

# Minesing Wetlands

David Featherstone, NVCA Ecologist

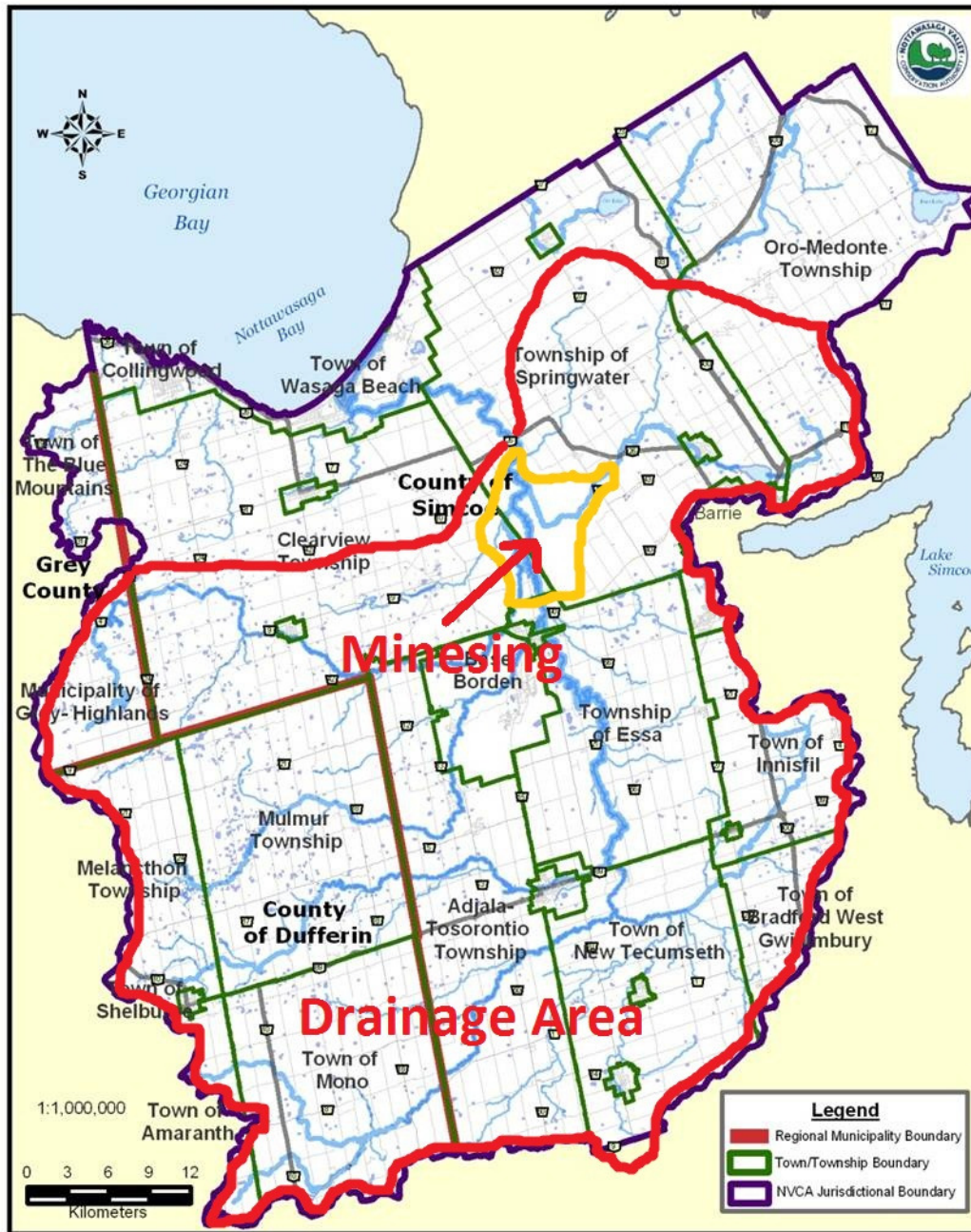
Friends of Minesing Wetlands –  
Evening of Science and Stewardship  
November 13, 2014



# Presentation Outline

- Minesing in context – lots of maps!
- Minesing tour – lots of photos!
- Other cool stuff – “birds and bees”
- Threats, Monitoring and Management

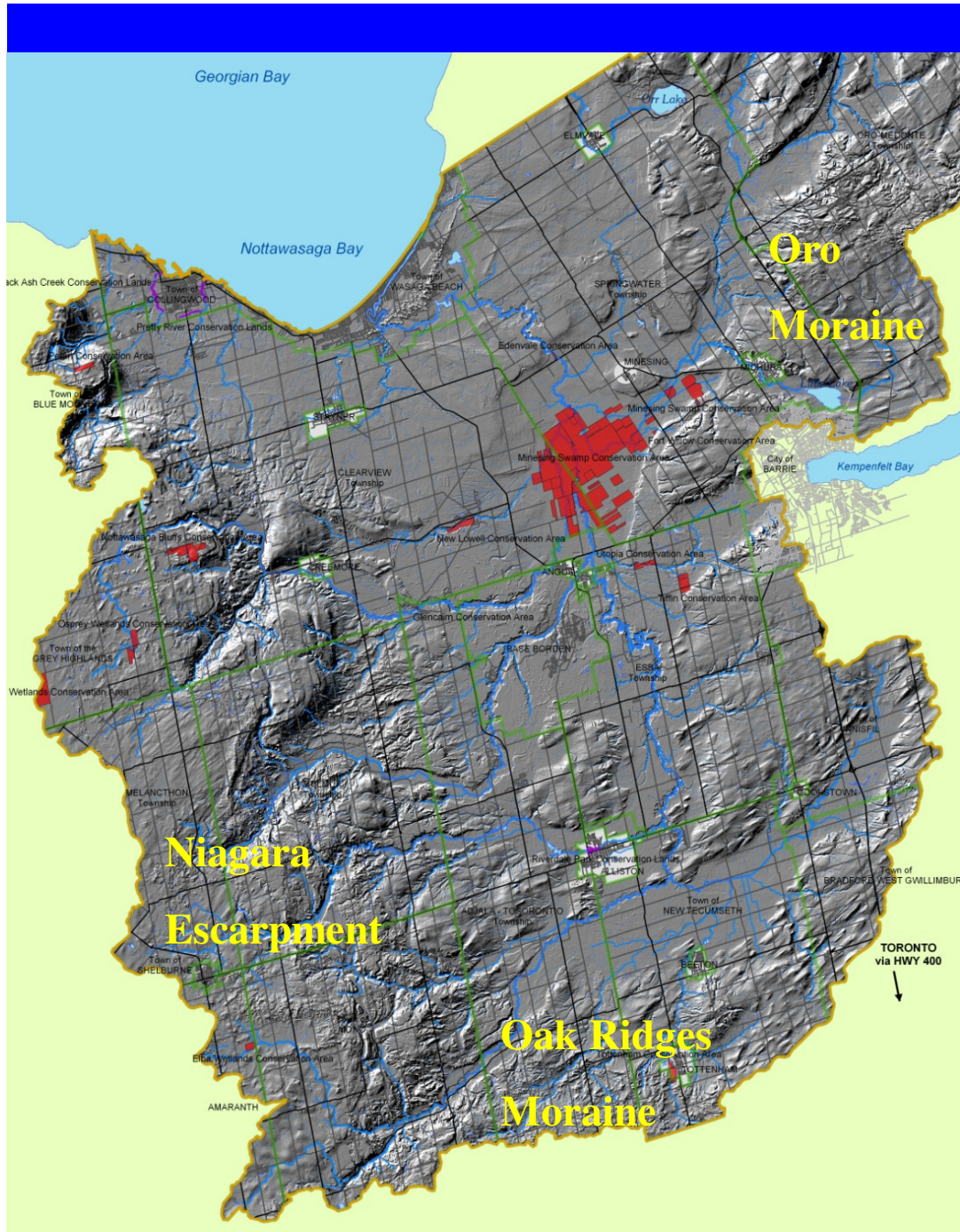




# Where Is Mining Wetlands?

- Nottawasaga River watershed
- >3,000 km<sup>2</sup> drainage area
- Includes drainage from Niagara Escarpment, Oak Ridges Moraine and Oro Moraine
- Convergence area for 3 river systems – Nottawasaga, Mad and Willow





# Lay of the Land

Minesing roughly represented by clustered red properties (NVCA lands)

Located in Simcoe Lowlands

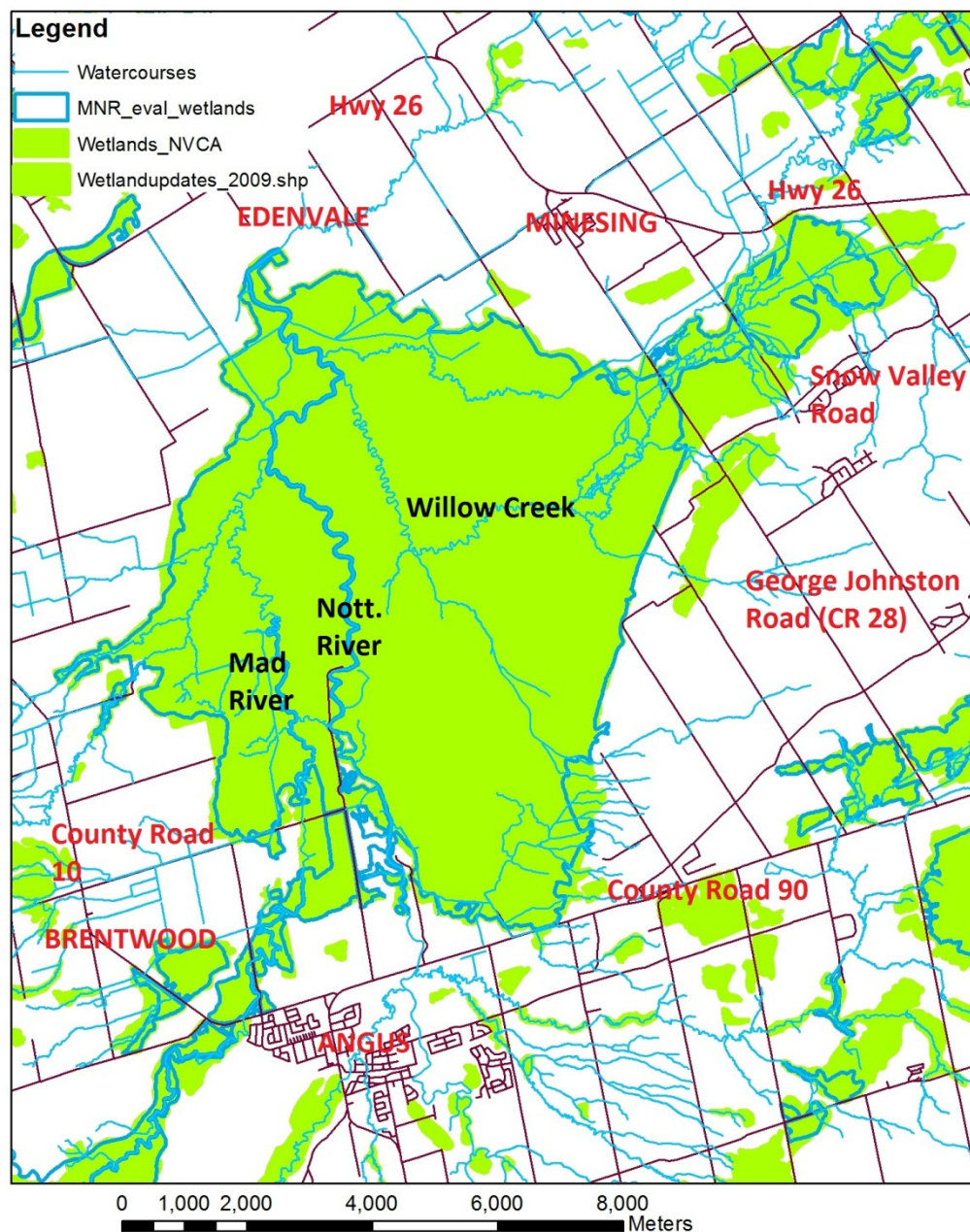
Part of Lake Algonquin (11,000 years ago – Georgian Bay 70 m higher than present)

Inundated during Nipissing transgression (5,000 years – Georgian Bay 13 m higher than present)





## Minesing Wetland Boundaries MNR/NVCA Mapping



# Minesing Wetlands

- Roughly bracketed by Hwy 26, County Road 90 and County Road 10
- >6,000 ha (15,000 acres) – 12,000 football fields
- Core is approximately 8 km X 8 km with no roads
- Extends southwest along Mad River valley and east into Springwater Provincial Park



**Legend**

- |                   |                        |
|-------------------|------------------------|
| Lakes & Ponds     | Minesing Wetlands      |
| NVCA Jurisdiction | Woodlands and Wetlands |
| Municipalities    | Watercourses           |

This map has been produced for illustrative purposes only. While every effort has been made to accurately depict the information, data/mapping errors may exist.

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August, 2006  
Universal Transverse Mercator  
Zone 17 North  
North American Datum 1983

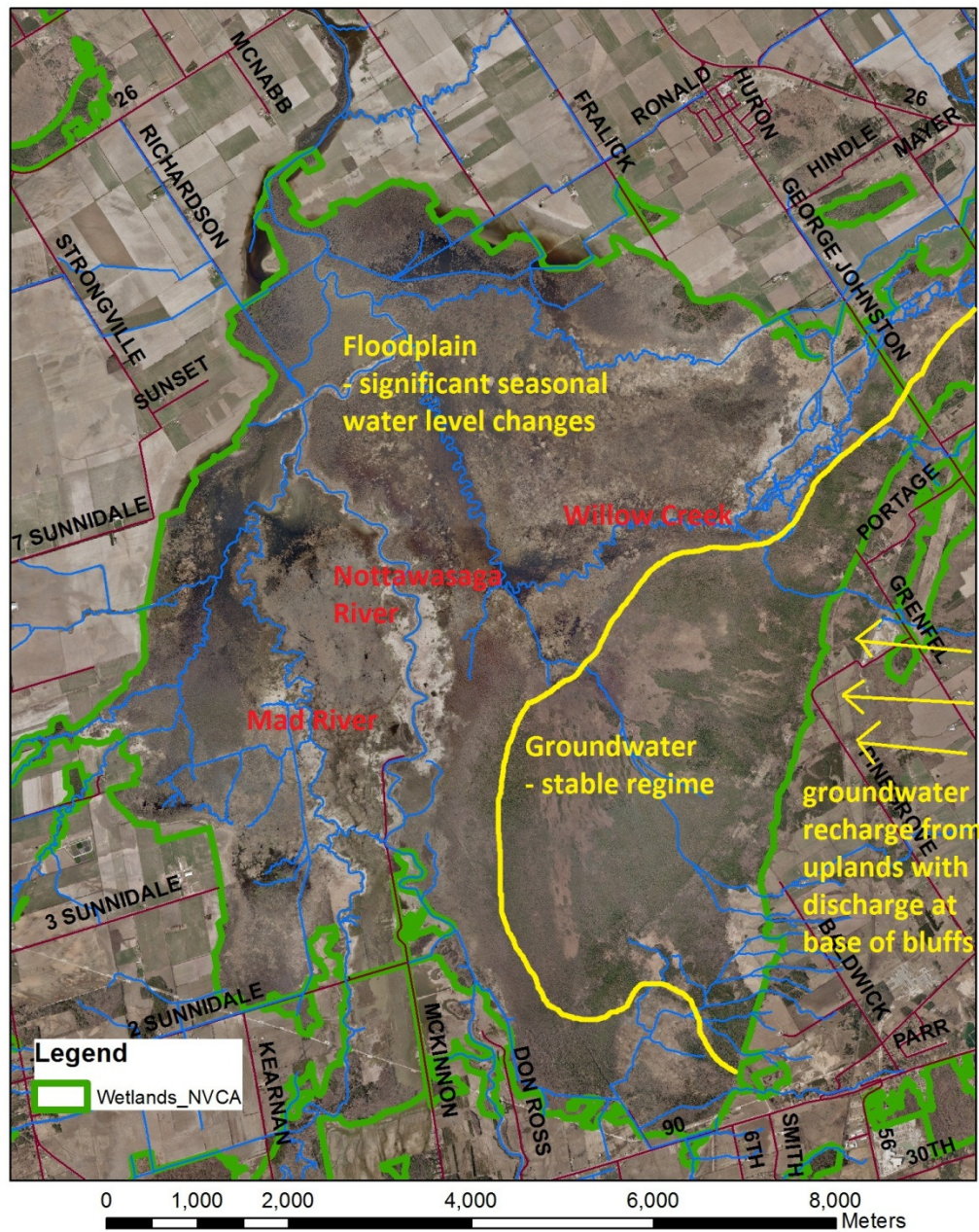
# Natural Heritage Systems

- Minesing the “hub” of natural corridors that extend from the Niagara Escarpment (NE) to the Canadian Shield (CS) – Save Our NECS???
- Includes Escarpment, major valley systems, Algonquin Bluffs, Nottawasaga River Valley, Oro Moraine and “The Land Between”





## Minesing Wetlands - Floodplain vs Groundwater-Dominated Systems



This map illustrates the Kootenai River floodplain, highlighting two primary land use types: 'Floodplain - deciduous swamp and marsh' (indicated by blue and orange areas) and 'Groundwater boreal swamp and fen' (indicated by green and pink areas). The map also shows surrounding communities and roads, including Rainbow Valley, Culham, McNabb, Glengarry Landing, Fralick, Ronald, Adams, Hindle, Mayer, Vespra Valley, Hendrie, Binnill, Golf Course, Wilson, Nursery, Reillys, Seadon, George Johnston, Grenfell, Pinegrove, Baldewick, Sunnidal, Smith, 30th, 6th, 5th, Centre King, Hill Mill, Cegil, Brentwood, Kearnan, McKinnon, 2 Sunnidal, 3 Sunnidal, McCarthy, Strongville, Richardson, and Adams. A red line traces a path through the floodplain, and a blue line indicates the Kootenai River. The map is overlaid with a grid of roads and highways, including 26, 80, 30th, 6th, 5th, 8th, 9th, 10th, and 25th.

 <all other values>

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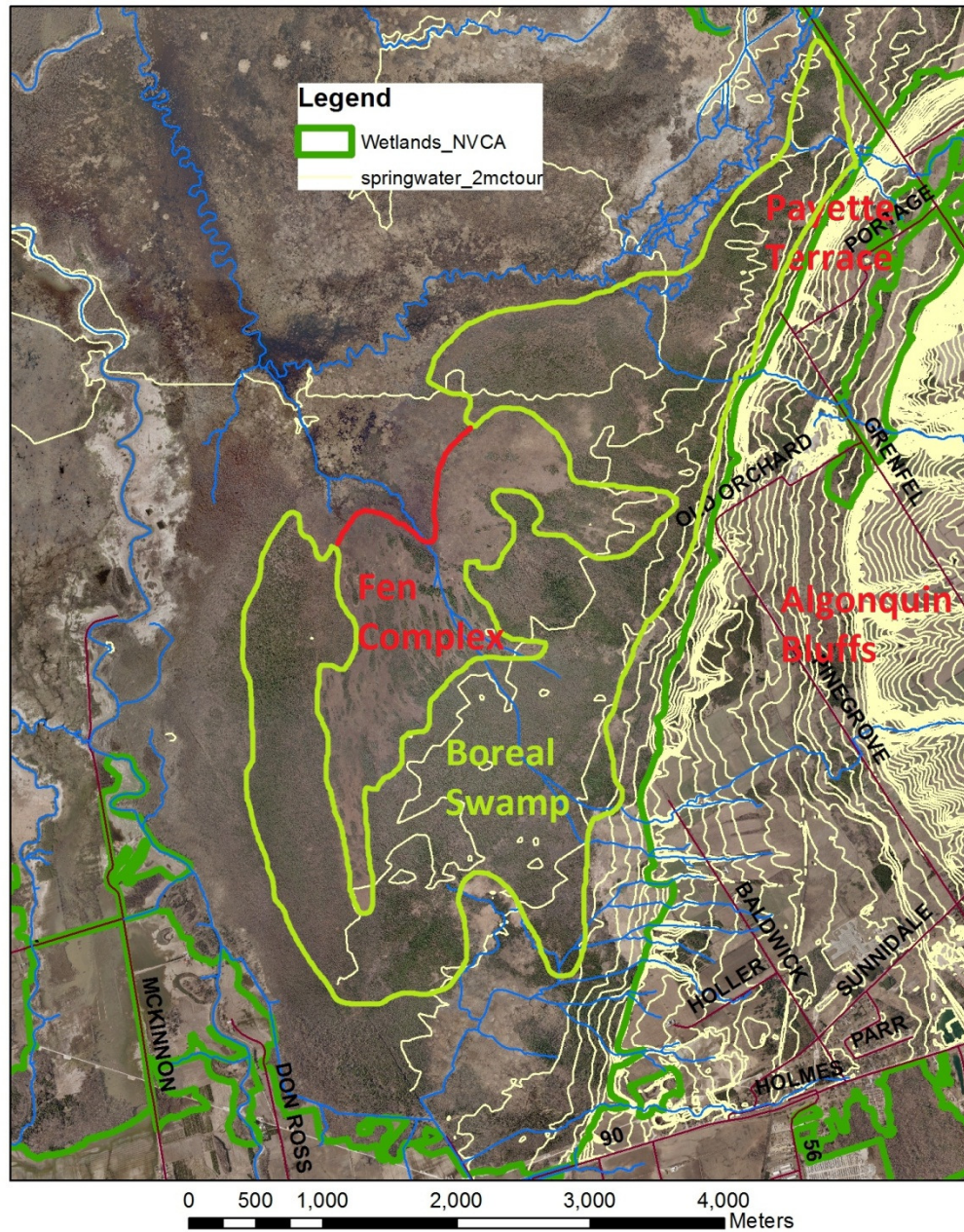
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## Minesing Wetlands - Boreal Swamp and Fen

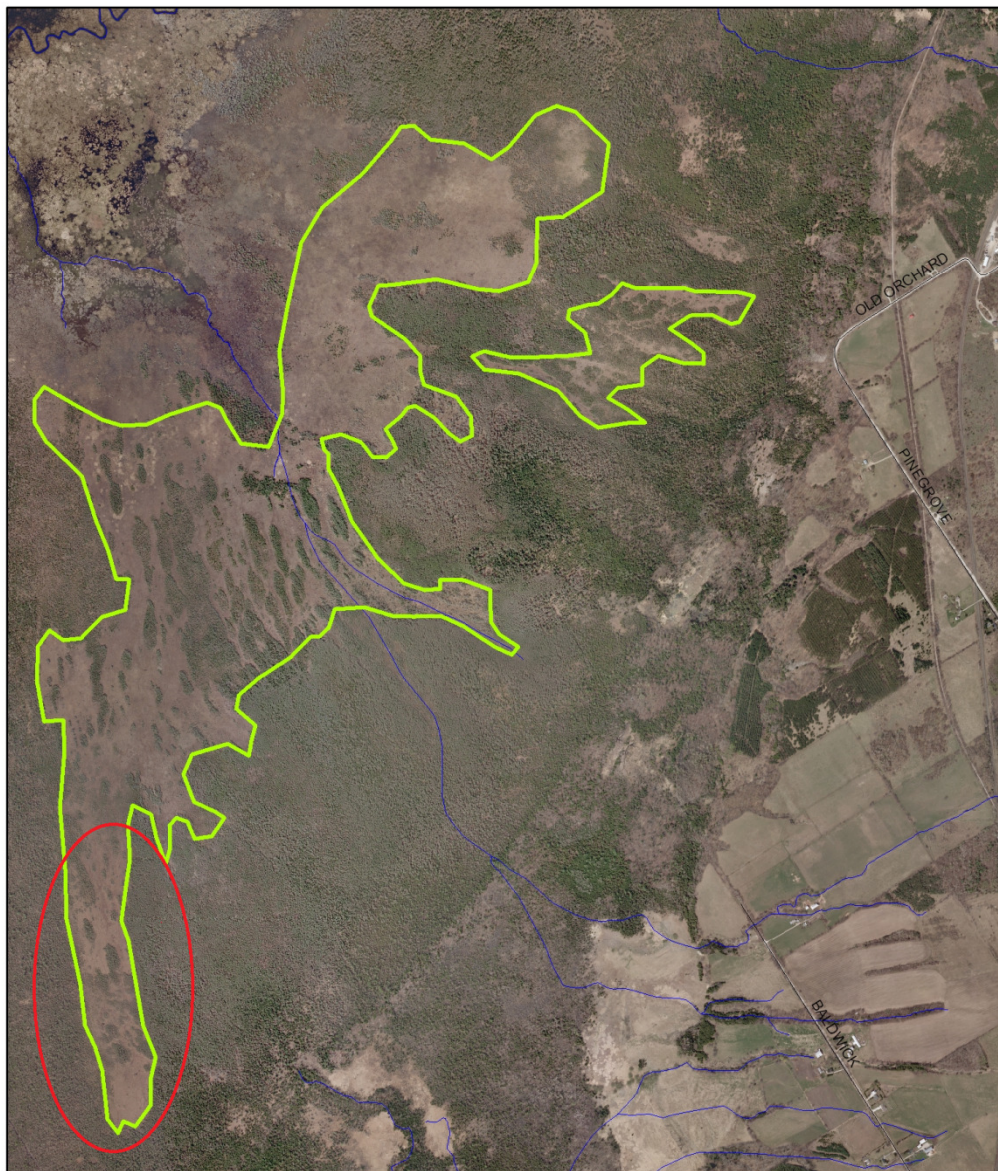






# Minesing Fen

0 250 500 1,000 1,500 2,000 Meters

































































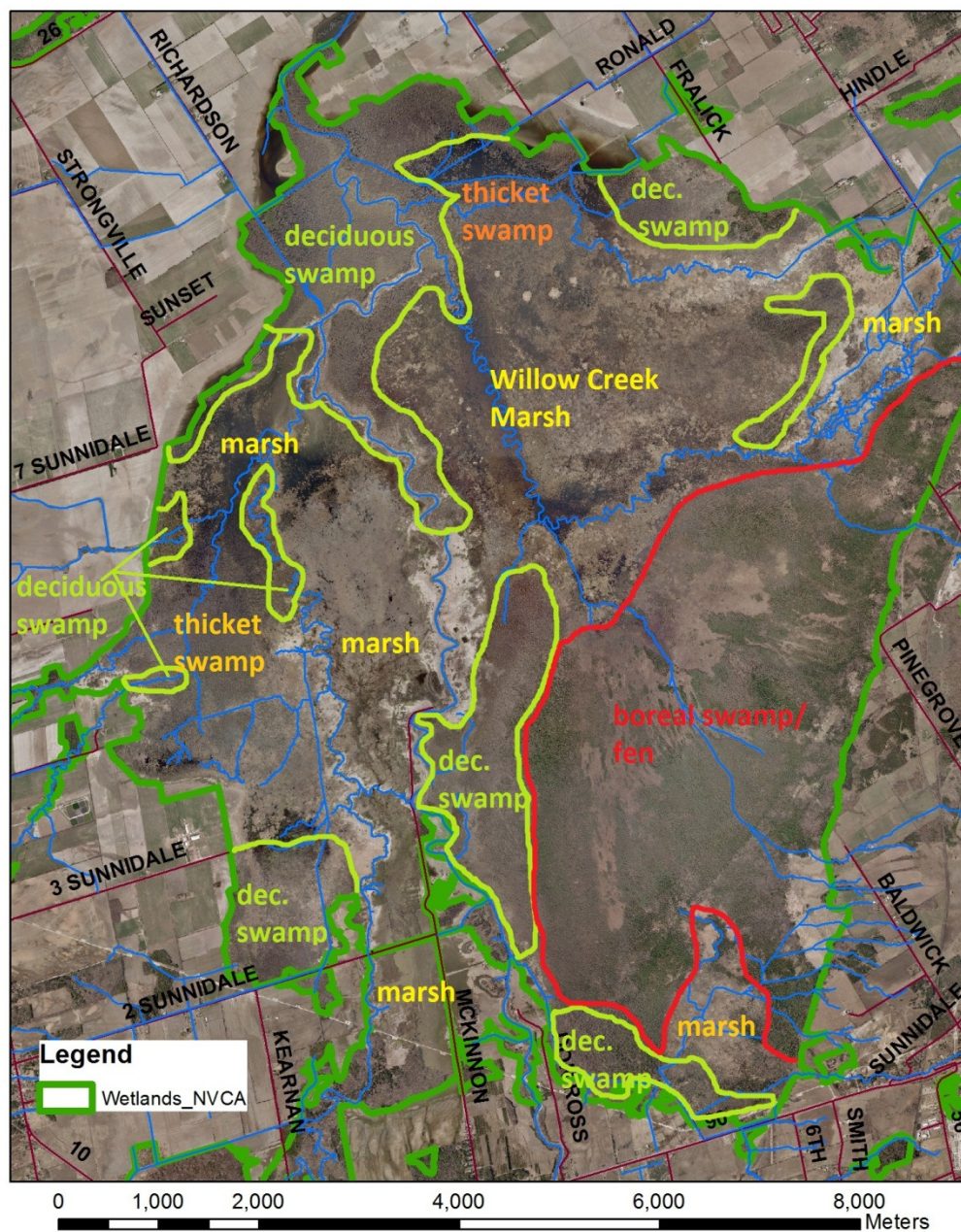


**Hine's Emerald – photo  
credit: Chris Evans**





## Minesing Wetlands - Deciduous Swamp and Marsh





## Extreme Water Level Fluctuations







Willow Creek – Spring View





**Willow Creek – Summer View**





SPRING



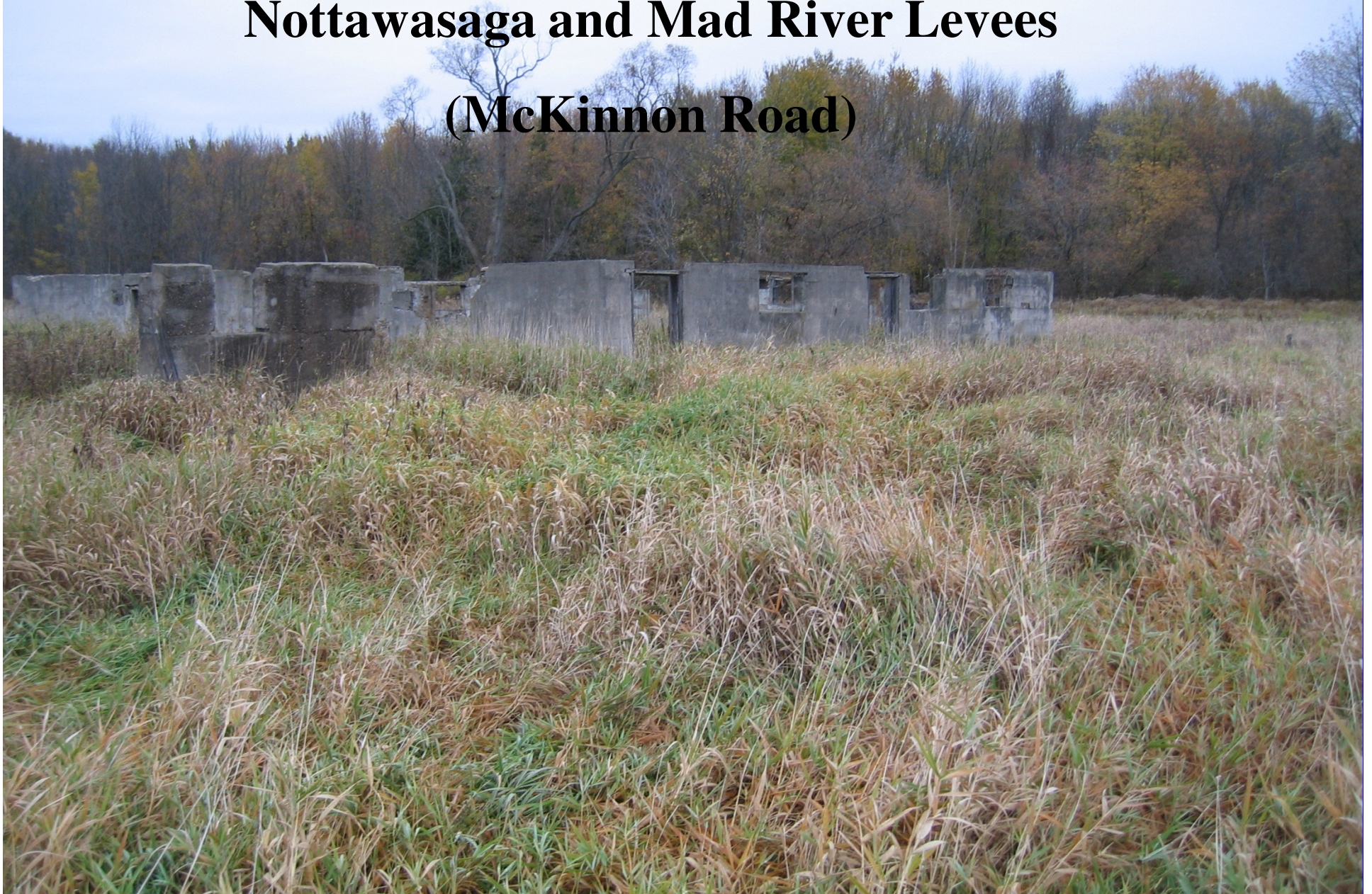
SUMMER







**Abandoned Agricultural Fields –  
Nottawasaga and Mad River Levees  
(McKinnon Road)**





















**Recently flooded fields – Mad River  
levee break (McKinnon Road and 2<sup>nd</sup>  
Concession)**







Hackberry  
Levee  
Forests



## Carolinian Forest (North End)



Bur Oak  
Swamp















**Nottawasaga River Levee – note that river elevation is higher than the back levee swamp**







# Cerulean Warbler – Threatened/Endangered

















# **Floodplain Thicket Swamps**









# Floodplain Marshes















Virginia  
Rail



Sora





Common  
Moorhen



Least Bittern -  
Threatened





Black-crowned  
Night Heron



Great Egret



Sandhill Crane





**Bald Eagle Nesting**



# **Mad River Marsh**



**Black Tern  
Nesting**









# **The Minesing Heronry**









**OTHER COOL STUFF!**



## Rare Fish



Northern Brook Lamprey –  
Special Concern



Lake Sturgeon - Threatened





Wood Turtle -  
Endangered



## Turtles, Turtles, Turtles

Blanding's Turtle –  
Threatened







Map Turtle –  
Special Concern



Spotted Turtle -  
Endangered

## Turtles, Turtles, Turtles



Snapping Turtle  
– Special  
Concern





# Provincially Rare Insects



Giant Swallowtail



Zebra Clubtail



Moustached  
Clubtail



Delta-spotted  
Spiketail



Blue-tipped  
Dancer



Halloween  
Pennant





## Butternut

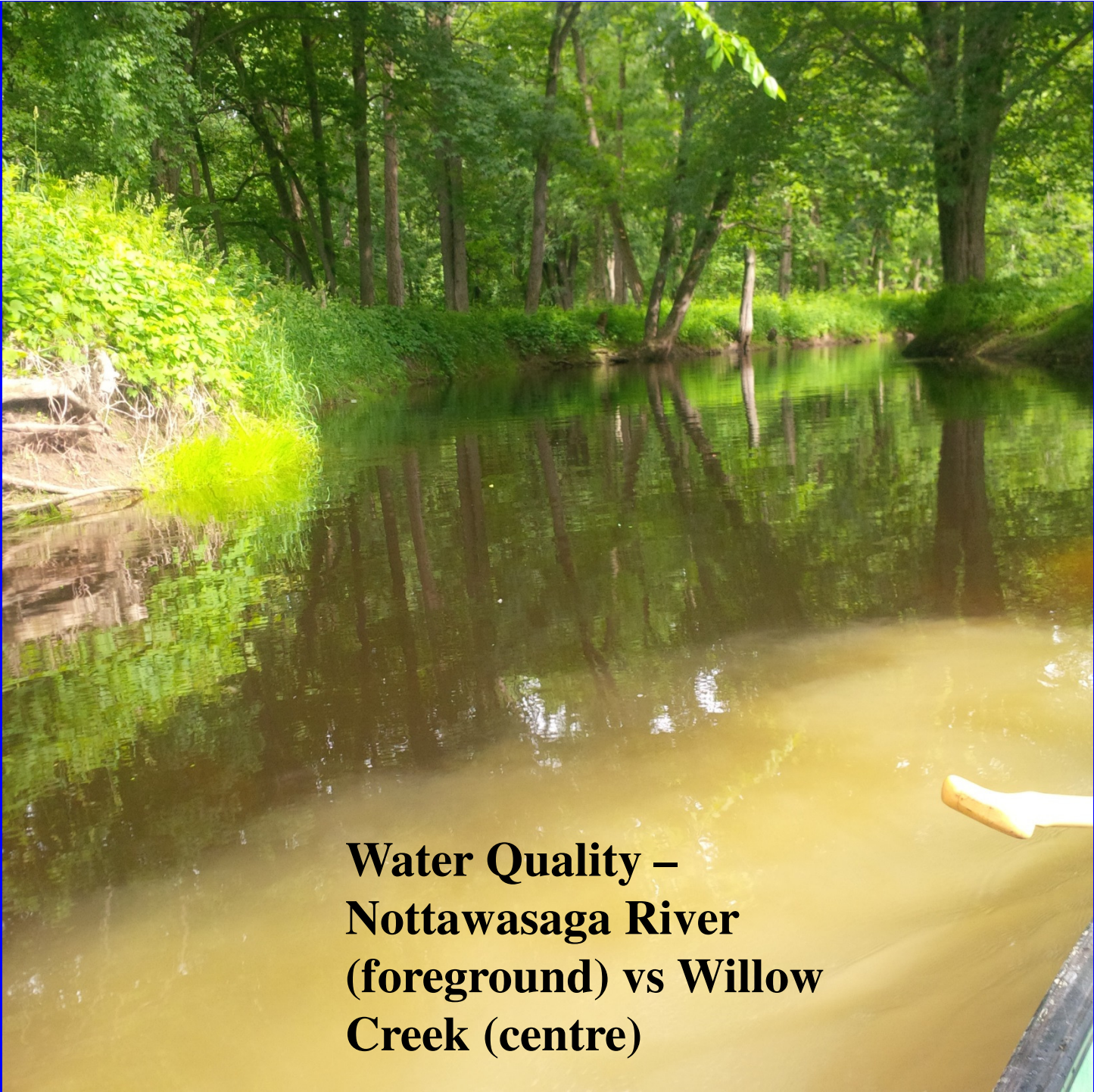
Endangered due to butternut canker which is spreading through North American populations.



# Milk Snake – Species of Concern







**Water Quality –  
Nottawasaga River  
(foreground) vs Willow  
Creek (centre)**



**INVADERS!!!**





# Dog-strangling Vine







*Phragmites*



# Garlic Mustard







Tall Manna Grass (*Glyceria maxima*)



# Minesing Threats

- Non-native Species
- Illegal Access (ATVs)
- Private Land Management (non-sustainable logging)
- Turtle Mortality (major roads)
- Development and Agricultural Intensification
- Continued floodplain forest decline



# Minesing Monitoring

- Minesing Wetlands Biological Inventory (Bob Bowles and NVCA staff) completed in 2006
- Refining vegetation community mapping (over 400 individual communities identified to date!) – including help from Nature Conservancy Canada
- Marsh Monitoring – Breeding Bird Surveys since 2007
- Groundwater monitoring (bluffs to fen) since 2009
- Invasive species monitoring
- Species At Risk monitoring – participating in Species At Risk Recovery Plans (Hine's Emerald)
- Surface water quality studies – NVCA and McMaster University



# Minesing Management

- NVCA works closely with Nature Conservancy Canada (NCC) and other partners to manage Minesing Wetlands through an approved management plan (updated in 2014!)
- Invasive species management (dog-strangling vine and *Phragmites* to date)
- Natural heritage corridor analysis (NCC with NVCA input)
- Illegal access – NVCA continually investigating additional structural controls and enforcement (getting better!)
- Turtle Crossing signs (Kids for Turtles) and ecopassage consideration
- Establishment of Acquisition Priorities (NCC – key role)
- Through planning process, protection of Minesing Wetlands and connecting corridors



# Friends of Minesing Wetlands

<http://minesingwetlands.ca/>



- protect the ecological integrity of Minesing Wetlands, and its supporting watershed.
- undertake specific projects and initiatives
- promote educational, recreational and eco-tourism opportunities compatible with the preservation of the Minesing Wetlands ecosystem.
- To raise funds to supplement, complement and enhance the ecologically sound management of Minesing Wetlands.

Individual membership: \$20

Family membership: \$50

Club: \$200



# Friends of Minesing Wetlands

- Spring and fall canoe trips
- Winter snowshoe hikes
- Other events (stay tuned)

<http://minesingwetlands.ca/>





