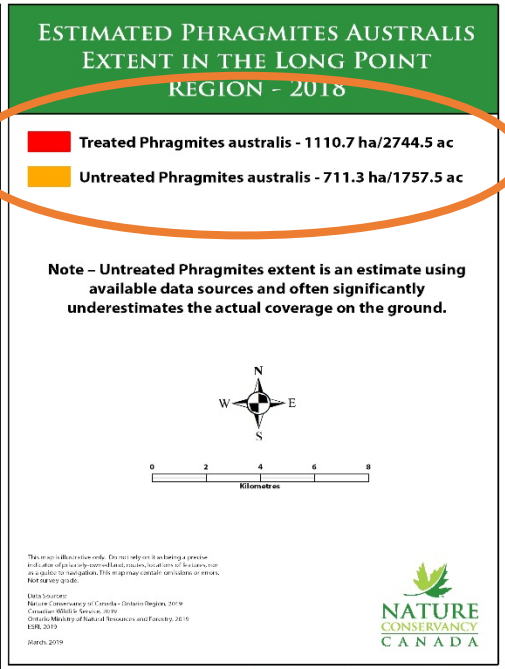
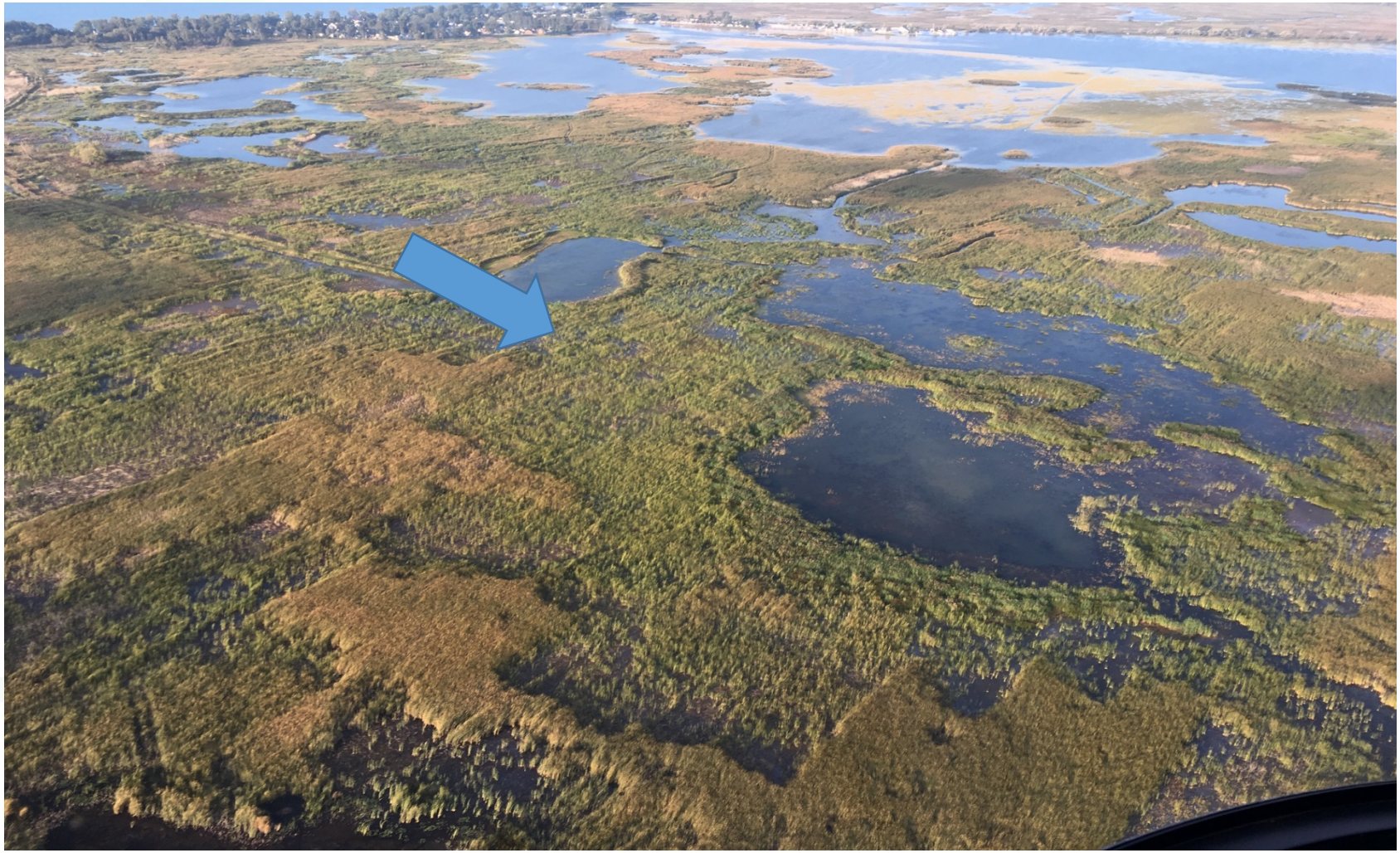
The Big Picture – It's actually much bigger



Restoration Success!



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Thank You! - Donors, Grantors and Partners

- Ontario Ministry of Natural Resources and Forestry
- Environment and Climate Change Canada – CWS ON Region
- Ducks Unlimited Canada
- Wildlife Habitat Canada
- USFWS – NAWCA
- Bird Studies Canada
- Long Point Phragmites Action Alliance members
- Private landowners and waterfowl hunt clubs

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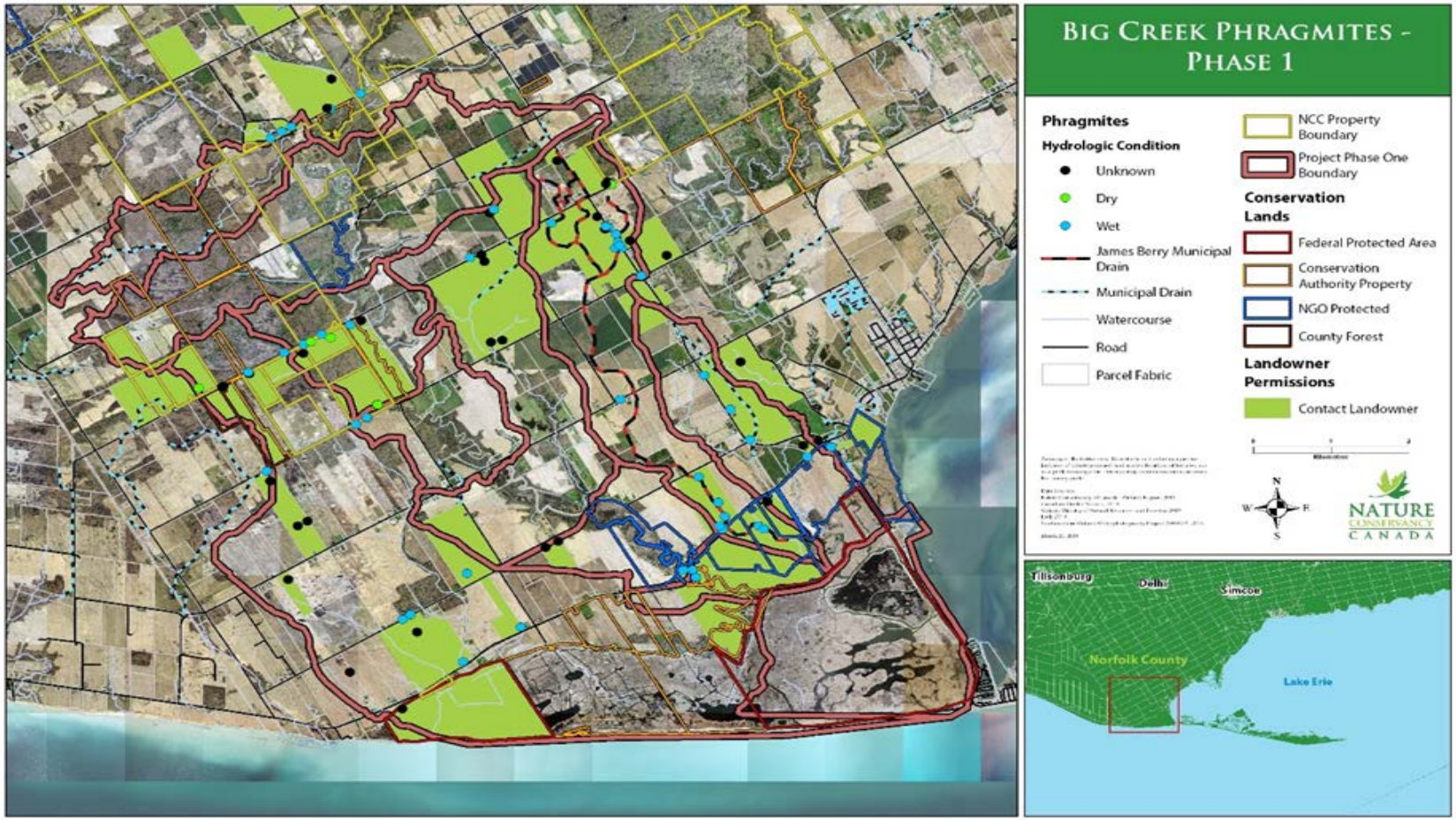
Next Steps – Landscape-scale Phragmites Control – Big Creek watershed



Big Creek Phragmites Control Program

16 January 2019

Brett Norman – Coordinator Conservation Biology,
Norfolk Forests and Long Point Wetlands

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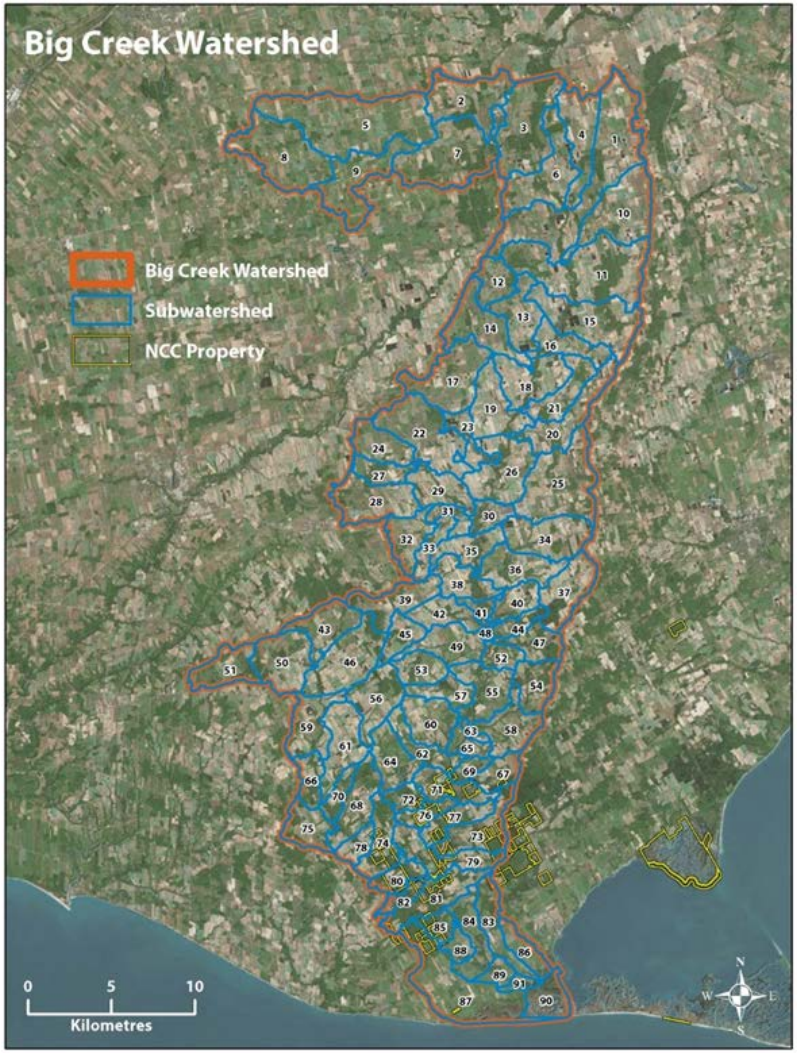
Big Creek Watershed

- 750 sq. km
- 22 sub watersheds
- Entirely within Norfolk County
- 1 settlement: Delhi (4,000 people)
- Sandy soils, some pockets of heavy clay
- Agriculture dominates land cover
- Road density is high



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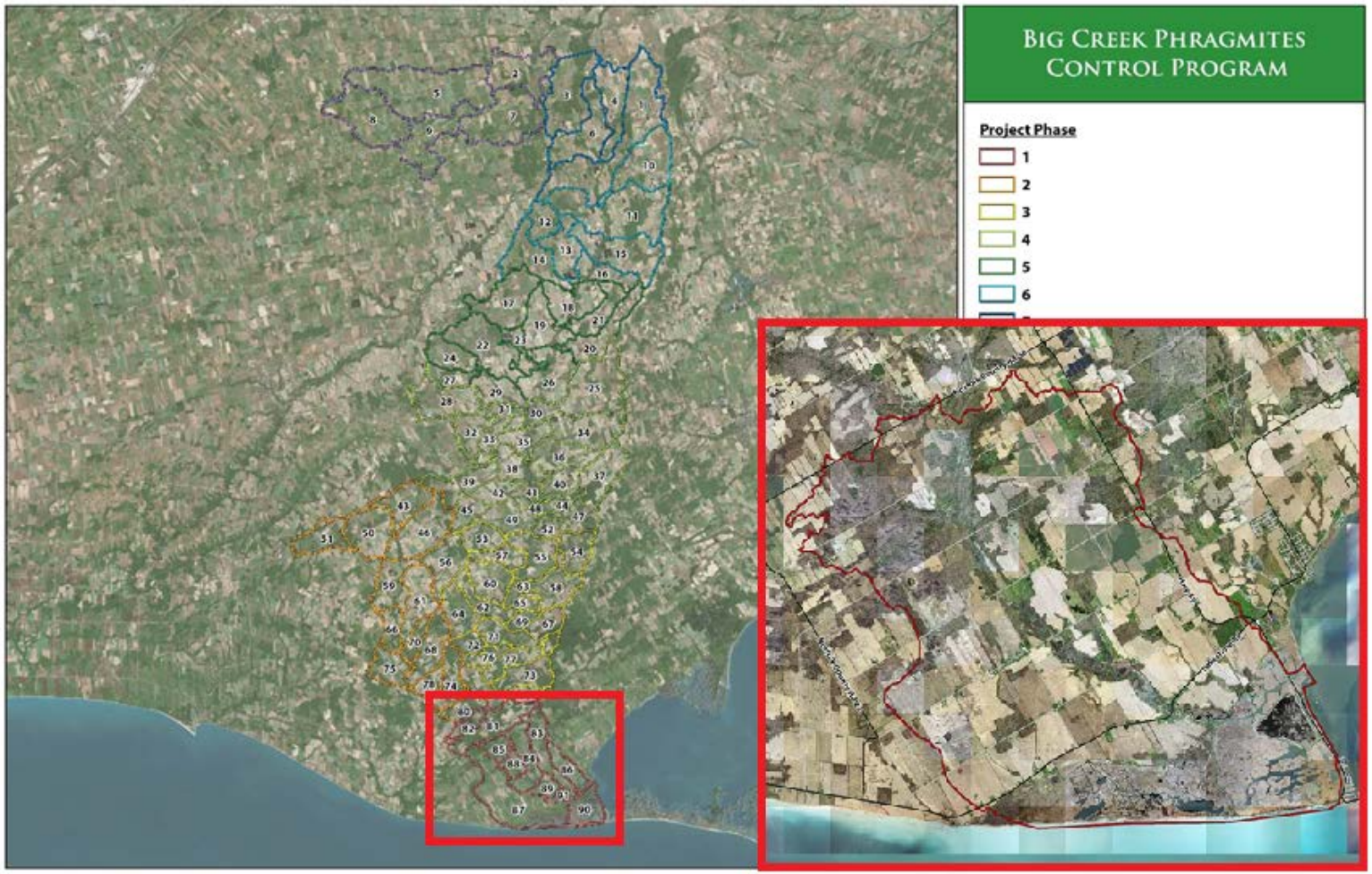
Project team

- The project is lead by 15 organizations, from the Long Point Phragmites Action Alliance, who form the Big Creek Watershed Subcommittee.
- They include: ALUS Norfolk, ECCC – CWS, Giles Restoration Services, IPCC, LPRA, LPRCA, LPWBRF, MNRF, MTO, NCC, NFA, NWOA, and Norfolk County (Roads, drainage, and Forestry divisions).

Control Plan



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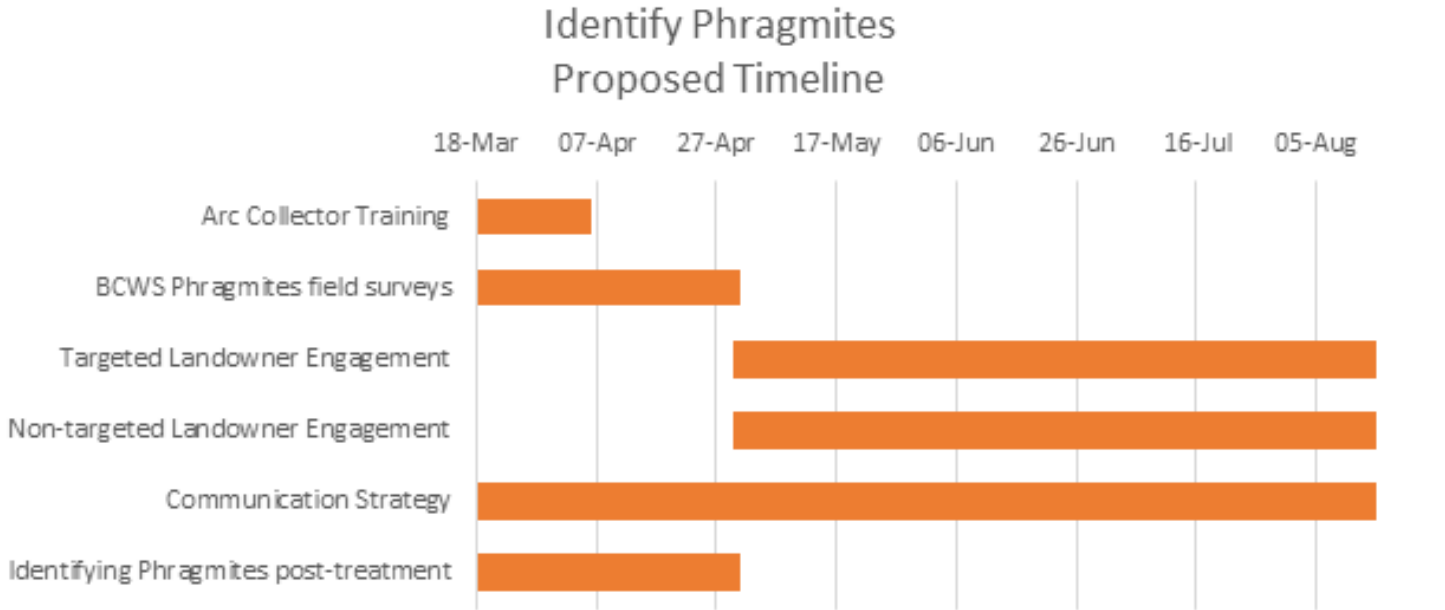
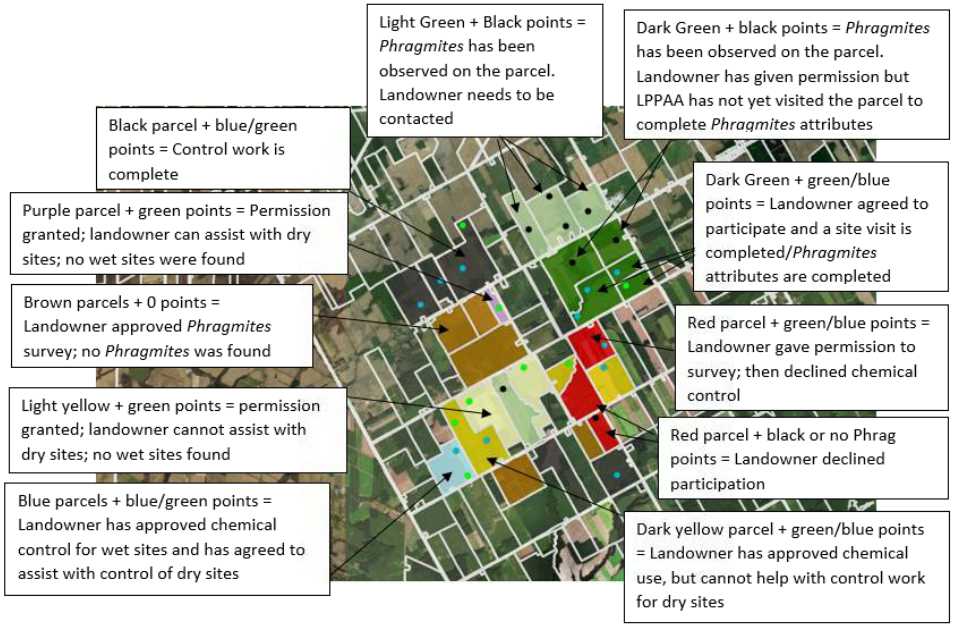
Control Implementation – Data Collection



	Identifying Phragmites post-treatment	Communication Strategy	Non-targeted Landowner Engagement	Targeted Landowner Engagement	BCWS Phragmites field surveys	Arc Collector Training
Start date	18-Mar	18-Mar	30-Apr	30-Apr	18-Mar	18-Mar
Duration (days)	44.00	150.00	185.00	185.00	44.00	19

Control Implementation – Data Collection Continued

- Needs to be accessible to all partners
- Contain parcel information for reporting
- Capture landowner permission and contact information
- Capture Phragmites location information



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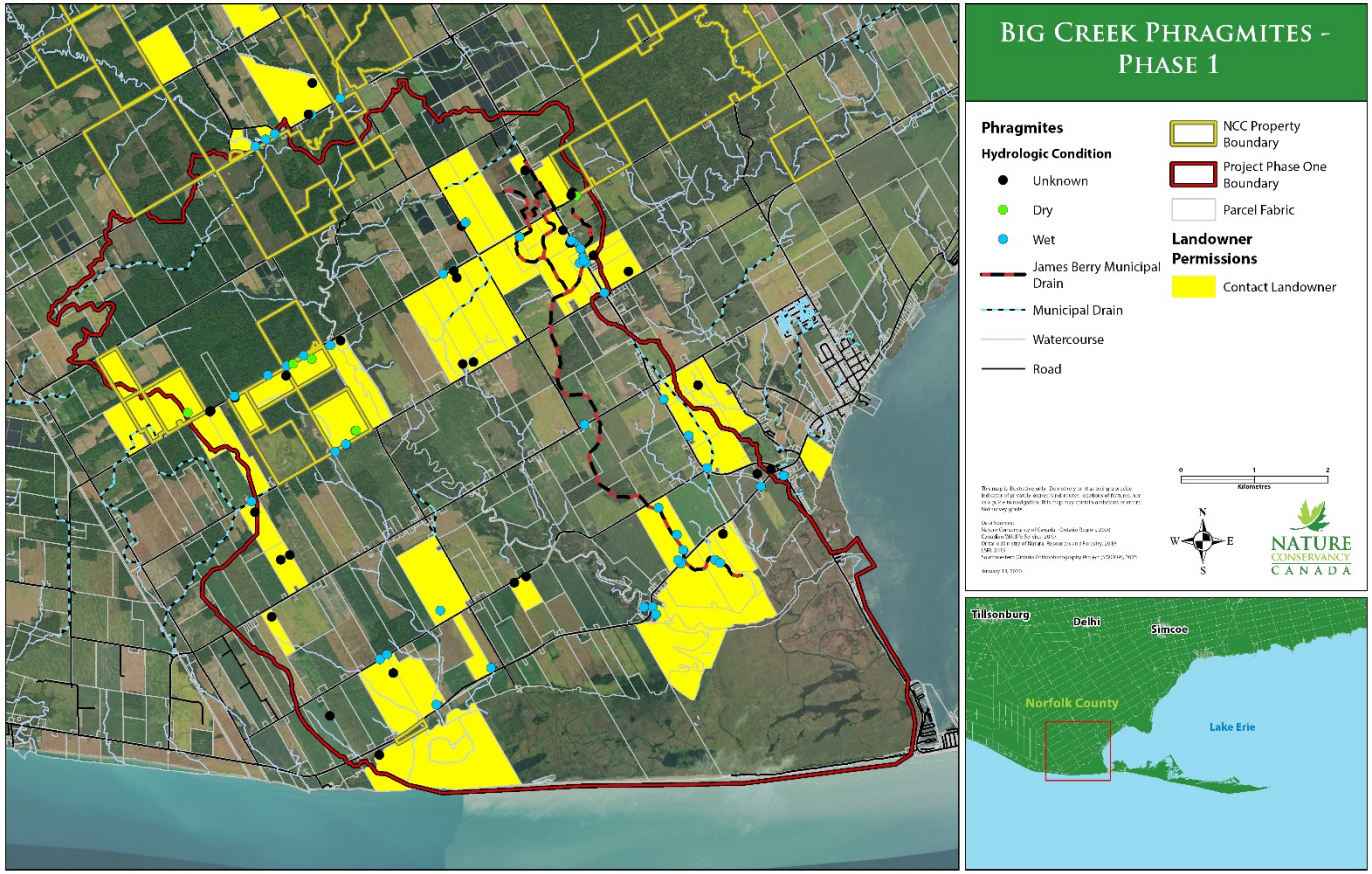
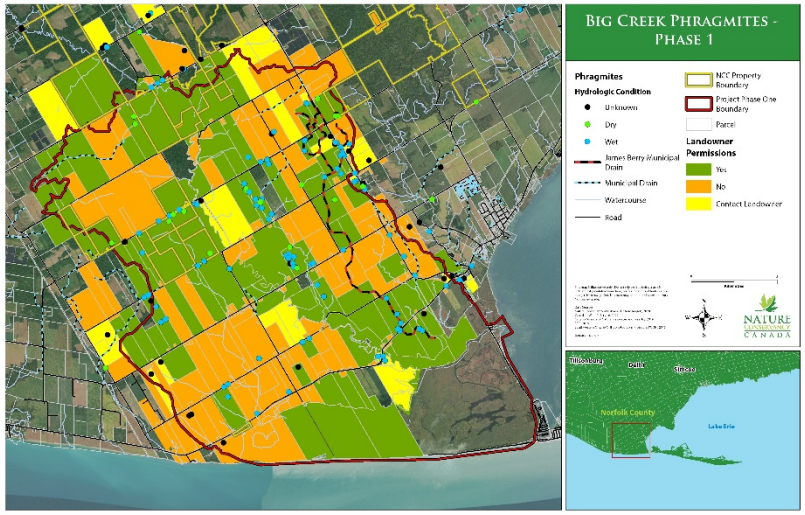
Control Implementation - Engagement



Engagement results



- 704 parcels in phase 1
- 298 culled due to knowledge of the area (residential lots, location etc.)
- Additional 257 culled during roadside surveys
- Remaining 147 parcels were targeted for surveys, this included 69 priority parcels that had been identified in roadside surveys as definitely having Phragmites.
- Of the 147 parcels 105 signed up for Phragmites surveys and control took place on 24 of the 105 parcels. The remaining 81 properties didn't have Phragmites.
- 42 parcels did not sign up; 20 were visited but declined participation in the program, the remaining 22 were not able to be reached in any fashion.

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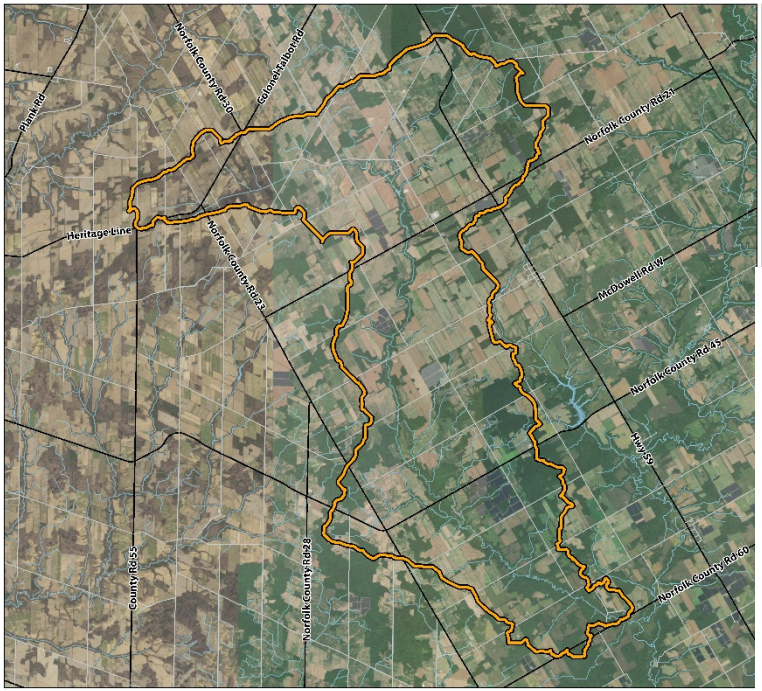
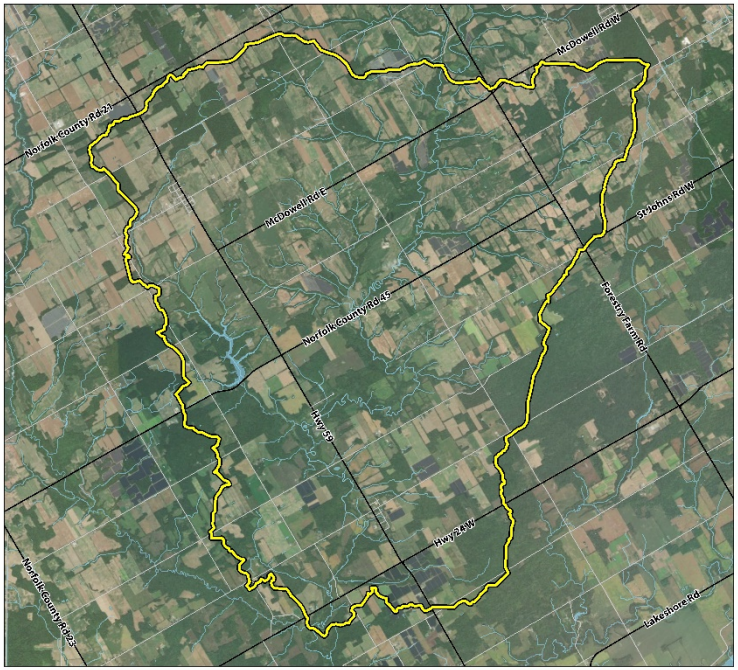
Next steps



Do you live in Phase 2?

Big Creek Phragmites Project Phase 2



Do you live in Phase 3?

Big Creek Phragmites Project Phase 3

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Questions

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