

UTILIZING COLLABORTIVE REGIONAL BASED PRIORITIZATION TO GARNER SUPPORT AND FUNDING FOR RESTORATION IMPLEMENTATION PROGRAMING

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Resource Management Projects Group
Toronto and Region Conservation Authority

August 28, 2018

Presentation Outline

- Background and Rationale
- Strategic Restoration Programs and Partnerships
- Compensation Restoration Programs and Partnerships
- Natural Cover and Tree Planting Strategies
- Summery and Next Steps

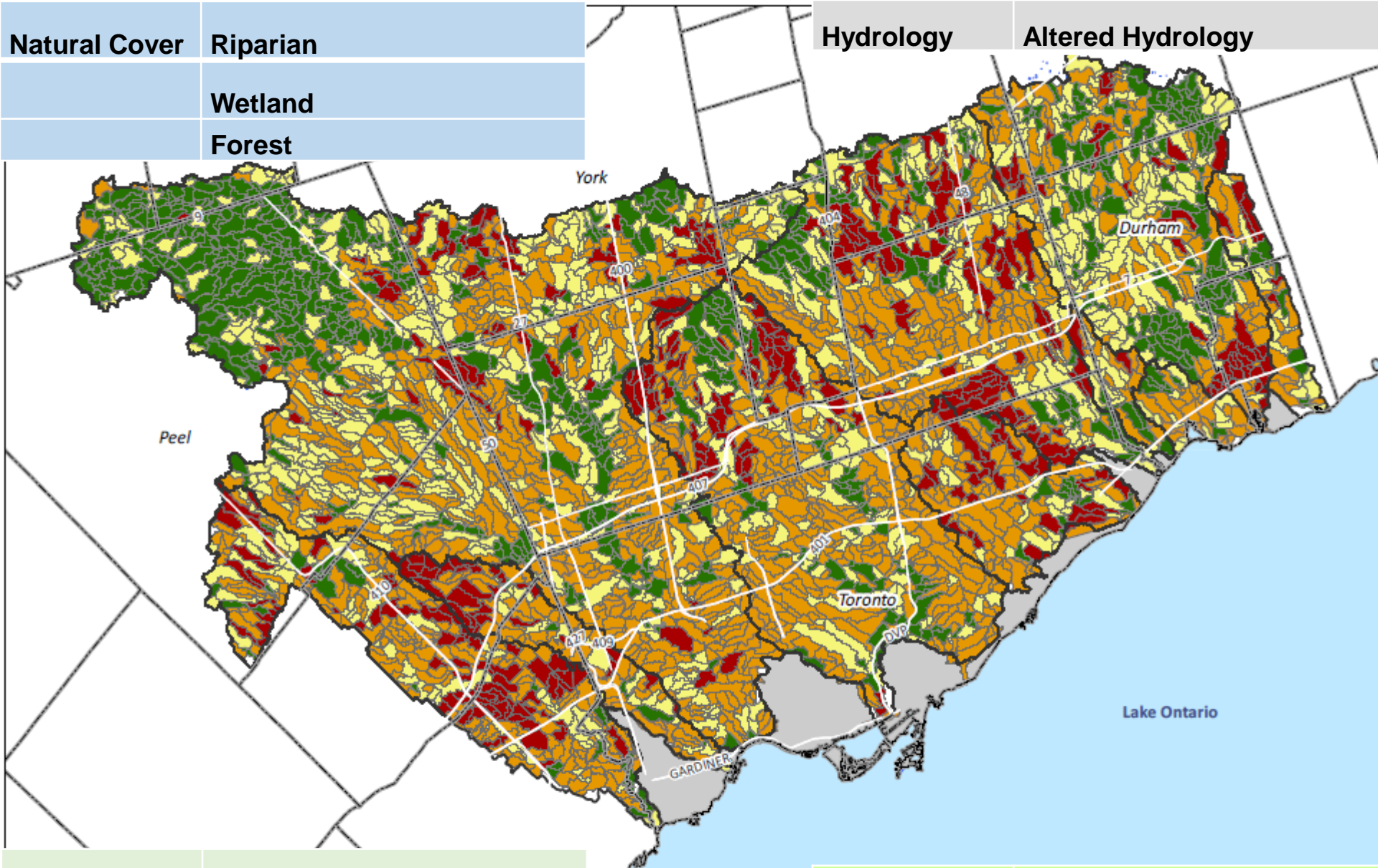
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Building a Solid Restoration Program

Strategic or Opportunistic?

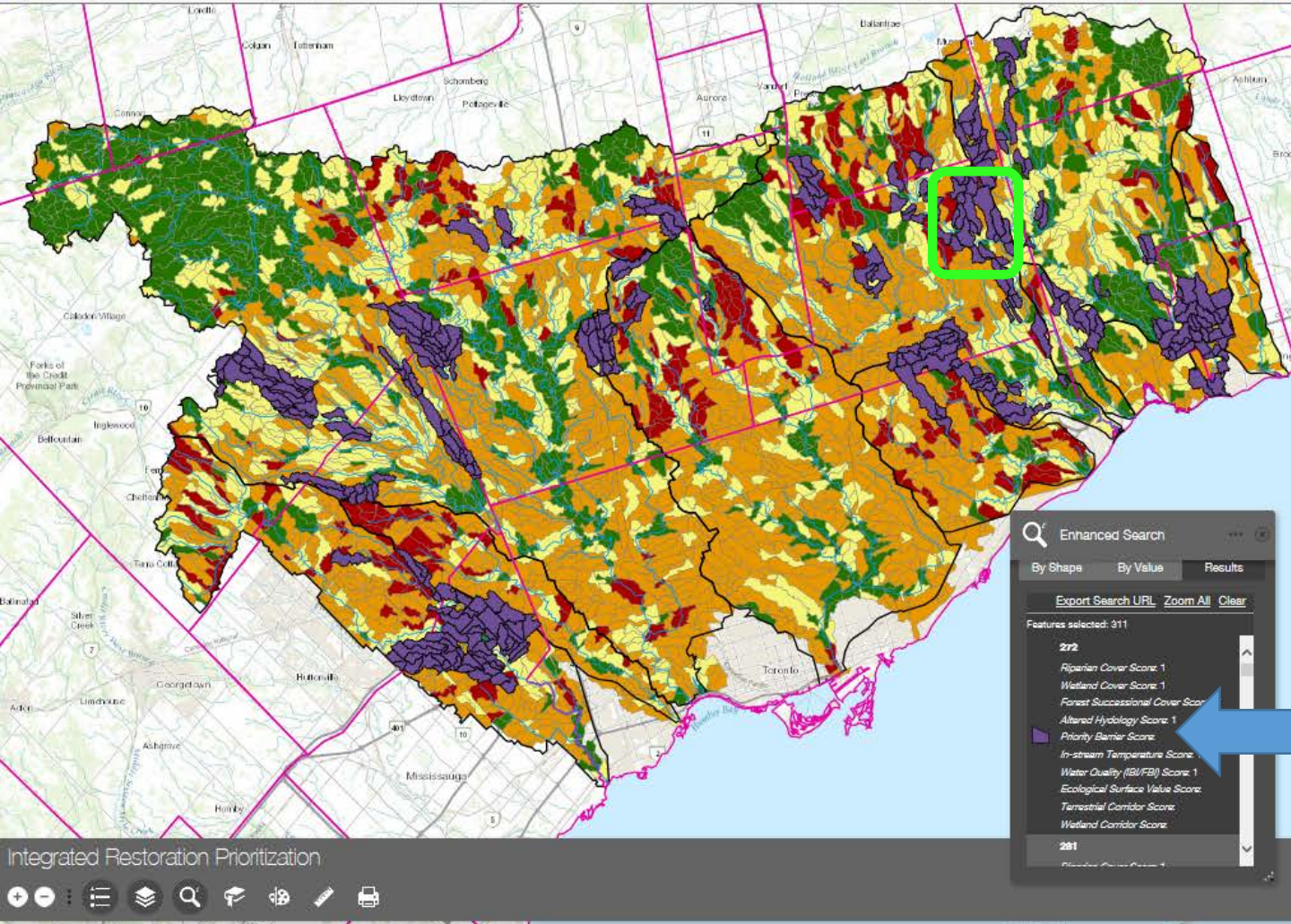
Reforestation / Forest Management	1970
Wetland Restoration	
Remedial Action Plans	1980
Coastal Marsh Restoration	
Environmental Farm Plans	1990
Oak Ridge Moraine	
Source Water Protection	2000
Species at Risk	
Climate Change	2010
	2018





Aquatic	Stream temperature
	Barriers

Natural Heritage	Ecological value
	Potential terrestrial corridor



Legend

Search Results: IRP Supporting Data

- IRP Supporting Data

IRP Total Score

Final IRP Score

- 7 - 10: High Priority
- 5 - 6: Medium Priority
- 3 - 4: Low Priority
- 0 - 2: Protection

Operational Layers

- Search Results: IRP Supporting Data
- Watercourse
- General Rivers
- Municipalities
- Watershed Boundary
- IRP Total Score
- Total Aquatic Score
- Total Connectivity Score
- Total Natural Cover Score

Enhanced Search

By Shapes By Value Results

Export Search URL Zoom All Clear

Features selected: 311

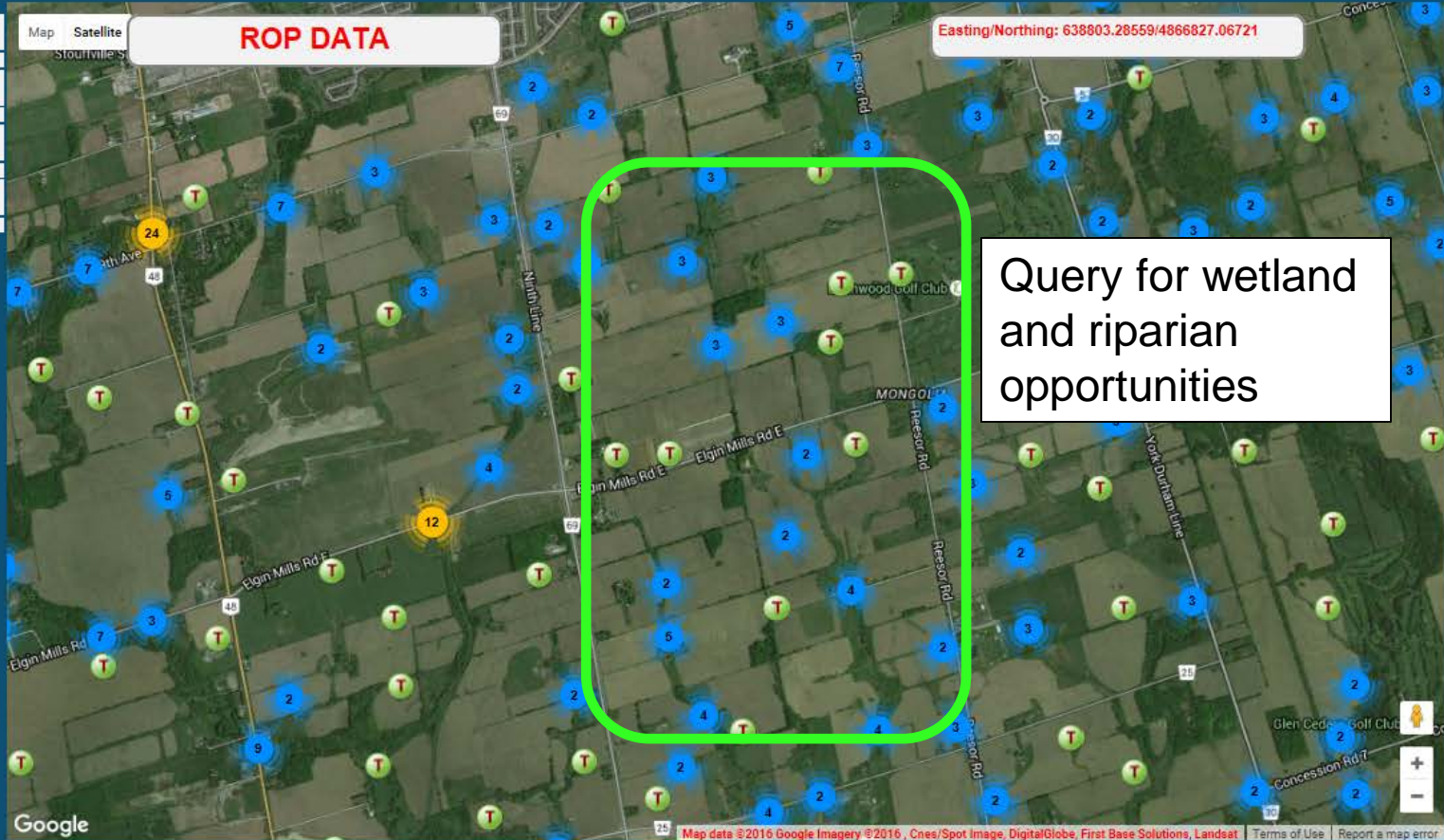
- 222
- Riparian Cover Score: 1
- Wetland Cover Score: 1
- Forest Successional Cover Score
- Altered Hydrology Score: 1
- Priority Barrier Score: 1
- In-stream Temperature Score
- Water Quality (B/I/FBI) Score: 1
- Ecological Surface Value Score
- Terrestrial Corridor Score
- Wetland Corridor Score
- 281

Can Query Data for Partner Specific Targets and Goals



TRCA RESTORATION PROJECT DATABASE

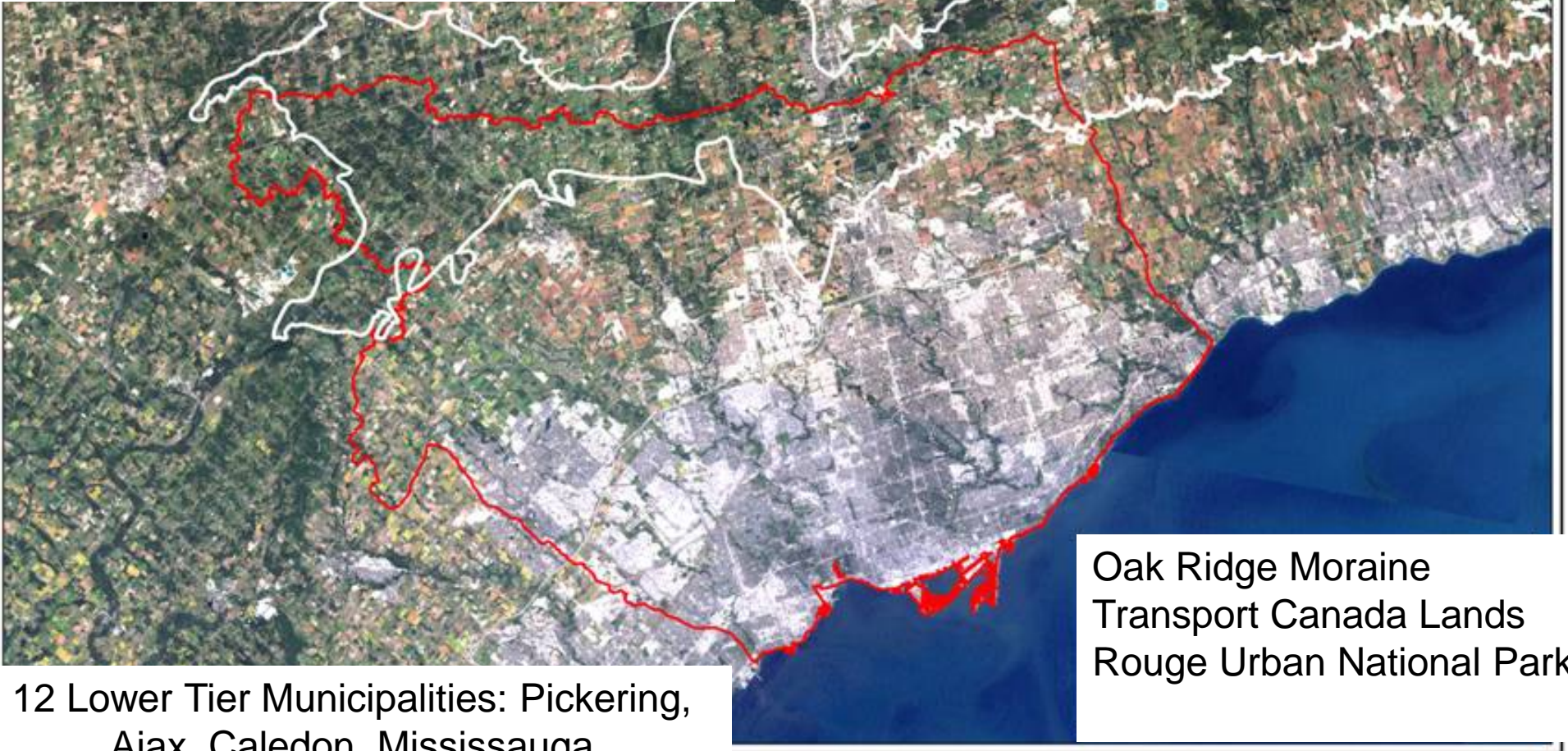
- PROJECTS
- ROP
- REPORTS
- COMPENSATION



Refresh Map

9 Watersheds Etobicoke Creek, Mimico Creek, Humber River, Don River, Highland Creek, Rouge River, Petticoat Creek, Duffins Creek and Carruthers Creek

6 municipalities: City of Toronto; Regional Municipalities of Durham, Peel and York; Township of Adjala-Tosorontio Town of Mono.



Oak Ridge Moraine
Transport Canada Lands
Rouge Urban National Park

12 Lower Tier Municipalities: Pickering, Ajax, Caledon, Mississauga, Brampton, Richmond Hill, Aurora, Vaughan, King, Markham, Uxbridge, Whitchurch-Stouffville

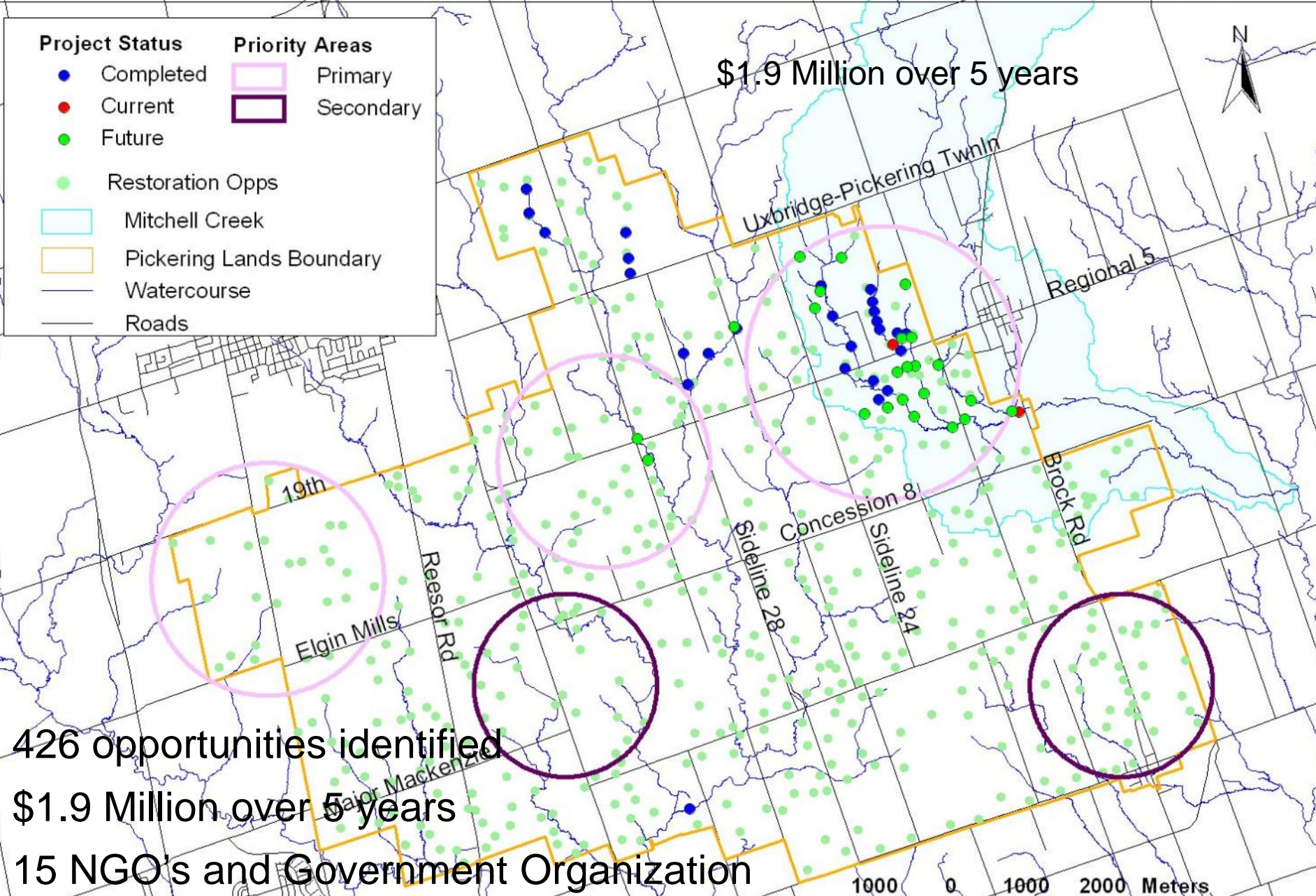
Population 3,200,000
3,467 km²

Strategic Restoration Plans, Programs and Initiatives

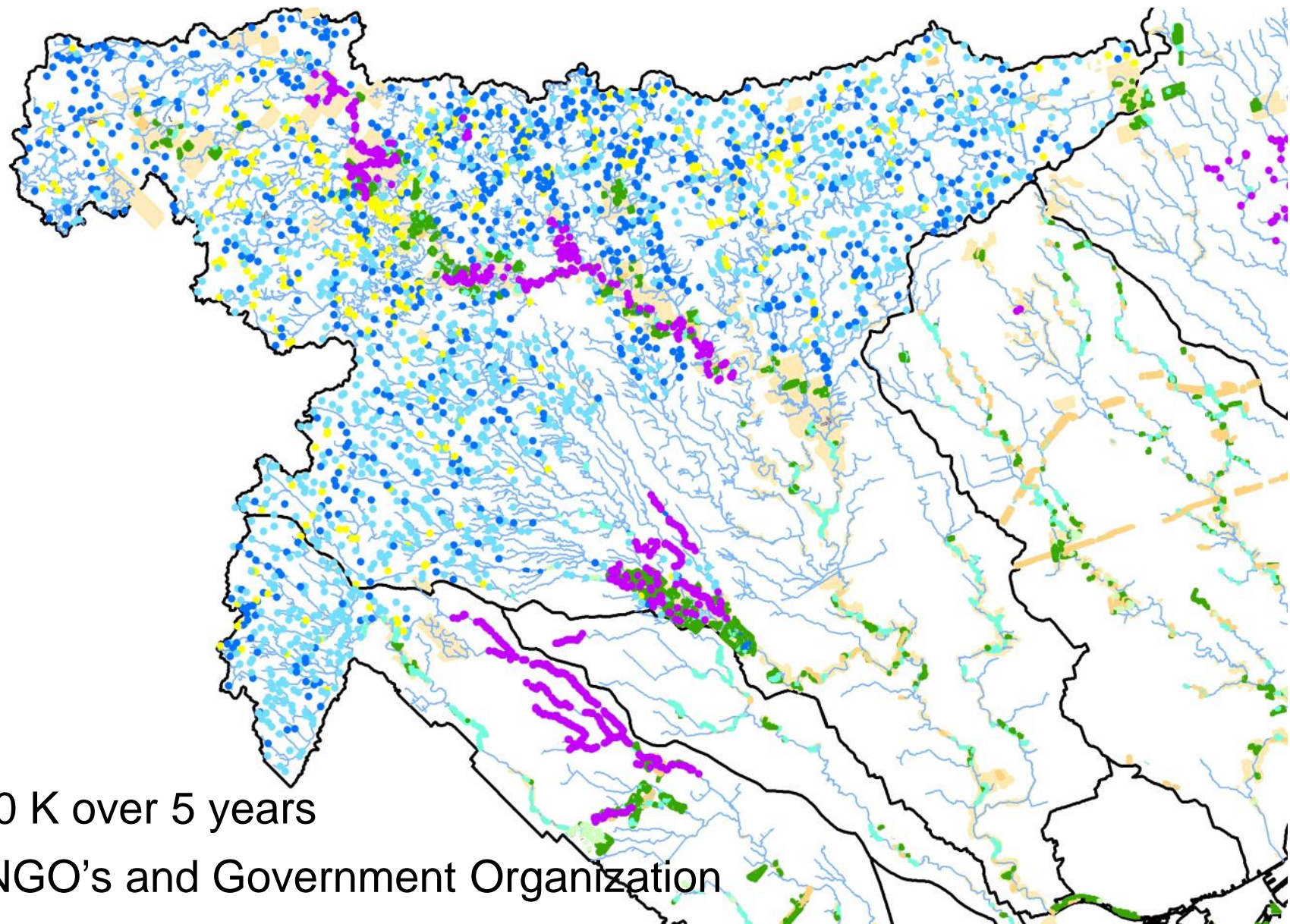
Toronto Remedial Action Plan
Ontario Power Generation (OPG)
Oak Ridge Moraine
Transport Canada
Rouge Urban National Park
Atlantic Salmon Recovery
City of Toronto
Forest Ontario
Ontario Federation of Anglers and Hunters
Salamander Foundation
*Great Lakes Sustainability Fund
Species At Risk Overall Benefit Programs
Private Landowner Stewardship Programs



Pickering Lands Site Opportunities and Completed Works



HUMBER RIVER ATLANTIC SALMON HABITAT RESTORATION



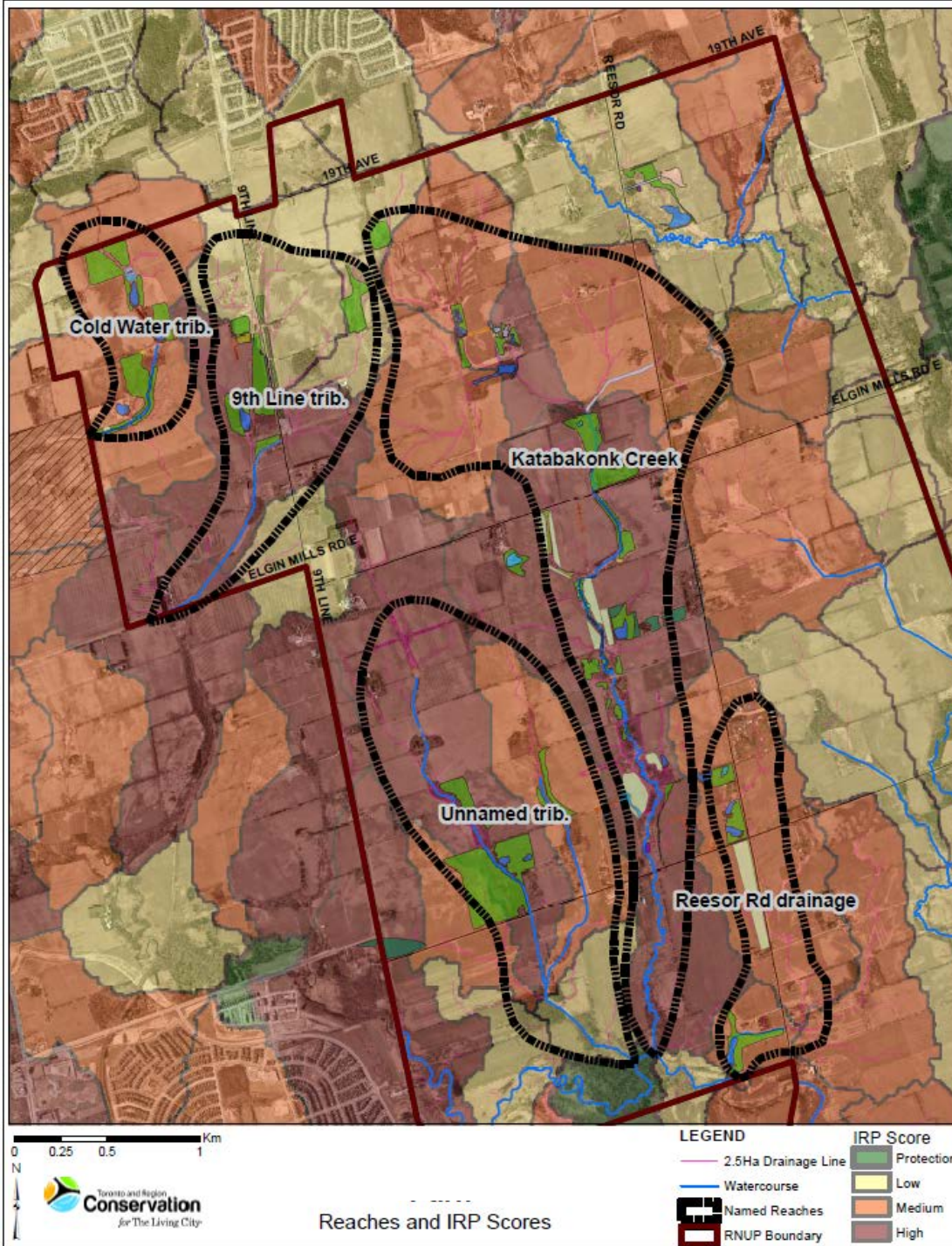
\$900 K over 5 years

12 NGO's and Government Organization

- Wetland Opportunity
- Riparian Opportunity
- Stream Opportunity
- Best Management Practices
- Natural Cover Enhancement

Rouge Urban National Park Restoration

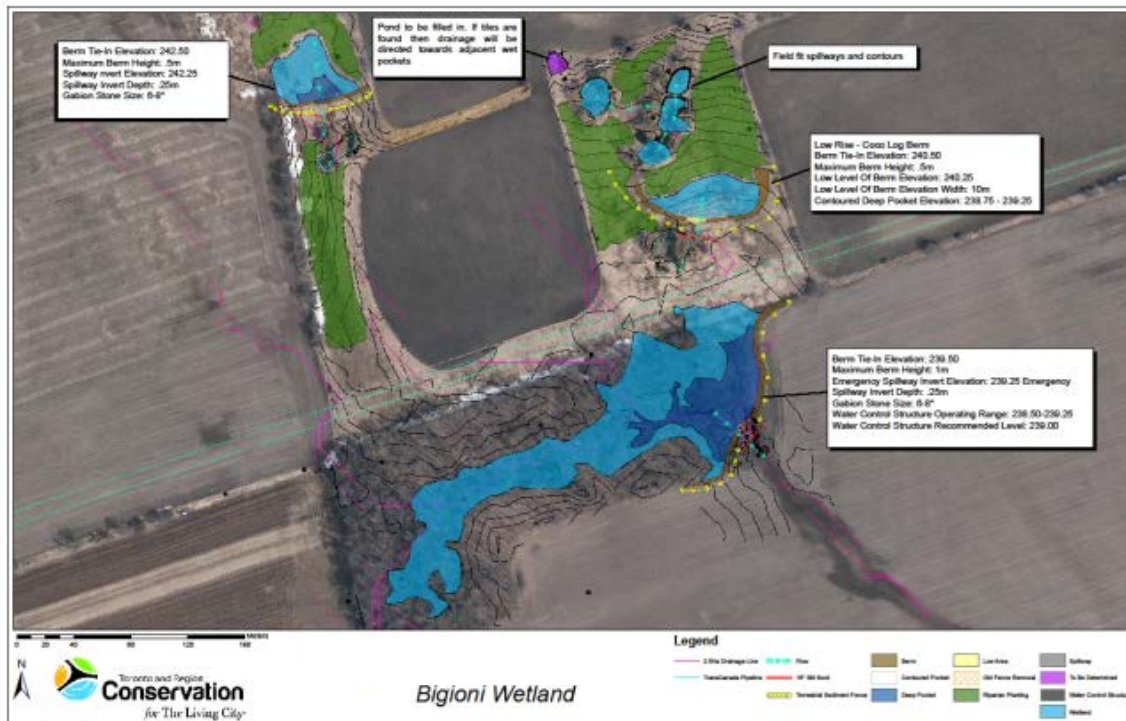
- High priority restoration opportunities within a high priority catchment
- Reach based prioritization and implementation
- Cumulative and multiple benefits can be achieved (aquatic, natural cover, hydrology, corridor)
- Metrics to determine priority can also be used to measure change (e.g. below average to above average riparian cover)



Rouge Watershed to 2017

- 40 ha wetland including plantings
- 3912m of riparian planting
- 26.6ha of forest planting
- 750 Structural Habitats
- 6 barriers mitigated
- 32,000 trees and shrubs planted

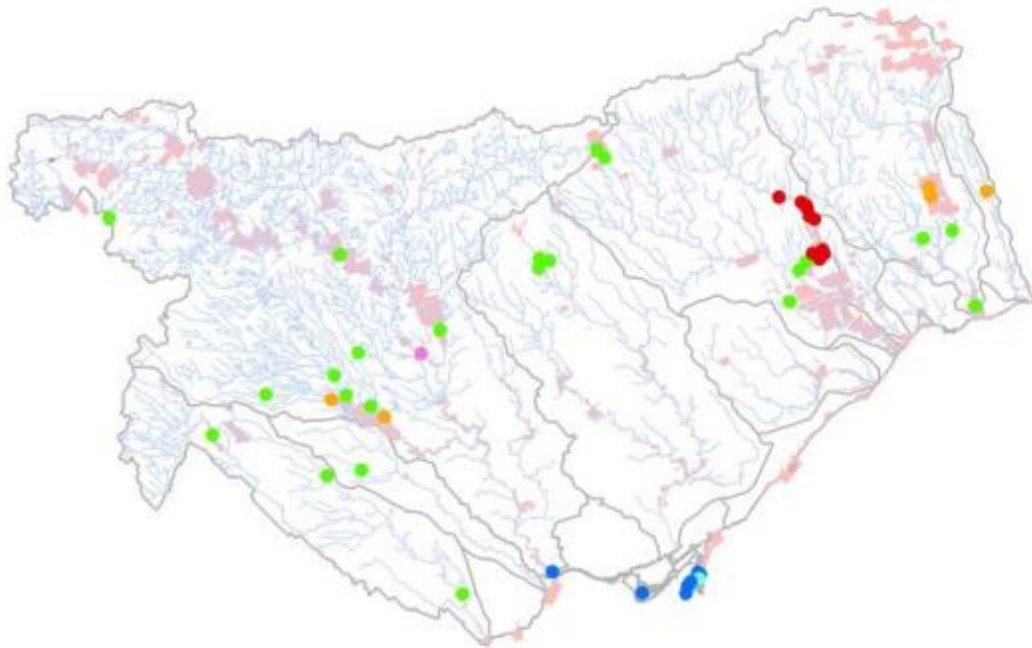
\$2.7 million over 3 years
3 Government Organization and Tenants



TRCA Compensation Banking Program

TRCA has been working with partners to implement restoration projects for a variety of compensation requirements

- \$13 million received from 2006 to 2017
- \$8 million has been implemented
- \$5 million in progress or to be implemented

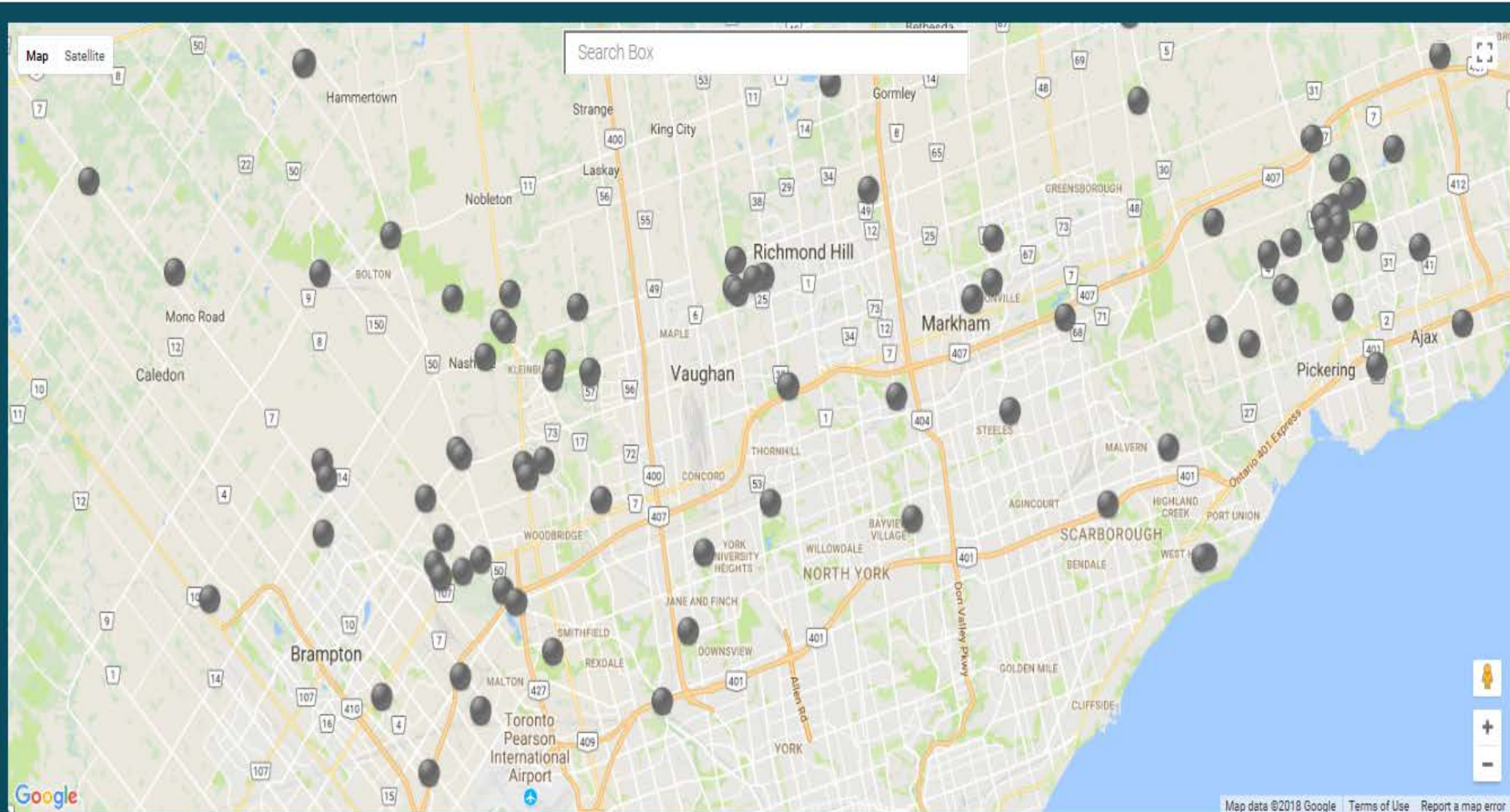


Projects from 2005 to 2017

Mechanism	Projects
TRCA/Municipal	56
Dep Fisheries Oce	13
Species at Risk	9
Environmental Assessment	2
Independent	2
Total	82

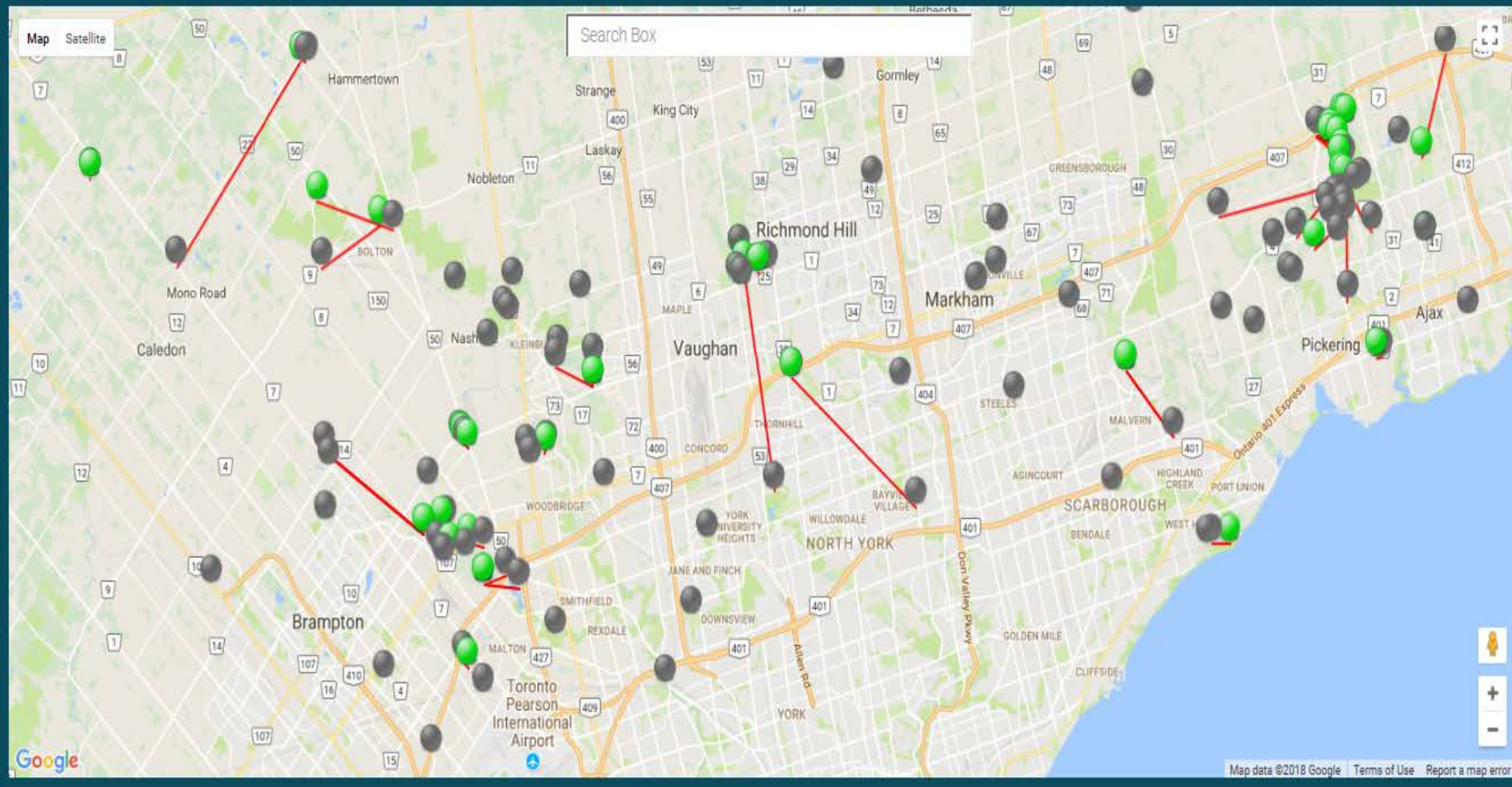
190 Total Hectares Restored

Compensation Restoration Programs and The TRCA Compensation Bank



Refresh Map

Project ROP **Compenstation**



Refresh Map

Natural Cover Strategies, Tree Planting Plans and Tree Canopy Initiatives

York Region

City of Markham

City of Vaughan

Town of Richmond Hill



City of Toronto

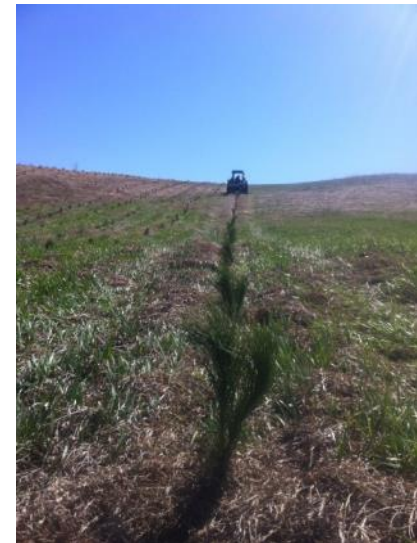
Peel Region

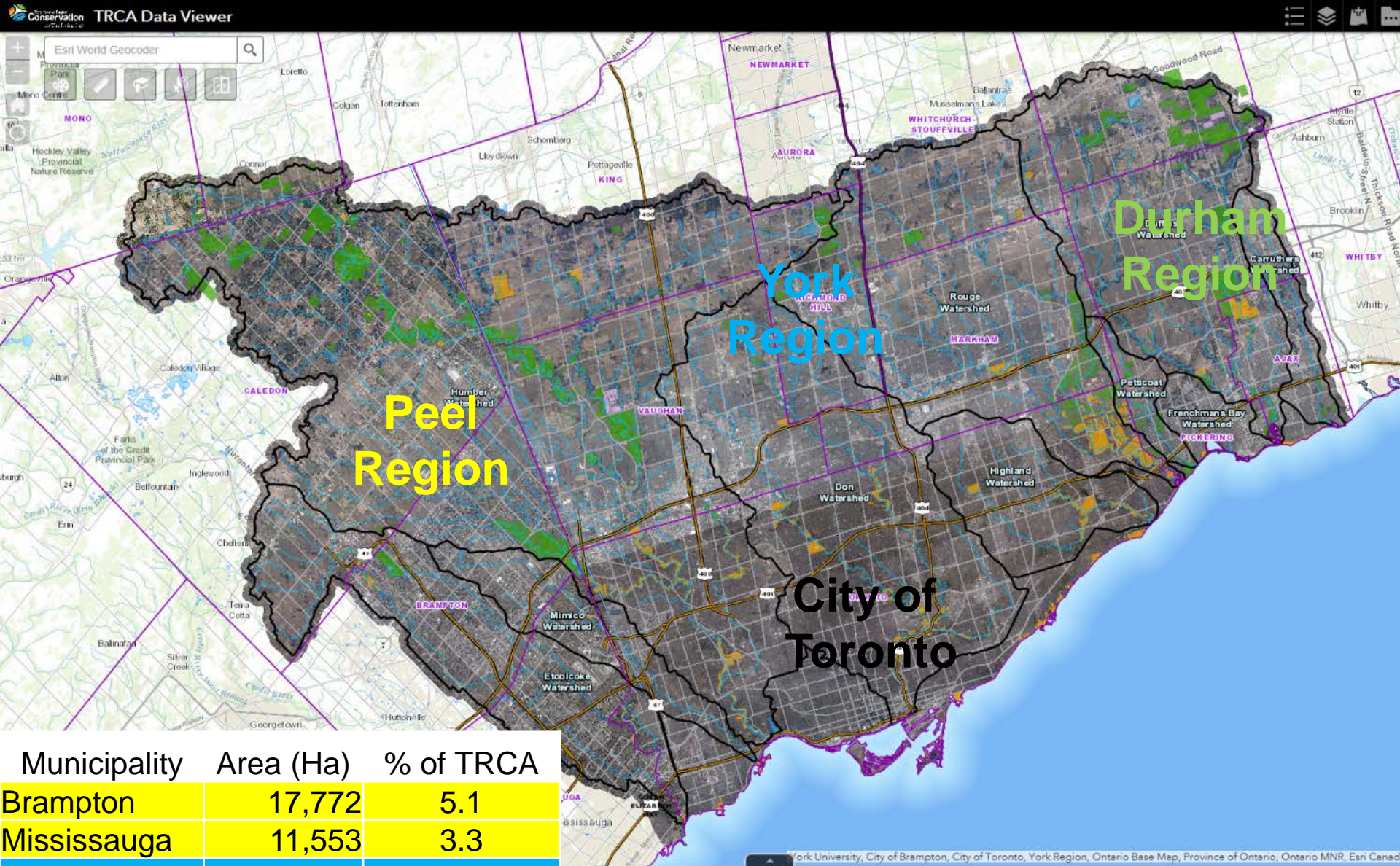
City of Brampton

City of Mississauga

Durham Region

City of Pickering





Municipality	Area (Ha)	% of TRCA
Brampton	17,772	5.1
Mississauga	11,553	3.3
Vaughan	27,462	7.9
Richmond Hill	10,201	2.9
Markham	21,268	6.1
Pickering	21,361	6.2
Total	109,616	31.6

100% Municipal Partnership by 2021

York Region

40% Canopy Target

City of Markham

City of Vaughan

Town of Richmond Hill

*Rouge Urban National Park

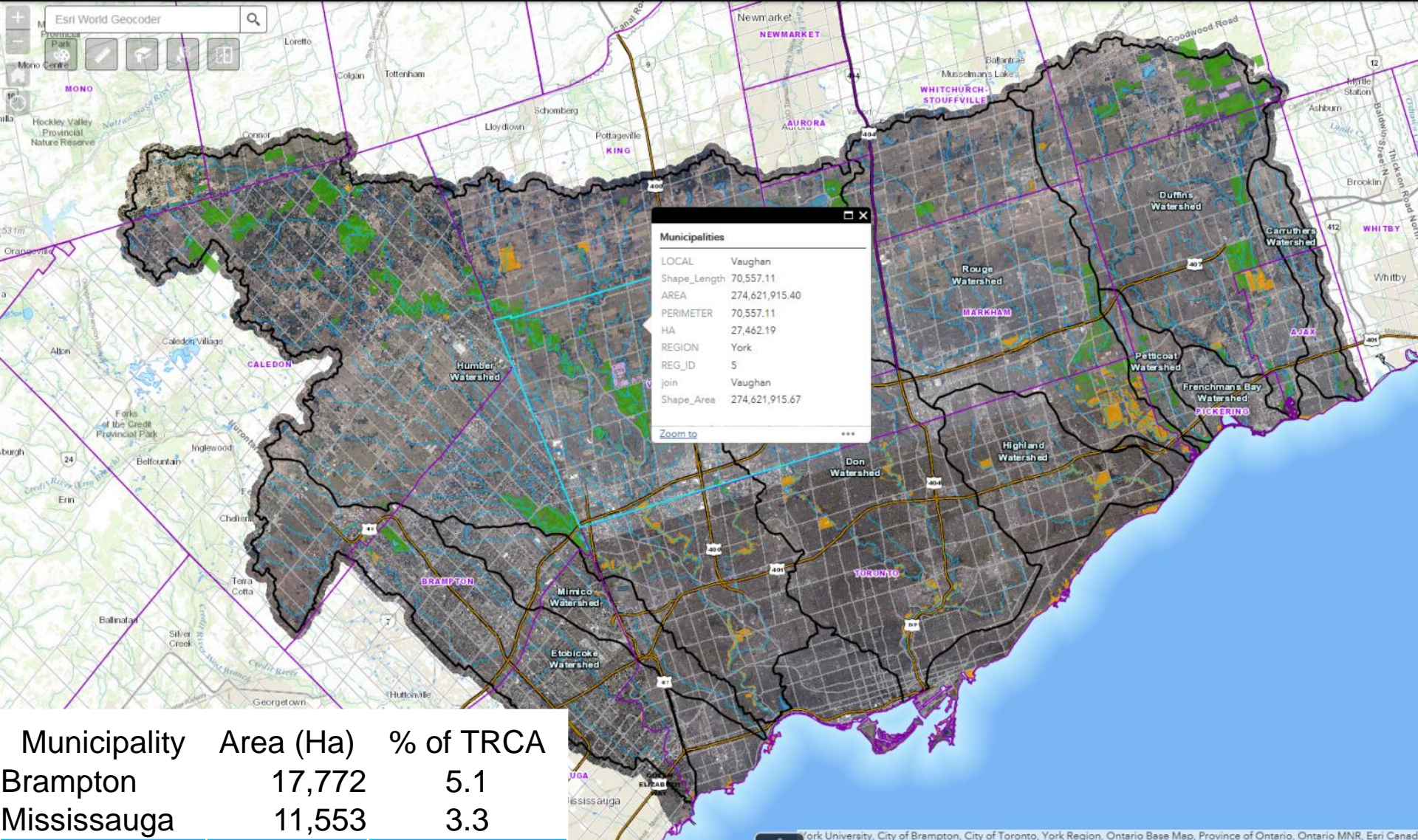
86,335 Trees and shrubs
planted by TRCA

OUR TARGET 70,000 → **85,464 TREES PLANTED IN 2017**

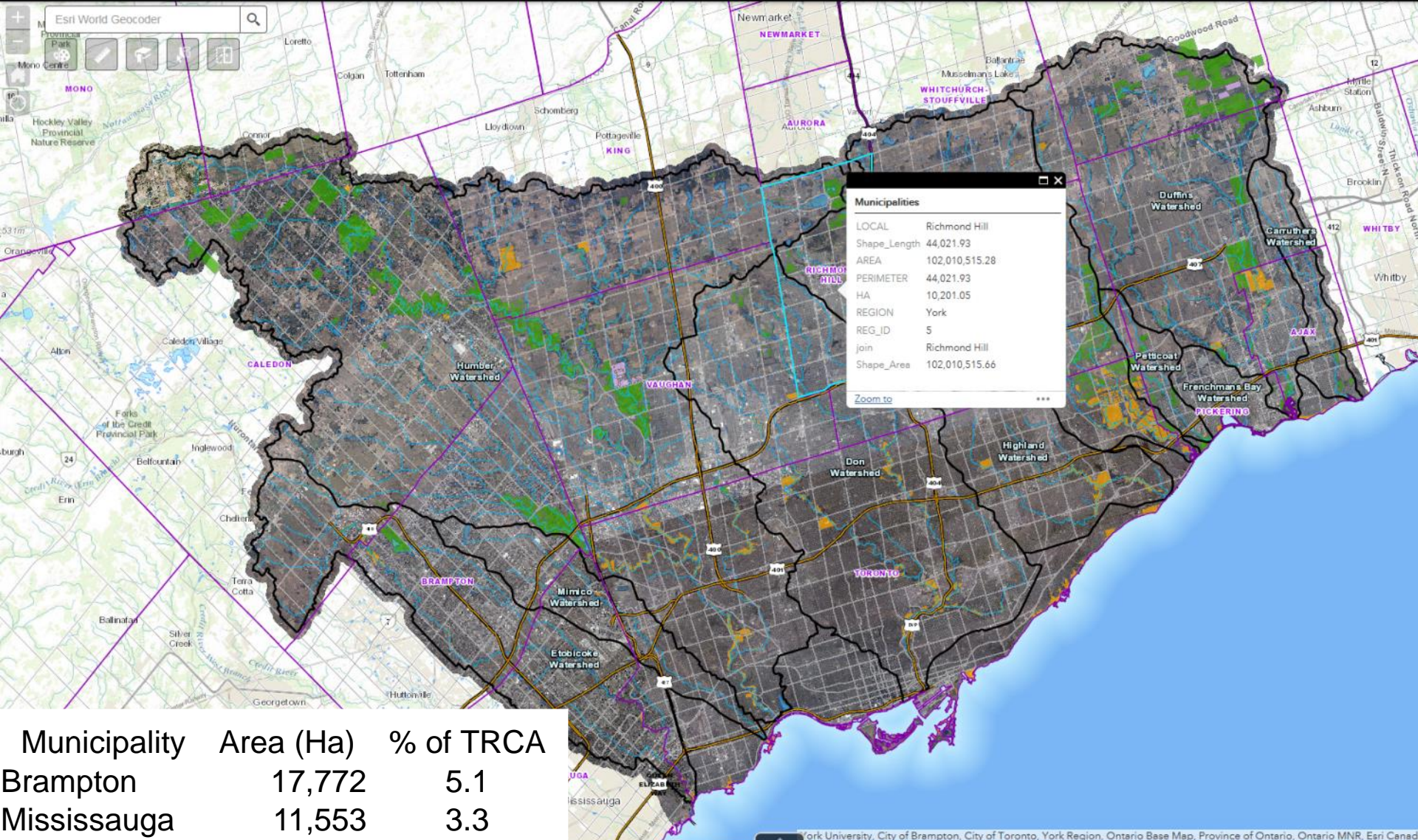
4,525	3,875	4,945	27,104	29,029	10,063	1,177	523	4,223
Adopt-A-Stream Crossing Program	York Regional Forest	Earth Week and National Forest Week seedling hand out	Large-scale private land reforestation with conservation authorities	On public land with conversation authorities	Partner community planting events	York Region outreach and education events	Backyard LEAF	York Region Property Naturalization



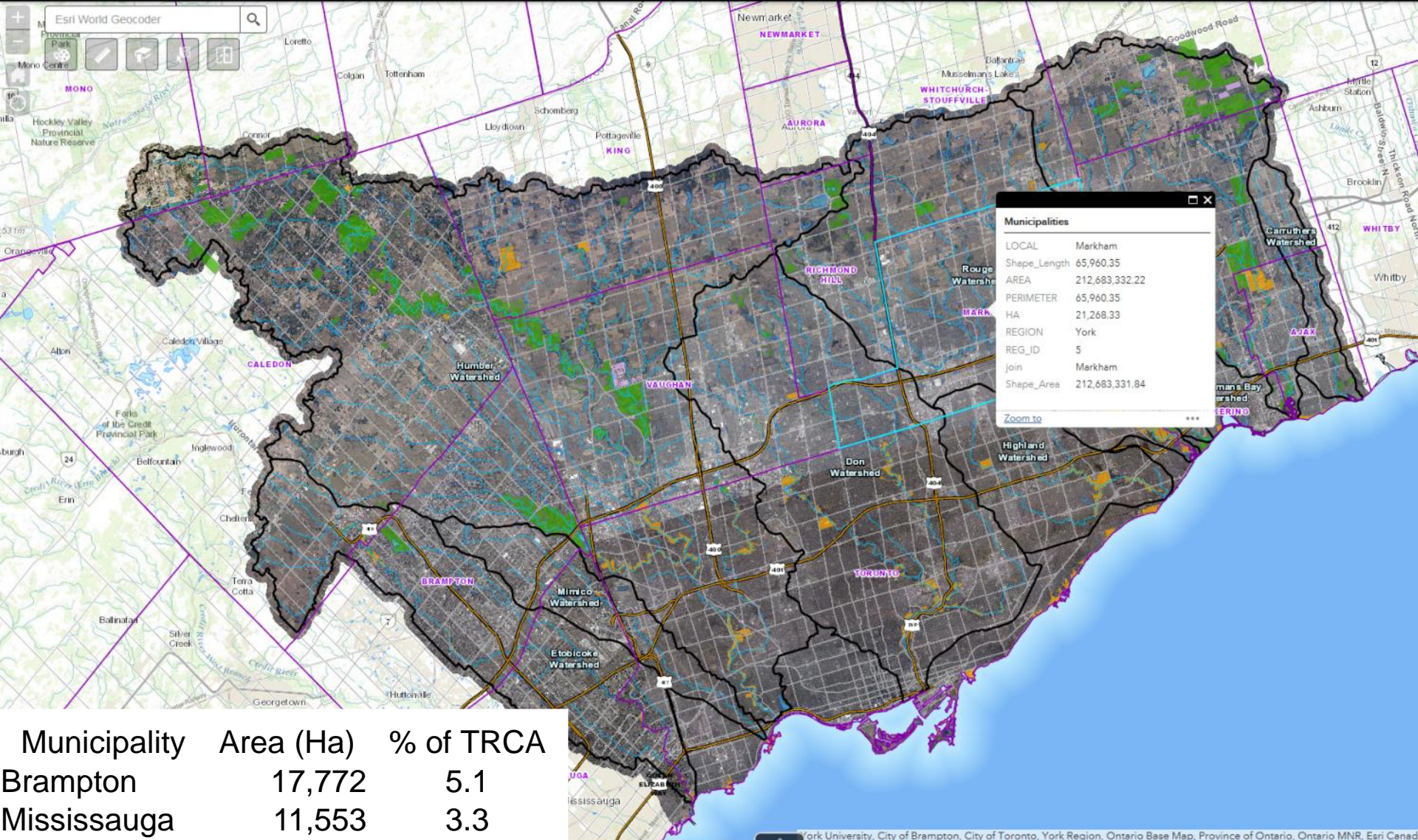
Plantings occur on public and private land in all nine municipalities.



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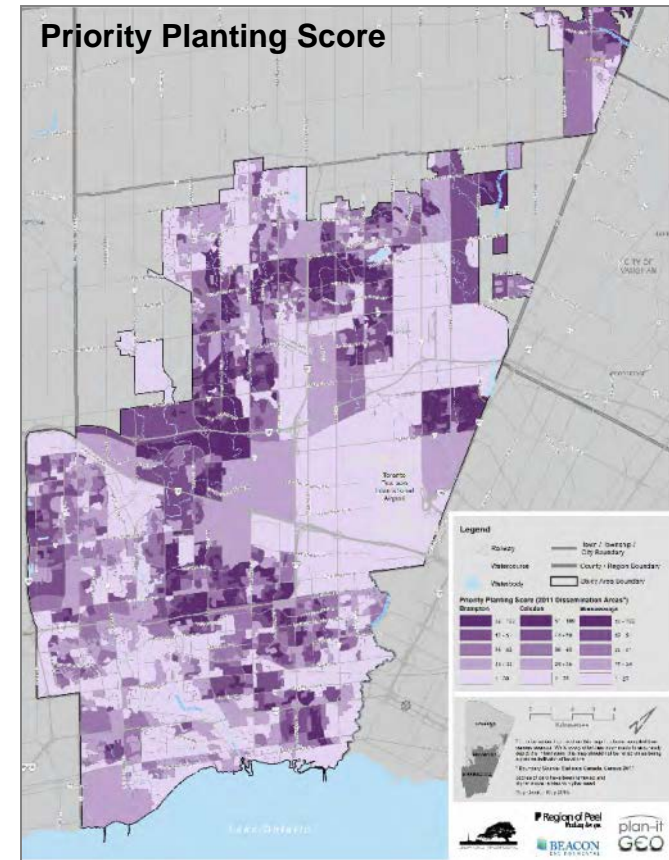
Peel Urban Forestry Initiatives

Peel Region's Tree Planting Prioritization Tool

- GIS mapping tool that allows users (municipal foresters) to identify planting opportunity zones based on desired ecosystem services
- Produces 1) Benefits Score Maps, and 2) Priority Planting Score Maps at a multiple scales (e.g. Ward, DA)

Peel Region Heat Vulnerability Analysis

- Identify sites with high exposure, high sensitivity, and low adaptive capacity
- Establish climate tolerant trees



Summary and Next Steps

- Continue Developing Partnerships with remaining Municipalities
- Develop 5-10 Implementation Strategies
- Further Develop the Urban Canopy and Green Infrastructure Tools
- Develop an Climate Change Implementation Strategy

 **Region of Peel**
Working for you

 **TORONTO**

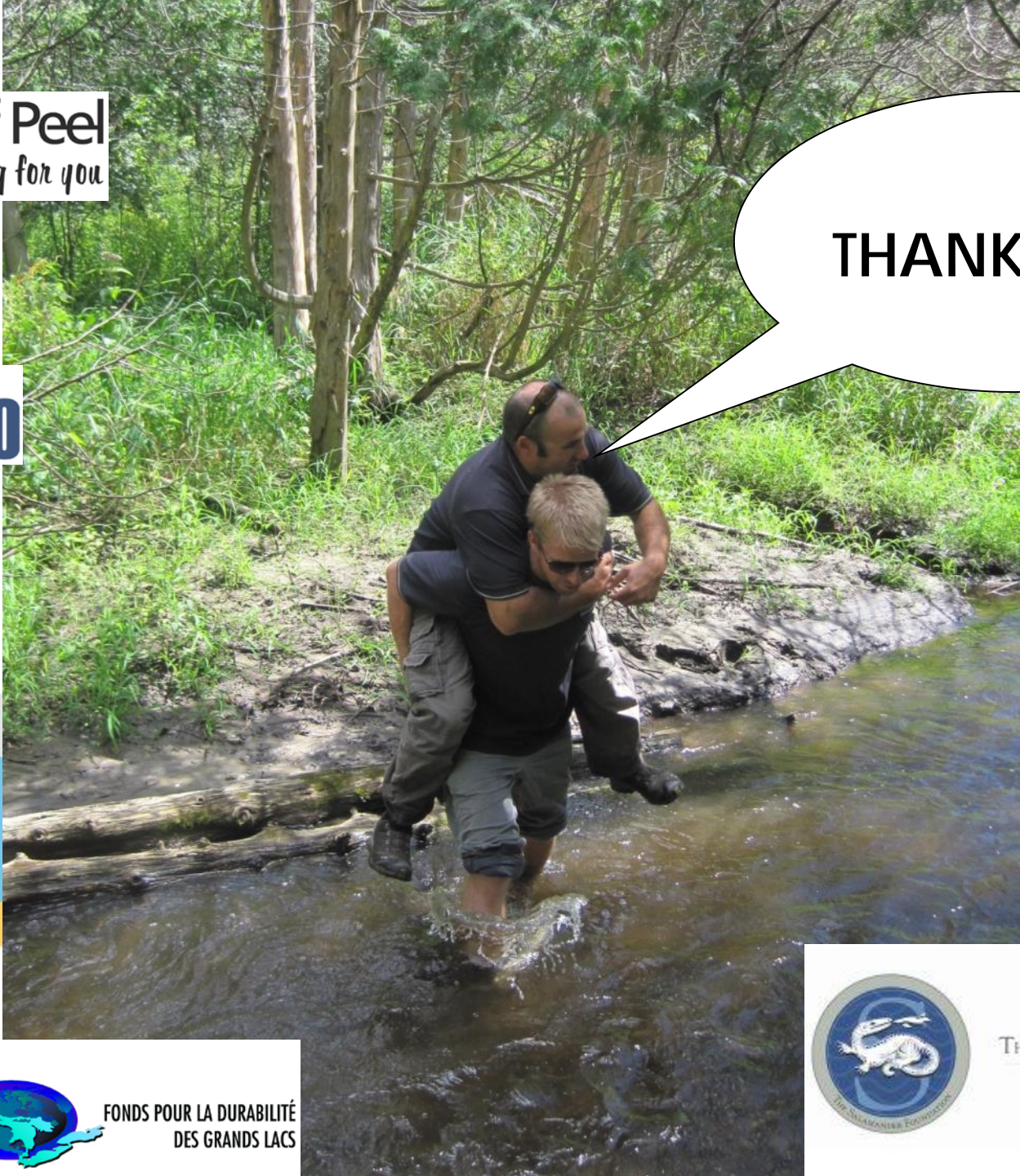
 **York Region**

 Government of Canada / Gouvernement du Canada

**GREAT LAKES
SUSTAINABILITY FUND**



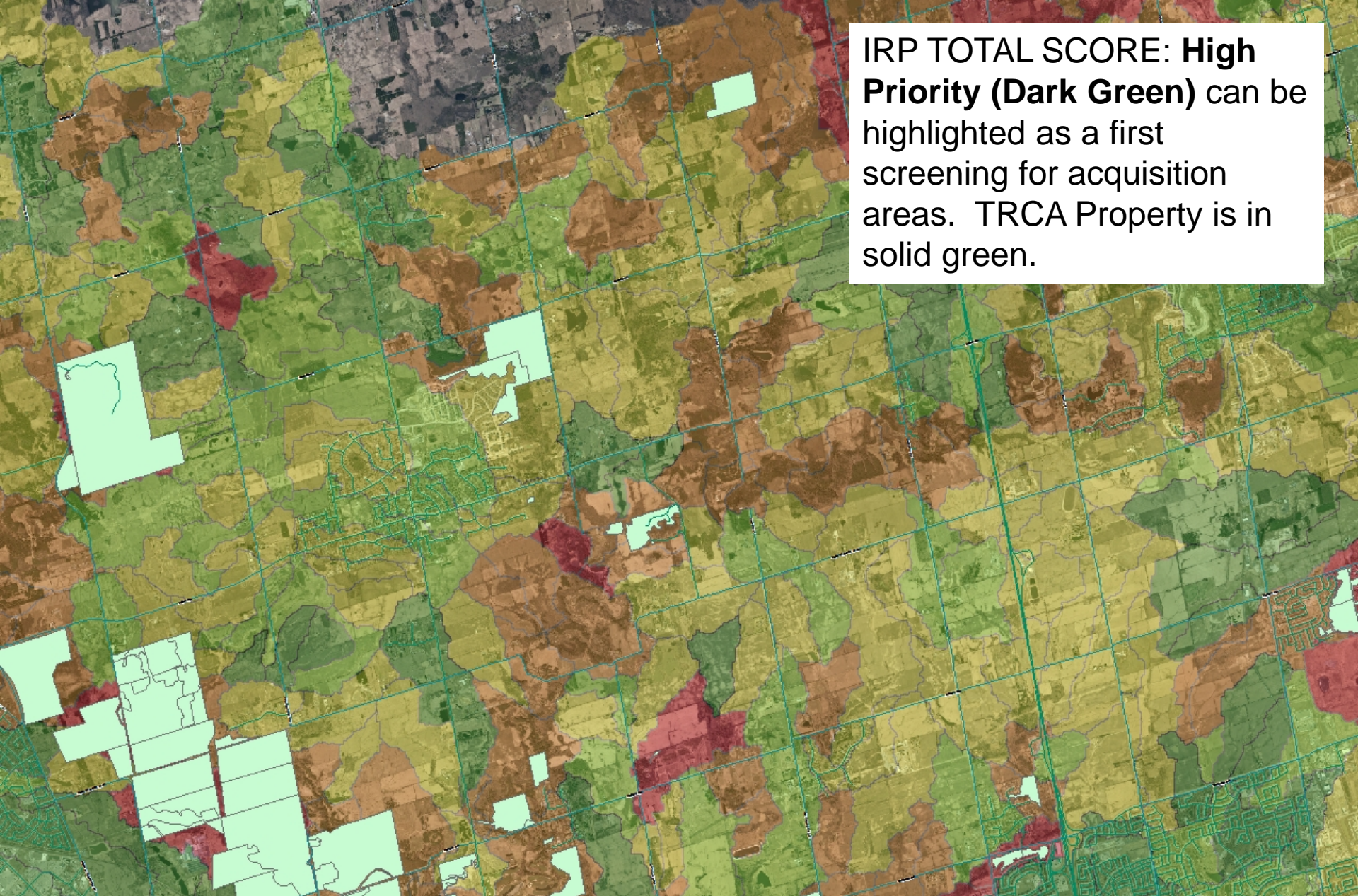
**FONDS POUR LA DURABILITÉ
DES GRANDS LACS**



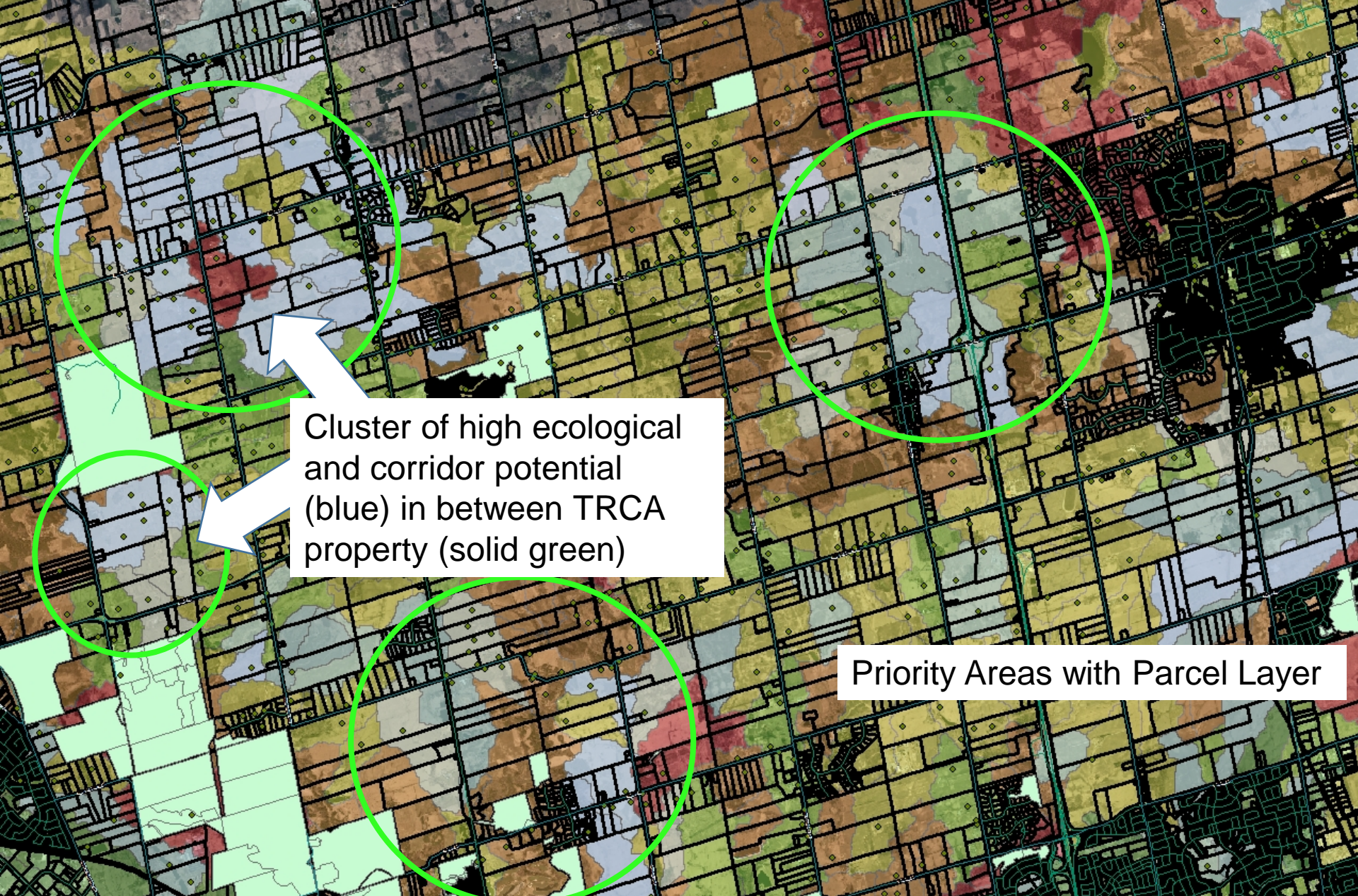
THANK YOU!



THE SALAMANDER FOUNDATION
www.salamanderfoundation.org

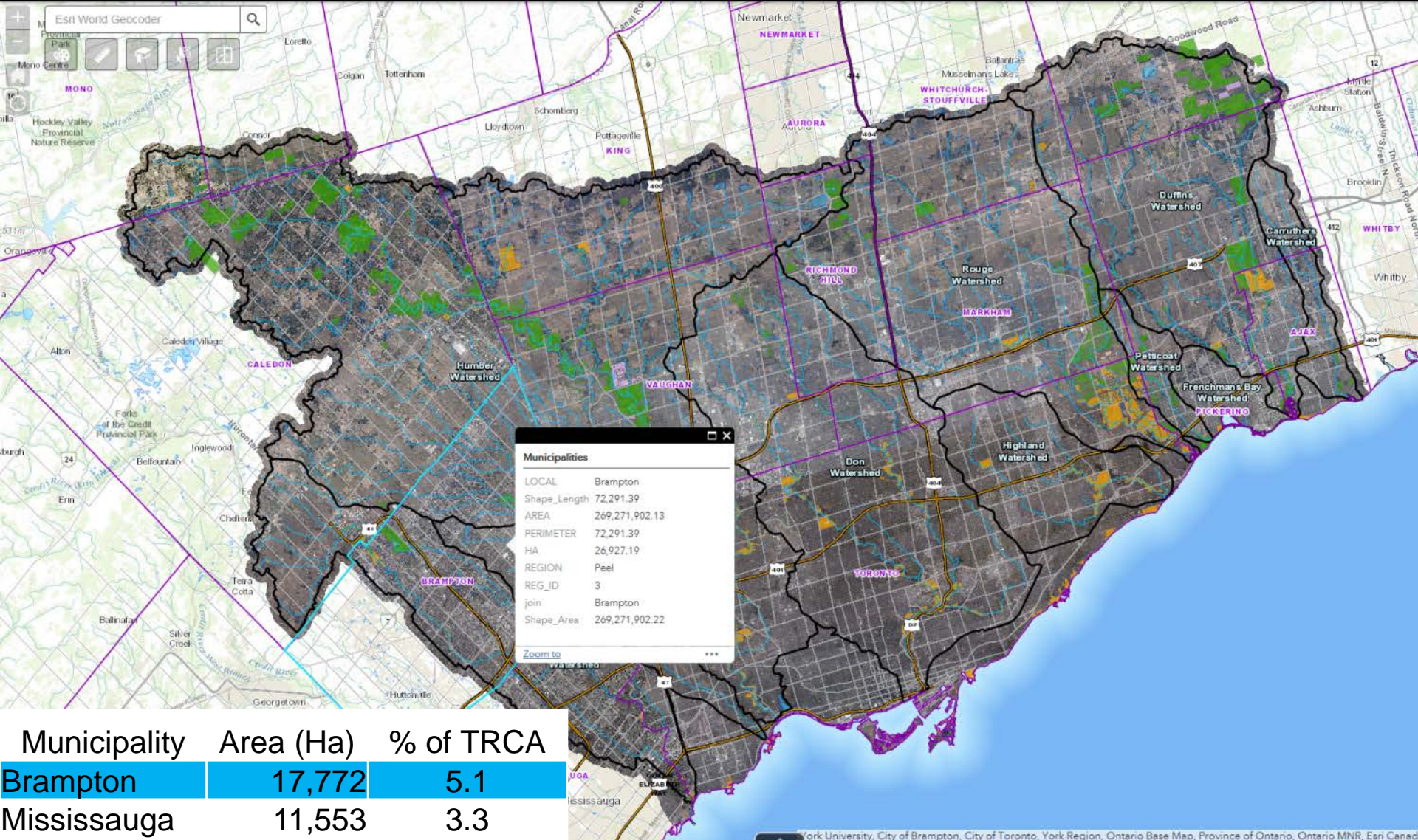
An aerial photograph overlaid with a color-coded map. The map uses a color scale from dark green to red to represent different levels of priority or risk. A white text box in the upper right corner provides context for the colors. The map shows a grid of blue lines, likely representing roads or property boundaries. Several areas are highlighted in light green, and one specific area is highlighted in solid green. Other areas are colored in shades of yellow, orange, and red.

IRP TOTAL SCORE: **High Priority (Dark Green)** can be highlighted as a first screening for acquisition areas. TRCA Property is in solid green.

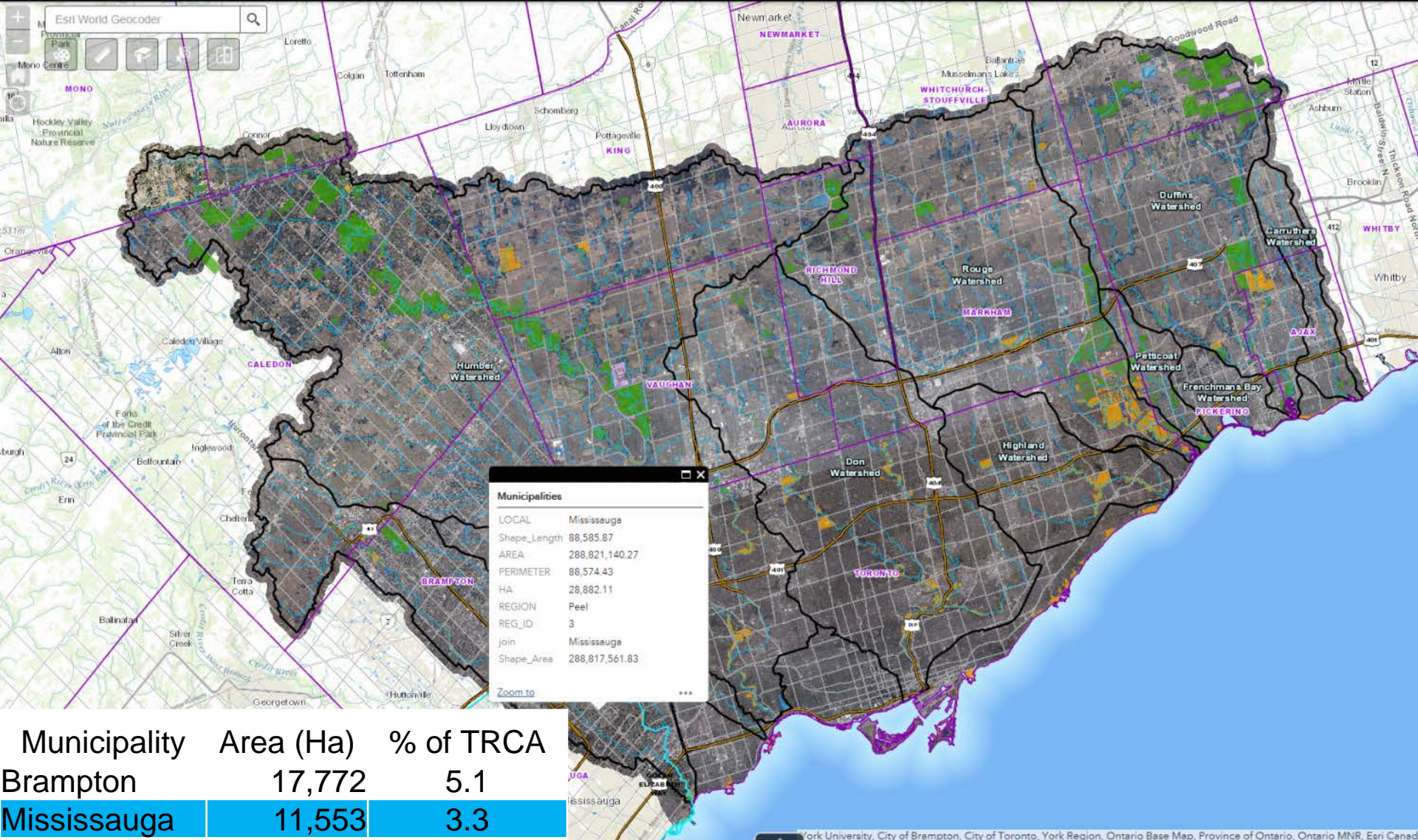


Cluster of high ecological and corridor potential (blue) in between TRCA property (solid green)

Priority Areas with Parcel Layer



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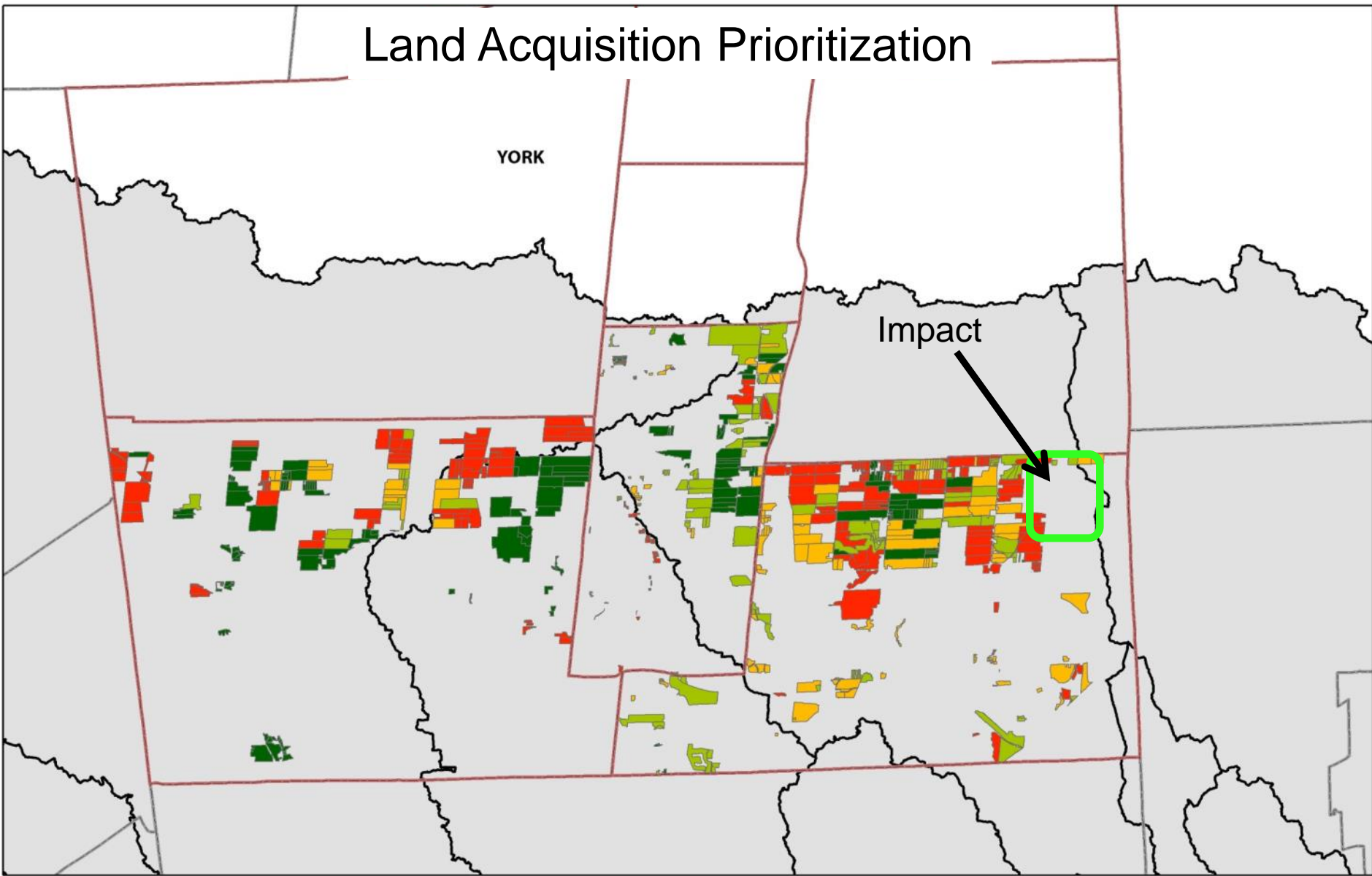


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Land Acquisition Prioritization

YORK

Impact



0 1 2 4
Kilometres



Date: 11/28/2017

Parcels with High Connectivity
and Restoration Potential

Watersheds

IRP Final Score

- Protection Priority
- Low
- Medium
- High Priority

Disclaimer:

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