

Appendix 5.2 *Oak Ridges Moraine*

The Issue:

A moraine is a deposit of rocks and soil left behind when a glacier retreats. Several thousands of years ago deep glaciers covered a part of Southern Ontario. When the glaciers started to melt and the ice left the area, the debris frozen within the glaciers was left behind. This is now known as the Oak Ridges Moraine, a landform unique to southern Ontario. It is one of Ontario's largest moraines, extending 160 kilometers from the Niagara Escarpment in the west to the Trent River system in the east. Besides being a beautiful landscape and habitat to many plant and animal species, the Moraine is a water recharge and discharge area that provides fresh, clean water to the streams, rivers and wells that supply water to over 250,000 people. Urban development on the Oak Ridges Moraine in the 1980s and 1990s changed the way water moved through the natural system. Roads, parking lots, housing and industrial developments compacted the soil and prevented groundwater recharge. Instead, storm water contaminated with oil, pesticides, fertilizers, road salt and silt entered the nearby streams and rivers, thus undermining the value of the Oak Ridges Moraine as a natural source of pure water.

The Players:

Starting in 1999, several organizations including Save The Oak Ridges Moraine (STORM), the Federation of Ontario Naturalists (FON) and Earthroots worked closely on joint projects to get the attention of the public, the provincial government and the media.

The Actions:

These organizations called for individual actions that included writing personal letters to the Premier of Ontario, the local MPP (Member of Provincial Parliament), and editors of local journals. Members of the public also raised their voices at town hall meetings in Toronto, Caledon, Uxbridge and Richmond Hill. Many youth and other volunteers raised funds for the movement and joined demonstrations.

Conclusion:

The Ontario Legislature passed the Oak Ridges Moraine Conservation Act in December 2001. Four months later, the Oak Ridges Moraine Conservation Plan was approved as a regulation under the new legislation. This Plan sets firm urban boundaries and focuses on protecting headwater areas, watersheds and groundwater features and functions, as well as forests, wetlands and farmlands.

Appendix 5.3 *Smart Growth*

The Issue:

New development that consumes land at a faster rate than the rate of population growth is known as urban sprawl. Sprawl interferes with the natural functioning of ecosystems and contributes to air and water pollution. Urban sprawl is growing all over Ontario as well as in some other parts of Canada. However, merely withdrawing land from development is not enough to save it from environmental “insults” that affect extensive areas and cross political boundaries. The solution to sprawl is Smart Growth, an approach to urban development that considers all social, economic, and environmental issues in the planning process. This is a strategy to foster community partnerships and encourage local self-reliance. At its core is the idea of the efficient use of land, energy and other natural resources. Affordable housing, efficient public transit, improved air and water quality, protection of natural areas, farmlands, and water resources as well as community participation in development planning, are essential features of Smart Growth.

The Players:

Several organizations, such as the Conservation Council of Ontario and the Federation of Ontario Naturalists have been working to promote a more sustainable approach to development in Ontario for years. These organizations came together to form the Ontario Smart Growth Network (OSGN) in July 2003 to change the face of urban development.

The Actions:

The Network’s policies include stopping urban sprawl, fostering healthy communities, and supporting community involvement in planning. The organizations involved are working with all levels of government and with the media to influence government policies on Smart Growth, stimulating individual actions by one-to-one discussion with residents, and publishing community guides.

Conclusion:

The Smart Growth movement of these organizations followed by the formation of the Network marks a challenge to the provincial and municipal governments and developers to stop urban sprawl. Already the provincial government and many municipal governments in Ontario have started thinking in Smart Growth terms. The Government of Ontario formed five Smart Growth panels in 2002, one for each of five regions in the province: eastern, central, western, north-eastern and north-western. All the panels brought out reports in 2003 with region-specific strategies and action plans. Recently the provincial government announced its intention to create a permanent greenbelt for the Golden Horseshoe, which will protect hundreds of thousands of acres of environmentally sensitive land and farmland. Many municipalities, such as Waterloo and Wellington North, have already formulated strategies to revitalize the communities using smart growth principles.

Appendix 5.4 *Citizens' Environment Watch*

The Issue:

Due to cutbacks to the Ontario Ministry of the Environment in the 1990s, the resources available to monitor surface waters in Ontario became inadequate. These cutbacks created a need for citizens' increased involvement in environmental monitoring.

The Players:

Drs. Beth Savan, Ian Brindle and Ursula Franklin formed the Citizens' Environment Watch (CEW) in 1996. CEW is a non-profit organization dedicated to environmental education, and monitoring and identifying environmental quality concerns in communities across Ontario.

The Actions:

CEW actively involves school and community groups in monitoring key environmental variables in the air, water and soil to produce an accessible database of environmental monitoring information. By providing hands-on education and environmental monitoring resources, CEW promotes the role of young people as environmental stewards. High school

students join CEW workshops every year to learn methods for monitoring *e-coli*, ammonia, phosphate, and pH. They also learn biological methods for monitoring surface water quality using *benthic macroinvertebrates* and local air quality using lichens. They identify local sources of pollution and form an action strategy to improve air and water quality in their communities.

Conclusion:

CEW has been able not only to collect and provide information on monitoring data but also to promote grassroots action and empower citizens to initiate environmental improvements. For instance, a CEW volunteer discovered high ammonia concentrations in a few water samples in Collingwood harbour, presented his findings to the municipal sewage treatment plant and participated in developing plans to improve sewage treatment. This activity encouraged community involvement in Collingwood by the formation of an Inner Harbour Water Quality Committee.

Appendix 5.5 *Energy Efficient Lighting in Calgary*

The Issue:

Energy efficiency is not only cost saving but also good for the environment. By turning down the thermostat to cut our heating bills, we reduce the amount of natural gas or oil we burn. When we change our lights from highly inefficient incandescent bulbs to energy miser compact fluorescents, we use far less coal-fired electricity. Burning less natural gas, oil and coal (fossil fuels) to create electricity means a reduction in energy use and greenhouse gas emissions.

The Players:

The City of Calgary, which had one of the highest levels of street lighting in North America until recently, has now become an energy conservation leader by initiating a streetlight retrofitting program that will shed light on roads and not into the night sky.

The Actions:

In early 2002, the City of Calgary started a four-year, \$7.2-million program to retrofit 49,000 streetlights on residential roads. The

existing 250- and 200-watt bulbs are being replaced with 150- and 100-watt bulbs, which still exceed minimum illumination guidelines. Also the standard teardrop glass enclosures are being replaced by flat-lens fixtures, which focus light on the street instead of into drivers' eyes, private properties, and the sky.

Conclusion:

Calgary is the first North American city to undertake such an extensive streetlight retrofitting program. Once completed, the retrofitting program will save the City of Calgary \$2 million a year in electrical costs and reduce climate-changing carbon dioxide emissions from gas and coal-burning generators by up to 16,000 tonnes per year. This action has prompted residents of other municipalities in Alberta to write to their local government encouraging them to replace existing streetlights with energy-efficient bulbs and fixtures.

Appendix 5.6 Campaign for Pesticide Reduction

The Issue:

Many cities and municipalities spray pesticides in parks, forests and school playgrounds. Some residents of urban and rural areas also use pesticides on their lawns. These chemicals have the potential to harm the environment and human beings. The cumulative effects of being exposed to many different pesticides over a lifetime represent enormous risk to all, particularly children.

The Players:

The Partnership for Pesticide Bylaws was formed in the fall of 2002 to bring together many health, environmental and community organizations such as the Canadian Association of Physicians for the Environment, the Ontario College of Family Physicians, the Humane Society of Canada, the Canadian Environmental Law Association, Environmental Defence Canada, the Toronto Environmental Alliance and Pesticides Free Ontario in support of municipal pesticide bylaws.

The Actions:

The coalition focused its efforts on the City of Toronto and called on the municipal government to ban the non-essential use of pesticides in lawns and gardens. They educated the public through workshops and media releases and also encouraged people to participate in a survey done by Toronto Public Health. According to this survey, 72% of Toronto residents supported a municipal bylaw to restrict the use of cosmetic pesticides. A larger majority, 88%, supported restrictions on pesticide use around daycares, hospitals and homes for the aged.

Conclusion:

In May 2003, Toronto City Council adopted a bylaw to restrict the use of lawn pesticides. The bylaw came into effect in April 2004. The first year of the bylaw will focus on public education; enforcement will begin in September 2005. Many other municipalities throughout Ontario are now debating the possibility of implementing pesticide bylaws.

Appendix 5.7 *Banff National Park*

The Issue:

Banff National Park on the British Columbia/Alberta provincial border is Canada's first national park and the world's third, spanning 6641 square kilometers of valleys, mountains, glaciers, forests, meadows and rivers. Unfortunately, Banff's ecosystem has been heavily damaged by human development in recent years. To add to the damage, the Fairmont Hotels and Resorts Inc. has started clearing land at Lake Louise in the heart of the park for a 14,000 square metre convention centre. This would endanger many threatened wildlife species, including grizzly bears.

The Players:

The Environmental Investigation Agency (EIA), an international campaigning organization that is committed to investigating and exposing environmental crime, organized the fight against the construction of this convention centre in Banff National Park.

The Actions:

EIA organized demonstrations in several parts of North America and Europe against the proposed development in the park. One such demonstration was held in April 2003 at the Fairmont Royal York in downtown Toronto.

Another demonstration was held in front of the House of Commons in Ottawa to protest the decision of the Canadian Heritage Minister to allow this development. Protesters expressed their outrage at Fairmont Hotels' plans to build the seven-storey convention centre at its Chateau Lake Louise complex in Banff National Park and distributed more than a thousand flyers describing the issue. Hundreds of passers-by signed a petition asking the Minister for Canadian Heritage to immediately withdraw the permit for the convention centre. The protesters also asked people to write to Fairmont expressing their concern.

Conclusion:

The protests were tremendously successful in attracting media attention, raising public awareness about the potentially disastrous impacts of this development, and further strengthening the message to Fairmont Hotels and Parks Canada that this development is unacceptable. Although the protests did not bring any change at the government level, legal challenges are still pending.

Appendix 5.8 *The Earth Keepers Solid Waste Management Planning Program*

The Issue:

Aboriginal Peoples have a historical relationship to the land and have, over many generations, developed a wealth of knowledge of their lands. Despite this knowledge, in today's society they have not been able to participate fully in sustainable development and need support to do so.

The Players:

Ontario First Nations Technical Services Corporation has developed a unique training initiative for aboriginal people who learn to combine technical knowledge on solid waste management with their traditional knowledge.

The Actions:

The program is based on the circle of life, a traditional aboriginal concept. Aboriginal people participate in the program to gain the necessary skills for applying solid waste management plans to their home communities. Participants engage in a combination of both formal training sessions in a central location and planning periods in their home communities. At the end of the program, each participant has the knowledge and tools to develop a Solid Waste Management Plan for their community. All aspects of this program are communicated to the local people through a monthly newsletter.

Conclusion:

This program has encouraged participants to draw on traditional knowledge, community resources and technical information to assess options for dealing with solid waste. For example, the Manitou Rapids First Nation in northwestern Ontario worked with other community groups to improve the local landfill site. The site was a mess - people dumped their garbage wherever they wanted, the landfill was expanding rapidly and animals were raiding it. Local people, working with Earth Keepers and other environmental agencies, implemented many improvements. As a result, the situation at the landfill has improved. Illegal dumping has been reduced by installing a gate that can be locked. There is a plan to build a fence around the entire area. The landfill has been divided into different sections, so that items such as tires or furniture or industrial wastes are not dumped in the same area. A recycling program has also been extended and a pilot roadside composting program was planned for spring 2004. The compost will be used in a community garden.

Appendix 5.9 *PollutionWatch*

The Issue:

It is important for a concerned citizen to know how much pollution is being released in the community. This information enables people to take a stand against pollution and raise their voices demanding remedial or preventive actions.

The Players:

The Canadian Environmental Law Association, the Canadian Institute for Environmental Law and Policy, and the Canadian Environmental Defence Fund, launched the web program PollutionWatch in 2001, relaunching it in its current format in June 2003.

The Actions:

The PollutionWatch website is a unique Internet-based service that allows Canadians to find out about local toxic pollution by simply typing in a postal code. Visitors to the site can identify the facilities that are

releasing chemical pollution, the types of chemicals that are being released, the address, fax and telephone number of the polluting facility. PollutionWatch also provides profiles of chemicals, describes their potential health effects, and explains the laws and regulations that govern toxic pollution in Canada. The user can also analyze pollution trends over several years and take action by contacting politicians by fax. www.pollutionwatch.org

Conclusion:

PollutionWatch has proved to be a useful tool for information about the toxic pollution that facilities release in the community, the province or the nation. Concerned citizens have used this website to find out about companies that pollute in their neighbourhood and have written to ask both the polluting industries and local governments to take action.