

# Measuring Success on the Oak Ridges Moraine

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# Purpose of Project

- To document successes and failures in implementation of the ORMCP
- To document successes and failures of the ORMF
- To initiate work that provides more effort in the development of indicators and investigations needed as part of the 2015 review
- To identify opportunities and needs for future improvements to the ORMCP and related initiatives

# Measuring Success - Preparing for 2015

- Assessment of Stakeholder Awareness, Support and Concerns
- Compliance Monitoring- Assessing Policy and Regulatory Agency Compliance to the ORMCP
- Health of ORM in a Landscape and Municipal Context (Ecological Baseline)
- Health of ORM in a Watershed Context
- Progress in Land Stewardship
- Progress in Land Securement
- Progress in Education and Research
- Improvements to the Oak Ridges Moraine Trail



# Stakeholder Survey

- An assessment of stakeholder awareness , support and concerns for the implementation of the ORMCP
- Over 60 interviews with stakeholders
- Meeting with Provincial planners
- Two workshops with municipal planning professionals



# Compliance Assessment

- Assess the compliance of planning and regulatory agencies with the requirements of the ORMCP
  - Preparation and adoption of appropriate policy and procedural vehicles (official plans, bylaws etc.) to support ORMCP
  - Ensure land use changes or development meet the requirements of the ORMCP as part of their approval to move forward
  - Monitoring of these activities to ensure they meet the terms and conditions of the approval
- No agency tracks decisions made by implementation bodies on an landscape basis on a regular basis
- Report draws on Monitoring the Moraine Status Reports and meetings conducted with government and non-government agencies

# Landscape Health Assessment

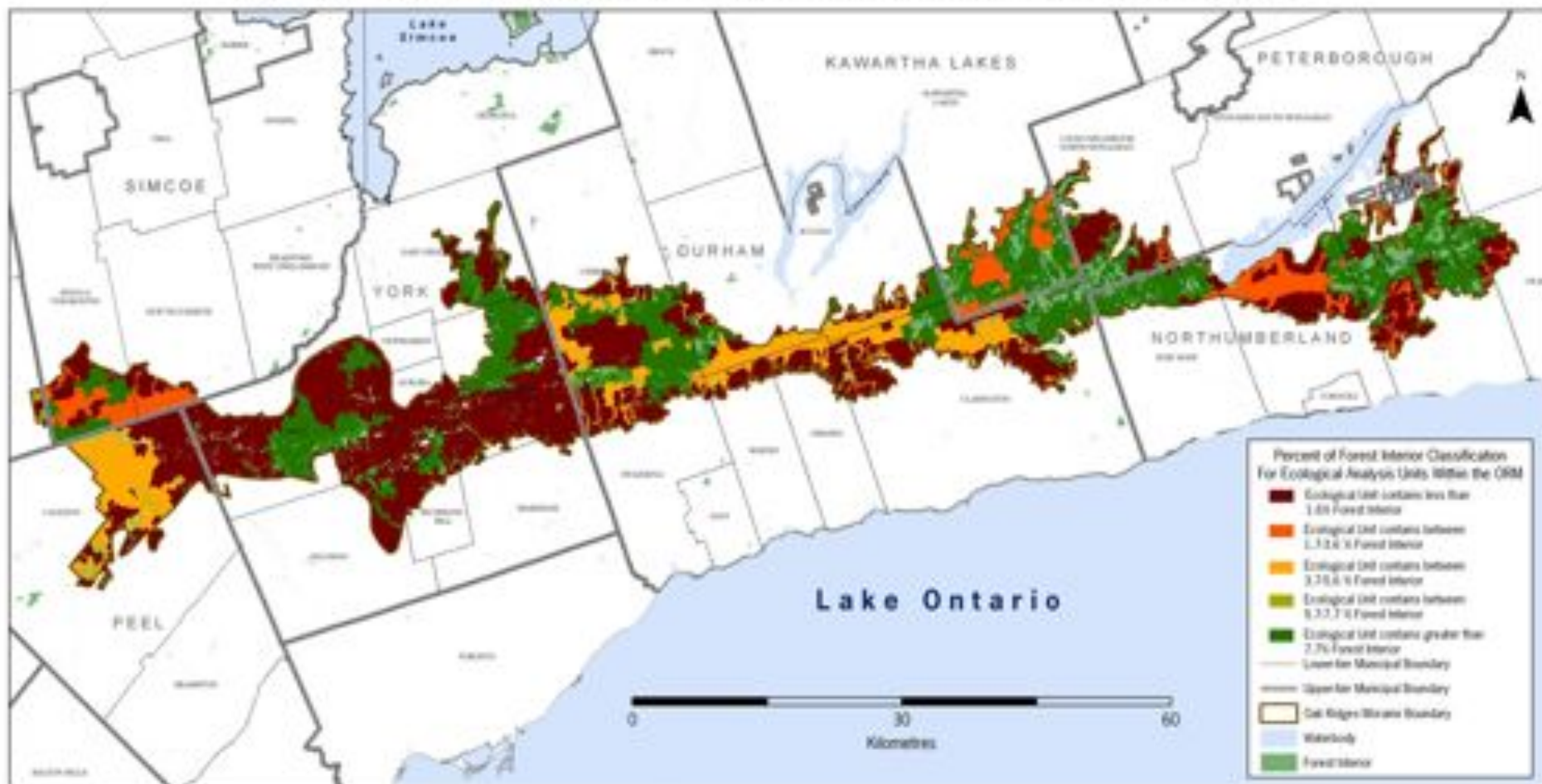
- Simple and easily collected datasets (primarily from MNR sources) that can be used to monitor trends in ecological integrity of the ORM and the effectiveness of the ORMCP
- This report can serve as a baseline against which future changes in natural features can be compared

## Landscape level health indicators identified:

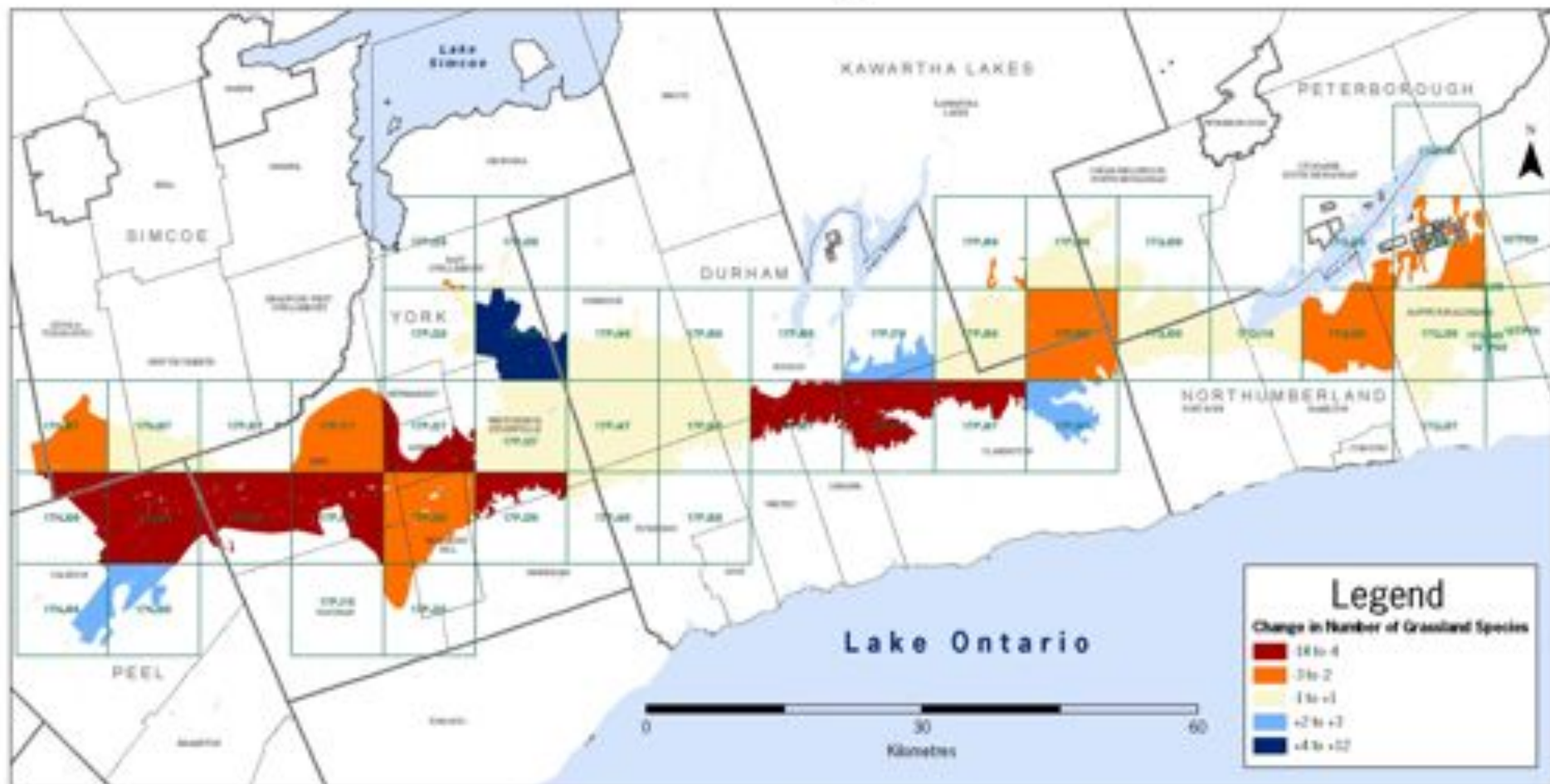
- Natural terrestrial cover
  - Forest interior
  - Wetland habitat
  - Prairie, savannah and sand barrens
  - Species at risk
  - Breeding bird atlas
- 
- Generally shows good healthy levels of natural cover over most of the ORM
  - More effort needed in open field, grassland, forest interior in Natural Linkage areas and continuing emphasis on specialized habitats like prairies, SAR habitat, etc.

# Forest Interior

Within Ecological Analysis Units of the Oak Ridges Moraine



Map 9: Change in Number of Breeding Bird Grassland Species  
Within the Oak Ridges Moraine







# Watershed Health Assessment

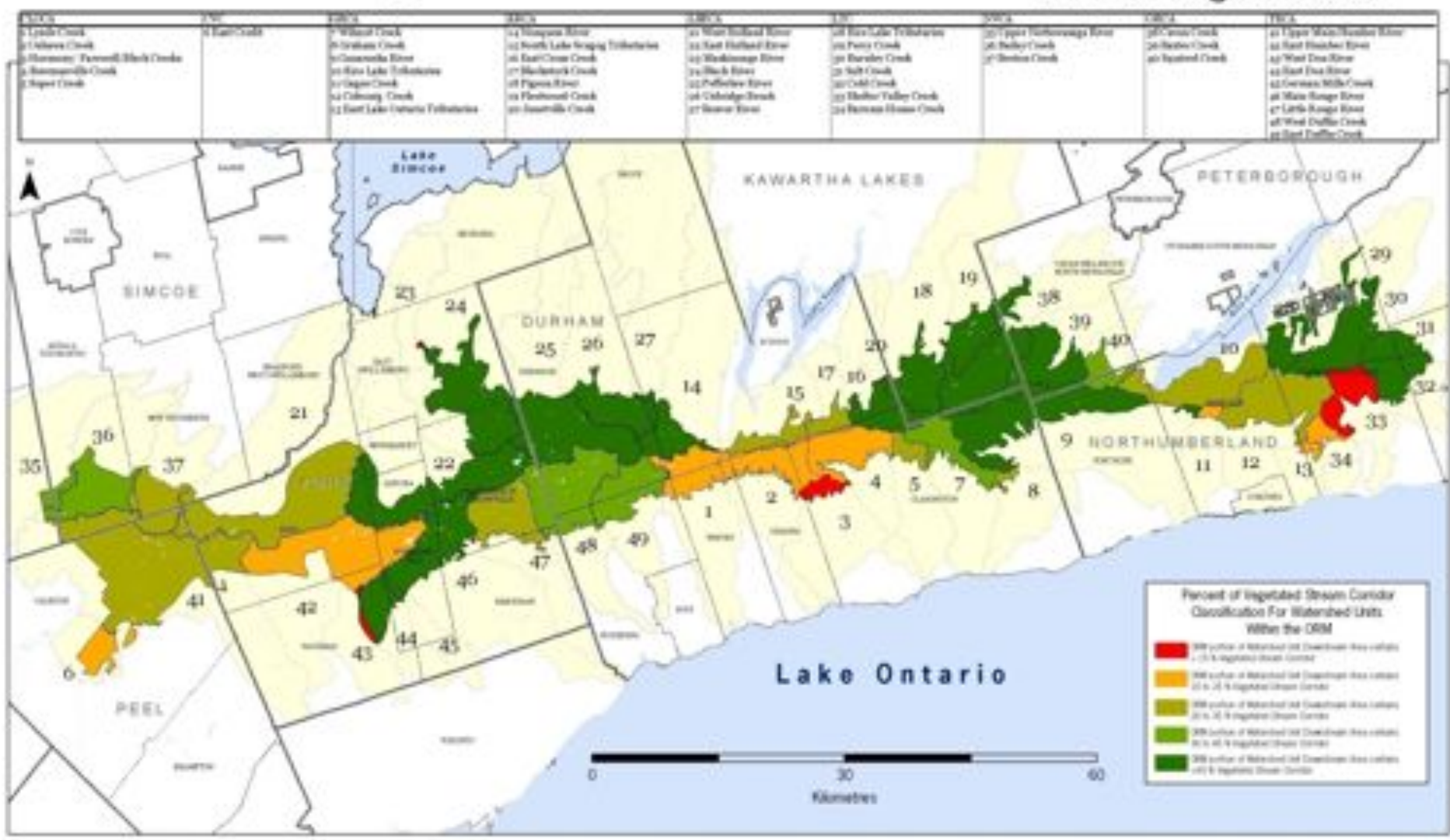
- Assessing the health of ORM in a watershed context
- A major partnership with CAMC who have provided major amounts of data and technical expertise as an in-kind service
- Identified 21 potential indicators and targets on a basis of 49 subwatershed units identified within the ORM



# The Indicators

- Assessing Ecological Health
  - Natural terrestrial coverage
  - Forest Interior
  - Natural vegetated Stream corridor
  - Presence of Healthy Aquatic Communities-Fish
  - Presence of Aquatic Communities- Benthic Invertebrates
- Assessing Hydrological Health
  - Hardened surfaces
  - Water Quality- Phosphorous
  - Water Quality- Chlorides
  - Water Quality- E. coli
  - Land Use Stressors
  - Land Use enhancers
  - Water Use Stressors
- Assessing Planning Preparedness
  - Status of Watershed Planning
  - Status of Stormwater Management Plans
  - Status of Stormwater Management Facilities
- Assessing Watershed Monitoring Status
  - Baseflow Monitoring Stations
  - Well Monitoring Stations
  - Climate Monitoring Stations
  - Terrestrial monitoring Stations

# Map 4: Natural Vegetated Stream Corridor Of Watershed Units Within The Oak Ridges Moraine

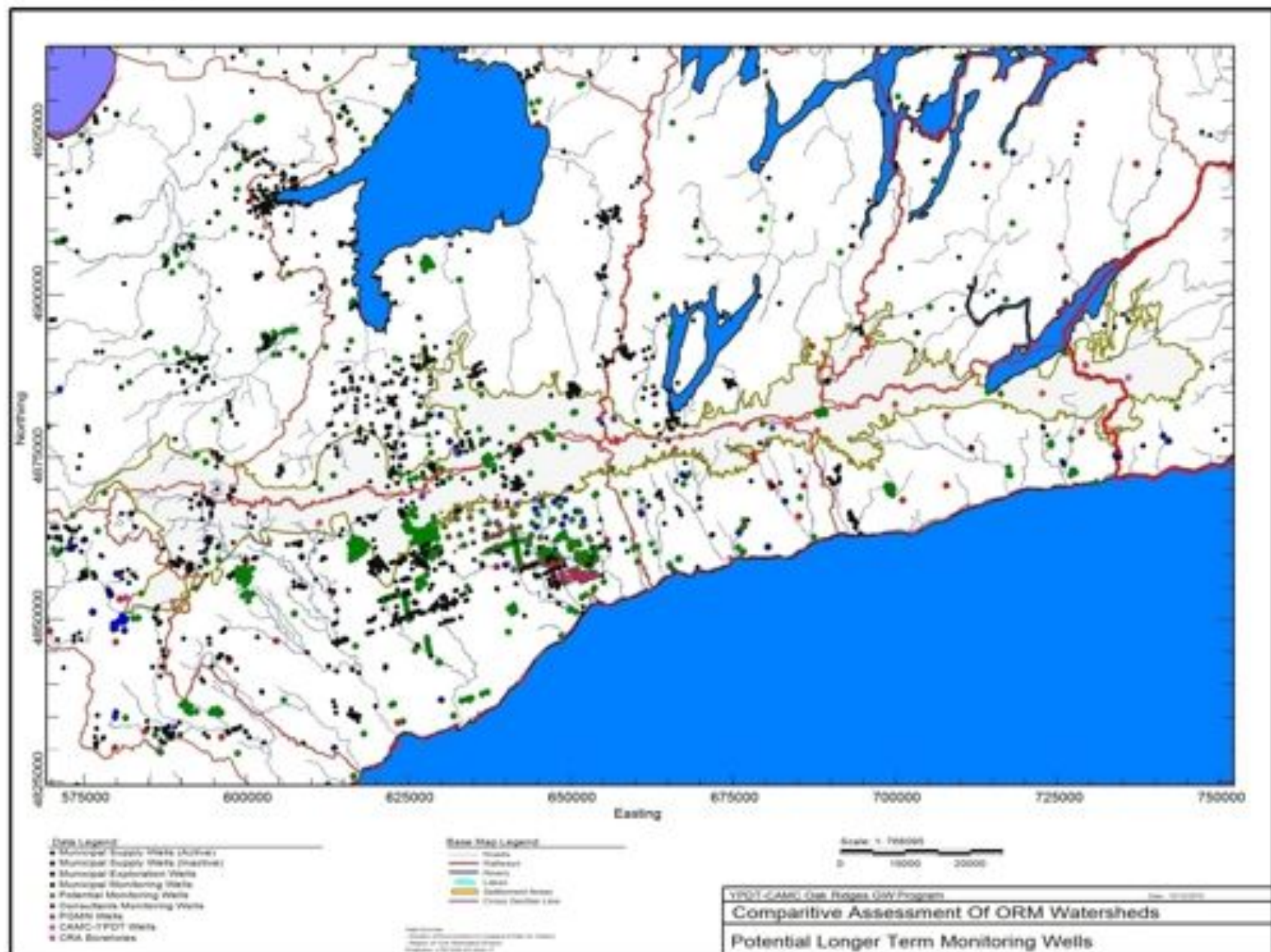


# Map 19: Status Of Watershed Plan

Watershed Units Within  
The Oak Ridges Moraine



Map 25



# Conclusions– Watershed Assessment

- Demonstrated that practical, affordable performance indicators and targets can be provided at minimal cost
- Identified many areas where additional restoration work is needed to improve health of the ORM especially stream and associated riparian health
- Provided basis for developing an ongoing monitoring framework on the ORM

# Suggested Next Steps



## Using Watershed Assessment as basis:

- Develop Study Guide to identify and guide future refinements to the Assessment
- Commit to revisit the Assessment sometime prior to 2015 in preparation for the Provincial Review
- Improve indicators by:
  - Refining descriptions and methodologies
  - Greater standardization and comparability between CAs and Watersheds
  - Better coverage more strategically located data points
  - Import data that may be available outside CAMC

# ORMF Program Areas

- Stewardship initiatives are critical for protection and in meeting restoration targets
- Land securement is able to protect lands that cannot be protected through legislation alone
- Research, education, and recreation (Oak Ridges Moraine Trail) program areas need a longer-term dedication of resources to ensure that the Plan remains strong in its provisions and continues to have public support
- Knowledge gaps and deficiencies identified in the other Measuring Success reports will be used to help identify future research priorities



# Project Conclusions

- The ecological based reports of the Measuring Success Project serve a dual purpose: they tell us that many of our streams are well below ecological targets; and they identify gaps and deficiencies in monitoring efforts across the landscape.
- The Project shows that a combination of regulatory and non-regulatory approaches are needed to ensure the continued protection of the Oak Ridge-Morris

