



# MONITORING the MORaine

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To All Public Works Managers:

The Monitoring the Moraine (MTM) project is seeking your assistance for our 2007 and 2008 Status Reports. MTM is a collaborative project between the Save the Oak Ridges Moraine (STORM) Coalition, Citizen's Environment Watch, and the Centre for Community Mapping. The MTM project engages volunteers in ecological and policy monitoring with the goal of determining the effectiveness of the provincial Oak Ridges Moraine Conservation Plan (ORMCP).

One of the tools that STORM is using is an annual status report, the first of which was released last year. The 2006 Status Report tracked municipal official plan and zoning bylaw conformity with the ORMCP. Information provided by the municipalities for last year's Status Report showed a Moraine wide map of municipal progress towards fulfilling the objectives of the ORMCP. I have attached this Status Report for your reference. It is also available from our website: [www.monitoringthemoraine.com](http://www.monitoringthemoraine.com).

The 2007 and 2008 Status Reports will focus on infrastructure projects and in particular, compliance with Section 41 of the ORMCP. In order to produce a Moraine wide map of past and present infrastructure projects, I would like to locate all projects that have triggered a formal undertaking under the Environmental Assessment Act. Specifically, we need the following information about all Environmental Assessments in the Oak Ridges Moraine that your municipality has completed or is in the process of completing since the introduction of the ORMCP in November, 2001:

- The exact location of the project
- The nature of the project and the type of infrastructure
- When the project was completed or what stage it is at currently



Citizen's environment watch

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COALITION



**Save The Oak Ridges Moraine**



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In order to ensure timely publication of the 2007 Status Report, I would appreciate this information by August 10, 2007.

Thank you very much for your participation in this project. Your contribution is very valuable. I would appreciate if you could follow up on receipt of this letter with a telephone call or email to the phone number or email address below.

Regards,

Katrina Broughton  
613-531-3620  
katrinabroughton@gmail.com

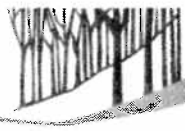


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# MONITORING the MORaine

## Status Report on the Implementation of the Oak Ridges Moraine Conservation Plan: Implications for the Greenbelt Plan

### Four Year Anniversary

April 22, 2006 marks four years since the Minister of Municipal Affairs and Housing established the Oak Ridges Moraine Conservation Plan (ORMCP) as Ontario Regulation 140/02 under the *Oak Ridges Moraine Conservation Act, 2001*. The Act became law in December 2001 by an all-party unanimous vote in the Ontario Legislature.

### Oak Ridges Moraine and Greenbelt Plans

The ORMCP is a regional conservation-based planning model, heralded as a victory by the environmental community and general public. It was further embedded into public policy with the enactment of the *Greenbelt Act, 2005*. The *Greenbelt Act* is unique, knitting together three distinct socio-ecological regions under one piece of legislation: the Oak Ridges Moraine, the Niagara Escarpment and 400,000 hectares of agricultural lands and natural areas of the Protected Countryside. This resulted in the establishment of a permanent, secured and well-defined greenspace framework within one of the fastest growing urban areas in North America. While the Niagara Escarpment Plan is administered by the Niagara Escarpment Commission (a provincially-funded and administered agency), the ORMCP and Protected Countryside policies are implemented by municipalities through the adoption and approval of official plans and zoning by-laws. Critics of this model argue that a provincial plan requires provincial oversight to ensure the actions of municipalities and landowners are implementing the intent of these plans in a consistent and effective manner. In the absence of such oversight, the public needs assurances and confidence that the 32 municipalities in the Oak Ridges Moraine Plan Area and the additional 29 within the Protected Countryside are consistently and effectively administering these provincial plans.

### Community Role in Land Use Planning: Monitoring the Moraine Project

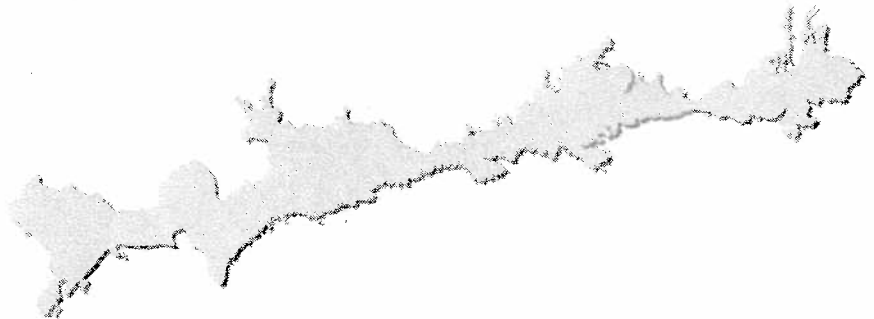
This Status Report is the first of an annual series of report cards intended to highlight the successes and challenges of ORMCP implementation. This report is designed and maintained by the Monitoring the Moraine (MTM) project, a partnership between Citizens' Environment Watch, STORM Coalition (Save the Oak Ridges Moraine) and Centre for Community Mapping. The MTM project aims to facilitate a more active and engaged role for citizens in provincial and municipal land use planning and environmental protection of the moraine. The goal of the MTM project is to design and implement an integrated ecological and policy monitoring program for the Oak Ridges Moraine. The moraine is well positioned to showcase innovative approaches to sustainability and the role of science, information technology and data management in public policy decision-making. The project partners expect that the lessons learned on the Oak Ridges Moraine will be applied to other areas of the Greenbelt and beyond. Community-based monitoring is an area of innovation that has general application to land use planning across Ontario.

In preparing this Status Report, the historic four-year milestone was chosen as the cut-off for data reporting. The good news is that by this date the required conformity activities, including official plan and zoning by-law amendments, were largely completed; however, deadlines were missed and certain provincial obligations have yet to be fulfilled.

### Key Observations

#### Municipalities are Generally on Board

Municipal performance as a whole has been above average with a majority (63%) of lower-tier municipalities meeting the deadline for official plan conformity. However, only 38% of municipalities met the deadline for bringing their zoning by-laws into conformity with the ORMCP. The low rate of zoning by-law compliance may speak more to the magnitude of the task and the limited resources available to some of the smaller municipalities than to municipal indifference. An observed trend is that municipal performance was generally higher in the western and central parts of the moraine than in the east. Many of the eastern municipalities claim to be under-resourced and cite a 'lack of need' for the ORMCP due to low development interest. Praise came from a number of municipal staff toward provincial staff for their willingness to negotiate compromises in areas of conflict between the ORMCP and local approaches. In general, it was felt that this resulted in increased levels of understanding between the two levels of government.



#### Lack of Provincial Accountability

Our research highlighted the absence of milestones within both the ORMCA and ORMCP with which the public can evaluate the province's performance in fulfilling its numerous responsibilities regarding implementation. In particular, no specific deadlines exist for provincial delivery of essential tools for municipalities (mapping, technical papers, resources and staff time) nor are there established deadlines for the provincial approvals of municipal conformity. The lack of time frames makes it difficult for the public to hold the province accountable for its role in ORMCP implementation.

#### Mammoth Task for Province: Overly Complex or Insufficiently Resourced?

The amount of time being required by the province to fully integrate the ORMCP into the 32 municipal structures suggests that they seriously underestimated the complexity of the undertaking. It is possible that progress was slower than anticipated due to the internal secondment of staff within provincial ministries to the Greenbelt file. Whatever the reasons, it remains that four years after the ORMCP was established, 20 of the 32 municipalities do not have approved zoning by-laws that reflect and enforce the policies of the ORMCP. This, as well as the lack of an overall framework that defines what 'conformity' means, makes it difficult to evaluate how effective the ORMCP has been in protecting the ecological and hydrological integrity of the moraine.

### Recommendations

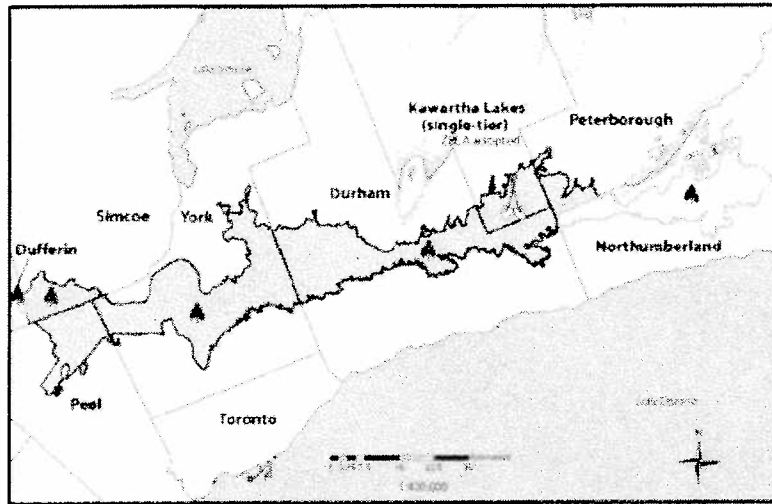
#### Immediate

1. The provincial government should provide more staff resources to immediately complete the official plan and zoning by-law approval process including the provision of direct staff assistance to smaller municipalities.
2. The province should place a high priority on the finalization of the technical paper series prepared by the Ministries of the Environment and Natural Resources. Sample tree-cutting and site alteration by-laws for use by municipalities to more effectively address the requirements of the ORMCP should also be developed.
3. The province should work with the Monitoring the Moraine project and partners to adopt a monitoring framework that includes ecological and policy monitoring that will allow for an independent evaluation of municipal conformity and consistent application of the ORMCP policies.

#### Short-term

1. The province should take measures to bring greater accountability to its role in Oak Ridges Moraine governance including creating a well-resourced Oak Ridges Moraine/Greenbelt ombudsman's office to provide third-party oversight to municipal decision-making.
2. The province is to be commended for re-initiating the Inter-ministerial Performance Measures Working Group as should be provincial staff for their valuable participation in the Monitoring the Moraine Advisory Committee. However, the province should move more aggressively to fulfill its obligation to develop a multi-party monitoring framework in collaboration with its many partners in the Greenbelt Area.
3. The province should develop a communication plan to inform the public about the status of ORMCP implementation while promoting the innovative aspects of the ORMCP such as integrated land use management, watershed planning and advances in scientific understandings.
4. The province should work with its partners to establish conferences for the Oak Ridges Moraine and Greenbelt, similar to the Niagara Escarpment Leading Edge Conference Series, to encourage exploration and documentation of the unique strengths of each of the three components of the Greenbelt: Niagara Escarpment, Oak Ridges Moraine and Protected Countryside lands. This type of information could inform planning innovation across southern Ontario.

## Upper-tier (Region/County) Municipal Progress



### Map Key

CPA Adopted	Tree cutting By-law Adopted	Wellhead Protection Policies Adopted
No planning functionality	Fill/Site Alteration By-law Adopted	Wellhead Protection Policies NOT Adopted

OPA = official plan amendment      ZBLA = zoning by-law amendment

## MONITORING the MORaine

### Official Plan Conformity: **B**

Of the eight upper-tier municipalities on the moraine, six have amended their official plans to bring them into conformity with the ORMCP. Northumberland and Dufferin do not have planning functions and therefore were not subject to the April 22, 2003 deadline for official plan conformity. Of the six who were subject to this requirement, only Peel, York and Durham met the deadline as set out by the Act.

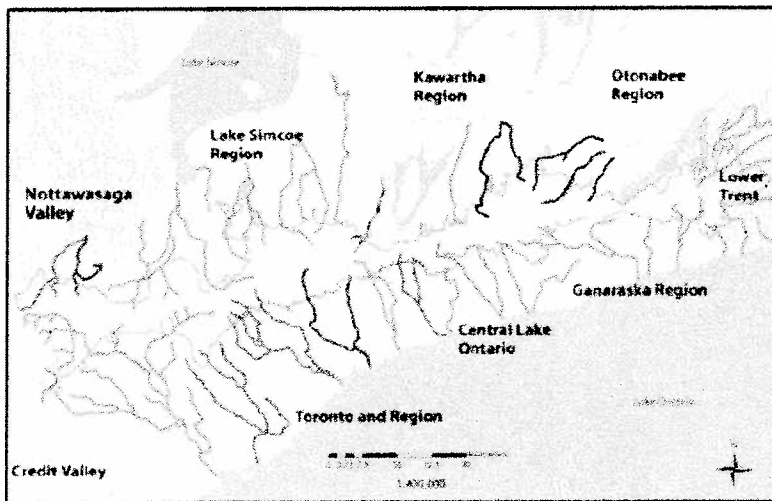
### Wellhead Protection: **C**

The eight upper-tier municipalities report different levels of progress on wellhead protection policies. The Region of Peel gets an A+ grade for having wellhead protection policies prior to the ORMCP – these have been updated and adopted with new ORMCP standards. York Region also complied with the ORMCP, although modifications to the policies are still underway. The Region of Durham, City of Kawartha Lakes, and Counties of Simcoe and Peterborough have not adopted wellhead protection policies although Durham draft policies are out for public consultation. The wellhead protection areas are administered by the lower-tier municipalities in the Counties of Dufferin and Northumberland.

### Aquifer Vulnerability and Landform Conservation Mapping: **B+**

All but Peterborough have included maps identifying areas of high aquifer vulnerability and landform conservation as either schedules or figures in their official plan amendments. Peterborough has not undertaken the necessary mapping.

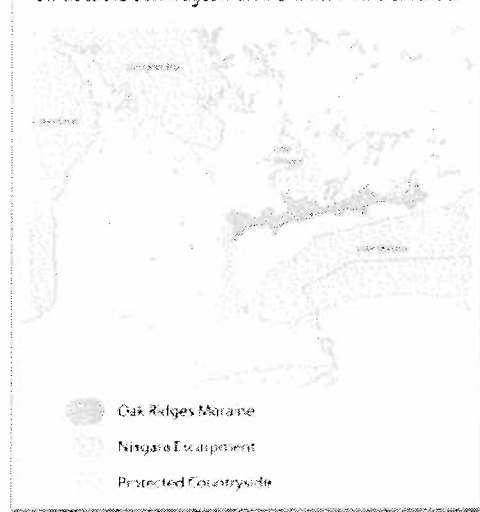
## Watershed Planning



### Map Key - Watershed Plan Levels of Completion

Not started	Phase 2
Phase 1	Phases 3 and 4

### How does the Oak Ridges Moraine fit within the Greenbelt?



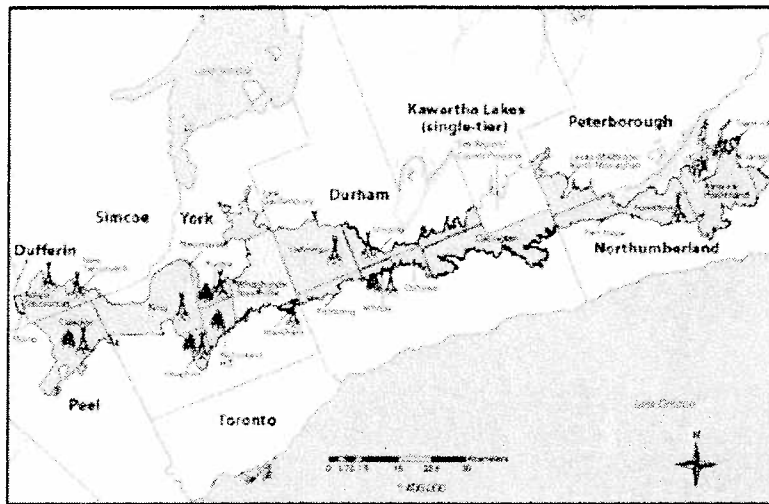
### Watershed Planning: **B**

One of the more significant contributions of the ORMCP is the requirement for municipalities to develop watershed plans. Watershed plans are comprehensive tools for sustainable planning. The differences in development pressures along the moraine are reflected in the progress to date of the region or county in meeting the milestones of the ORMCP. Phase 1 involves characterization of the watershed along with the development of water budgets. Phase 2 is the stage of impact assessment. Phases 3 and 4 are implementation and monitoring stages. These categories are broad for the purposes of providing an overview and do not reflect the specifics. For instance, the Humber River already has a completed plan, but is now undergoing a review.

### Groundwater Studies: **A**

Four groundwater studies are underway, funded by the relevant municipalities, the Ministry of Environment, and managed by the local conservation authorities. These include the York-Durham-Peel-Toronto Coalition and Conservation Authorities Moraine Coalition study covering the Greater Toronto Area; the Trent Conservation Coalition study encompassing the eastern part of the moraine; the County of Victoria (now City of Kawartha Lakes) study; and the Simcoe County study covering the north and west of the moraine. These groundwater studies will make valuable contributions to the development of watershed plans which in turn will be useful in developing source water protection plans.

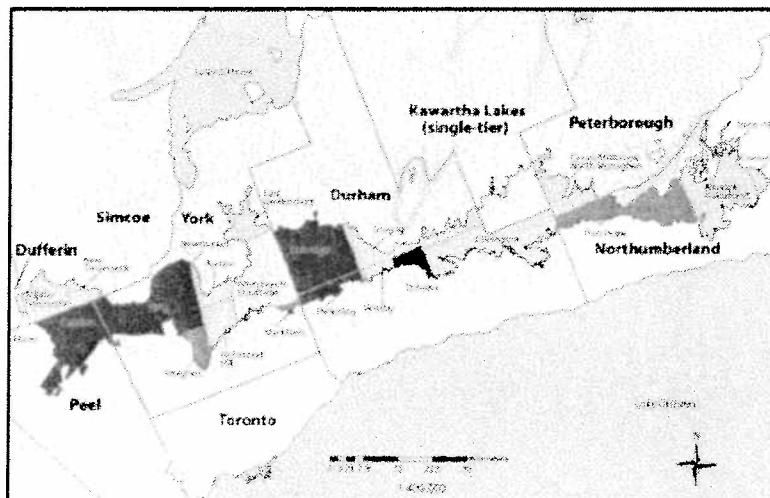
## Lower-tier (Area) Municipal Progress



### Map Key

OPA Adopted ZBLA Not Adopted	Tree cutting By-law Adopted	Wellhead Protection Policies Adopted
OPA and ZBLA Adopted	Fill/Site Alteration By-law Adopted	Wellhead Protection Policies NOT Adopted
OPA = official plan amendment ZBLA = zoning by-law amendment		Wellhead Protection Policies Not Applicable

## Provincial Progress



### Area Municipalities - 24

OPA and ZBLA Approved	OPA NOT Approved ZBLA NOT Approved
OPA Approved, but ZBLA NOT Approved	ZBLA NOT Adopted/Submitted

OPA = official plan amendment

ZBLA = zoning by-law amendment

### Regions/Countries - 8

OPA Approved
No Planning Functionality

### Official Plan Conformity: **B+**

All 24 area municipalities have adopted official plan amendments (OPAs) with 63% making the October 22, 2003 deadline. Pickering and Oshawa recently adopted moraine-OPAs justifying non-compliance as 'lack of need' due to the non-urban nature of the moraine lands within their jurisdictions.

### Zoning By-Law Amendments: **B-**

Of the 24 municipalities, only Whitchurch-Stouffville has yet to adopt a moraine-zoning by-law amendment. Only 38% met the October 22, 2003 deadline.

### Wellhead Protection: **C**

The value of the ORMCP is evident when examining levels of progress on wellhead protection. Of the 11 municipalities who reported having wellhead protection policies, several (New Tecumseth, Newmarket and Aurora) reported that only moraine wellheads were identified in official plan amendments. Vaughan and Hamilton have not yet developed any wellhead protection policies. There was insufficient data received from Alnwick-Haldimand, Cranache, Oshawa, Pickering, Uxbridge and Whitchurch-Stouffville upon which to report satisfactorily. Clarington, Mono, Markham, Scugog, Whithy and Trent Hills report that no wellheads exist within their moraine lands.

### Tree-Cutting By-laws: **A**

All of the 24 area municipalities have some form of tree protection controls either under regional or county by-laws or in the case of Caledon, a lower-tier town-wide by-law.

There is concern that some of these by-laws, while in place, may not be vigorously enforced and administered.

### Site-alteration or Fill By-laws: **C**

Some municipalities have fill by-laws, others have site-alteration by-laws and some rely on conservation authority fill regulations. Some have no related by-laws at all. There is a high probability that most of these by-laws were adopted without the requirements of the ORMCP and as such it is difficult to evaluate their effectiveness.

### Provincial Approvals on Municipal Conformity to the Oak Ridges Moraine Conservation Plan

The Ministry of Municipal Affairs and Housing is responsible for enforcing municipal compliance to the ORMCP and for approving official plan and zoning by-law amendments of all eight regions/counties and 24 area municipalities.

### Official Plan Approval: **B-**

The average approval time was 14 months for upper-tier municipal official plan amendments. Fourteen months was also the average approval time for the lower-tiers that were approved by April 22, 2006. However, five area municipalities have not yet been approved by the Ministry of Municipal Affairs and Housing 2.5 years after being submitted to the ministry.

### Formal By-Law Approvals: **C-**

As of April 22, 2006, the province has approved four of the 24 area municipal zoning by-law amendments (Vaughan, Markham, Port Hope, and Hamilton). The complexity of this undertaking must not be underestimated and the province is to be commended for committing resources to ensuring a thorough and comprehensive review. Nevertheless, the government should have anticipated the magnitude of the job and acted accordingly.

### Technical Paper Series and Ecological Integrity Mapping

The ORMCP identifies a moraine-wide system of key natural heritage features, hydrologically sensitive features and landform conservation areas that together provide for the ecological integrity of the moraine.

The Ministry of Natural Resources (MNR) made draft mapping available to municipalities for use in preparing zoning by-law amendments and posted final draft technical papers on the Environmental Bill of Rights in November 2003. In June 2005, the Ministry of Environment (MOE) posted draft technical papers dealing with the water sections of the ORMCP. It is concerning that there has been no further word on the status of the Technical Paper Series.

MNR's and MOE's draft technical paper series are comprehensive and useful in providing guidance to municipalities. However, a lack of provincial assistance including municipal training workshops and active involvement in helping to settle disputes around interpretations of the technical criteria raises concerns about provincial accountability to the effective implementation of the ORMCP.

### Technical Paper Series and Ecological Integrity Mapping: **A**

Two significant amendments made to the Oak Ridges Moraine Conservation Act include: closing a serious loophole in section 17 dealing with transition files; and broadening the scope of what the province can require municipalities to include in tree-cutting and site-alteration by-laws. The patchwork array of tree cutting and site alteration by-laws across the moraine is concerning and should become a priority after official plan and zoning by-law conformity is completed.

# MONITORING the MORaine

**Monitoring the Moraine (MTM)** is a collaborative project between Citizens' Environment Watch (CEW), STORM Coalition (Save the Oak Ridges Moraine), and Centre for Community Mapping (COMAP). It is designed to engage and sustain community volunteers in science, stewardship, monitoring and decision-making on the Oak Ridges Moraine.

In 2002, the Ontario government took steps to protect the moraine through the passage of the Oak Ridges Moraine Conservation Plan (ORMCP). The MTM project partners applaud the vision, objectives and intent of the ORMCP, and believe it provides the foundation to sustain and strengthen the ecological and hydrological integrity of the Oak Ridges Moraine and its associated communities. However, the moraine continues to be under pressure from challenges associated with urban sprawl. The ORMCP, like any regulation, is only as strong as the will of people to implement it. The future health of the moraine will not rest solely with the provincial or municipal governments; residents and other interested parties must also be involved. People living on the moraine, and those in neighbouring urban centres, must work together to ensure that the ORMCP is not only adhered to, but that it is also effective and remains relevant over time. An effective way for volunteers to achieve this is through ecological and policy monitoring at the community level.

The Monitoring the Moraine project engages volunteers in ecological and policy monitoring with the goal of determining the effectiveness of the ORMCP and measuring changes to the moraine landscape as a result. The project will ensure that the information gathered by participating volunteers is successfully communicated to other stakeholders. This is not an easy task given the geographic size and complexity of the Oak Ridges Moraine. In order to develop an accurate picture of the entire moraine's ecological health, consistent standards or protocols must be agreed upon and applied at all levels of monitoring – the MTM project works toward this goal. The challenge is to create a common monitoring framework within which everyone dedicated to the moraine's preservation can work. Thus, the Monitoring the Moraine project aims to:

- Develop, implement and evaluate collaborative approaches to community-based monitoring across the Oak Ridges Moraine landscape;

- Improve the efficiency and utility of both environmental and policy monitoring;
- Develop an effective and dynamic monitoring framework that is widely applicable to all communities and moraine monitoring organizations;
- Generate a visual and interactive 'big picture' in the form of an online map that can be viewed and updated by anyone with Internet access;
- Inform decision-making by disseminating relevant and credible environmental and policy monitoring data to key decision-makers;
- Facilitate a strong and informed community voice in the upcoming 2014 review of the ORMCP;
- Provide a model for other large scale monitoring projects, provincially, nationally and internationally.

The success of this ambitious project relies on community initiative and participation. The project is being guided and implemented by the "Monitoring Advisory Committee", comprised of local volunteer champions, moraine-based environmental and citizens' groups, environmental non-government organizations, provincial and regional government, conservation authorities, and the private sector. As a result, diverse areas of expertise and knowledge are being drawn upon. At the same time, this collaboration ensures the project will recognize and support what residents hold dear.

The MTM project will benefit communities across the moraine in numerous ways. It will provide the necessary education, training and support to carry out monitoring projects and help to ensure that the data generated by participating volunteers is valuable and scientifically defensible. This will allow community members to raise and act upon environmental concerns in a timely fashion. Community empowerment will lead to wider community involvement and ensure that those who live, work and play on the moraine will be informed, engaged and well positioned to protect this unique landscape for years to come.

## Project Partners



Citizens' Environment Watch empowers people in Ontario to pay attention to their local environment. CEW provides education, equipment and support to monitor local ecosystem health, and opportunities to participate in informed community decision-making and active stewardship. CEW has experience working with volunteers who are keen to undertake community-based environmental monitoring as part of their efforts to protect and restore the environmental integrity of the Oak Ridges Moraine.

For more information, visit [www.citizensenvironmentwatch.org](http://www.citizensenvironmentwatch.org)



Save The Oak Ridges Moraine Coalition (STORM) is focused on protecting the ecological integrity of the Oak Ridges Moraine. Since 1989, STORM has been working at the local and regional levels to ensure that municipalities make good planning decisions that respect the environmental significance of the moraine and that take into account its ecological and hydrological functions. STORM's years of experience in policy and planning advocacy on the Oak Ridges Moraine and its well-developed network of local and regional contacts were critical to the campaign that saved (legislatively) the Oak Ridges Moraine.

For more information, visit [www.stormcoalition.org](http://www.stormcoalition.org)



The Centre for Community Mapping is an assembly of designers and researchers, whose goal is to provide accessible and affordable informatics tools and support to community-based organizations. COMAP's main focus is to enable communities to communicate information through a sustainable, shared infrastructure, a common map platform for visual exploration and contribution of community information. The common map will have natural and cultural heritage applications, as well as land use management policy monitoring applications, serving communities that care for the Oak Ridges Moraine.

For more information, visit [www.comap.ca](http://www.comap.ca)

## Supporters



The core purpose of the Oak Ridges Moraine Foundation is to provide support and encouragement for activities that preserve, protect, and restore the environmental integrity of the Oak Ridges Moraine and support a trail along it. The Foundation operates primarily by funding the work of others and through offering leadership or coordination for moraine-wide activities where appropriate. The Foundation also sees itself as a convener, bringing people and interests together to identify common ground, and as a funding partner. The Foundation will encourage all activities that are consistent with its core purpose and objects and with the Oak Ridges Moraine Conservation Plan.

For more information, visit [www.ormf.com](http://www.ormf.com)



The Metcalf Environment Program seeks to strengthen and enhance the effectiveness of people and organizations working together to ensure the ecological health and integrity of Canada's natural and working lands.

For more information, visit [www.metcalffoundation.com](http://www.metcalffoundation.com)

For more information, or find out how to get involved, email [info@monitoringthemoraine.ca](mailto:info@monitoringthemoraine.ca), call 647-258-3280 or visit [www.monitoringthemoraine.ca](http://www.monitoringthemoraine.ca)