Environmental Commissioner of Ontario

Changing Perspectives



Annual Report 1999/2000

Cover Photos

The aerial photographs on the cover were taken of the same landscape in 1946 and in 1989. The lands shown include the area above and below an escarpment that runs through the City of North Bay. The pictures illustrate the profound change in the landscape that has occurred across Ontario with creeping urbanization.





Production Notes

Paper – Rolland Opaque New Life 30% recycled from post-consumer fiber 100% elemental cholrine free Printed with vegetable-based inks Recyclable Environmental Commissioner of Ontario



Commissaire à l'environnement de l'Ontario

Gord Miller, B.Sc., M.Sc. Commissioner Gord Miller, B.Sc., M.Sc. Commissaire

October 2000

The Honourable Gary Carr
Speaker of the Legislative Assembly
Room 180, Legislative Building
Legislative Assembly
Province of Ontario
Queen's Park

Dear Mr. Speaker:

In accordance with section 58 of the *Environmental Bill of Rights, 1993*, I am pleased to present the 1999-2000 annual report of the Environmental Commissioner of Ontario for your submission to the Legislative Assembly of Ontario.

Sincerely,

Gord Miller

Environmental Commissioner of Ontario

1075 Bay Street, Suite 605 Toronto, Ontario M5S 2B1 Tel: (416)325-3377 Fax: (416) 325-3370 1-800-701-6454



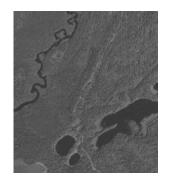
1075, rue Bay, bureau 605 Toronto (Ontario) M5S 2B1 Tél: (416)325-3377 Téléc: (416) 325-3370 1-800-701-6454

Table of Contents

A Message from the Environmental Commissioner4				
	Highlights of the ECO 1999-2000 Report of the Environmental Commissioner of Ontario6			
Part 1	The Environmental Bill of Rights	10		
Part 2	The Environmental Registry	12		
	Quality and Availability of Information	15		
	Unposted Decisions	22		
	Information Notices	25		
	Exception Notices	28		
	Instruments	29		
	Educational Initiatives	32		
Part 3	Significant Issues 1999-2000	34		
	Protecting Ontario's Groundwater	35		
	The Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA)	43		
	Protection of Species at Risk			
	Intensive Farming			
	The Sale of Government Lands			
Part 4	Ministry Environmental Decisions	60		
	Ontario's Living Legacy - Land Use Strategy	60		
	Recognizing and Encouraging Voluntary Action	63		
	Classification and Exemption of Spills: Amending Regulation 675/98 of the Environmental Protection Act (EPA)	65		
	MNR's Natural Heritage Reference Manual	68		
	Closing the Spring Bear Hunt	70		
	Additional Exemptions from Certificates of Approval for Air: Environmental Protection Act, Regulation 505/99	71		
	Amendments to Regulation 828, <i>Niagara Escarpment</i> Planning and Development Act	72		
	Setting Environmental Quality Standards in Ontario: MOE's Standards Plan	74		
	The Need for Action	80		

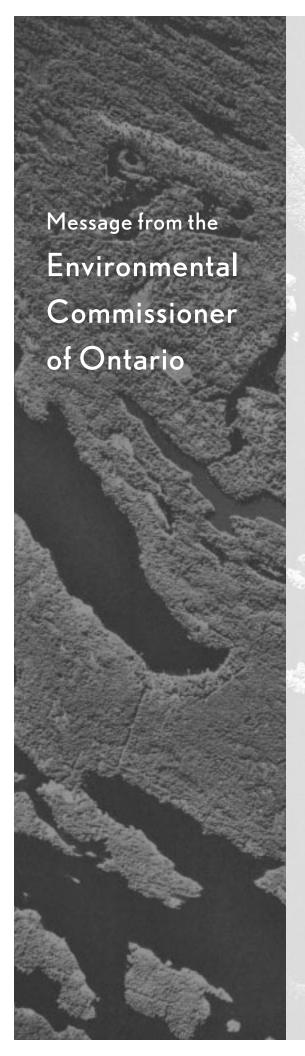
Changing Perspectives

Part 5	Reviews and Investigations	86
	Nuisance Impacts from Discharges of Noise and Odours	90
	Electricity Restructuring	92
	Forestry	95
	Hazardous Waste	100
	Landfills	103
	Abandoned Mines	105
	Investigation: Aggregate Resources Act	108
Part 6	Appeals, Lawsuits and Whistleblowers	112
Part 7	Ministry Progress	116
	Ministry Responses to Recommendations	
	Made in the ECO 1998 Annual Report	
	New ECO Initiatives – 2000	
	Cooperation from Ontario Ministries	125
Part 8	Developing Issues	128
	Ecosystem Monitoring	128
	Genetically Modified Organisms in Agriculture	132
	Ecosystem Fragmentation	135
Part 9	Financial Statement	140
An Effect	ive Environmental Registry	
	Understandable Descriptions #1	16
	Understandable Descriptions #2	17
	Interpreting the EAA Exemption	54
	Explaining the Effects of Public Comment	108
	Decision Notices	114
	Making Information Available	125
Appendia	x A – Additional Ministry Comments	146









Changing Perspectives

As someone who deeply believes in the great traditions of the Ontario public service, I consider my appointment as Environmental Commissioner of Ontario an honour and a privilege. In that capacity and with the greatest respect, I offer this annual report to the Legislature and to the people of Ontario.

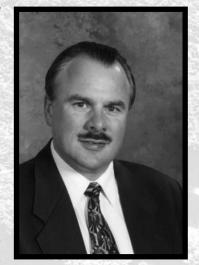
The office of the Environmental Commissioner of Ontario (ECO) has been effectively administering the *Environmental Bill of Rights (EBR)* for over six years now. It is an institution that serves the people and the ecosystem of Ontario well. I acknowledge my appreciation to the first Environmental Commissioner, Eva Ligeti, for meeting the challenge of creating and establishing the ECO in those difficult and formative years. Ms. Ligeti and the Legislature should be assured that I will do my utmost to protect and cultivate the office and to expand its influence and effectiveness in protecting the environment of Ontario.

I would also like to acknowledge the efforts of the interim Environmental Commissioner, Ivy Wile, who served in this capacity during the six months it took to select the new Commissioner. In her brief tenure, Ms. Wile made an important and significant contribution to the organization. Her appointment was an appropriate culmination to a long and distinguished career in protecting Ontario's environment.

The *Environmental Bill of Rights* governs the role and activities of the ECO. It sets out formidable objectives relating to protecting our ecosystems. However, these objectives are not accomplished through the direct activity of the ECO. Rather, they are met by working to change and improve the way government ministries make decisions and conduct their operations. This is largely accomplished by encouraging the citizens of the province to exercise their rights under the *EBR* and become engaged in the environmental decision-making process. My report is the product of such efforts during the period from January 1, 1999, to March 31, 2000.

This report, to some extent, reviews the past, present and future of environmental protection in Ontario. It updates the status of concerns previously described by the ECO, and it identifies many current and complex issues, some of which are administrative in nature but many of which pose substantial risks to the natural ecosystems of Ontario. The report also anticipates some future environmental issues, drawing on the expertise and insights of the ECO staff in order to convey early warnings to the Legislature.

In preparing this report, I was struck by the apparent inability of several ministries to respond adequately in finding solutions to the kind of environmental problems we currently face. This inadequacy may well be a symptom of a more fundamental flaw in our environmental protection system. It may be that ministries cannot "see" the problems. Their policy structures, organization and procedures are not able to detect developing issues because these tools were created for another time and a former set of environmental problems. These ministries may lack the needed broader perspectives on the issues and the organizational structures that would correspond to those perspectives.



In 1969 when the astronauts walked on the moon, they took a photograph of the Earth that was dubbed "earthrise." It has been sug-

gested that their photo had a profound impact on human culture. Although all educated people knew that the earth was a planet in a larger solar system, it was not until we saw "earthrise" that our fundamental perspective changed and we began to think and act as if the tiny blue planet did have limits - as if our activities could have consequences on a global scale. Earthrise changed our perspective.

So do we, as well, need a change of perspective on environmental protection in Ontario. We know that many of the challenging problems of the day, such as Great Lakes toxins, the loss of biodiversity, and groundwater protection are problems on an ecosystem scale. Yet we continue to seek solutions to these problems through institutions and policies that are site-specific and divided into narrow jurisdictions. We must broaden our thinking to break down the jurisdictional barriers between ministries. We need to change our perspective on Ontario's environment to an ecosystem perspective.

Just as the new vantage point from space changed our comprehension, so a new ecosystem perspective will broaden our vision. We will see the cumulative impacts of all our local activities, developments and land use conflicts. And we will be able to ask the question, "Is this the ecosystem landscape we want?" If the answer to that question for the majority of Ontarians is not in the affirmative, then we must begin the public debate about a major revision of the policies of environmental protection in Ontario. It is with these thoughts that I offer you my 1999/2000 annual report, "Changing Perspectives."

Gord Miller

Environmental Commissioner of Ontario



Part 1: The Environmental Bill of Rights

The goals of the *Environmental Bill of Rights (EBR)* are to protect and restore the natural environment and to protect people's right to a healthy environment. The *EBR* gives all Ontario residents the right to participate in environmental decisions made by provincial ministries. Under the *EBR*, Ontarians have the right to comment on environmentally significant ministry proposals; ask a ministry to review a law or policy or to investigate alleged harm to the environment; appeal a ministry decision; and take court action. The Environmental Commissioner of Ontario (ECO) is appointed by the Legislature to monitor and report on government compliance with the *EBR* and to educate the public about their rights.

Part 2: The Environmental Registry

The Environmental Registry gives Ontarians electronic access to the government's environmentally significant proposals. The ECO monitors how well ministries utilize the Registry and whether the public is given enough time and information to be able to comment on proposals before they become final decisions. The ECO also identifies ministry decisions that should have been, but were not, posted on the Registry, such as possible changes to the Green Workplace Program, the procedures for determining whether new aggregate operations should take place on the Niagara Escarpment, and MNR's decision to allow hunting in wilderness parks.

Part 3: Significant Issues

The Environmental Commissioner of Ontario is focusing special attention on a number of environmental issues that require prompt attention by Ontario ministries. Some of these issues are the subject of applications under the *EBR* that were denied by provincial ministries in spite of the compelling evidence and valid concerns presented by applicants. The ECO is concerned that current ministry management of some of these issues may be resulting in ongoing environmental damage or the loss of ecologically sensitive or important conservation lands to development, without the public's knowledge.

Protection of Ontario's Groundwater: Ontario has a confused patchwork of laws and policies covering groundwater. Development and intensification of land use are placing extraordinary demands on groundwater, creating concern that some aquifers are being depleted faster than they can be recharged. The Ontario ministries that share responsibility for groundwater management should work together to develop a comprehensive groundwater management strategy, including identifying sources of contamination and the potential effects on health.

	of its own key clean-up goals and objectives. The ECO's review of this issue has found that many of the most important tasks to restore the Great Lakes are uncompleted and inadequately funded. A new agreement, with clear objectives and timelines, is required
	Protection of Species at Risk: Species at risk are inadequately protected in Ontario by a confusing blend of generally outmoded and ineffective laws and policies. MNR is encouraged to initiate a public debate on an effective means of preventing species loss and identifying and protecting species at risk. 48
	Intensive Farming: Ontario's environmental laws do not address the problems that are caused by large, intensive farming operations. Land application of manure is one of the major sources of environmental risks. The ECO would like to see intensive farming operations regulated like other waste-producing industries. 52
	Sales of Government Lands: The Ontario Realty Corporation has been selling government lands without following the requirements of its Class Environmental Assessment, including environmental studies and public consultation on land sales affecting environmentally significant lands. The ECO review of this issue supports the need for independent auditing of ORC compliance with the Class EA.
P	art 4: Ministry Environmental Decisions
	ne ECO reviewed many of the more than 2,000 environmental decisions made by provincial ministries uring the review period. Among the most significant:
	MNR's Ontario's Living Legacy – Land Use Strategy established new parks and conservation reserves, but also allowed previously prohibited uses in the new protected areas
	MOE's REVA policy framework would permit industrial facilities voluntarily meeting high standards of environmental performance to receive streamlined approvals. The ECO urges MOE to incorporate effective monitoring and public involvement into the program
	A new decision by MOE exempts certain classes of spills from the reporting requirement. The ECO is concerned that this may compromise MOE's ability to understand the cumulative impacts and chronic sources of small spills
	The ECO believes that MNR's new Natural Heritage Manual could help to achieve the natural heritage goals of the Provincial Policy Statement, but only if MNR and MMAH work with municipalities to ensure that it is applied appropriately
	MNR passed a regulation prohibiting the shooting of bears between April and June each year, prompting thousands of comments from the public. MNR indicated its decision was based on ethical principles rather than scientific data
	MOE finalized an Approval Exemption Regulation exempting certain contaminant sources, including noise from race tracks, from the requirement for ministry approval and downloaded the responsibility for these to local authorities. The ECO is concerned that local land use planning methods may not be sufficient to control noise pollution, and that inconsistencies may result among
	Ontario communities

	Public comments on amending the <i>Niagara Escarpment Planning and Development Act</i> led to an improvement in the final version of a new regulation eliminating the requirement for a permit for certain kinds of development.	.72
	The ECO is concerned about the slow progress on MOE's plans to set or update a number of air, water, soil and other standards.	.74
	The ECO believes ministries need to update the public on a number of environmental initiatives posted long ago as proposals on the Environmental Registry. They include MOE's Regulatory Reform, Smog Plan, and Model Sewer Use Bylaw, as well as several MNR forest policies	80
P	art 5: Reviews and Investigations	
in	ased on our review of the ministries' handling of 35 applications for review and applications for vestigation submitted by Ontario residents to ministries prescribed under the EBR, the ECO as a number of recommendations to improve the handling of applications.	86
	In addition, seven specific applications are discussed:	
	Nuisance Impacts: Based on MOE's response to three applications by Ontario residents concerned with noise and odour impacts on the environment, their health and their property, the ECO concludes that the ministry does not place a high priority on enforcing contraventions of section 14 of the <i>Environmental Protection Act</i> .	90
	Electricity Restructuring: An application concerned with potential air pollution from the electricity sector was denied by both MOE and MEST because of initiatives already under way. The ECO, however, found that responses from ministries to the applicants were unsatisfactory, brief and vague, and that some concerns were ignored altogether.	92
	Forestry: Sixteen forest-related applications for investigation have been submitted over the past five years, some alleging forest industry contraventions of the <i>Crown Forest Sustainability Act</i> , administered by MNR, others alleging MNR contraventions of the <i>Environmental Assessment Act</i> , administered by MOE. The ECO is concerned with MNR's ability to monitor whether forest companie are complying with forestry rules, given reduced staffing and reliance on industry self-monitoring. The ECO is also concerned with MOE's handling of the investigations into MNR's compliance with the <i>EAA</i> .	es . 95
	Hazardous Waste: Applications requesting reviews of MOE's hazardous waste management regime have alleged that the ministry's current approvals process for new and expanded facilities is inconsistent and inadequate, placing the health and safety of Ontario residents at risk. The ministry denied the applications, saying reviews of these issues were already under way. However, the ECO believes that insufficient information on these initiatives was provided to the applicants.	00
	Landfills: Two applications, concerned with impacts on areas adjacent to municipal landfills, request that MOE review its approvals for the landfills. Both requests were denied on the basis that the certificates of approval were less than five years old. Two additional applications alleged various legislative and certificate of approval contraventions at two other municipal landfills	

Abandoned Mines: An application for investigation of the Kam Kotia Mine and Mill site near Timmins highlighted the problems of public safety and environmental hazards at such sites. It is estimated that Ontario has 6,000 abandoned mines, and the ECO urges MNDM to focus greate attention on their environmental rehabilitation.	r
Aggregate Resources Act Investigation: This application alleged contraventions of the ARA which damaged a wetland and a woodlot, as well as damage to the groundwater sources of cold water trout streams. Although the investigation was thorough, the ECO found the summary of the investigation provided to the applicants was deficient. The application emphasized the need for improved monitoring by MNR of aggregate operations.	r
Part 6: Appeals, Lawsuits and Whistleblowers	
This section reviews the extent to which these additional <i>EBR</i> rights have been exercised in 1999/2000, including leave to appeal applications relating to permits to take water and to the use of Dombind as a dust suppressant on Ontario roads.	112
Part 7: Ministry Progress	
Ministry Responses to Recommendations: The ECO analyzes ministry feedback on their progress in implementing previous ECO recommendations.	116
With this 1999-2000 annual report, the ECO has initiated an annual Recognition Award to ministry programs that best meet the goals of the <i>EBR</i> .	123
The ECO reviewed how well ministries cooperated with staff to carry out the ECO mandate during the reporting period.	125
Part 8: Developing Issues	
In this 1999-2000 annual report, the Environmental Commissioner of Ontario draws attention to be ministries are missing the ecosystem perspective on a number of issues. This poses a real risk befor ministries and the Ontario public, because unforeseen problems may erupt without warning.	
Ecosystem Monitoring: The health and future of ecosystems cannot be properly protected without meaningful and continuous monitoring. Ministries must ensure that adequate resources are available to design and operate effective monitoring systems and to report the results	
Genetically Modified Organisms: Bio-engineering poses risks to ecosystems that may not be apparent at present. The ECO recommends the establishment of an independent provincial advocate for ecosystem protection capable of addressing these issues.	132
Ecosystem Fragmentation: The ECO believes there is an urgent need for provincial ministries to monitor and manage the impacts of ecosystem fragmentation, especially in southern Ontario, where there has been a massive transformation of croplands, forests and wetlands into built environments	135



The Environmental Bill of Rights

The *Environmental Bill of Rights (EBR)* gives the people of Ontario the right to become involved in ministry decisions that affect the environment. The *EBR* helps to make provincial ministries accountable for their environmental decisions, ensuring that those decisions are made in accordance with goals all Ontarians hold in common – to protect, conserve, and restore the natural environment of this province for present and future generations. While the government has the primary responsibility for achieving these goals, the people of Ontario now have the means to ensure they are achieved in a timely, effective, open and fair manner.

The EBR gives Ontarians the right to . . .

- · comment on environmentally significant ministry proposals.
- ask a ministry to review a law or policy.
- ask a ministry to investigate alleged harm to the environment.
- · appeal certain ministry decisions.
- take court action to prevent environmental harm.

Statements of Environmental Values

Each of the ministries subject to the *EBR* has a Statement of Environmental Values (SEV). The SEV guides the minister and ministry staff when they make decisions that might affect the environment.

Each SEV should explain how the ministry will consider the environment when it makes environmentally significant decisions, and how environmental values will be integrated with social, economic and scientific considerations. Each minister makes commitments in the ministry's SEV that are specific to the work of that particular ministry.

What is the Role of the Environmental Commissioner?

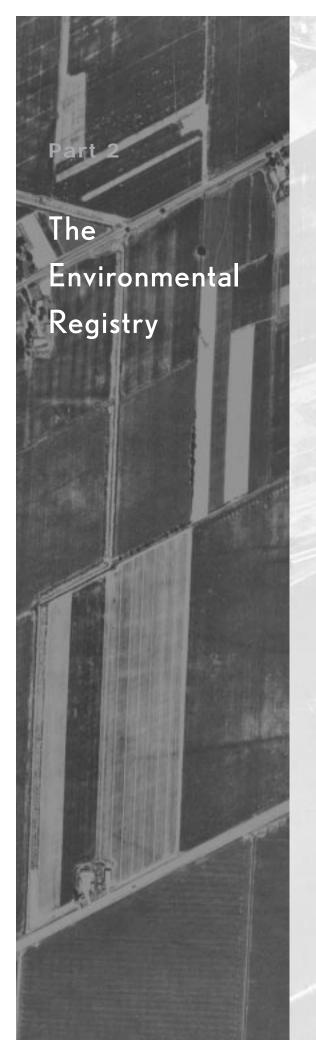
The Environmental Commissioner of Ontario (ECO) is an independent officer of the Legislative Assembly and is appointed for a five-year term. The Commissioner reports annually to the Legislative Assembly – not to a political party or to a ministry.

In the annual reports to the Legislature, the Environmental Commissioner reviews and reports on the government's compliance with the EBR. The ECO and staff carefully review how ministers exercised discretion and carried out their responsibilities during the year in relation to the EBR. We review whether applications from the public requesting ministry action on environmental matters were handled appropriately, and whether ministry staff complied with the procedural and technical requirements of the law. The ECO also monitors whether the actions and decisions of a provincial minister were consistent with the ministry's Statement of Environmental Values and with the purposes of the EBR.

The Environmental Commissioner and ECO staff assess how ministries use public input to draft environmental Acts, regulations and policies, and how ministries investigate reported violations of Ontario's environmental laws. Each year the ECO also reviews the use of the Environmental Registry, monitors appeals and court actions under the EBR, and reviews the use of EBR procedures to protect employees who experience reprisals for "whistle-blowing."

Ministries Prescribed Under the EBR (October 2000)

Agriculture, Food and Rural Affairs	(OMAFRA)
Citizenship, Culture and Recreation	(MCzCR)
Consumer and Commercial Relations	(MCCR)
Economic Development and Trade	(MEDT)
Energy, Science and Technology	(MEST)
Environment	(MOE)
Health	(MOH)
Labour	(MOL)
Management Board Secretariat	(MBS)
Municipal Affairs and Housing	(MMAH)
Natural Resources	(MNR)
Northern Development and Mines	(MNDM)
Transportation	(MTO)



What is the Environmental Registry?

The Environmental Registry is a key foundation of the *Environmental Bill of Rights*. It is an Internet site that provides the public with electronic access to environmentally significant proposals and decisions, appeals of instruments, court actions, and other information related to ministry decision-making. Ministries must post information about environmentally significant proposals on the Registry so that the public is able to provide input on decisions before they are made.

Ontario residents have made good use of the Registry since its inception in 1994. The past year was no exception. User sessions averaged between 2,500 and 3,000 per month for 1999 and are continuing to increase as more Ontarians realize the benefits of monitoring the Registry and keeping informed about environmental proposals in their communities.

What's New?

Access

The Ministry of Citizenship, Culture and Recreation has completed the public Internet access portion of the Network 2000 strategy so that almost all Ontario library branches now provide public Internet access. Ontario residents who do not have Internet access in their homes can now log-on to the Registry at their local libraries.

Web site to be re-designed

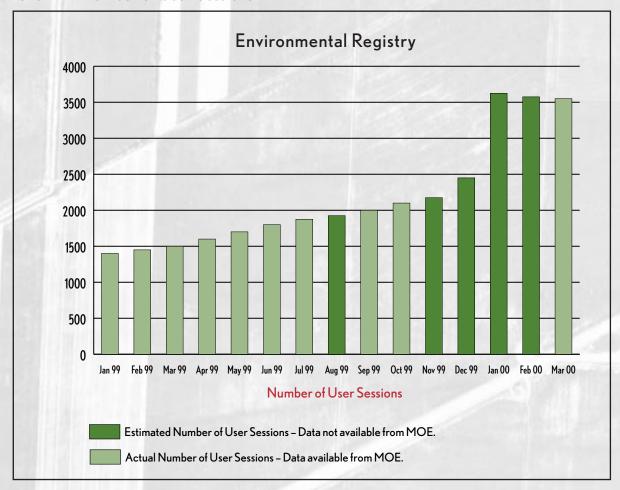
Early in the spring of 2000, the Environmental Bill of Rights Office (EBRO) at the Ministry of the Environment began the process of redesigning the Registry Web site. The object was to create a more user-friendly Web site with a fresh look, making use of newer web browser software technology. The office of the Environmental Commissioner did have concerns that some of the possible technology upgrades would make the Registry less accessible for those who had earlier version browsers or low speed modems. The EBRO agreed that the Web site should be optimized to allow the broadest possible access. As a result, the Registry will still be compatible with 3.0 level browsers, 28.8 kbps modems and low resolution screens.

Making the Registry Information More Accessible

The Registry is now firmly established as a cost-effective means for ministries to consult with the public about environmentally significant proposals. However, the ECO believes that MOE could make better use of the historical and current information contained on the Registry database by making it more accessible to Ontarians.

Lately the ECO has received many requests to provide mechanisms by which groups may use the Registry database in more complex and sophisticated ways. Third parties have come forward who have suggested that they would be prepared to provide such services to interested groups if the Environmental Registry database could be made available to the public through a standardized File Transfer Protocol (FTP). FTP makes it possible for a Registry user to download the entire Registry database as a batch file and import it into another database program. In this way, the Registry can be easily analyzed for many other useful purposes. The ECO is in the process of discussing with MOE ways to make the Registry information database more accessible and hopes to see progress on this project in the near future.

Chart 1 - Number of User Sessions



Environmental Registry 4000 3500 3000 2500 2000 1500 1000

Chart 2 - User Sessions Monthly Average

Environmental Assessment Home Page

Jan to Mar 1999

Apr to Jun 1999

500

0

The Environmental Registry continues to be the central place for Ontarians to look for environmental activities planned or under way in the Province of Ontario. The Environmental Assessment (EA) home page is also accessed from the Registry Web site. It contains all information related to activities that fall under the Environmental Assessment Act. At the EA home page the public can view Terms of Reference (ToR) documents that are submitted to MOE to facilitate public consultation on proposed EA activities, including information on how to comment, time frames for making comments, and descriptions of decisions made on ToRs and EA approvals.

Jul to Sep 1999

User Sessions Monthly Average

Oct to Dec 1999

Jan to Mar 2000

The Environmental Registry: Quality and Availability of Information

The Environmental Registry is only as good as the information it contains. The EBR sets out basic information requirements for notices that ministries post on the Registry. The ministries also have discretion on whether to include other information. Previous annual reports of the Environmental Commissioner have recommended that in posting information on the Registry, ministries should:

- use plain language.
- provide clear information about the purpose of the proposed decision and the context in which it is being considered.
- provide a contact name, telephone and fax number.
- clearly state the decision and how it differs from the proposal, if at all.
- explain how all comments received were taken into account.
- provide hypertext links to supporting information whenever possible.

The ECO evaluates whether ministries have complied with their obligations under the EBR and exercised their discretion appropriately in posting information on the Registry. This ensures that residents are able to participate effectively in the decision-making process.

Comment Periods

The EBR requires that ministries provide residents with at least 30 days to submit comments on proposals for environmentally significant decisions. Ministries have the discretion to provide longer comment periods depending upon the complexity and level of public interest in the proposal.

All proposals posted on the Registry in 1999/2000 were posted for at least 30 days. Furthermore, ministries did post a significant number of proposals for longer periods. The Ministry of the Environment posted 11 out of 12 proposals for new policies for 45 days or more. The Ministry of Municipal Affairs and Housing and the Ministry of Northern Development and Mines also posted important proposals with 60-day comment periods. The Ministry of Natural Resources posted 20 out of 68 proposals for policies or regulations for 45 days or more.

Unfortunately, in a few instances, ministries posted complex proposals for only 30 days. In January 2000, MOE posted three complex proposals all at the same time, with only 30-day comment periods. The notices proposed air emission monitoring requirements for electricity generating facilities, new emission limits and an emission trading system for all major sources of air pollution, and the application of the Environmental Assessment Act to the electricity generating projects. Many individuals, companies, and organizations would have been interested in commenting on all three proposals. While the ministry did continue to consult with selected stakeholders after the 30-day comment period had ended, it still should have provided a longer comment period. Alternatively, the ministry should have posted the three proposals at least 30 days apart.

An Effective Environmental Registry:

Understandable Descriptions #1

The provincial ministries prescribed under the *EBR* are required to provide only a brief description of proposed decisions on the Environmental Registry. But the description must still contain enough information for people to understand the nature of the proposal and the potential impacts upon the environment. Sometimes the ministries fail to provide enough detail. Consider the following example of a sketchy Registry notice:

Instrument Type: OWRA s. 34 –
Permit to Take Water
Description:

Source: Rankin's Back Lake

Purpose: Irrigation of an 18 hole golf course

Proposed Rate per minute: 3785 litres
Proposed Rate per day: 2,271,000 litres

Period: 150 days (May - October)

Proposed Expiry Date: March 31, 2010

This notice provides only limited information, undermining the effectiveness of the Registry.

To be able to understand what is being proposed here, the person reading the notice needs previous knowledge of what a permit to take water is. Furthermore, the potential environmental impacts and how these impacts will be mitigated are not explained. Compare this Registry notice with the one set out on the next page.

MNR posted the Ontario's Living Legacy – Land Use Strategy (OLL) for only a 31-day comment period. The ECO wrote to the ministry, requesting that the comment period be extended, as did some members of the public. However, MNR did not accede to these requests. The minister should have exercised his discretion to increase the length of the comment period in this case. (For more information on OLL, see pages 60-62.)

Description of Proposals

Ministries are required to provide a brief description of proposals on the Registry. The description should clearly explain the nature of the proposed action, the geographical location, and the potential impacts on the environment. The quality of descriptions varied widely during the reporting year. In some cases, ministries provided detailed descriptions. In other cases, ministries provided very limited information, sometimes in point form (see the example on this page). In the past, the ECO has stressed the need for ministries to use plain language in Registry notices and avoid the use of technical terms and jargon.

Policies, Acts and regulations

During this reporting period, descriptions of proposals for policies, Acts and regulations met the basic requirements of the *EBR*. They generally provided a brief and understandable explanation of the actions ministries were proposing. However, ministries could provide further context for their proposed actions, starting from the assumption that most readers know little about environmental law and policy in Ontario. For example, many notices still refer to section numbers of regulations and Acts without explaining what these sections do.

Instruments

The Ministries of the Environment, Municipal Affairs and Housing, and Northern Development and Mines, along with the Technical Standards and Safety Authority (TSSA), all administer instruments that are posted as proposals on the Registry. ECO staff evaluated the quality of information in nearly 100 instruments, which include the licences, orders, permits and certificates of approval issued to companies and individuals granting them permission to undertake activities that may adversely affect the environment.

The ECO is concerned that many instrument notices contained sketchy descriptions of the proposed instruments. For example, a Registry notice for an official plan amendment described a proposal to re-designate land from one use to another without describing the types of activities permitted under the land use designations. At a minimum, the Registry notice should have explained the types of activities permitted so that the public could understand the implications of the land use change.

A notice declaring a mine "abandoned" stated that MNDM would have the site rehabilitated at the owner's expense without providing any details. While it is encouraging that MNDM is taking action to have this mine site cleaned up, it is difficult for the public to comment without knowing the nature of the problem and the type of rehabilitation required.

Many of TSSA's and MOE's instrument notices described the proposal too briefly to provide an understanding of the proposal's implications. For example, a TSSA notice for a *Gasoline Handling Act* variance described a proposal for a "field development project on mobile fueling" that will have a "B620 tank vehicle" provide fuel to trucks and tractors. This notice should have explained the field development project and any potential impacts. The ECO is particularly concerned with the limited amount of information provided by MOE in notices for proposed permits to take water.

Ministries included the proposed expiry date for the instrument in only eight of the 100 notices reviewed. Notices should include expiry dates for time-limited instruments so the public understands the time frame for the proposed activity.

Our reviews found that ministries are trying to use plain language in most notices. However, some instrument notices still include misspellings, jargon or technical terms such as "visocity [sic] index polymer," "vacuum distillatin [sic]," "impounded kettle pond," and "cathodically protected." While it may be challenging to explain specialized words and phrases, ministries need to use plain language so that the public can understand the proposal.

An Effective Environmental Registry:

Understandable Descriptions #2

On the previous page, we set out an example of a sketchy Registry posting. A better example, below, clearly explains the nature of the proposed decision, making the Registry more understandable to the reader – and more effective.

Instrument Type: OWRA s. 34 -

Permit to Take Water

Description: This is a request for renewal of an existing Permit to Take Water issued to the golf course for the irrigation of the site. There are three production wells operated at a combined rate of 270 IGPM to recharge surface irrigation ponds on the property. As required, the wells may be used for up to 24 hours per day for up to 214 days per year. The club has installed and maintains a series of monitor wells on site and provides annual reports to the Ministry as per the conditions of the permit.

This description explains that the water will be drawn from three wells and used to recharge surface irrigation ponds (although it could have been explained that IGPM means imperial gallons per minute). It also indicates that there are monitoring wells in place to regulate whether the water taking is having an adverse impact upon the environment.

Access to Supporting Information

Ministries are required to provide information in the Registry notice about when and where residents can review supporting documentation about proposals. All ministries met this requirement. Last year, the ECO reported that TSSA instrument notices did not provide a location to view information. All of the TSSA instrument notices reviewed by the ECO during this reporting year contained this information.

The Environmental Registry notice template is ambiguous in its provision of public viewing information. Registry notices list government offices which "may" have copies of the proposal or decision and its supporting information for the public to view. Use of the word "may" is confusing, especially when the notice provides two viewing locations, and does not inform residents precisely where they can find the documentation. Last year, the ECO recommended that MOE revise the template, but the ministry did not remedy this situation in 1999/2000. In the coming year, the ministry should revise the template to indicate clearly where the public can find the information.

Registry notices should provide the name, telephone number and address of a person whom people can contact. MNDM, MMAH and TSSA consistently provided the name of a contact person. MMAH's provision of a toll-free number enhanced public accessibility. MNR almost always provided a contact name for notices describing proposed policies, Acts and regulations. However, eight MOE notices for policies, Acts and regulations did not provide a contact name and only three out of 48 MOE instrument notices reviewed by the ECO contained the name of a contact person.

Ministries are increasingly providing electronic links to supporting documentation for Registry postings. This is a positive development that saves residents a great deal of time in accessing more detailed information, helping to facilitate public participation. For some complex proposals, ministries have provided a link to a separate page on their Web site that enables users to download supporting documents.

Some hypertext links lead to a draft of the proposal. In other cases, the link leads to related background information. Hypertext links could be made even more effective by explaining in the text what information the link leads to and how the information is relevant. For example, MNR often provides a link to the Government of Ontario Publications Online Internet site without explaining to users how to navigate the site and access the necessary information.

Environmental Impacts

A number of Registry notices describe the economic and social impacts of a proposal without explaining what the environmental impacts will be. For example, MOE proposed to extend the dead-line for the use of refrigerants containing ozone depleting substances (ODS) for one year. The Registry notice did not explain that ODS released into the environment harm the Earth's ozone layer. Furthermore, the Registry notice did not clearly indicate that the implications of the ministry's decision were that ODS was not completely phased out by December 31, 1999, as committed to

in 1994. Only three comments were submitted to MOE on this proposal. If residents had fully understood the consequences of MOE's proposal, more comments might have been submitted.

In comparison, MOE did a much better job of describing the environmental impacts of stormwater when it proposed a new Stormwater Management Planning and Design Manual. The ministry stated: "Stormwater runoff is the link between the change in land use and the impacts on receiving streams and lakes. The change in landscape, stream geomorphology and the hydrologic regime has resulted in problems such as flooding, streambank erosion, increased pollutant loadings, temperature effects, baseflow reduction, habitat changes and groundwater impacts. Stormwater management practices are used to mitigate the impacts of stormwater runoff." A concise summary of environmental impacts similar to this would be helpful in all notices.

Description of the Decision

The description of the decision lets residents know the outcome of the public consultation process. Ministry descriptions tended to be quite brief, sometimes simply stating that the decision was "to proceed with the proposal." Ministries need to include the date on which the decision was made, the date on which the decision becomes effective, information about the regulation number if applicable, and an explanation of whether there have been any changes made to the proposal.

MOE began providing copies of decision documents, such as permits to take water, in electronic format that are accessible via hypertext links contained in the decision notice. This is an excellent initiative for which the ministry should be congratulated. The ECO fully endorses the use of links and encourages MOE and the other ministries to build upon this important first step and provide links to all decision documents in the future. However, links to electronic documents should not replace thorough decision notices. Ministries should still include the basic information outlined above in addition to providing links to electronic documents. In particular, MOE needs to ensure that decision notices for permits to take water include key information such as the water source, the quantity of water being taken, and the length of the permit. Notices should also clearly present any differences between the proposed permit and the final decision.

Explaining How Public Comments Were Addressed

The *EBR* requires ministries to explain how public comments were taken into account in making a decision. Ministries should take the time and effort to summarize the comments, state whether the ministry made any changes as a result of each comment, and explain why or why not. In a small number of cases, MOE has failed to acknowledge that comments were submitted in response to a proposal. This oversight leads the public to believe that the ministry has completely disregarded their concerns and diminishes their confidence in the Registry and their rights under the *EBR*.

Several Registry notices clearly outlined all the issues raised in the comments and provided the ministry's response in each case. MNR summarized all the issues raised by 8,274 comments submitted on its Ontario's Living Legacy proposal (see pages 60-62). Other good MNR decision notices include the decision to amend Regulation 828 under the *Niagara Escarpment Planning and Development Act* (see pages 72-73) and the decision to adopt the Natural Heritage Reference Manual (see pages 68-69). MOE provided a comprehensive summary through a hypertext link for its decision to amend the Spills Regulation under the *Environmental Protection Act* (see pages 65-67). The ECO encourages ministries to use these decision notices as models.

In Summary

The Environmental Registry provides the first point of contact for residents who want to participate in environmental decision-making. The Registry should be as user-friendly as possible to ensure that the experience is a positive one. The recommendations contained in this and previous annual reports are intended to improve the quality of information on the Registry and to ensure that the public is able to participate fully in the decision-making process. The ECO congratulates ministries for responding to past recommendations. In particular, ministries continue to improve access to information by providing hypertext links.

On the other hand, as outlined above, there are still further measures ministries should take to improve the information contained on the Registry. It is important for all Registry notices to contain adequate detail, for without it the public may not understand the environmental significance of a proposal, how their comments were taken into account, or the nature of the decision. The public requires this information to exercise their rights under the *EBR* and participate effectively in the decision-making process.

MCCR and TSSA Comment:

MCCR and TSSA propose to:

- Endeavor to provide improved information within posted proposals to provide the public with a better understanding of why the variance is being requested and how the undertaking may affect the environment.
- 2. Avoid the use of technical jargon wherever possible. Where technical terminology is required, an explanation of the meaning will be provided.
- Further enhance the public's ability to communicate with TSSA by continuing to provide contact information on all postings, as well as attempting to list TSSA's new toll-free telephone number and web address on all postings.

MCCR and TSSA support measures to identify environmental concerns and encourage meaningful public participation in fulfilling our regulatory responsibilities. After posting in excess of 100 variances in the 1999 reporting year, we believe the effectiveness of our efforts in this area is evidenced by the fact that only one posting received any expression of public concern. In this single case, TSSA was able to adequately address and clarify the issues of concern regarding the variance.

For additional ministry comments, see Appendix A

MNDM Comment:

With respect to the ECO's concerns regarding the Registry posting for the Ross Mine site that the MNDM did not provide information in the posting on the nature of the problem and the type of rehabilitation required, the following should be noted. While the Ministry appreciates the need for more information, in this case litigation was in process and it is problematic to comment on or provide information on cases before the courts. In addition, final details of the rehabilitation measures had not been finalized.

MOE Comment:

The expiry date for some applications for permits to take water is unknown when the application is first submitted as the proponent does not always include the expected expiry date. The actual expiry date of a permit is decided after MOE staff's technical review of the application. Upon completion of the technical review, MOE can issue the permit and post a decision notice (with an expiry date) on the Environmental Registry.

Regarding MOE's practice of acknowledging comments received on Registry notices, the ministry occasionally receives comments after the closing date for the comment period. The ministry's instrument reviewers do consider the comments, however, those comments are sometimes not reflected in the "# of comments received" field on the decision notice. The ministry's Environmental Bill of Rights Office has always recommended that any comments received on a proposal should be reflected in the decision notice, regardless of how or when they are received.

MOE appreciates the Commissioner's concerns regarding the terminology used in the Registry template (use of the word "may" in the context of where the public can access information). This enhancement is under review but any change to the Registry template would require agreement from all the *EBR* prescribed ministries.

MOE is committed to continuous improvement in the quality of its Registry postings. The ministry is looking at ways to ensure a consistent level of content in MOE registry notices which are prepared by many different offices and authors within the ministry. MOE believes that it has made progress in this area in the last year and will continue to do so.

Recommendation 1

The ECO recommends that MOE revise the Registry template to indicate clearly where the public can find supporting information on Registry notices, rather than stating that some offices "may" have information available.

Recommendation 2

The ECO recommends that MOE provide more complete information and descriptions of the undertaking for permit to take water proposals, including expiry dates for permits and functioning hypertext links.

The Environmental Registry: Unposted Decisions

When it comes to the attention of the Environmental Commissioner that prescribed ministries have not posted proposals on the Environmental Registry that are potentially environmentally significant, we review them to determine whether the public's participation rights under the Environmental Bill of Rights have been respected.

In response to the ECO's inquiries, some of these decisions are subsequently posted on the Registry as regular or information notices. In some cases, the ministry responsible provides the ECO with a legitimate rationale for not posting the decision on the Registry (for example, the decision is not environmentally significant, it was not made by a ministry but by a related non-prescribed agency, or it falls within one of the exceptions in the EBR). In other cases, the decision remains unposted, with the ECO disagreeing with the ministry's position. (The chart in the supplement to this annual report shows examples of some "unposted" decisions, the rationale given by each ministry for not posting them on the Registry, and a brief commentary by the ECO.)

Since 1995, the ECO has generally observed improved performance by the ministries, with a trend towards more Registry notices and fewer unposted decisions. However, in 1999/2000, there were still some major environmentally significant decisions made by ministries that were not posted on the Registry.

Determining the Need for Aggregate Operations in the Niagara Escarpment Plan Area

For many years, the Ministry of Natural Resources and the Niagara Escarpment Commission (NEC) have disagreed about which organization should decide whether there is need for new or expanded aggregate operations in the Niagara Escarpment Plan area. During the 1999-2000 reporting period, MNR and NEC established a new policy to resolve this issue. In June 1999, MNR presented a position paper to NEC outlining how the ministry would consider the public need for mineral aggregate resources as part of the justification for amending the Niagara Escarpment Plan to allow for new or expanded aggregate operations. NEC endorsed MNR's proposed process, and agreed that the ministry, as the provincial expert for mineral aggregate resources, would provide advice to NEC on public need for them. In February 2000, NEC adopted revised Plan Amendment quidelines to reflect the principles in MNR's position paper. And in March 2000, NEC accepted MNR's proposed procedure on a one-year trial basis. However, MNR did not post any of these documents on the Registry, claiming it was an administrative clarification.

The determination of whether or not there is public need for aggregate extraction has environmental implications because it can influence whether or not an approval is granted to amend the Niagara Escarpment Plan, changing the land use designation to permit a new or expanded pit or quarry. The Niagara Escarpment is a sensitive and important ecological corridor. Aggregate extraction can disrupt that ecosystem. The public has a right to participate in the development of policies that could influence the level of aggregate extraction activity. Therefore, both MNR's standardized procedure for providing advice to NEC and NEC's revised Plan Amendment guidelines should have been posted on the Environmental Registry for public notice and comment.

MNR Comment:

In MNR's view, the clarification that was made to the procedure does not constitute a significant effect on the environment. In addition to the public consultation that is required under the *Aggregate Resources Act*, for any new proposal for aggregate operations, the matter of need continues to be a part of the Niagara Escarpment Plan Amendment process. Opportunities for public review of such proposals occur through notices placed in local media, and through public meetings and hearings.

Green Workplace Program

In 1999, the ECO learned that Management Board Secretariat was considering cancelling the Green Workplace Program. MBS introduced the Green Workplace Program in 1991 with the objective of "greening" the Ontario Public Service. This program includes elements such as waste management, water and energy conservation, green transportation and green purchasing, and it applies throughout the Ontario government. At present, MBS has stated that it has not cancelled the Green Workplace Program. MBS has maintained that the program is being coordinated by the Ontario Realty Corporation and that MBS is currently considering the realignment and ongoing assignment of the program responsibilities. Cancellation or modification of the program would likely result in fewer conservation programs and would affect several other ministries whose Statements of Environmental Values under the *EBR* reference the Green Workplace Program. Given the size of the Ontario government (approximately 60,000 employees) and the importance of "green" initiatives, a decision by MBS to cancel the program would be environmentally significant and subject to the public notice and comment requirements of the *EBR*. The ECO continues to monitor this issue.

1999 Ontario Forest Accord

On March 29, 1999, MNR announced the 1999 Ontario Forest Accord and made the document available to the public on its Internet site. The Forest Accord is an agreement between MNR, representatives of the forest industry and a coalition of environmental groups on numerous forest management issues in Ontario. It also creates a new Forest Accord Advisory Board (OFAAB), whose duties include developing a strategy for making additions to the system of protected areas and identifying areas for intensive forest management. The Forest Accord contains a number of environmentally significant commitments, such as: no long-term reduction in wood supply for the forest industry; no net increase in the cost of wood to mills; and revision of provincial laws and regulations to allow intensive forest management practices. The Forest Accord is related to MNR's Ontario's Living Legacy – Land Use Strategy, which was posted on the Registry, but the Forest Accord itself was not posted on the Registry. The ECO urged MNR to post the Forest Accord separately on the Registry for public comment before it was implemented, but MNR declined. Many of the activities of the OFAAB will result in environmentally significant proposals, and therefore these also should be posted on the Environmental Registry for public comment (see pages 60-62).

MNR Comment:

The Ontario Forest Accord is an innovative partnership contributing to the establishment of new protected areas while considering the needs of the forest industry for a sustainable wood supply. An Advisory Board oversees the Forest Accord, with equal representation from the forest industry, an environmental coalition, and the Ministry of Natural Resources. The Ontario Forest Accord partnership is a model for jurisdictions around the world, and affirms that Ontario's forest industry is environmentally responsible and committed to sustainable forest management. Where MNR is considering changes to policies, Acts or regulations resulting from Ontario Forest Accord Advisory Board recommendations, and the changes may have a significant effect on the environment, MNR will fulfill its *EBR* obligations.

Hunting in Existing Wilderness Parks

In March 2000, the ECO was asked to examine the issue of hunting in wilderness parks. When the Registry decision notice for Ontario's Living Legacy – Land Use Strategy was released in June 1999, it contained a statement that "based on comments from the hunting and angling community, MNR will consider opportunities to provide additional hunting opportunities during park management planning for existing parks, including existing wilderness parks." In its Registry proposal notice, MNR had indicated that it would allow hunting in new parks, including wilderness parks additions, and that existing parks would continue only under existing permitted uses. MNR's decision to allow hunting in existing wilderness parks is environmentally significant because it may have negative impacts on the sustainability of northern ecosystems and protected areas. Given the environmental implications and public interest in this issue, MNR should post a proposal on the Environmental Registry for public comment before any such policy is implemented.

In April 2000, the ECO wrote to MNR's Deputy Minister, inquiring about this unposted decision. In early September 2000, the ECO received a written response from the ministry, stating that "Broad public consultation would take place prior to any discussion regarding potential hunting opportunities in individual existing wilderness parks (those affected by the Land Use Strategy – Woodland Caribou, Quetico, Wabakimi and Killarney) as part of park management planning," and that "Expansion of hunting opportunities in these parks would not be considered in any park planning initiatives prior to this broad public consultation, which would include posting of notice on the *EBR* Registry." MNR added that the park management planning process itself also involves broad public consultation, including *EBR* postings at three stages.

MNR Comment

Broad public consultation, including notice on the Environmental Registry, would take place prior to any discussion regarding potential hunting opportunities in the wilderness parks affected by the Land Use Strategy.

The Environmental Registry: Information Notices

Even in cases where provincial ministries are not required to post a notice of a proposal on the Environmental Registry for public comment, they can still provide an important public service by posting an "information notice" on the Registry.

The ECO encourages the ministries' use of information notices for this purpose. The number of information notices related to policies, Acts, regulations and instruments more than doubled since last year. They were distributed as follows:

Ministry	Number of Information Notices (Except for Forest Management Plans) (January 1, 1999-March 31, 2000)
MBS	2
MCzCR	1
MEST	1
ММАН	13
MNR	16
MOE	17
TOTAL	50

The Ministry of Municipal Affairs and Housing posted 12 Minister's Zoning Orders on the Registry during this reporting period. These are regulations that allow the minister to control land use in areas without municipal organization or in areas where the provincial interest is at stake. (A more detailed overview of the 50 information notices related to policies, Acts, regulations and instruments appears in Section 2 of the supplement to this report.)

The Ministry of Natural Resources also posted more than 60 information notices for Forest Management Plans during this reporting period. These plans establish long-term objectives for sustainability, diversity, timber harvest levels and forest cover in particular forests. MNR is not required to post these Plans, because they fall within a Class Environmental Assessment approval. However, the ECO commends the ministry for providing them, since they allow the broader public to get involved in and stay informed about forestry planning.

The Use of Information Notices

It is important that ministries use information notices only when they are not required by the EBR to post a notice for public comment.

In one case, a ministry's use of an information notice was inappropriate. The Ministry of the Environment posted an information notice on amendments to Regulation 347, clarifying the "mixture rule" for hazardous waste. When the ECO questioned the ministry, MOE responded that a reqular notice was not required because the amendments were administrative in nature. MOE also noted that it was important for the ministry "to move immediately" to close a regulatory gap and clarify the wording to ensure that the original intent of the regulation was maintained. The ECO feels that these regulatory changes should have been posted as a regular notice for public comment, under section 16 of the EBR, or as an emergency exception under section 29 of the EBR.

Several ministries demonstrated good use of information notices. The Ministry of Citizenship, Culture and Recreation posted an information notice on the Main Street Ontario program, a decision to provide municipalities with "one-time" funding for community-oriented Millennium projects. While the program itself was not determined to have a significant environmental impact, funding could be provided for environmental projects such as lake and creek improvements, gardens and public green spaces.

MMAH used an information notice to inform the public of a series of 11 related instruments that were being placed on the Environmental Registry for comment. This information notice assisted the public by putting the instruments into context and showing "the big picture."

The Quality of Information Notices

In reviewing the ministries' information notices for the quality and clarity of information provided, the ECO became concerned that the Environmental Registry template incorrectly classifies information notices as "exceptions." The ECO urges the Ministry of the Environment, which is responsible for the Environmental Registry notice template, to revise the template to reduce confusion. An information notice should be clearly identified as such to avoid confusion with an exception notice, under sections 29 or 30 of the EBR, or a normal notice, under sections 15, 16 or 22 of the FBR.

The ECO also encourages ministries to provide clearly written reasons for using information notices. As with regular Registry notices, information notices should include the name, address, phone number and fax number of a ministry contact person.

In some cases, information notices relate to an ongoing project. In these situations, ministries should post updates on the Registry to inform the public of the outcome of a particular issue and should indicate clearly which parts of the notice reflect new information.

Some information notices invite public comment. When this is the case, the ministry should commit to considering those comments in its decision-making process.

MOE Comment:

While MOE appreciates the Commissioner's concerns regarding the "mixture rule" information notice, the purpose of this notice was to share/establish certain definitions regarding hazardous waste. MOE considers this to be a predominantly administrative posting so there was no requirement for a section 16 posting. In addition, this was not an emergency, and to use section 29 of the EBR would have been inappropriate.

MOE's Environmental Bill of Rights Office will look into addressing the ECO's concern about labelling information notices as "exception" notices. Because a change of this nature would require modifications to the Environmental Registry System database, discussions with the EBR Inter-ministerial Committee would be required.

In the interest of continuous improvement of customer service, the ministry's Environmental Bill of Rights Office will endeavour to work closely with MOE technical staff toward drafting less technical descriptions for Registry postings.

Recommendation 3

The ECO recommends that MOE revise the Registry template so that information notices are clearly identified and not confused with exception notices under section 29 or 30 of the EBR.

The Environmental Registry: Exception Notices

The Environmental Bill of Rights relieves the ministries of their obligation to post proposals for public comment in certain situations. There are two cases in which ministries can post an "exception" notice on the Registry to inform the public of a decision, explaining why it was not posted for public comment. First, the ministries are able to post an exception notice where the delay in giving public notice would result in danger to public health or safety, harm or serious risk to the environment, or injury or damage to property. Second, the ministries can post an environmentally significant proposal as an exception notice when it will be or has already been considered in another public participation process, such as an Environmental Assessment hearing.

For the most part, ministries used exception notices appropriately. For example, the Ministry of the Environment posted an exception notice to inform the public that the ministry had issued an emergency certificate of approval for a temporary recycling facility after the original facility had been destroyed by a fire. The Ministry of Northern Development and Mines used an exception notice to inform the public that it had issued an emergency order to secure a number of mine sites that posed an immediate risk to public health and safety.

However, the Environmental Commissioner of Ontario disagrees with the way in which MOE used exception notices for granting extensions for some landfill sites in the 1999/2000 reporting period. MOE issued three "emergency" approvals to operators of landfill sites despite the fact that the ministry and the operator knew months in advance that the approval would expire on a certain date. These decisions are obviously not emergencies, as it was foreseeable that approvals for the extensions would be required in the future.

This issue was discussed in the ECO 1994/1995 annual report, also with regard to exception notices posted on the Registry for "emergency" landfill sites. The ECO recommended then that MOE "should develop criteria for determining emergency exemptions for these sites and make those criteria public through the Environmental Registry."

The Environmental Registry: Instruments

What are instruments?

Instruments are legal documents issued to companies and individuals granting them permission to undertake activities that may adversely affect the environment, such as the licences, permits and certificates of approval that permit companies to discharge contaminants into the air, take large quantities of water, or operate a waste disposal site. Instruments also include ministry orders to remediate or prevent environmental harm.

Classifying Instruments

Under the *EBR*, certain ministries must classify instruments they issue into one of three classes according to how environmentally significant they are. A ministry's instrument classification regulation is important for Ontario residents wishing to exercise their rights under the *EBR*. The classification of an instrument determines whether a proposal to grant a licence or approval will be posted on the Environmental Registry. It also determines the level of opportunity for public participation in the decision-making process, whether through making comments or applying for appeals, reviews or investigations under the *EBR*. In past years the Ministries of Northern Development and Mines, Environment, and Consumer and Commercial Relations have all finalized their instrument classification regulations under the *EBR*.

Ministry of Natural Resources delay in completing instrument classification regulation unacceptable

Although the *EBR* required the Ministry of Natural Resources to develop an instrument proposal within a reasonable time after April 1, 1996, four years later the ministry has not yet finalized a regulation classifying environmentally significant instruments under the various Acts it administers. The ministry did post two proposals for an instrument classification regulation on the Environmental Registry, the first in March 1997, and the second in November 1997. In response to inquiries from the ECO in fall 1999 and March 2000, MNR indicated work on the regulation is continuing and that the ministry expects to post a final decision on the regulation in fall 2000.

MNR's failure to finalize its instrument classification regulation in the reporting period has prevented the public from seeing or commenting on the ministry's proposals and decisions for specific instruments related to Ontario's natural resources, such as licences to extract aggregate resources and forest resource processing facility licences. Members of the public also have been unable to exercise their rights under the *EBR* to appeal these decisions, to request instrument-related reviews and investigations, or to bring actions to prevent harm to a public resource.

Although MNR's delay in completing its instrument classification regulation is unacceptable, the efforts of MNR staff to finalize this regulation in the year 2000 are a positive step. The ECO believes the ministry should finalize and post its classification regulation as soon as possible.

MNR Comment:

MNR intends to bring forward a regulation in the fall of 2000.

Ministry of Municipal Affairs and Housing commended for completing its instrument classification regulation

In 1999 MMAH completed its instrument classification process. MMAH also undertook mandatory intensive training for ministry planners and managers to ensure that staff were aware of overall *EBR* requirements and specific procedures relating to the posting of *Planning Act (PA)* instruments. Members of the public will now be able to comment on MMAH instruments proposed under the Act, including proposals for approval by the minister of official plans under the *PA* and plans of subdivision where there is no official plan in place. As well, the public can now submit applications for review in regard to these instruments. MMAH is to be commended for the completion of its instrument classification regulation.

It should be noted, however, that for many instruments under the PA, the minister will not be the approval authority, and as a result, the *EBR* public notice and comment provisions will not apply. Through legislative changes made to the *PA* under the *Land Use Planning and Protection Act, 1996*, decision-making authority has been delegated to some municipalities for official plans and official plan amendments. The ministry's ultimate goal is to have 96 per cent of Ontario, by population, governed by municipalities and planning boards that will be exempt from provincial approval under the *PA*.

Selected Instruments

Approval for a waste disposal site

The approval for a waste disposal site issued to the Enviro-Med company is one example of an environmentally significant instrument. Enviro-Med applied for an approval for a waste disposal site for its facility in North Bay in order to provide waste management services to biomedical, personal care, and pharmaceutical waste generators in Ontario, Manitoba and Quebec. The facility operates seven days per week and 24 hours per day and is allowed to process up to 13.5 tonnes of biomedical waste per day. The facility uses a hydroclave waste treatment system in which the waste is steamed at very high temperatures in order to kill any pathogens. Residual waste is to be disposed of in the North Bay landfill.

The proposal on the Registry generated a great deal of public interest, receiving 19 comments. On the basis of those comments, the Ministry of the Environment added conditions to the certificate of approval. The conditions included a requirement that all wastes be unloaded and stored inside a building at the facility in order to prevent pollution leaking into Trout Lake, the local water supply; a prohibition on incineration of any wastes on the site; and a requirement to define a set procedure to follow so that any spill would be contained in a manner that would protect the environment and minimize health risks.

Nevertheless, members of the public still had concerns about the decision, and an environmental group applied for leave to appeal MOE's decision to grant the certificate of approval to the facility. However, the Environmental Appeal Board refused to grant them leave.

Permit to take water

The permit to take water (PTTW) proposal for the Kitchen Creek Golf Course is another example of an environmentally significant instrument. In this case, the proponent, a golf course, wished to take 500 gallons per minute and 220,000 gallons per day from a holding pond, and 55 gallons per minute and 79,200 gallons per day from two wells, in order to develop a reliable water supply for the golf course irrigation system. This would have been a seasonal taking, extending from May 1 to September 30 for a 10-year period.

The application for the PTTW was withdrawn by the proponent after concerns were raised by the public and MOE. A news article noted that one local resident was concerned that the golf course's water taking had already had an impact on the water level in the area, in particular Kitchen Creek, which was used to draw water for his cattle. In 1998, he was forced to draw water from his well after the creek dried up, and once his well had run dry, to haul water. MOE's decision posting for the PTTW noted that the golf course would re-submit an application after completing a reevaluation of its requirements.

Recommendation 4

The ECO recommends that the Ministry of Natural Resources finalize and post its instrument classification regulation on the Registry as soon as possible.

Educational Initiatives

Public education plays an important role in the success of Ontario's Environmental Bill of Rights because informed citizens are the key force behind the EBR. People need to know how the EBR lets them participate when the provincial government makes environmentally significant decisions. People also need to know how the EBR gives us the tools to hold the government accountable for the environmental decisions it makes.

Educating the public about the EBR is an important part of the mandate of the Environmental Commissioner of Ontario. During this reporting period, the ECO used a comprehensive approach to meet that mandate, employing public speaking, seminars, symposiums, conferences, public displays, the Internet, and television, radio and print media.

During 1999, ECO Public Education Officers contacted all kinds of organizations with an interest in the environment. State-of-the-art presentations, tailored to a group's needs and level of knowledge, were presented to groups throughout Ontario, including Rotary Clubs, municipal councils, community groups, conference participants, and teacher and student groups at Ontario high schools, colleges and universities. The Environmental Commissioner also met with business and municipal leaders, environmental groups, Chambers of Commerce, provincial MPPs and government staff. The ECO also has an in-house bureau of experts available to answer the inquiries and educational requests of all interested organizations.

The ECO Web site (www.eco.on.ca) continues to expand, with a wide range of educational materials, from our newly revised user's guide, "Ontario's Environmental Bill of Rights and You," to "ECOnotes," detailing how the EBR applies to specific issues. Special reports, annual reports, and background papers are all available online, and the public is making increasing use of these materials. The number of user sessions on the ECO Web site in 1999 was nearly five times greater than just two years ago, averaging about 2,000 hits per month.

The ECO's extensive catalogue of educational print materials has also grown. In 1999, we published the proceedings of the ECO symposium featuring the reflections of leading environmentalists on the importance and future potential of the EBR. These materials may be downloaded from the ECO Web site or they may be ordered by calling our office at (416) 325-3377, or, outside the 416 region, 1-800-701-6454. The demand for ECO educational print materials continues to grow. In 1999 we distributed over 25,000 publications.

Here are some of the comments from Ontarians who have attended presentations on the EBR:

- "...it is extremely important for every citizen to be aware of the EBR..."
- " ... an excellent tool for Ontarians to protect our province..."
- "... useful information that definitely needs to be disseminated to all residents of Ontario."

The EBR is a citizen's tool-kit for better environmental decision-making, and like any tool-kit, if it is not used, it cannot do the job. Any group or individual wanting a presentation, or having questions about the EBR, is urged to contact the ECO.

Summary of the ECO's 1999 Educational Activities			
Number of Public Education Events*	Number of Public Inquiries**	Publications Distributed	Number of People Reached
108	1100	25,000	15,300

^{*}including presentations, workshops, conferences, etc.

^{**}phone, fax, email, mail, walk-in



The Environmental Commissioner of Ontario is focusing special attention on a number of environmental issues that require prompt attention and improved handling by Ontario ministries. These issues are quite varied in nature. Some, like the protection of groundwater and the restoration of the Great Lakes, have recently received a great deal of public interest and media scrutiny. Others have been less in the public eye. Several topics have been the subject of recent *EBR* applications for review – applications which the ministries have denied in spite of the compelling evidence and valid concerns presented by applicants. The ECO is concerned that current ministry management of certain issues, such as intensive farming, may be resulting in ongoing environmental damage. For other issues, such as the sales of public lands, the ECO's concern is primarily that ecologically sensitive or important conservation lands are being lost to development, without the public's knowledge.

The ECO has found that some issues are characterized by a confused patchwork of ineffectual, outdated laws and policies as well as poor coordination between Ontario ministries and with other levels of government. This is true, for example, for the issues of groundwater protection and for the protection of endangered species. These issues are complex and require good cooperation among jurisdictions. But they also require strong leadership. This should be clearly assigned to one ministry, along with the authority to call upon other ministries for supportive actions and the resolution of policy conflicts. The lead ministry should have primary responsibility for developing and carrying out a coherent strategy, including action plans, goals, targets and time lines.

On other issues, such as the restoration of the Great Lakes, useful strategies have actually been developed in the past, but their implementation has been poor because of faltering commitment, cutbacks in funding and weak project management. Ministries have on some issues misused progress reports as public relations exercises, focusing only on their achievements. They have failed to articulate and analyze roadblocks to achieving their targets, and as a consequence, have not been able to practise adaptive management.

The ECO has also observed that in some situations, ministries are operating without a baseline of environmental information needed for decision-making. The issue of groundwater protection, for example, is plagued by inadequate monitoring data. Similarly, the effects of intensive farming cannot be determined, due to the complete absence of monitoring.

Finally, some ministries are simply ignoring their own stated commitments to consider the environment in their day-to-day decision-making. Management Board Secretariat, for example, has not been considering the environmental impacts of its land sales, and has not been complying with environmental legislation.

Protecting Ontario's Groundwater

Groundwater is important to the health of many people in Ontario, and to their economic and social well-being. Nearly 3.7 million Ontarians depend on groundwater as their main source of domestic water, and it is used extensively for irrigating crops and for supplying drinking and bathing water for livestock operations. A wide variety of commercial operations also use groundwater, including industrial facilities, water bottling plants, golf courses and aggregate pits.

Groundwater sustains ecosystems by releasing a constant supply of water into wetlands and contributing up to 20 per cent of the flow of headwater streams. In some regions of the province, during dry periods when surface water flows diminish, groundwater provides most of the stream flow. Groundwater is also important for water quality. The constant flow and quality of groundwater aquifers and headwater streams provide habitat for fish, wildlife and flora, as well as ecological and aesthetic values that benefit all Ontario residents.

Adequate quantities of clean groundwater are needed to support these human and ecological needs. Underground aquifers are recharged mainly by rainfall and snow. As long as the water contained in these aquifers is not extracted faster than it is replenished, groundwater is a renewable resource. However, housing development and the intensification of land use in rural southern Ontario are placing extraordinary demands on groundwater, creating concerns that some aquifers are being depleted faster than they can be recharged.

For example, certain commercial operations, especially water bottling plants, consume 100 per cent of the groundwater they extract. Over 70 per cent of the water extracted for irrigation evaporates or is lost to runoff. Industrial and municipal uses consume approximately 10 per cent of the extracted water. At the same time, agricultural land and green space are being transformed into built-up areas. Land that has been paved over or otherwise built up has a reduced capacity to absorb rain water and return it to aquifers, resulting in precipitation running off directly to streams.

The quantity of groundwater has important implications for water quality because reduced flows can aggravate the effects of contamination. Groundwater may become contaminated by leaking underground storage tanks, farming activities, leachate from landfills, discharges and spills from industrial facilities, and pesticides and fertilizers from golf courses. Many rural residents rely upon septic tanks which, if not well-maintained, can threaten groundwater quality.

Given the environmental and economic importance of groundwater, the Ontario government, together with other stakeholders such as municipalities, industry, farmers and environmental groups, must ensure that these resources are protected and managed for the benefit of present and future generations. However, Ontario does not currently have a comprehensive strategy in place to protect groundwater. In our previous four annual reports, the Environmental Commissioner of Ontario has urged the Ontario government to develop a groundwater management and protection strategy in consultation with key stakeholders and the public.

What would a groundwater management and protection strategy look like? In April 1997, the ECO suggested that a groundwater management and protection strategy could contain many interrelated elements. These include:

- a publicly accessible inventory of groundwater resources and a data management system.
- a long-term monitoring network of water levels for major aquifer systems.
- a system to identify and protect sensitive aquifers and groundwater recharge areas.
- an inventory of current and past uses of groundwater and sources of groundwater contamination and an evaluation of their potential effect on health and ecosystems, including cumulative impacts.
- a strong regulatory program aimed at preventing contamination.
- an economic assessment of groundwater value, including current and replacement value.
- a means of coordinating decision-making between all ministries and agencies that have jurisdiction over groundwater.

In reports to the ECO, dated March 1999, the Ministry of Municipal Affairs and Housing and the Ministry of Natural Resources told the ECO that they are "active partners" with the Ministry of the Environment, which is "developing" a groundwater strategy. OMAFRA has also confirmed it is working with these ministries. Yet, despite years of assurances from the ministries that they have been developing such a strategy, one has not been introduced. The contaminated-water tragedy in Walkerton in late May 2000, thought to be connected to contamination of local groundwater supplies by runoff from local farms, suggests that the need to protect groundwater aquifers is as great as ever.

Competition for Groundwater

In many parts of the province, businesses and rural residents who once had extensive access to groundwater are now finding that they must share existing resources with growing numbers of commercial and suburban users and with more intensive farm operations. In some cases, disputes have erupted. Over the past two years, lower than average levels of precipitation and higher than average temperatures in southern Ontario have exacerbated the conflicts that result from competition for groundwater.

In early 2000, some farmers in Southwestern Ontario expressed concern that water-taking limits imposed by MOE would impede their ability to irrigate crops during the peak summer growing season. MOE later relaxed the limits during those months. In return, the farmers and local farm groups committed to developing a water management strategy for the area. In other examples, after a food rendering plant and an aggregate operation submitted requests to MOE for permission to extract large quantities of groundwater, local residents expressed concern about the potential for groundwater depletion and contamination.

Some residents have used EBR Registry comment opportunities to try to resolve their groundwater disputes. For example, eight different people wrote to MOE asking that an application for a permit to extract groundwater submitted by a golf course be denied, fearing that their domestic and farm needs would be compromised. The golf course later withdrew the application, partly in response to this public outcry. In two other cases, residents challenged MOE decisions to issue permits to extract groundwater by submitting applications for leave to appeal under the EBR (see page 113).

Shared Management of Groundwater

Several provincial ministries share responsibility for aspects of groundwater management with municipalities, conservation authorities and other provincial and federal agencies. The key provincial ministries with interests in water management include: Environment; Natural Resources; Agriculture, Food, and Rural Affairs; and Municipal Affairs and Housing. Adding to this complexity is the fact that various ministries and agencies of the federal, provincial and municipal governments administer dozens of policies, bylaws, Acts and regulations related to groundwater.

The role of the Ministry of the Environment

MOE plays a key role in managing groundwater because it administers the Ontario Water Resources Act (OWRA). OWRA requires that anyone drawing more than 50,000 litres of ground or surface water a day obtain a permit to take water (PTTW). Historically, PTTWs were issued on a first-come, first-serve basis. When a conflict arose, MOE could use PTTWs to allocate available groundwater among competing users. In the past, the ecosystem functions of water were "also important considerations," but were not overriding factors.

In April 1999, MOE introduced a new Water Taking and Transfers Regulation, setting out criteria for MOE staff to consider before issuing a PTTW. Staff must now give precedence to the impact the PTTW will have on the natural functions of the ecosystem. They also have the discretion to consider the impact on uses for livestock, municipal sewage and water supply, agriculture, and domestic wells – and to assess whether it is in the public interest to grant the permit.

This new regulation is a positive step, but MOE has yet to implement some important changes that would support its effective implementation. For example, the ministry has not updated its 1994 water management policies and guidelines document. Thus, MOE staff, PTTW applicants, and residents must interpret the new regulation on a case-by-case basis, and as noted by the Environmental Appeal Board in a December 1999 decision, there is a danger that it will not be interpreted in a consistent or appropriate manner.

MOE has not effectively used the *EBR* to manage conflicts over groundwater. In the past few years, many residents have contacted the ECO because they are concerned with the lack of information contained in Registry notices for PTTWs. They are also concerned that notices on the Registry are the only forms of notice provided, and that there is no adequate explanation of the effect their comments may have had on the decision-making process. In some cases, the ECO encouraged these residents to write to MOE and request that the ministry provide enhanced public participation opportunities on these water-taking proposals, such as public meetings, open houses or even mediation. To date, MOE has provided no evidence that these requests were seriously considered or that this kind of public consultation, provided for by the *EBR*, has ever been carried out.

Conflicting information in the media about MOE policies on groundwater has added to the public's uneasiness about the availability of groundwater. In the spring of 1999, the media widely reported that MOE had placed a moratorium on the issuance of new PTTWs in certain parts of the province. In response to ECO inquiries, MOE indicated that a "moratorium" was never imposed, but that the ministry was applying increased scrutiny to PTTW applications. Yet many media sources and some government officials continued to report that a moratorium on the issuance of new PTTWs was in place. Furthermore, information about the changes to the PTTW review process was not posted on the Registry for public notice and comment.

Another concern was the fact that, until recently, Registry notices for PTTWs often failed to reference the expiry date for the permit, or to include an electronic link to the full text of the permit. In September 1999, the Minister of the Environment indicated that the ministry had updated its procedures "to include strictly-defined time limits or expiry dates on permits." The ECO reviewed 60 PTTW decision notices posted between May 1999 and March 2000. Nearly half of these Registry notices failed to state the expiry date for the permit. Of the remaining notices that did list an expiry date, 13 were for 10 years and the remainder were for varying time lengths ranging from "indefinite" to one year.

The public needs to be confident that MOE is managing Ontario's groundwater effectively. Our review suggests that MOE must provide guidance to staff on how to apply the criteria set out under the new regulation. In addition to updated water management policies, MOE staff require much better data on groundwater resources in order to evaluate PTTW applications effectively, including the cumulative impacts of numerous permits for drawing water from the same aquifer or watershed.

The role of other ministries

Other ministries also have important responsibilities for groundwater, but the wide range of provincial laws, regulations, and programs are often directed toward conflicting goals.

For example, the Ontario Ministry of Agriculture, Food and Rural Affairs provides guidance to rural landowners on wells and encourages farming practices that minimize the impacts on both ground-water quality and quantity through its assistance with the voluntary nutrient management planning and Environmental Farm Plan programs.

The ministry also administers the *Drainage Act*, which provides a legal mechanism for rural landowners to drain their lands and share the costs of doing so. Moreover, the *Drainage Act* encourages farmers to increase the productivity of agricultural lands by creating outlet drains that take the flow from individual landowners' drainage systems. These total systems remove excess water from individual fields faster than would otherwise occur. Draining low-lying areas can potentially divert needed water away from aquifers.

The Ministry of Natural Resources manages aquatic habitat and provides support to conservation authorities under the *Conservation Authorities Act* to enable them to control flooding and erosion and to conduct watershed planning. However, the *Aggregate Resources Act*, also administered by MNR, promotes resource extraction activities that may alter groundwater flows.

In the Provincial Policy Statement (PPS) under the *Planning Act*, the Ministry of Municipal Affairs and Housing has set out policies that municipalities must "have regard to" in making land use planning decisions that may affect groundwater, and although the PPS expresses the need for municipalities to protect water quality and quantity, the policy is not legally binding.

The Technical Standards and Safety Authority administers and enforces the *Gasoline Handling Act* (*GHA*) on behalf of the Ministry of Consumer and Commercial Relations. The *GHA* and a range of regulations and policies under that Act contain a number of provisions related to prevention of gasoline spills by service station operators.

In summary, the current legal and policy framework for groundwater management is best characterized as fragmented and uncoordinated. Provincial ministries do not have a publicly recognizable strategy that spells out how priorities are to be set and how ministries can coordinate their efforts and work with all stakeholders to address the conflicting goals contained in different laws and policies.

Recent Initiatives

Over the past several years, the ministries' efforts on groundwater have focused on processbased initiatives. Most of these initiatives create new tools and methods that are intended to assist municipalities and conservation authorities cope with ministries' downloading of responsibilities to them. These include funding for municipal groundwater management studies, a guide for developing watershed management plans, and a video to increase awareness of the importance of groundwater. The province has set up the Ontario Water Directors Committee (OWDC) to coordinate provincial water management programs and the government's response to water issues. Also announced is a low-water response plan to address water takings at the local level during extreme conditions. To begin to understand the quality, location and quantity of Ontario's available groundwater, the province has initiated an aquifer mapping and groundwater monitoring project.

The problem is that these initiatives are being developed and implemented in a piecemeal way without adequate public notice or a meaningful opportunity for public comment. The OWDC, and the establishment of both a low water response plan and groundwater database are all good first steps. However, the lack of transparency in the development of recent initiatives means that it is difficult for Ontario's citizens to understand the government's approach to managing groundwater and the implications for various groundwater users or the environment. Recent ministry projects and the current system of laws, regulations and policies amount to a confused patchwork.

Growing Risks if Ministries Fail to Act

Ontario urgently needs a groundwater protection and management strategy, as evidenced by the demands being placed on Ontario's groundwater resources and the fragmented management of groundwater. A key element of this strategy is the need to protect groundwater supplies. There will be several negative consequences if the ministries fail to develop a such a strategy, including a growing number of conflicts over groundwater throughout rural Ontario and in urban areas that rely on groundwater for municipal and industrial purposes. There is a significant risk that water taking permits will be granted and land use planning decisions made without adequate knowledge of groundwater availability. Furthermore, decisions about groundwater will not be made in a transparent and publicly accountable manner, contrary to the goals of the EBR.

The contours of a clearly defined, comprehensive groundwater strategy have yet to emerge, in spite of years of promises from provincial ministries. The ECO urges ministries to develop and implement a groundwater strategy in a timely manner in consultation with key stakeholders and the public. Moreover, the ECO encourages MOE to use the EBR's enhanced public participation measures to keep the public informed and attempt to resolve conflicts before they become disputes.

MMAH Comment:

In exercising any authority that affects a planning matter (or in providing comments, submissions and advice that affect a planning matter), land use planning decision makers, such as municipalities, ministries, and the Ontario Municipal Board, "shall have regard to" provincial policy statements. Therefore, these decision-makers have an obligation to consider the application of a specific policy statement when carrying out their planning responsibilities. The ministry's position is that failure to conscientiously apply the "shall have regard to" standard could result in the approval authorities, members of the public, or the province intervening to ensure that this standard is considered. This could involve an appeal to the Ontario Municipal Board on land use planning applications.

MNR Comment:

MNR, through the Ontario Water Directors' Committee (OWDC), and in collaboration with other provincial ministries, municipalities and conservation authorities, developed "Ontario Water Response – 2000," a management framework for co-ordinating Ontario's response to potential low-water conditions. This is a provincially co-ordinated, interagency response plan to be implemented at a local level on a watershed basis. The draft plan has been sent to municipalities and conservation authorities, and posted on the Environmental Registry for comment. MNR has also provided support to eight Parliamentary Assistants who have been consulting with key resource management partners and stakeholders on long-term strategies for managing Ontario's water resources. Those consultations will be considered in finalizing "Ontario's Water Response – 2000," and in an on-going assessment of water management practices in Ontario.

MOE Comment:

MOE has held several public meetings, open houses and educational sessions to deal with public concerns over permits to take water for bottled water and for agricultural irrigation. Ministry staff have also had discussions with various special interest groups, such as golf courses, tobacco farmers, etc., informing them of the PTTW legislation and related policies.

The purpose of the Groundwater Management Studies Fund component of the Provincial Water Protection Fund is to assist municipalities and public utility commissions to develop strategies to ensure the long-term management and protection of groundwater resources. In addition to the province's \$4.3 million contribution, municipal partners are also contributing, for a total project Funding commitment of \$6.6 million.

Regarding a groundwater database, the Ministry dedicated \$6.0 million for the development of a Provincial Groundwater Monitoring Network in partnership with 38 conservation authorities and municipalities. The ministry will establish the key work in seven critical watersheds this year. The ministry has also updated the water well database so that all data is fully accessible in electronic format. MNR is undertaking a Water Resources Information Project on behalf of several ministries to consolidate data and information about water from the monitoring network, the ongoing groundwater studies, the water well database and many other sources.

For additional ministry comments, see Appendix A

Recommendation 5

The ECO recommends that ministries develop and implement a groundwater management strategy in a timely manner in consultation with key stakeholders and the public.

The Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA)

In response to a 1999 application for review under the EBR, the Environmental Commissioner of Ontario has reviewed the progress of Ontario ministries on the Great Lakes. In their request for a review, the applicants had outlined a need for a new Canada-Ontario agreement on the Great Lakes. They provided evidence that the federal and provincial governments failed to meet many of their own key clean-up goals and objectives. Although the Ministry of the Environment decided to turn down the application (see R99001 in S7 of the supplement to this annual report), the ECO's review of this issue has also found that many of the most important tasks to restore the Great Lakes are incomplete, unassigned and inadequately funded.

Need for Action on the Great Lakes

The Great Lakes basin makes up the world's largest fresh water system. This region is home to 8.5 million Canadians and almost half of Canada's industries. Such intensive human activity on both the Canadian and U.S. sides of the border has put a great deal of pressure on the Great Lakes ecosystem. As early as 150 years ago, the lakes were being stressed by untreated factory effluents, garbage and human wastes. By 1909, widespread problems resulted in a bi-national treaty (the Boundary Waters Treaty), agreeing not to pollute boundary waters. But the lakes continued to deteriorate.

In 1972, Canada and the U.S. signed the Great Lakes Water Quality Agreement (GLWQA), committing both parties to address a host of pollution concerns, including municipal and industrial sources, agriculture, forestry, shipping, dredging and contaminated sediments. The GLWQA was amended in 1987 to incorporate concepts of ecosystem-based management. A number of highly degraded sites on the Great Lakes were designated Areas of Concern (AOCs), and Remedial Action Plans were initiated for each of these sites. A total of 17 of these sites were located in Canada, including five in the connecting channels of the Great Lakes, which share jurisdiction with the U.S. Each Remedial Action Plan has involved numerous levels of government and hundreds of citizen volunteers. These plans aim to reverse "impairments of beneficial uses," including restrictions on fish and wildlife consumption, fish tumours or other deformities, beach closings and restrictions on drinking water consumption.

Since the early 1970s, the Great Lakes have seen significant improvements because of controls over nutrients such as phosphorus, human disease-causing organisms, and loadings of toxic contaminants. But the environmental turnaround has by no means been complete. In 1994, a major international meeting of government experts on the Great Lakes concluded that "the loss of

aquatic habitat has been catastrophic" and the "loss of native species has been equally catastrophic." They also reported that "contaminant concentrations in fish and wildlife, as well as in sediments have declined dramatically since the early 1970s, but are still a problem." There are also concerns about human health impacts. The International Joint Commission (IJC), a respected international advisory and monitoring body, issued the following warning to Great Lakes governments in 1998:

There is overwhelming evidence that certain persistent toxic substances impair human intellectual capacity, change behavior, damage the immune system and compromise reproductive capacity. Injury has occurred in the past, is occurring today and, unless society acts now to further reduce the concentration of persistent toxic substances in the environment, the injury will continue in the future.

What was COA?

In 1994 the Ontario and federal governments signed a far-reaching agreement to restore and protect the Great Lakes ecosystem. The agreement, entitled the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA), covered three broad objectives:

- to restore certain areas along the Great Lakes degraded by pollution
- to prevent and control pollution by cutting the release of certain toxic substances by 90 per cent by the year 2000
- to conserve and protect human and ecosystem health.

The Signing Partners to the 1994 COA		
Environment Canada	Ontario Ministry of Environment and Energy	
Department of Fisheries and Oceans	Ontario Ministry of Agriculture, Food & Rural Affairs	
Department of Agriculture and Agri-Food	Ontario Ministry of Natural Resources	
Health Canada	Ontario Ministry of Health	

The signing partners emphasized that the new agreement was designed to achieve clear and measurable results, with milestones, performance indicators and regular progress reports to the public. Among its numerous targets, to be met by the year 2000 or earlier, were commitments to restore at least nine of 17 Areas of Concern, to increase and rehabilitate aquatic habitat, to upgrade eight primary sewage treatment plants, to remediate 20 provincial contaminated sites, and to achieve a 90 per cent cut in the use, generation and release of seven persistent toxic substances. But in April 2000, COA expired, with no indication that the two governments were close to a new agreement.

What did COA accomplish? Which targets are left unmet?

In three progress reports on COA, the federal and Ontario governments have stressed their progress on restoring the Great Lakes, stating that the lakes are cleaner than they have been for 50 years. The governments provide extensive lists of what has been achieved, noting significant reductions in the use, generation and release of key toxic pollutants, and destruction of more than 50 per cent of PCBs previously in storage. They also note that many of the Canadian AOCs are on their way to recovery, and that so far, one site (Collingwood Harbour) has been restored and delisted. The governments also note that due to actions on combined sewer overflows and storm water runoff, beaches are closed by pollution less often in Toronto, Hamilton and other waterfront communities. At the same time, however, the governments acknowledge that "there are still many major concerns." In discussions with the ECO, both Environment Canada and Ontario MOE officials acknowledge that important COA targets have not been met.

The ECO's review of the Third Report of Progress under COA concluded that most targets were still unmet by the time the agreement expired, especially those targets with direct impacts on the environment. For example, only one Area of Concern has been fully restored and delisted, although nine AOCs had been the goal. The parties had agreed in 1994 to set a target to restore 60 per cent of impaired beneficial uses in AOCs, but by 1999 only 13 per cent of these beneficial uses had in fact been restored. Similarly, only one of eight targeted primary sewage treatment plants has been upgraded to secondary treatment. According to the Third Progress Report, a 70 per cent cut – and not the targeted 90 per cent cut – has been made in the use, generation and release of seven persistent toxic substances.

Why did COA fall short of its targets?

Many reasons have been proposed by participants and observers to explain why so many COA targets were not met by the agreed-upon deadlines. Four of the more commonly cited reasons are:

1. Inadequate funding

The International Joint Commission reported several years ago that progress on restoring the Great Lakes ecosystem was faltering across all jurisdictions due to inadequate funding and staffing. In 1998 an advisory body to the IJC surveyed relevant jurisdictions in Canada and the U.S. and found that many had cut funding for Great Lakes work. Ontario's Ministries of the Environment and Natural Resources both said their funding for restoring degraded areas and for monitoring and surveillance work had decreased by more than 10 per cent between 1994 and 1997. In 1996, MNR decided to cut back significantly its involvement in Remedial Action Plans for the Great Lakes, while MOE eliminated almost all funding and staff for the coordination of these plans.

These cuts occurred despite Ontario's agreement to share clean up costs of \$2.5 billion, as laid out in the 1994 COA. The parties had also agreed that neither government would modify agreedupon funding commitments without consultation.

2. COA targets didn't specify who was accountable

Both provincial and federal officials have noted that COA targets were set without stating who was responsible for any given action. Also, some targets were clearly the responsibility of parties who had never signed the agreement.

3. COA targets were too vague

Many COA targets were not connected with measurable performance indicators, or the performance indicators were open to a great deal of interpretation.

4. Inadequate project management and quality control

The federal and provincial governments did publish three progress reports on COA between 1994 and 1999. But these reports were largely self-congratulatory in tone, despite COA's stated emphasis on accountability and measurable progress. They did not clearly identify how close or far specific targets were from being met, nor did they identify key barriers to meeting targets or identify steps to overcome those barriers.

What is happening on COA renegotiation?

Ontario ministries and the federal government are discussing the next steps on Great Lakes issues. As of May 2000, MOE representatives say that they are recognizing and discussing COA deficiencies, but they are still at the early stages of developing a new approach. The ministry has assured the ECO that whatever directions are taken, there will be extensive public consultation, including the use of the Environmental Registry.

In the interim, both governments have agreed to carry on with their Great Lakes activities on a "business as usual" basis, but MOE's 1999/2000 Business Plan targets don't reflect a major focus on Great Lakes issues. Only two targets are relevant: one is to reduce sport fish consumption restrictions modestly – by 10 per cent by the year 2010. The other is to improve 72 water and sewage treatment systems by the year 2001. The ministry also states that it will continue to work with partners on certain Areas of Concern. In May 1998, the Ontario government launched an Ontario Great Lakes Renewal Foundation with seed money of \$5 million for restoration, public education and research. But the funding appears to be one-time only, and it is not clear whether COA targets will receive priority attention.

ECO Comment

The ECO finds it troubling that all four provincial ministries which signed the 1994 COA – MOE, MNR, the Ontario Ministry of Agriculture, Food and Rural Affairs, and the Ministry of Health – appear to have withdrawn resources and support without clear notification to the public. In the interests of transparency, ministries should provide Ontarians with a clear accounting of both the accomplishments and the shortcomings of COA. MOE should also consult with the public on reinvigorating Great Lakes programs, and more specifically, on developing a successor agreement to COA, because there is still a great deal of work to do. MOE should ensure that the management structure for the next COA agreement includes clear interim benchmarks and also mechanisms for mid-course corrections when barriers are encountered. These plans should be coordinated with MNR and other key ministries, and should be posted on the Registry for public comment.

MOH Comment:

The government has given approval for MOE and the Ministry of Intergovernmental Affairs to initiate negotiations with Environment Canada with a view to renewing the agreement. MOE will continue to be the lead ministry in any future agreement. MOE has recently convened a meeting with representatives of the other provincial ministries involved – Intergovernmental Affairs (MIA) Agriculture, Food and Rural Affairs (OMAFRA), Natural Resources (MNR) and Health and Long-Term Care (MOHLTC) to develop an appropriate framework for a new agreement. ECO's concerns will be taken into consideration by the Interministerial Committee.

OMAFRA Comment:

OMAFRA has met its COA target through delivery of existing technology and applied research initiatives. The COA target regarding farmers attending Environmental Farm Plan workshops (COA target 3.6.4) has been exceeded. By March 31, 2000, nearly 16,000 farmers had attended more than 1,000 workshops.

For additional ministry comments, see Appendix A

Recommendation 6

The ECO recommends that MOE's development of a successor agreement to COA include a clear public accounting of both accomplishments and shortcomings of the expired COA; a management structure with clear interim benchmarks and mechanisms for mid-course corrections when barriers are encountered; and public consultation and posting on the Registry.

Protection of Species at Risk

Our analysis has shown that species at risk are inadequately protected in Ontario because of a confusing blend of generally outmoded and ineffective laws and policies. This framework, which is difficult for the public to understand, could be clarified if the Ministry of Natural Resources would provide an overview document that would cover the following provincial laws and policies:

- The Endangered Species Act (ESA) offers protection to species that have been designated as "threatened with extinction." This protection is articulated in Section 5, which states that "no person shall willfully (a) kill, injure, interfere with or take or attempt to kill, injure, interfere with or take any species of fauna or flora: or, (b) destroy or interfere with or attempt to destroy or interfere with the habitat of any species of fauna or flora, declared in the regulation to be threatened with extinction." Persons who commit an offence under this Act are liable to a fine of up to \$50,000 and/or imprisonment for up to two years. (However, only a handful of cases have ever gone to court.) It should be noted that the designation "threatened with extinction" is generally understood to be equivalent to the "endangered" designation.
- The Fish and Wildlife Conservation Act (FWCA) defines a number of mammals, birds, reptiles, amphibians and invertebrates as "specially protected," thus protecting them from hunters and trappers.
- The Natural Heritage part of the Provincial Policy Statement under the Planning Act states that "development and site alteration will not be permitted in significant portions of the habitat of endangered and threatened species." MNR's Natural Heritage Reference Manual, which supports the Natural Heritage part of the Provincial Policy Statement, indicates that the habitats of so-called "threatened" and "endangered" species require a high level of protection. However, since planning authorities need only "have regard to" the Provincial Policy Statement, the protections offered by the species designations are somewhat discretionary.
- MNR's Forest Management Planning Manual for Ontario's Crown Forests provides guidelines for the protection of the habitat of "threatened" species.

MNR has established the Committee on the Status of Species at Risk in Ontario (COSSARO) to evaluate the status of "species at risk" and make recommendations to the ministry regarding the listing of species in different status categories (e.g., "endangered," "threatened," "vulnerable," etc.). MNR generally implements the recommendations of COSSARO through a list it calls the "Vulnerable, Threatened, Endangered, Extirpated and Extinct Species of Ontario" – the VTEEE Species of Ontario.

A completely separate initiative for species designation occurs at the national level at the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), of which MNR is a member. COSEWIC also assigns "risk categories" to species at risk. However, the list of endangered species on the Ontario portion of the COSEWIC list is not consistent with the species "threatened

with extinction" listed in Ontario's *Endangered Species Act*. This discrepancy was the subject of an application for review under the *EBR*, submitted by the Federation of Ontario Naturalists (FON) and a private citizen, which pointed out that the number of species "threatened with extinction" in Regulation 328 (24 species) of the *ESA* is much smaller than the number of "endangered" Ontario species on the COSEWIC list (43 species). Consequently, the applicants alleged that the *ESA* list of species "threatened with extinction" is deficient, and they requested that the *ESA* list be immediately amended to include all of those species that are on the COSEWIC list but not currently in Regulation 328.

The applicants also requested that other species be reviewed and considered for inclusion on the *ESA*'s Regulation 328 list, including an additional 30 Ontario species that COSEWIC has determined to be "threatened" and about 600 Ontario species that the MNR's Natural Heritage Information Centre has determined to be "extremely rare."

The larger issues implicit in the *EBR* application include: How can MNR justify longstanding discrepancies between the *ESA* list and the COSEWIC list, especially since MNR is a member of COSEWIC? Are there considerations, other than ecological, which affect the *ESA* listing methodology? Why is the *ESA* listing process so slow? The applicants support their application with reference to MNR commitments provided in the *ESA*, as well as commitments the ministry has made through the National Accord for the Protection of Species at Risk, the Canadian Biodiversity Strategy, and MNR policy itself.

MNR denied the *EBR* application for review, but the ECO found that the ministry did not provide convincing arguments for the denial. The ministry's response did not address the major issue raised by the applicants, namely the need to review endangered species legislation. MNR's response appeared to provide excessive weight to landowner concerns at the expense of ecological considerations in determining which species to protect under Regulation 328. As a minimum, MNR should have made the process of classifying species at risk more transparent.

During the review period covered by this ECO annual report, MNR introduced a number of changes to the VTEEE Species, adding two "endangered" species, 20 "threatened" species, and 17 "vulnerable" species to the list. The two "endangered" species added to the VTEEE list were also added to the species "threatened with extinction" listed in Regulation 328. The newly designated "endangered" species were the Prothonotary Warbler and the King Rail.

The Prothonotary Warbler was designated as "rare" in 1984 by COSEWIC and uplisted to "endangered" in 1996. Surveys have documented a decline in its population in Ontario since the 1960s. The population has fallen from over 100 pairs in the early 1900s, to approximately 50 pairs in the mid-1980s, and to a known population in 1998 of 16 pairs and seven single males. The decline probably reflects wetland habitat loss, fluctuating water levels in the Great Lakes, competition for nesting sites, and a gradual continental population decline.

The King Rail was designated as "rare" and uplisted to "endangered" in 1994 by COSEWIC. The most recent breeding survey, conducted in 1997, demonstrated that the King Rail was found at fewer than 10 sites in Ontario. Marsh drainage and degradation of wetlands appear to be the primary causes of population decline.

In amending Regulation 328, the Ministry of Natural Resources has taken positive steps to protect two species at risk of extinction. The ECO is concerned, however, that the MNR decision to include these species as "threatened with extinction" did not come until well after COSEWIC listed these species as "endangered." In the case of the Prothonotary Warbler, the MNR decision came three years later and in the case of the King Rail, the decision came five years later. The ECO wonders how many Prothonotary Warblers and King Rails might have been saved had the ministry acted more expeditiously.

MNR claimed that its decision to add 20 "threatened" and 17 "vulnerable" species to the VTEEE list would increase the chance of survival of the "threatened" species and improve the conservation prospects of the "vulnerable" species. The ECO finds, however, that this decision will have very little impact on the protection of the 37 species at risk, either in terms of direct protection or in terms of protection of habitat, for the following reasons:

- The ESA offers no protection to "threatened" and "vulnerable" species, only to those that are "endangered."
- The *FWCA* provides no additional protection to species when they are designated as "threatened" or "vulnerable."
- The protections offered under the Natural Heritage part of the Provincial Policy Statement and MNR's Forest Management Planning Program are somewhat discretionary.

The primary benefit of these new designations is the possible increase in public awareness of the status of the 37 subject species. However, even this benefit is limited, because MNR does not provide sufficient information to the public on the location of these species nor on the habitat critical for their survival.

Another MNR decision dealt with the provision of mapping guidelines for endangered species habitat for the Conservation Land Tax Incentive Program (CLTIP), which, according to MNR, encourages landowners to preserve species habitat. Although mapping guidelines will lead to greater certainty in the determination of habitat, and are to be encouraged, ECO staff were unable to confirm that CLTIP provides sufficient protection to the habitats of endangered species on private property and that sufficient staff resources are dedicated to this program.

Our analysis suggests that the existing regulatory and policy framework for the protection of species at risk is in need of an overhaul. The issues of the criteria and timeliness of endangered species designation and the lack of protection for vulnerable and threatened species should be addressed. The ECO notes that at present insufficient staff resources have been dedicated to this program. More dedicated staff, for example, may speed up the process for designating "endangered" species.

The ECO encourages MNR to initiate the necessary public debate into policy options that will effectively prevent species loss and adequately identify and protect species at risk.

For ministry comments, see Appendix A

Intensive Farming

Although the number of farmers in Ontario has declined over the past few decades, agricultural production has grown in the province during that same time, and the size of the average farm is increasing dramatically. Today, one-quarter of Ontario farms account for three-quarters of total farm revenues. While small family farms can still prosper in Ontario, new farms are often highinvestment intensive operations, with very large numbers of livestock. Farms with 3,000 or more pigs or 1,200 cattle are increasingly common. The Ontario Ministry of Agriculture, Food and Rural Affairs suggests that one definition of an intensive farm might be a facility with over 10,000 pigs or 1,500 dairy cows. As this new form of farming spreads, environmental laws created when small operations were the norm may not address the associated environmental risks that come with more intensive farm operations.

The management of nutrients, particularly from manure, is one of the major sources of environmental risk in agriculture. When manure is incorrectly stored, handled, or spread onto land, it can harm soil, water, and air quality. Raw manure is traditionally spread onto farm fields as fertilizer, and this can be a reasonable environmental practice as long as farmers have sufficient acreage to absorb the manure of their livestock. But new large-scale farms produce vast quantities of manure, and often do not have correspondingly large areas of farm land. Ontario currently has over 3.4 million hogs (approximately 400,000 in Huron County alone), and altogether they produce as much raw sewage as the province's 10 million people.

Excess manure application can result in run-off to streams or leaching of nutrients from the soil into groundwater. The run-off spurs additional growth of algae and other aquatic plants, which may make water unusable for drinking or swimming. As well, excess aquatic plant growth reduces oxygen levels in the water, leading to fish-kill incidents. Excess nitrogen (as nitrate) can make groundwater unsafe to drink, particularly for infants and the elderly. Ammonium nitrate and ammonium sulfate emitted to the air from animal housing can be harmful to human and animal health. Epidemiologists have also recently published research that showed that Ontarians living in rural areas with high cattle density have elevated risk for toxic E. coli infections. The contamination of drinking water with E. coli that killed several residents of Walkerton, Ontario, in May 2000, is suspected by some experts to be related to livestock manure.

Residents in a number of rural Ontario municipalities have complained in recent years about the handling of manure at large livestock operations. Several large manure spills and leaks have increased the public's concern. Citizens' groups have recently formed in the London area, in Bruce County and also near Peterborough, all focused on problems related to intensive farming and manure management. Within the last two years, numerous counties and townships across rural Ontario have attempted to deal with the issue by passing bylaws which either place short-term moratoria on new large livestock operations or require manure management plans. These municipalities have also urged the provincial government to take action, arguing that municipalities do not have the legislative tools necessary to deal with manure management.

OMAFRA has long promoted a voluntary approach to the management of environmental risks from manure. Since 1993, OMAFRA has provided technical support to the voluntary Environmental Farm Plan Program, which encourages farmers to develop Environmental Farm Plans, including manure management plans. The program has been funded by approximately \$15 million federal Green Plan dollars from Agriculture and Agri-Food Canada. Under the program, farmers with peer-reviewed Action Plans are eligible for up to \$1,500 of incentive funds to offset expenses. OMAFRA reported to the Environmental Commissioner in February 2000 that more than 17,000 people have attended Environmental Farm Plan workshops across Ontario, representing an estimated 30 per cent of Ontario's farm acreage. Farmers have also completed 7,000 environmental improvement projects, with the support of the incentive funds. It is not clear how many of these projects addressed manure management.

OMAFRA has avoided using regulatory measures to deal with manure management. There are no legally binding standards for constructing manure storage facilities or for the application of manure. For example, there are no rules forbidding the spreading of manure onto fields that are drained by tile drains. There are also no monitoring mechanisms to ensure that farmers use best practices for managing manure. Ontario environmental legislation also specifically exempts some aspects of manure management. For example, waste management requirements in the *Environmental Protection Act (EPA)* do not apply to animal waste, i.e., certificates of approval and manifests are not required. Originally, such exemptions had some merit, in that they intended to protect small family farms from onerous regulation, but with the advent of industrial-scale agriculture, these exemptions have become problematic.

In 1998, the Farming and Food Production Protection Act (FFPPA) strengthened the protection to farmers against complaints from neighbours. The new FFPPA also stipulates that no municipal bylaw can restrict a normal farm practice if the practice is determined to be "normal" by the Normal Farm Practices Protection Board. The ECO's 1998 annual report noted that as a result of this new law, farm discharges may not be dealt with as vigorously as industrial discharges and emissions. The ECO said it would continue to monitor and report on the impact of this new law.

In fact, the new legislation has already been used to overturn a municipal bylaw attempting to control intensive farming operations in Biddulph township, north of London. In 1998, the township tried to restrict the size of farming operations to a maximum number of livestock, partly to protect local wells that rely on shallow aquifers – in some spots lying within six feet of the surface. The township also planned to require farmers to complete a nutrient management plan, and to own at least two-thirds of the land base required for manure spreading, as determined by the nutrient management plan. A local hog farmer alleged that this bylaw restricted normal farming practice, and the Normal Farm Practices Protection Board agreed after a hearing. The Board decided that municipalities could in principle impose nutrient management plans upon intensive farming operations, but noted that most livestock farmers have informal plans which are rarely committed to writing. The Board also decided it was not a normal farming practice to focus only on land actually owned by the farmer when calculating available tillable acreage for manure spreading. A local

An Effective Environmental Registry:

Interpreting the EAA Exemption

Ontario residents rely upon the Environmental Registry to provide them with notice of environmentally significant decisions. The consequences of failing to post notice of an environmentally significant decision were demonstrated by a recent decision by the Ministry of the Environment.

The ministry issued an Order under the *Environmental Protection Act (EPA)* to London Hydro, directing the utility to clean up coal tar contamination that was leaching into the Thames River from property it owned. The decision to issue this order was not posted on the Registry. London Hydro is subject to the *Environmental Assessment Act (EAA)* and the *EBR* provides an exemption from the requirement to post notice of environmentally significant decisions on the Registry where the decision is part of a larger project that has been approved under or exempted from the *EAA*. However, the decision to issue the *EPA* Order was initiated by MOE and was unrelated to the project by London Hydro that had been approved under the *EAA*. Therefore, the *EBR* posting exemption did not apply.

After the Order had been issued, London area residents complained that they were not informed of the decision nor given an opportunity to consider alternative remedies. If the decision had been posted on the Registry, the public would have had an opportunity to comment on the proposal.

Ministries have interpreted the exemption that relieves them of their duty to post notice of decisions approved under or exempted from the *EAA* too broadly, resulting in environmentally significant decisions being omitted from the Registry. This undermines the effectiveness of the Registry as a "one-stop" window where residents can obtain information about environmentally significant decisions that may affect them.

citizens' group is now challenging the decision before an Ontario appeal court, against the farmer and the Ontario Federation of Agriculture.

To deal with manure problems, the Ministry of the Environment has in some cases undertaken prosecutions and issued orders under the *EPA*. In 1998, MOE issued a Director's Order against a hog farmer with 1,000 pigs in Hope Township, requiring him to provide bottled water to seven families whose wells were contaminated. In 1999, MOE ordered the farmer to drill new and deeper wells for each of the affected families. In 1999, a pork producer in the Chatham area was prosecuted successfully under the *EPA* for a discharge of approximately 1.5 million litres of pig manure, some of which reached a drain and Lake Erie. As well, Environment Canada charged a pig production facility under the *Fisheries Act* in 1999. It was the first prosecution of its kind in Ontario.

Other jurisdictions, including New Brunswick and Quebec, have created regulatory standards for manure management. In the United States, the Environmental Protection Agency has recently announced that large agricultural operations will be required to have permits under the National Pollutant Discharge Elimination System, as factories already do. Many American states also have regulatory requirements. About half require that farms have manure management plans. Some states also prohibit spreading of manure during the winter, when the risk of run-off from frozen ground is high.

In January 2000, OMAFRA began public consultation on intensive farming operations in Ontario, with the support of the Ministry of the Environment, and with a proposal on the Registry. Six well-attended public meetings across rural Ontario addressed the environmental impacts of intensive farming, such as water quality, damage to land, and odour. Many of the participants at the meetings supported a provincial regulatory system for manure management, and over 400

comments were submitted. OMAFRA received a summary report in April 2000. The Minister of Agriculture, Food and Rural Affairs has committed to the release of this report and the introduction of legislation on intensive farming by the summer of 2000.

In 1998, OMAFRA removed several environmental commitments from its Statement of Environmental Values, including the commitment to "ensure an environmentally responsible and sustainable agriculture and food system." The ECO's 1998 annual report noted that these changes were disappointing, and were not in keeping with the goal of the *EBR* to promote sustainability. The trend toward agricultural intensification is expected to continue over the next decade, and needs to be dealt with as an industrial pollution problem. The ECO questions why MOE has not been designated the lead ministry to address this issue, since MOE is the lead ministry for regulating and enforcing other environmental regulations. OMAFRA, on the other hand, has been accustomed to using the voluntary approach with its client group, the farm industry, and it is evident that on this issue, the voluntary approach has not been good enough.

Ontario residents have already shown concern about industrial-style agricultural operations, and it is likely that managing the environmental impacts of these operations will be of increasing concern to Ontarians over the next few years.

OMAFRA Comment:

On July 10, 2000 the government announced a proposal for clear enforceable province-wide legislation regulating agricultural operations. The proposed legislation will include among other things: developing standards for agricultural practices, including manure handling, storage and application; providing strict enforcement authority; and setting penalties and fines for infractions.

For additional ministry comments, see Appendix A

Recommendation 7

The ECO recommends that the regulatory framework relating to large intensive farming operations be equivalent to that of other industries that produce large volumes of waste with respect to approvals, monitoring and compliance mechanisms.

The Sale of Government Lands

In our 1998 annual report, the ECO reviewed whether the Management Board Secretariat was in compliance with its Statement of Environmental Values (SEV) and with the Environmental Bill of Rights. We found that, contrary to commitments in its SEV, MBS was not meeting minimum requirements for consideration of the environmental significance of its activities and for public participation, particularly in its disposition of the Ontario government's substantial land holdings.

During the reporting period for this annual report, the ECO has become concerned that the Management Board's real estate agency, the Ontario Realty Corporation (ORC), has continued to market, rezone, subdivide, and sell government land holdings affecting environmentally significant lands - including lands in the Parkway Belt north of Toronto, the Oak Ridges Moraine, the Markham-Pickering Agricultural Land Preserve and the Rouge Park areas – all without adequate environmental study or public consultation.

1998 ECO Findings

Management Board Secretariat began to restructure and downsize ORC in the mid-1990s, privatizing many of its activities. Since 1995, MBS has also directed ORC to accelerate disposal of government land holdings to increase revenues. At the same time, MBS substantially revised its directives on real estate activities to include principles such as achieving "value for money" by "optimizing the use of the Government's real property" and "maximizing the return to the Crown when disposing of surplus assets."

In its 1998 review of MBS, the ECO found that, as a result of these new policy directions and the pressure to increase revenues, ORC had been selling environmentally significant lands without following the requirements of its Class Environmental Assessment under the Environmental Assessment Act (EAA) – not carrying out, for example, the environmental studies required for land sales affecting environmentally significant lands.

The ECO also found that, contrary to commitments in its SEV, MBS was not meeting minimum requirements for public participation in its environmental decision-making. The changed MBS directives on real estate, for example, which apply to the entire Ontario Public Service, are environmentally significant policies. But these policies were substantially revised without public consultation on the Environment Registry, as required by the EBR.

ORC had also not been carrying out the extensive public consultation required by its Class Environmental Assessment under the EAA when selling environmentally significant lands. Nor had the agency submitted required annual reports to the Ministry of the Environment.

MBS Response to ECO 1998 Findings

In response to our 1998 annual report, Management Board Secretariat maintained that none of the decisions it made between 1995 and 1998 were environmentally significant, and that it had complied with the requirements of its Class EA. But at the same time, MBS also assured the ECO that it would improve its compliance under the *EBR* and *EAA*. For example, ORC quickly prepared and submitted annual reports to MOE under the Class EA for 1996 and 1997. And MBS committed to the following:

- to review and improve current practices related to the environmental assessment of sales of surplus lands.
- to post ORC's annual Corporate Plan on the Environmental Registry as an information notice to let the public know what properties it is planning to sell, including a marketing plan highlighting the properties it plans to market actively for sale.
- to post a number of new or revised real estate policies on the Environmental Registry, including the MBS-led development of criteria for determining surplus lands, and the newly revised directive on government real estate, which contains policies all ministries have to follow.
- to ensure that specific commitments and responsibilities under the EBR and the EAA are reflected in the Memorandum of Understanding and Realty Service Agreement between MBS and ORC.

1999/2000 ECO Findings

During this reporting period, MBS took some of the corrective actions it promised the ECO, but its compliance with the *Environmental Assessment Act* and the *Environmental Bill of Rights* further deteriorated in many ways (see pages 123 and 126). Some of the MBS commitments to the ECO were prominently featured in ORC's 1999/2000 Corporate Plan and in the 1999/2000 Realty Services Management Agreement between MBS and ORC. Unfortunately, none of these commitments were actually carried out in 1999/2000.

For example, one of the commitments was to include ORC's annual reports on environmental activities in its corporate annual reports to MBS and the Ontario Legislature, and to make them available to the public. ORC's annual reports are an essential tool for accountability, and will be even more important in the future, since the government passed legislation in 1999 making ORC more independent of MBS. However, as of March 31, 2000, the latest ORC environmental annual report covered 1997, and the latest publicly available corporate annual report covered 1996/97.

The ECO concluded at the end of this reporting period that most of the problems identified in our 1998 annual report continued through 1999/2000. MBS has continued to direct ORC to meet ever increasing annual revenue targets, and has changed the agency's mandate to focus almost exclusively on selling lands. These policy directions from MBS are the root of the problem, caus-

ing ORC to pursue that mandate at the expense of environmental policies and legislation. Further evidence is seen in MBS's business plans, which show that in the past few years, the sole criterion MBS has used to evaluate ORC performance is its achievement of sales revenue targets.

Municipalities, conservation authorities, the public, conservation groups and even other government ministries, such as Municipal Affairs and Housing and Natural Resources, have expressed concerns about ORC's activities regarding particular land sales. In some cases ORC has sold portions of land parcels to municipalities or conservation authorities for protection, but divided up and sold the rest of the land to developers. In many cases ORC, sometimes in conjunction with development "partners," has appealed to the Ontario Municipal Board to overturn municipalities' decisions to restrict development.

While our reviews found that ORC routinely carries out environmental site assessments for soil contamination, these site assessments are not equivalent to the comprehensive environmental study reports required by the Class EA for sales affecting environmentally significant lands. And although ORC usually consults with municipalities, conservation authorities and the Ministry of Natural Resources on proposed land sales, it does not consult as broadly as required by the Class EA, nor does it give the public and interested parties notice that they are able to request further studies and consultation.

New ORC procedures for real estate sales, dating from January 2000, were not posted on the Environmental Registry for public comment. While the procedures refer to the requirement for "complete documentation" required by the Class EA, the necessary time to do the public consultation or environmental studies does not appear to be built into the procedures. MOE extended the MBS/ORC Class EA to June 2001, while the Class EA is being rewritten. Until a new Class EA is approved by MOE, existing rules remain in force. The ECO will continue to monitor implementation of the current rules and development of the new Class EA.

MBS informed the ECO that ORC's in-house Environmental Services Unit will periodically audit marketing files for the Class EA activities. But after repeated warnings to MBS and MOE that the ECO has identified problems with ORC compliance, the ECO is skeptical that an in-house unit can ensure ORC compliance. Indeed, our reviews support the need for independent auditing and review of ORC compliance with the Class EA.

The ECO's review over two years has found broad disregard of environmental legislation by ORC and MBS. The ECO continues to urge MBS, MOE and ORC to address these *EBR* and *EAA* compliance issues.

MBS Comment:

The ORC acknowledges that it has not to date filed last year's annual report. However, this will be available shortly and will be provided to the ECO at that time.

With respect to the sale of lands, it is important to clarify that MBS has not changed the agency's mandate to focus almost exclusively on selling lands. ORC's mandate is to manage core government assets, dispose of provincial real properties to maximize value for the Ontario taxpayer and ensure customer satisfaction. Within the context of this mandate and usual business practice, sale revenue targets are established, as well as targets for facility operating costs. At all times ORC is required to carry out its property dispositions in compliance with requirements under Class EA and associated environmental legislation and this is reflected in both its enabling legislation and the MOU.

The ORC has undertaken due diligence in applying the Class EA to its marketing activities and has sought public consultation on those properties that are environmentally significant. During the 1999/2000 reporting period, the ORC did not market, rezone or subdivide environmentally sensitive government land holdings in the Parkway Belt north of Toronto, the Oak Ridges Moraine, the Markham-Pickering Agricultural Land Preserve, or Rouge Park areas.

Recommendation 8

The ECO recommends that MBS, MOE and ORC review and revise the current practices relating to sales of government lands, and bring them into compliance with EBR and EAA requirements, especially with respect to completing environmental study reports, carrying out adequate public consultation, and publishing annual reports on environmental activities.



Each year the Environmental Commissioner of Ontario reviews the environmentally significant decisions made by the provincial ministries prescribed under the *Environmental Bill of Rights*. Based on the number of notices posted on the Environmental Registry, more than 2,000 decisions were made by Ontario ministries during the period under review. They include:

- 30 policies
- 2 Acts
- 43 regulations
- more than 2,000 instruments

The extent to which the ECO reviews a ministry decision depends on its environmental significance and the public's interest in the decision. Detailed reviews were undertaken for the 25 decisions that appear in the supplement to this annual report (S4). In addition, in the following pages, the ECO and staff review in greater detail some of these decisions.

Ontario's Living Legacy - Land Use Strategy

The Ministry of Natural Resources finalized Ontario's Living Legacy (OLL) – Land Use Strategy in June 1999. The Strategy is a land use plan covering a large portion of northern and central Ontario – about half the province. It divides all Crown lands and waters in the planning area into land use categories, and sets out the activities that may occur on the lands in each category. The Strategy adds 332 new parks and conservation reserves, and makes additions to 46 existing parks and conservation reserves, protecting a total of 12 per cent of the planning area from forestry and mining.

MNR's decision to protect 12 per cent of the land base in parks and conservation reserves is a significant achievement and contributes to the purposes of the *EBR*, particularly the protection and conservation of biological, ecological and genetic diversity and the protection of ecologically sensitive areas. However, there were also a number of controversial aspects to this decision, as set out below.

The Strategy changes some policies for provincial parks and conservation reserves to allow a number of currently prohibited uses in the new protected areas. For example:

- Mineral exploration will be allowed, under controlled circumstances, in new protected areas having very high mineral potential. A site within a park or conservation reserve developed for a mine would be removed by regulation and another area would be added to the park or conservation reserve.
- Sport hunting will be allowed in all new parks and conservation reserves (other than nature reserve parks and zones) and in some existing wilderness parks.

In addition, to compensate the forest industry for the loss of access to timber in the new protected areas withdrawn from forestry, the Strategy includes measures such as compensating forest licence holders for loss of capital works (e.g., bridges, roads), and changing provincial laws and regulations to allow more intensive forestry operations in certain areas than are currently permitted.

The ECO has some concerns about the public consultation provided for the proposal for the Strategy that MNR posted on the Environmental Registry for public comment. Called the Proposed Land Use Strategy (PLUS), MNR's notice on the Registry was the fourth and final public consultation stage of the Lands for Life planning process that began in 1997. It was good that in the Registry notice, MNR summarized the previous public consultations carried out by the stakeholder-based Round Tables appointed by the minister and the results of public comments on the Round Tables' recommendations. The notice also described subsequent negotiations between various parties.

Unfortunately, the ministry allowed only 31 days for the public to comment on the proposed Strategy, even though it was a very important and complex policy and significantly different from earlier proposals. Furthermore, the government had already announced the major policy decisions contained in the proposed Strategy, which suggests that the public comment period was only a formality and that the public's comments would have little chance of changing the decision.

Some of these major policy decisions had been made as a result of tripartite negotiations in early 1999 between representatives of the forest industry, environmental groups and MNR. The resulting 1999 Forest Accord set out the agreement between the three parties to a list of commitments. They include:

- 12 per cent of the planning area to be protected from forestry and mining.
- no reduction in wood supply to industry.
- no increase in the cost of wood to mills.
- changes to the Timber Class Environmental Assessment approval and the Crown Forest Sustainability Act and its regulations to permit intensive forestry.
- financial compensation to the forest industry.
- an extension of commercial forestry north of current boundaries.
- a review of forest management planning guidelines.

MNR and the Ministry of Northern Development and Mines also held discussions with other stakeholders - for example, with the hunting and mining sectors, who were not involved in the Forest Accord negotiations. The results of some of these negotiations were put forward for comment in the PLUS notice on the Registry. However, an important commitment from the Minister of Natural Resources to the Ontario Federation of Anglers and Hunters – that the ministry would remove the prohibition on sport hunting in existing wilderness parks – was not mentioned in the Registry proposal notice. This change to provincial parks policy appeared only in the text of the final approved Strategy and decision notice.

Ontario's Living Legacy was the largest and most complex public consultation exercise ever carried out by MNR. As the ECO reported in the 1998 annual report, the speed and complexity of the exercise resulted in poor access to information and inadequate time for public comment.

The ECO asked MNR to extend the comment period on PLUS, and to post notice of proposals for the new policy directions contained in the Forest Accord. MNR decided not to extend the comment period, or to post the other requested policy documents on the Registry. In a letter to the ECO, MNR instead committed to posting numerous proposals for comment on the Environmental Registry in the next few years as the ministry proceeds with various elements of implementation of Ontario's Living Legacy – for example, the policies relating to mineral exploration in parks.

As the ECO suggested in our 1998 annual report, the ministry should have consulted the public separately on these major changes to provincial policies. It was difficult for the public to understand the many different policy proposals contained in the Proposed Land Use Strategy, or to provide meaningful comment on site specific land use designations.

It is impossible to assess the potential environmental effects of some aspects of the Strategy, since many details are still being developed. For example, MNR and MNDM, in consultation with stakeholders and advisory groups, are developing new policies for mineral exploration in parks, for replacing park lands withdrawn for mining, for hunting in existing wilderness parks, and for intensive forestry operations - as well as deciding which lands will be open to these activities. MNR and MNDM should assess the potential environmental effects of those new policies and provide adequate public consultation before they are implemented. The ECO will continue to monitor implementation of this decision.

MNDM Comment:

MNDM continues to dialogue with MNR and will work cooperatively with MNR to assess potential environmental impacts of any new mineral exploration policies. These will be posted on the Environmental Registry for public comment as appropriate.

For additional ministry comments, see Appendix A



Recognizing and Encouraging Voluntary Action

The Ministry of the Environment has finalized a policy framework, called Recognizing and Encouraging Voluntary Action (REVA), that will give greater regulatory flexibility to industrial facilities that voluntarily and consistently exceed basic environmental requirements and meet high standards of environmental performance. In exchange for the voluntary action, for example, MOE could grant facility-wide certificates of approval instead of requiring separate certificates for each emission source within a facility. Or the ministry could streamline its review and approval of an application for a certificate of approval, depending on the environmental significance and technology involved.

REVA resulted from a 1994 Memorandum of Understanding signed by MOE, the Canadian Chemical Producers' Association (CCPA), and several CCPA member companies. However, MOE notes that this new policy direction could apply to other industrial sectors as well.

Under REVA, the ministry would set clear environmental objectives and priorities. In return, industry would articulate clear policies to guide the development and implementation of environmental management systems and facility environmental improvement plans.

REVA builds upon Ontario's traditional regulatory approval process by encouraging industry to undertake voluntary pollution prevention measures. Currently, companies that intend to make significant changes to their operations are required to obtain approvals from MOE, even if the changes would result in reduced emissions. This requirement costs companies time and money and may discourage facilities from making improvements that minimize pollution. MOE and CCPA assert that REVA, by blending environmental protection measures with operational and administrative flexibility, will provide incentives for industry to move beyond the government's legislative requirements and will lead to environmental protection that is more cost-effective for the government.

However, some stakeholders are skeptical about the effectiveness of REVA, citing the following concerns:

- Environmental protection will not be advanced if policy and legal reforms are driven only by what industry will do voluntarily, as opposed to what is necessary for environmental sustainability.
- Government cost-savings through voluntary action may not be realized if REVA principles are applied on a facility-by-facility basis or "piecemeal" approach.
- The public may be excluded from participating in decision-making if industry/government
 agreements are reached outside a public forum and outside the certificate of approval
 process, which provides the opportunity for public comments when applications for approval
 are posted on the Environmental Registry.

As REVA advances from the concept stage to facility pilot projects, the ministry, the CCPA and its member companies need to apply clear and measurable environmental performance goals to these projects. The establishment of these performance goals will help the ministry and the companies to resolve outstanding issues related to REVA's implementation. These issues include mapping out the details on third party audits for industry, public reporting, prerequisites for facility participation, and approvals streamlining. There remains, as well, the issue of whether ministry resources are available for implementing REVA.

It is critical that implementation of REVA does not result in reduced public participation opportunities, both under the EBR or in general. Many of the proposed "tools" that MOE may use to implement REVA, such as the development of sector-wide environmental priorities, consolidated facility approvals, streamlined approvals with reduced engineering review, and reduced fees for certificates of approval, could affect the public's right to participate in environmental decision-making. Therefore, any changes to ministry policy or legislation related to REVA's implementation, or any changes to REVA itself, should be posted on the Environmental Registry, in accordance with the EBR.

The ECO also urges the ministry and CCPA to incorporate effective monitoring and reporting mechanisms into any facility pilot projects implemented under REVA, and to integrate meaningful public involvement throughout pilot project development, implementation and assessment. MOE should further refine and regularly report on the measures of success listed in the ministry's notice on REVA posted on the Environmental Registry, including information about reductions in pollutant emissions beyond current requirements.

While recognizing the potential benefits of REVA, the ECO shares the stakeholders' concerns. Voluntary pollution prevention agreements can provide greater efficiency and flexibility, but they may lack clear and measurable goals, are not enforceable, and can reduce government accountability if they are negotiated without involving the public.

Classification and Exemption of Spills: Amending Regulation 675/98 of the Environmental Protection Act (EPA)

In 1996, the Ministry of the Environment put forward a proposal for Responsive Environmental Protection, which is part of its regulatory reform initiative. MOE proposed to cut the requirements for reporting industrial spills by 20 per cent - from 5,000 annually to 4,000. In 1998, MOE posted the proposed changes to the spills regulation on the Environmental Registry, and the decision to finalize the new regulation was made in 1999. The ministry announced that the purpose of the new regulation was to avoid trivial spills being reported, as long as the discharger complied with clean-up requirements and documented the spill. In this way, according to MOE, more serious spills could be given priority. The ministry noted that the new regulation would give dischargers an incentive to identify spill prevention opportunities and develop a contingency plan that would make them better prepared for and more responsive to spills.

The previous regulation on the Classification and Exemption of Spills Regulation was replaced with a new regulation that organizes and clarifies spill reporting requirements. Three classes of spills are now exempted from all of Part X of the EPA, which sets out requirements for reporting spills, responding to spills and liability for spills. For some additional types of spills, the new regulation broadens the existing exemptions to section 92 of Part X, the section that specifically requires spills to be reported.

The new regulation, O. Reg. 675/98, includes 11 classes of spills that are exempted from some or all of section 92, or all of Part X. The first three classes of spills listed are exempted from all of Part X.

Previous Regulation	New Regulation
Discharge authorized by certificate of approval or another instrument	Class I spill: broader, simpler language is used in new regulation
Discharge of water from reservoirs formed by dams caused by natural events	Class II spill: adds exemption for discharge of potable water from municipal water mains
Discharge of pollutants from residential fires of ten or fewer households	Class III spill: no change

The remaining classes of spills are exempt from Section 92 (or specified subsections of it).

Previous Regulation	New Regulation
Discharge resulting from a planned maintenance procedure or planned for research or training purposes – discharger must have the Director's consent, and monitor and report on adverse effects	Class IV spill: adds time lines for notifying and obtaining consent from the Director, clarifies that the Director can add conditions, and defines a planned spill
No exemption	Class V spill: spill of refrigerant, if no adverse effects
Spill of up to 100 litres of fluid from a motor vehicle's fuel system or other operating system	Class VI spill: broadens the existing exemption to include non-liquid fuels, and eliminates the requirement of compliance with notification requirements under the Highway Traffic Act – must not enter any waters or cause adverse effects that are not readily remediated and remediation must be carried out immediately
No exemption	Class VII spill: spill of up to 100 litres of mineral oil, except for PCB liquids, from electrical transformers or capacitors owned by a provincial or municipal utility – must not enter any waters or cause adverse effects except those readily remediated and remediation must be carried out immediately
No exemption	Class VIII spill: spill of a fluid petroleum product at a bulk plant, marina or private or retail outlet of up to 100 litres in areas restricted from public access, or up to 25 litres in areas with public access - must not enter any waters or cause adverse effects that are not readily remediated and remediation must be carried out immediately
No exemption	Class IX spill: spill of material designated as dangerous goods where the quantity discharged is less than the minimum reportable quantity under federal dangerous goods legislation – must not enter any waters or cause adverse effects that are not readily remediated and remediation must be carried out immediately

No exemption	Class X spill: spill which is described in a spill contingency plan as "not reportable," if the plan adheres to appropriate standards and has been provided to the Director on request – plan must be in effect, spill must meet the requirements of the plan and remediation must be carried out immediately
No exemption	Class XI spill: spill that is reportable to a provincial or federal agency, where a memorandum of understanding between MOE and the other agency resolves the issue of duplicate reporting of spills

The new regulation also provides that detailed records be kept of every Class V, VII, VIII, IX, X and XI spill for two years, and that these records be available for inspection by a provincial officer on request.

MOE received 11 comments in response to this proposal on the Registry. All comments came from industry stakeholders and generally supported the regulation, although there were many detailed suggestions for clarifying or improving the provisions. Most of the changes made to the proposal as a result of the comments were fairly minor clarifications. The final regulation was filed on December 17, 1998, although the decision notice was not posted on the Registry until August 11. 1999.

The decision to replace the spills regulation is consistent with the commitment in its Statement of Environmental Values (SEV) to prevent the release of pollutants to the environment, MOE stated, as well as the commitment that "action will be taken to ensure that those responsible for the harm remediate it." MOE also noted that the ecosystem approach is promoted because records must be kept which provincial officers may inspect on request, allowing MOE to identify cumulative effects that require abatement. However, MOE also stated that "regulatory effort will be conserved and available for application to more significant environmental priorities." But MOE's SEV refers to the conservation of natural resources, such as energy and water, and not to the conservation of "regulatory effort."

The 1997 ECO annual report noted that a good understanding of trends in spills can be used to target problem areas and focus prevention programs. A reduction in the reporting of spills may compromise MOE's ability to monitor the total volume of spills, to understand and model cumulative impacts, and to identify chronic sources of small spills. This may have a negative impact on pollution prevention work by MOE and by industry. And although MOE is setting quantity limits for exempting spills within specific industries, some observers note that the type of contaminant and the circumstances of a spill must also be considered.

MNR's Natural Heritage Reference Manual

In 1999, the Ministry of Natural Resources finalized its Natural Heritage Reference Manual (NHRM). The manual is intended to help municipalities apply the Natural Heritage section (Policy 2.3) of the Provincial Policy Statement (PPS), issued under the *Planning Act*. This policy states that natural heritage features and areas will be protected from incompatible development, including significant wetlands, significant portions of habitat of endangered and threatened species, fish habitat, significant areas of natural and scientific interest, significant wildlife habitat, and significant woodlands and valley lands east and south of the Canadian Shield.

NHRM contains detailed technical advice to aid municipalities in identifying and protecting natural heritage and incorporating natural heritage policies into their own municipal policy documents. The approach suggested by the NHRM includes: inventorying; identifying natural heritage features and areas; identifying areas to protect to maintain diversity and connectivity; and implementing the system by protecting areas through official plan zoning, for example, or purchase or landowner agreements. The manual states that "in situations where mitigation measures cannot prevent negative impacts on the natural features or on the ecological functions for which the area is identified, an application should not be approved."

However, as a result of the government's reform of the municipal planning system in 1996, municipalities are now responsible for implementing the *Planning Act* and must only "have regard to" matters of provincial interest set out in the Provincial Policy Statement. MNR's suggested process for addressing the impacts of development on natural heritage is therefore advisory only and municipalities are free to use MNR's suggested approach – or any other approach that would meet the intent of the policies of the PPS.

At the same time, the Ministry of Municipal Affairs and Housing now provides one-window service for provincial input, review and appeal of planning applications and municipal planning documents, and the Ministry of Natural Resources has a much reduced role in these matters. MNR reviews development applications or municipal planning documents only to determine their effect on natural heritage, when requested by MMAH. The ministry no longer has the authority to appeal proposed development applications or municipal planning decisions directly to the Ontario Municipal Board. However, such matters can be appealed to the Board by MMAH at MNR's request.

MNR carried out excellent public consultation on this manual, developing it in consultation with stakeholders and then providing a 63-day comment period on the Environmental Registry. The ministry received 17 comments from a range of stakeholders, including environmental groups, municipalities, development agencies, conservation authorities and other Ontario ministries. Comments demonstrated ongoing differences of opinion about the government's planning reforms and how prescriptive provincial policies and guidance to municipalities should be in matters of provincial interest. Despite the wide range of opinions, MNR staff did a very good job of considering the comments of the public and describing their influence on the final decision when it was posted on the Environmental Registry.

The NHRM is one of several technical documents produced by MNR in support of the matters of provincial interest in the Provincial Policy Statement that fall under its mandate. Several other manuals are under development or are being revised. The ECO commends MNR for being the first ministry to prepare such manuals to provide technical assistance to municipalities, which must "have regard to" provincial interests in the new municipal planning system. MNR is also to be commended for its public consultation, including extensive notice and comment periods on the Registry.

The manual itself is comprehensive and well-written, and if implemented consistently across the province, has the potential to protect Ontario's natural heritage from incompatible development. Unfortunately, since it is advisory only, implementation of the approach the manual suggests will depend on how and whether it is used by municipalities, MMAH, and the Ontario Municipal Board. There does not appear to be any incentive for municipalities to follow the approach suggested by MNR.

The Ministry of Municipal Affairs and Housing is required under the *Planning Act* to carry out a review of the effectiveness of the Provincial Policy Statement by May 2001, and the PPS requires ministries to monitor the performance of some or all of its policies. As the ECO reported in the 1998 annual report, MMAH is leading the development of indicators that municipalities can use to report voluntarily on how they are implementing the PPS. MMAH's proposed indicator for Policy 2.3 is the total amount of development in, adjacent to, or within natural connecting corridors of forests, significant wooded areas, significant wetlands, areas of natural and scientific interest, and environmentally sensitive areas. But results of a pilot project by seven municipalities in 1999 showed that most of the municipalities could not test the indicator because data were not available, either at the local level or from MNR.

The ECO believes that the Natural Heritage Reference Manual is an effective tool and could help to achieve the goals of the Provincial Policy Statement. But this can occur only if MNR and MMAH work with municipalities to ensure they are using the manual. The ECO is concerned that lack of monitoring will lead to failure to identify and manage cumulative environmental impacts, and urges MNR and MMAH to take responsibility for the necessary monitoring and evaluation to measure the effectiveness and implementation of the Natural Heritage policies of the Provincial Policy Statement.

MMAH Comment:

The ministries are moving toward a system of performance measurement whereby the ministries and municipalities will be able to evaluate the effectiveness of land use policies and decisions. MMAH will begin preparing for a review of the PPS which will include an evaluation of the effectiveness and implementation of the Natural Heritage policies of the PPS.



Closing the Spring Bear Hunt

In the mid-1990s, environmental groups urged the Ontario government to end the open spring hunting season for black bear, held each year between April and June. These groups opposed the spring bear hunt on the ground that the legal prohibition against hunting lactating bears was ineffective. The spring bear hunt led to the shooting of female bears, and the consequent orphaning and death by starvation of young cubs.

In March 1999, the Ministry of Natural Resources decided to pass a regulation cancelling the spring bear hunt, held between April and June, in order to eliminate mistaken shootings of female bears with young cubs during the spring open hunting season.

Over 35,000 comments were received on this proposal when it was posted on the Environmental Registry for a 30-day comment period. Sixty-four per cent of commenters opposed the proposal, approximately 35 per cent expressed support for it, and about 1 per cent were unclear. Even though the majority of comments were against the proposal, MNR decided to pass the proposed regulation and cancel the hunt. Although MNR agreed with comments that Ontario's bear population is high, the ministry indicated its proposal was not put forward in order to sustain the bear population, but to guarantee that female bears emerging from hibernation with young cubs were not mistakenly shot during the spring months.

In its proposal notice on the Registry, MNR said it expected the environmental consequences of the regulation would be positive, since it would halt the orphaning of young bear cubs. The regulation would not have any significant long-term effect on the overall bear population, according to the ministry notice.

To compensate the tourist operators and guides who rely on the spring bear hunt for income, the government established an immediate assistance program, at a rate of \$250 per hunter who used their services. In addition, MNR posted a related regulation in March 1999, expanding the fall season for bear hunting each year by opening the season up to two weeks earlier in most areas of Ontario (August 15 in Northern Ontario.)

In response to comments that its decision was not based on scientific data, MNR said it was based more on ethical principles, and that "... the scope of accepted wildlife management principles takes into account, with respect to hunting practices, perceptions of social acceptability and humane hunting practices as they may change from time to time."

MNR indicated that the proposal did not conflict with any provisions or commitments set out in the ministry's Statement of Environmental Values. Since MNR predicted the regulation would not have a significant, long-term impact on the overall bear population, it would have a neutral effect on the SEV goal of the sustainable development of Ontario's natural resources.

As pointed out in the ECO's 1997 annual report and supplement, MNR needs to improve many of its wildlife information databases, including those on the bear population and on big game mortality. While the ministry's decision to end the spring bear hunt was intended to address social and ethical concerns rather than the sustainability of the bear population, improvements to the provincial databases on wildlife populations and on big game mortality may help MNR assess the impact of future regulatory changes on natural resource sustainability.

Additional Exemptions from Certificates of Approval for Air: Environmental Protection Act, Regulation 505/99

In July 1996, the Ministry of the Environment put forward the concepts of Standardized Approval Regulations (SARs) and Approval Exemption Regulations (AERs). These regulatory reform initiatives are intended to reduce red tape and conserve ministry resources by exempting companies from the requirement to obtain certificates of approval for certain industrial activities. Since that time, the ECO has monitored the ministry's progress in implementing these initiatives.

MOE finalized its first two AER regulations, related to air and water, under the Environmental Protection Act (EPA) in 1998. In 1999, a new regulation added more facilities and types of emissions to the list of exempted emissions sources in the AER covering air approvals. These include:

- emissions from a racetrack involved in racing dogs, horses, or motorized and non-motorized vehicles.
- emission of contaminants from the grounds where a special amusement, entertainment, charitable, political, educational, artistic, musical or sporting event is held, if the emissions are attributable to the special event.
- emission of contaminants from a shooting range, if they are attributable to the firing of guns.

MOE maintains that these additional AER exemptions would streamline the ministry's approvals program and allow it to "focus its resources on environmentally significant activities without compromising the integrity of the environment." MOE received 15 comments on the proposed new regulation when it was posted on the Environmental Registry. Several people expressed concern about the proposal, while a minority supported the AER additions.

The notice for the ministry's final decision on the regulation states that facilities and activities that are candidates for AER exemptions must either not have significant environmental impacts or the nuisances caused by them must be able to be addressed through local bylaws or land use planning. However, in the past, the ECO has received EBR applications for investigation about noise from racetracks, one of the proposed AER exemptions. The EBR applications, as well as people commenting on the proposed regulation, point out that noise pollution can be environmentally significant, threatening the rights of Ontario residents to enjoy their property and live, work and conduct business in their communities.

Furthermore, the ECO recognizes the commenters' concerns that local land use planning methods are sometimes not sufficient to control noise emissions, and that removing this type of pollution from province-wide control could create inconsistencies among communities across Ontario. Smaller communities often have inadequate resources and staffing to enforce local bylaws or to address such problems through land use planning. The ministry should have taken these comments into account when making its final decision on the regulation, but did not.

Moreover, while the new regulation may bring economic benefits because it allows companies to avoid the approvals process, it also has a negative impact on the public's ability to know about and influence decisions on the exempted industrial activities. Because MOE does not issue an instrument for an activity exempted under an AER, no proposal is posted for notice and comment on the Environmental Registry, and the right to seek leave to appeal, or to request a review under the EBR is eliminated. Thus, the removal of instruments from the EBR's processes decreases the public's opportunity to participate in potentially significant environmental decisions.

Amendments to Regulation 828, Niagara Escarpment Planning and Development Act

A proposal by the Ministry of Natural Resources to amend a regulation under the Niagara Escarpment Planning and Development Act (NEPDA) provides an excellent example of how comments submitted by Ontario residents under the EBR can lead to better decisions being made about the environment.

The Niagara Escarpment is a unique geological feature that is designated as a World Biosphere Reserve because it provides habitat to numerous and diverse animal and plant ecosystems. Under NEPDA, any person who wants to carry out development within an area of development control as designated under the Niagara Escarpment Plan must obtain a permit from the Niagara Escarpment Commission (NEC). However, the Minister of Natural Resources exempts certain classes of development from this requirement.

In an effort to streamline its approval processes and reduce red tape, MNR proposed increasing the number of exemption classes from 19 to 35. New classes of development that were to be exempted from the requirement to obtain a development permit included the following:

- renovations and additions to homes
- cutting trees on a lot greater than 0.8 hectares where no more than 10 per cent of the trees will be cut
- repair or replacement of an existing underground storage tank.

MNR stated that these amendments would have a neutral impact on the environment because in the past these kinds of development were usually approved by the NEC and did not generally have a significant impact on the environment.

The five comments MNR received in response to this proposal pointed out deficiencies in the draft regulation. The exemption for cutting trees did not state a minimum time period over which the trees could be cut. Nor did it require any advice from a responsible agency, forester or ecologist. Concern was also expressed that the proposed exemption for additions to homes did not specify a size limit.

True to the vision of the *EBR*, public consultation on this regulation resulted in a better environmental decision being made. In response to residents' concerns, MNR made important changes to its proposal. The ministry limited the cutting of trees to 10 per cent of the trees over a 10-year period and inserted a requirement that the cutting be done in accordance with a forest management plan recommended by MNR, a conservation authority, or a qualified forestry professional. Furthermore, the exemption for home additions was limited to those that are less than 93m² (1,000 square feet).

MNR Comment:

According to the United Nations' Man and the Biosphere (MAB) Program, each Biosphere Reserve is intended to fulfil conservation, development and logistical functions. These functions are complementary, mutually reinforcing and are indicative of the program's intent to provide for certain kinds of resource use and development in Biosphere Reserves, provided that these are sustainable.

Setting Environmental Quality Standards in Ontario: The Ministry of the Environment's Standards Plan

The Ministry of the Environment's Standards Plan, posted as a decision on the Environmental Registry in February 2000, is an update to the Proposed Three Year Plan for Standard Setting that the ministry originally posted in the fall of 1996. In that proposal, MOE laid out a list of prioritized standards for air, water and other media that the ministry planned to develop within the next three years. The ministry proposed to adopt standards from other jurisdictions and to encourage joint development of standards with other regulatory agencies in order to deliver an increased number of scientifically sound environmental standards in a cost-effective manner.

During this reporting period, MOE staff have told the ECO they received negative feedback from stakeholders on their 1996 proposal, causing them to rethink their approach. MOE has worked internally for several years on revising the approach, but has not published annual updates as promised. Moreover, MOE continued during that time to state in news releases, minister's letters, and business plans that it had an aggressive three-year plan to upgrade and strengthen Ontario's environmental standards for more than 200 chemical pollutants.

In our 1998 annual report, the ECO recommended that the ministry post an updated plan. MOE carried out this recommendation in a proposal posted in November 1999. The ECO also recommended that MOE post a decision on the outstanding 1996 proposal, including a summary of public comments received, the ministry's next steps, and a cross reference to the updated plan. MOE also carried out this recommendation, which helps the public understand how the policy changed over time.

There are a number of differences between the 1996 plan and the 1999 plan. In the new plan the priorities on some contaminants have shifted, there are some changes to the public consultation process, and fewer targets and timelines are set, especially for completion of air standards.

Priorities on Contaminants have Shifted

The 1999 Standards Plan revises the ministry's original priorities for developing or updating a variety of air, water, soil, tissue, sludge, compost and sediment standards. The decision notice focuses heavily on air standards: it refines the process used for setting standards for airborne contaminants, reviews current air standards to see whether they are consistent with standards in other jurisdictions, and recommends that 75 air standards be confirmed at their current values. The decision also clarifies which contaminants will receive priority attention for standard-setting, and explains which standards are being developed through joint efforts with the federal government and other provinces.

Changes to Public Consultation

MOE says that the standard-setting process has been modified to allow for formal consultation during each stage of standard-setting, including priority setting, risk assessment and risk management.

It appears that the ministry will apply the following six steps in developing each new air standard, and possibly other types of standards:

- 1. An information notice on the Registry, with extensive technical information and a 90-day public comment period.
- 2. An internal ministry review of comments received.
- 3. A proposal notice on the Registry, again with extensive technical information and a 90-day public comment period.
- 4. A preliminary internal risk management analysis, based on comments.
- 5. The ministry will begin more detailed "risk management discussions with affected stakeholders" if there are "compelling implementation issues."
- 6. The ministry will finalize proposed standards and post a decision, if there are no "significant implementation issues."

Fewer Targets and Timelines

The updated Standard Setting Plan sets fewer targets and timelines, especially for air standards. In contrast, the 1996 Three Year Plan for Standards Setting had a number of clear timelines and targets, although the ministry fell considerably short of those targets, as indicated by the chart on the next page.

MOE's targets for new standards in the Three Year Plan for Standard Setting, proposed 1996	Progress described by MOE November 1999
73 for air (17 of these to be completed in 1996/97)	 9 have completed risk assessments 18 have published information drafts 40 in progress MOE also proposed that another 75 of its air standards be reaffirmed at their present values; MOE confirmed this in January 2000
37 for drinking water (6 to be completed in 1996/97)	 3 standards set in 1998 1 reviewed and reaffirmed 9 are under review
29 for surface water (8 to be completed in 1996/97)	6 new or revised standards in 19982 proposed17 in progress
5 for sediment	unspecified number under development with federal and other provincial governments
11 for composting	no progress indicated
121 for soil placement	no progress indicated, but Guidelines for Contaminated Sites were published several years ago
6 for tissue	unspecified number under development with federal and other provincial governments

MOE's new Standards Plan lists 70 air standards in development and notes their current status, but not their anticipated completion dates. The Standards Plan also lists numerous standards for drinking water, surface water, tissue residues and sediment quality that are being developed by a national process, with MOE as a participant. Most of these latter standards are expected to be completed within one or two years.

Priorities on Some Timelines Have Shifted

Important contextual information is missing in the new Standards Plan. The plan does not mention the unmet targets the ministry set for itself in 1996, and does not explain why progress has been considerably slower than expected. MOE should have explained why there are no timelines for finalizing new air standards. MOE has also not explained why certain air standards (such as arsenic, cadmium, chromium VI and nickel) are still in development, even though they were considered high priority and originally scheduled for completion in 1996/1997.

Public Participation and the EBR Process

MOE has gone to some lengths to consult with the public on its standard-setting plan, providing 60-day comment periods on both the 1996 and 1999 proposed standard-setting plans, allowing the public adequate time to review the background documents and submit comments. MOE's 1999 posting included a convenient hypertext link to the background documents. MOE is also providing 90-day comment periods on individual air standards at both the information and proposal stages, which allows the public time to review the extensive background information packages.

To consult on the overall standard-setting plan, the ministry has organized a number of meetings since 1996, including information sessions in early 1997, a public workshop in September 1998, and numerous meetings with various stakeholders. Looking to the future, MOE promises further public consultation on new point-of-impingement models, and states that the ministry will coordinate any consultation efforts undertaken nationally with *EBR* consultation in Ontario.

The ECO does, however, have some concerns with the "risk management process" which MOE intends to apply to each new air standard (see Step 5 on page 75). For each substance, the ministry will weigh information about potential adverse environmental effects against industry information about the technical and economic feasibility of reducing emissions. Under this form of "risk management," the ministry decides whether to adjust a proposed new standard depending upon emitting facilities' predictions of how much trouble they will have meeting tougher limits. In effect, the process might be more accurately described as a cost-benefit analysis rather than risk management.

The ministry states that "public consultation is a key part of the risk management process." However, the ministry has not explained the format for this public consultation, or whether it will be consistently carried out. MOE has outlined what information it would like to receive from emitting facilities, but not how it will evaluate or verify that information, or what criteria will determine whether there are "compelling implementation issues," triggering further discussions. It is also not clear whether other stakeholders will be able to access or comment on the information, or whether they will be allowed to take part in risk management discussions.

MOE should clarify how it will consult with stakeholders when setting environmental standards. There have been a number of Canadian multi-stakeholder standard-setting processes that MOE could investigate as possible role models, including the MISA Issues Resolution Process, the CCME NO_{χ}/VOC Management Plan, or the work of the Advisory Committee on Environmental Standards.

The ECO hopes to discuss with MOE how best to use the Environmental Registry when consulting on individual air standards. MOE currently uses information notices with comment periods, followed by a proposal posting. While the ministry will receive public comments on the information drafts and will probably act on some of them, there is no *EBR* requirement that the ministry summarize those public comments on information notices or explain how those comments affected the subsequent proposal. As a consequence, neither industry stakeholders nor members of the public are able to properly track or evaluate MOE's decision-making on air standards, and cannot provide informed comment. One industry association has already raised a concern about this issue.

In Summary

MOE has laid out a general framework for standard-setting for air, water, soil and other media, and has also committed to updating many of its standards. Standard-setting is a complex undertaking which has to take into account both scientific and socio-economic factors. The ministry has recognized the need to involve stakeholders in this decision-making, and has taken a number of helpful steps to improve information sharing and public consultation. However, the ministry should have explained why progress on standard-setting has been so much slower than expected, and should set realistic timelines for finalizing new air standards. MOE has also not explained why certain air standards (such as arsenic, cadmium, chromium VI and nickel) are still in development, even though they were considered high priority and originally scheduled for completion in 1996/1997.

MOE should provide more detail on how the risk management component of standard-setting will work, and specifically how the public will be involved. This information should be posted on the Registry for public comment. MOE should also reconsider its use of information notices for individual air standards.

MOE Comment:

Setting absolute timelines for finalizing new air standards is difficult. The time required to revise an existing standard or set a new standard depends on the quantity and quality of available science used in developing the information draft, the number and complexity of comments received during both the information draft stage and the rationale document stage; and whether the proposed standard will require risk management, which is itself an evolving process, also requiring consultation.

Progress on revising the air quality criteria for arsenic, cadmium, chromium VI and nickel has been slower than anticipated because of the unexpected degree of complexity involved in assessing the physiochemical, environmental fate and toxicological data for these metals, as well as for the many inorganic forms and compounds of these metals. Further assessment of these scientific issues was indicated as a result of the initial stakeholder consultation.

We are consulting with affected stakeholders during the design of our risk management process and will also consult through the *EBR* to ensure that we design a process that can be applied consistently when risk management is required. The most recent consultation on 18 air standards solicited specific types of risk management information on proposed standards which will assist the Ministry in developing the final process. As well, criteria are under development to assist in determinations of where risk management is warranted. Although a portion of the risk management analyses may concern cost-benefit and socioeconomic impact, equally important are considerations of technical achievability across various sectors and processes, detection capability and enforceability. MOE recognizes that transparency is a key characteristic of a sound risk management process and as such all information utilized in making final decisions will be available to all stakeholders.

Although there is no *EBR* requirement to summarize comments received on information notices, a brief summary is provided in the rationale documents. The ministry intends to expand further in the rationale documents how various comments affected the final proposals/decisions.

Recommendation 9

The ECO recommends that MOE provide more detail on how the risk management component of standard-setting will work, including how the public will be involved, and post this information on the Registry for public comment.

The Need for Action

Ministries are required to post notice of a proposed policy, Act, regulation or instrument on the Registry for comment before it is implemented. Ministries also must post a notice of the decision to implement the proposal and provide an explanation of the effect of public comments on the ministry's decision-making. But often ministries leave a proposal notice on the Registry for months or years without posting a decision notice. Neither the public nor the Environmental Commissioner are able to tell whether the ministry is still actively considering the proposal, has decided to drop the proposal, or has implemented the proposal but neglected to post a decision notice.

Public expectations are raised by postings. Failure to post notices describing the effect of public comments on ministry decision-making may discourage the public from taking the time and effort to provide input.

The *Environmental Bill of Rights* requires the ECO to monitor ministries' use of the Registry, and specifically requires the Commissioner to include in the annual report a list of all proposals posted during the reporting period for which no decision notice has been posted. That list is included in the supplement to this report (see S5). The ECO periodically makes inquiries to ministries on the status of proposals that have been on the Registry for more than one year and suggests they post updates or decision notices. A chart describing some of these proposals, with updates from the ministries and ECO comment, is also included in the supplement (see S6).

The following are examples of some major proposals that need action. The ECO urges the ministries to post a notice on the Registry for each, informing the public whether or not the ministry will be implementing the proposal, and explaining the effect of public comments on the ministry's decision-making.

MOE Regulatory Reform

The 1998 ECO annual report examined a number of regulatory reform initiatives proposed under "Better Stronger Clearer: Environmental Regulations for Ontario" (BSC), the Ministry of the Environment's document summarizing proposed amendments to environmental regulations, which was released in November 1997. Some of the initiatives described in BSC and posted as proposals on the Registry at various times during 1998 were still listed as proposals on the Registry as of March 31, 2000, although it appears that MOE is not moving ahead with them. One example is a proposal for the consolidation and revision of eight waste management regulations under the *Environmental Protection Act* (including Regulation 347, the general waste management regulation), which was posted with a 100-day comment period. MOE received about 130 comments on the proposed changes from industry, environmental groups and others, raising substantial concerns with many aspects of the proposals.

While MOE made subsequent revisions to its waste management regulation in September 1999 and proposed further changes in February 2000, neither of those initiatives was related to the amendments proposed in 1998, and many observers concluded that the ministry was no longer planning to implement the earlier proposals. Instead of allowing these initiatives to remain in limbo, MOE should post a decision notice on the Registry telling the public whether or not it is proceeding with the 1998 proposals, and explaining the effect of public comments on its decision. If the ministry is going to revise its 1998 proposals substantially, it should provide another round of public consultation.

MOE Smog Plan

In January 1998, MOE posted Ontario's Smog Plan on the Environmental Registry as a policy proposal, with a 90-day public comment period. MOE described its Smog Plan as an "evolving document" and stated that there would be annual updates or progress reports. More than two years later, MOE has posted neither a decision notice nor an update, and has not issued progress reports on its Smog Plan. Yet MOE officials and documents refer to the Smog Plan (which was renamed the "Anti-Smog Action Plan" in 1999) as though it were approved government policy that is being implemented.

The 1998 Smog Plan is based on a mix of voluntary and regulatory actions, but the proposal contained a number of ministry commitments:

- The minister's introductory letter stated "We need to close the gap between the emission reductions identified to date and the 45 percent target...." According to MOE, actions have been identified that could deliver roughly half the needed emission reductions, if they were carried out. The ministry has yet to produce a list itemizing how the other half of the emission reductions might be achieved.
- The Registry proposal stated that key areas of action for 1998 would include developing
 processes to evaluate performance and to monitor and report progress on smog. However,
 MOE has not published a comprehensive up-to-date analysis and tally of "identified"
 emission reductions that have actually been carried out.
- The Registry proposal stated that key areas of action for 1998 would include completing a
 strategy on inhalable particulates (IP). Although MOE has used the Registry to release two
 background documents detailing the science and the strategic options available for
 controlling IP, the ministry has not yet completed a strategy for this category of air pollutant.

Since January 1998, there have also been a number of new smog-related developments, including new MOE policy initiatives, new scientific findings, and also reports of emission increases from at least one sector. MOE should ensure that the following new developments are reflected in an update for the Smog Plan:

- The Smog Plan counted on major emission reductions by Ontario's coal-fired power plants, to be achieved by the year 2000. These emissions were expected to be reduced by 19,000 kilotonnes of NO_x annually, one of the largest improvements identified by the Smog Plan. However, these emission reductions have not been achieved, and in fact emissions have risen dramatically between 1996 and 2000.
- In December 1999, MOE posted on the Registry a proposal to adopt new Canada-Wide Standards for ozone and fine particulate matter (PM_{2.5}). The proposed new standards and new research findings on health effects should be reflected in an update of the Smog Plan.
- In January 2000, MOE posted a proposal on the Registry for new air emission monitoring and reporting requirements for the electricity-generating sector. Facilities will need to monitor and report on some 28 substances of concern, including the key smog precursors sulphur dioxide (SO_2) and oxides of nitrogen (NO_x). As well, new caps for emissions of NO_x and SO_2 , along with an emission trading scheme, were proposed to take effect in January 2001 for the electricity sector. MOE has also proposed to develop emission monitoring and reporting requirements for other industrial sectors.

MOE should post a decision notice on the Registry explaining that it is implementing the Smog Plan, and describing the effect of public comments on the ministry's decision. MOE should also post an update on its Smog Plan on the Registry that reflects the new developments described above, and provide progress reports on the ministry's smog-related commitments.

MOE Comment:

The MOE released a report on Anti-Smog Action Plan progress that lists the identified, planned and implemented emission reduction opportunities. The report is available from the MOE web site. In June 2000, Ontario agreed to the Canada Wide Standards (CWS) for ozone and fine particulate matter. With regard to emission reductions by coal fired power plants, NO_x and SO₂ emissions for coal fired plants are being capped in 2001 and beyond. With regard to air emission monitoring and reporting requirements, MOE posted the final regulation for the electricity sector (effective May 01, 2000) on the Environmental Registry. Ontario's Anti-Smog Action Plan is an evolving process. Progress information and decision notices will be posted on the Registry and MOE web site.

MOE Model Sewer Use Bylaw

MOE's existing 1988 model sewer use bylaw is a reference document developed by MOE for voluntary adoption by municipalities to control discharges of pollutants to municipal sewers. The existing model bylaw is widely accepted to be out of date. Some substances require updating and limits need to be set for some previously unregulated substances.

In June 1998, MOE posted notice of a proposal to update its model bylaw by introducing:

- more stringent limits for cadmium, lead and mercury
- limits for 10 organic substances not previously regulated
- new sampling and analyzing protocols
- new monitoring requirements for dischargers.

Two years later, MOE has yet to move forward with this proposal. In spring 2000, the City of Toronto was consulting on a new sewer use bylaw that contains measures that go well beyond the 1988 model bylaw. For example, it requires companies from certain sectors to submit pollution prevention plans. It also sets new limits for 27 organic pollutants. While not every municipality needs to pass such a stringent bylaw, Toronto has demonstrated that MOE's 1988 model sewer use bylaw is no longer state-of-the-art. The ECO encourages MOE to move forward with its proposal and finalize a new model sewer use bylaw as soon as possible.

MOE Comment:

Based on comments received, the ministry has decided to develop a technical guidance document to assist municipalities in developing their own local sewer use bylaws instead of updating the Model Sewer Use ByLaw. Initial consultation with various stakeholder groups was conducted and the Ministry has received valuable input that will assist in developing the proposed guidance document. Stakeholders including municipal organizations like AMO, MEA (Municipal Engineers Association), and MESUG (Municipal Enforcement and Sewer Use Group), NGO's, industrial groups, and other government agencies were invited to participate. It is anticipated that the draft document will be posted on the Registry in the fall of 2000.

The 1988 model sewer use bylaw was based on sewer use limits for municipalities. However, the new guidance document will focus on developing a process for establishing a municipality's own sewer use by-law limits. The Municipal Sewer Use Guidance Document will address issues such as: Roles and Responsibilities, Sewer Systems and Treatment Plant Works, Formulating a Sewer Use Bylaw and Control Program, Setting Performance Standards for Discharges to Municipal Sewers and Implementation of an Effective Sewer Use Program.

MNR Forest Policies

In July 1997 the Ministry of Natural Resources posted a proposal for a Conservation Strategy for Old Growth Forest Ecosystems on the Registry. MNR told the ECO in late 1997 that the proposed strategy would be finalized without changes by the end of 1997. If MNR has decided not to finalize the strategy, it should post a notice on the Registry to inform the public that the policy initiative will not proceed. If it requires further policy development, MNR should consider posting a new proposal on the Registry for public consultation. The ECO continues to urge MNR to finalize the conservation strategy.

MNR Comment:

MNR is committed to completing the Old Growth Strategy. Throughout the development of Ontario's Living Legacy Land Use Strategy, many old growth sites have been identified for protection and this is considered to be an integral component of the Old Growth Strategy. Additional notice on the Environmental Registry will occur at appropriate times during completion of the Old Growth Strategy.

In 1996 MNR posted its proposed Forest Operations Prescriptions Guidelines on the Registry for comment. MNR staff told the ECO in early 1998 that revisions to address the public comments received were under way, and that the guidelines would be finalized soon. The ECO assumes the guidelines have been implemented, if not finalized, since the proposal notice indicated that MNR field staff and forest industry members were already being trained on the draft guidelines.

MNR Comment:

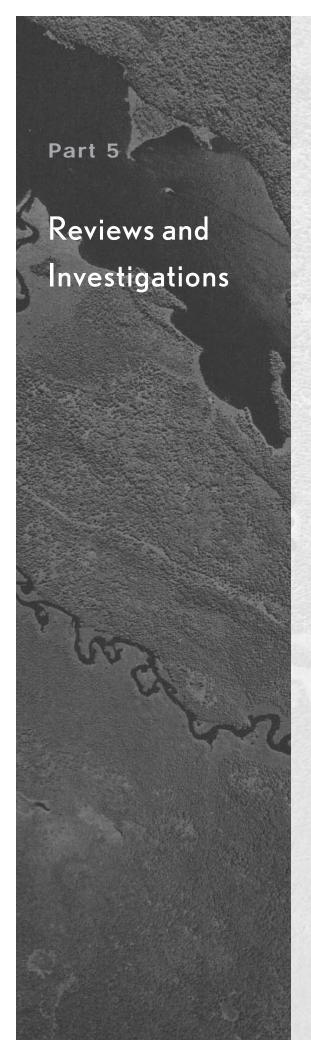
MNR is reviewing further actions necessary for the development and completion of the Forest Operations Prescription Manual.

Similarly, in 1998 MNR posted its proposed Forest Management Guidelines for the Conservation of Woodland Caribou on the Registry for comment. While no decision notice has been posted on the Registry, the MNR Web site says the draft guideline is being implemented as per Interim Direction dated March 4, 1999.

MNR Comment:

MNR guidelines are intended to identify and integrate the conservation of resource values in the forest management planning process. The direction in the caribou guideline is being considered in light of the ministry's effort to develop a fire simulation guideline. A draft of the fire simulation guideline is scheduled for completion by fall 2000. Notice on the Environmental Registry of the draft fire simulation guideline and the caribou guideline will be provided at this time.

The ECO reminds MNR of the EBR requirement to post a notice on the Registry as soon as reasonably possible after a proposal for a policy is implemented. Under the EBR, a proposal for a policy is implemented when the person or body with authority to implement the proposal does so. MNR should ensure that it properly posts decision notices for new policies when they are implemented, even if the ministry considers the policy to be a "working draft."



Members of the public can use the *Environmental Bill of Rights* application process to urge ministry action they believe is needed to protect the environment. Under the *EBR*, Ontario residents can ask government ministries to review an existing policy, law, regulation or instrument (such as a certificate of approval or permit) if they feel that the environment is not being protected. Residents can also request ministries to review the need for a new law, regulation or policy. These are called applications for review.

Ontario residents can also ask ministries to investigate alleged contraventions of environmental laws, regulations and instruments. These are called applications for investigation.

The ECO's Role in Applications

Applications for review or investigation are first submitted to the office of the Environmental Commissioner, where they are reviewed for completeness. They are then forwarded to the appropriate ministry which decides whether it will conduct the requested review or investigation or deny it. The ECO reviews and reports on the handling and disposition of applications by ministries.

Five ministries are required to respond to both applications for review and applications for investigation. They are:

- Environment
- Natural Resources
- Northern Development and Mines
- Consumer and Commercial Relations
- Energy, Science and Technology

Two ministries are required to respond to applications for review only:

- · Agriculture, Food and Rural Affairs
- · Municipal Affairs and Housing

In this review period, the ECO received and forwarded 16 applications for review and 27 applications for investigation. This represents a significant increase over applications received and forwarded in each of the previous four years.

The following table provides a breakdown of the disposition of the 16 applications for review, by ministry.

For MOE:

Reviews Denied	5	
Reviews Undertaken (but not completed by March 31, 2000)	1	
Undecided	2	
For MMAH:		
Reviews Denied	1	
Reviews Undecided	2	
For MNR:		
Reviews Denied	2	
Reviews Undecided	2	
For MEST:		
Reviews Denied	1	
	Charles to the Alley S.	

The majority of applications for review were denied, and the ECO generally accepted the rationale of the ministry that a review was already under way that addressed the concerns of the applicants. These ministry reviews, however, often failed to take into account all of the concerns of the applicants.

The 27 applications for investigation were dealt with as follows:

For MOE:

Investigations Denied	12	
Investigations Completed	5	
Investigations Undertaken(but not completed by March 31, 2000)	1	
For MNR:		
Investigations Denied	6	
Investigations Completed	3	

Of the 18 investigations denied, we generally accepted the ministries' rationale to deny. Exceptions were: an application that alleged that MNR was not fulfilling its obligation to develop a roadless wilderness policy (see I99001 in S7 in the supplement to this annual report) and one that alleged violations of the *EPA* through air discharges by Commercial Alcohols Ltd. (see I99027).

With regard to investigations undertaken and completed, we were critical of the results of MOE's investigation into alleged contraventions by MNR of the *Environmental Assessment Act* and some terms and conditions of the Timber Class EA (see pages 95-99). On the other hand, an application alleging violations of the *Crown Forest Sustainability Act* by Avenor Inc. and Buchanan Forest Products Ltd. was considered an EBR success story (see 199021). The ECO comment on this investigation states, in part:

This investigation illustrates how citizens can use the EBR effectively to take action to protect the environment. In this case, MNR carried out a thorough investigation and took appropriate action to address the contraventions that were verified by its investigations unit.

ECO Review of Receipt and Handling of Applications

A total of 35 applications were forwarded by the ECO and decided by the ministries during the review period. All of these, as well as four applications that were submitted in previous years, were reviewed by the ECO and summarized in S7 of the supplement to this annual report. Applications addressed a wide range of topics. Seven applications topics are discussed in the following sections of this chapter:

Nuisance Impacts
Air Standards
Forestry
Hazardous Waste
Landfills
Mining
Aggregates

Common Themes Emerging from ECO Reviews

In order to improve their handling of applications, ministries should:

1. Complete reviews in a timely way. There are still reviews that are more than four years overdue (see R0266 and R0334) and investigations that have dragged on since 1997 (see 197007, 009, 013). Applicants are entitled under the EBR to a prompt resolution of their applications. In the case of an unavoidable delay in completing a review or investigation, ministries should ensure that applicants are kept informed of their status and of any revised completion dates.

- 2. Improve client service. Ministries should pay close attention to the quality of correspondence and reports they provide to applicants. Whether it is a rationale for denying an application, or a ministry report on a completed review or investigation, information should be well organized, and clearly written in non-technical form. All allegations should be addressed in an investigation and all aspects raised by the applicants should be covered in a review. Sufficient background information should be provided to enable the applicants to appreciate the full scope of the issue. Additional opportunities for public participation and comment by the applicants, e.g., related proposal postings, should be provided. Developments related to the issues raised by the applicants should be relayed to them, and in particular, related ministry initiatives. Addressing the concerns of the applicants, and satisfying their information needs, should be the main objectives of the ministry in the handling of an EBR application, and if other avenues are available to the applicants, they should be so informed.
- 3. Perform the review or investigation without prejudice. For investigations, use independent ministry investigators without previous involvement in the issue. (We note with satisfaction that MNR has, during the review period, consistently assigned its investigations to independent parties.) Ensure that all of the evidence provided by the applicants is addressed. Provide the applicants with knowledgeable contacts for any required clarification or follow-up to the application.
- 4. In deciding whether to undertake or deny an application, use criteria as provided in the *EBR*, apply them in a consistent and transparent manner and explain the rationale clearly to the applicants and the ECO. Provide additional information or clarification to applicants if requested.
- 5. Where ministries deny an application for review on the basis that the issues raised by the applicants are already subject to review, ministries should explain the scope of the review and how applicants can become involved in the decision-making process, set out timelines, and indicate when proposals will be posted on the Registry for public comment.

Applicants should, in preparing applications, clearly indicate what they are asking the ministry to review and why (for reviews), or how they believe an Act, regulation or instrument has been contravened (for investigations). They should provide detail and supporting evidence as appropriate, and should present a clear, well-organized package for consideration by the ministry. Applicants should try to ensure that evidence in the application is complete and factually correct, and that it is presented in a dispassionate manner.

Nuisance Impacts from Discharges of Noise and Odours

Many human activities result in the discharge of noise and odours into the environment. At low levels, these discharges are accepted as a daily fact of life. However, at high levels, noise and odours can seriously interfere with people's use of the environment and possibly cause damage both to their health and to the environment. For this reason, section 14 of Ontario's Environmental Protection Act (EPA) specifically prohibits the discharge of any odour or sound that is likely to cause an adverse effect. This includes:

- impairment of the natural environment for any use that can be made of it
- harm or material discomfort to any person
- loss of enjoyment of normal use of property
- interference with the normal conduct of business.

The Ministry of the Environment administers the EPA and is responsible for responding to noise and odour complaints, as well as to EBR applications for investigation where it is alleged that someone is discharging noise and odours in contravention of section 14 of the EPA.

In 1999, three applications for investigation were submitted by applicants who were concerned with noise and odour impacts on the environment, their health and their property (see S7 in the supplement to this annual report for more information on these applications). The sources of noise and odours included a drag strip raceway, a milling operation, and a recycling plant. While at first glance, none of these sources would seem to pose a threat to the environment, for people living near them, the interference with their use of the local environment may be unbearable.

MOE did investigate the allegations contained in the three applications and found either a contravention or an adverse effect on the environment in each case. Yet the ministry did not take any direct enforcement action against any of the contravenors. In regard to the recycling plant and the milling operation, MOE relied upon assurances from the contravenors that they would undertake voluntary abatement measures to rectify the problems. In regard to the drag strip raceway, MOE refrained from taking further action because a new regulation was passed amending the Approval Exemption Regulation (AER) (see pages 71-72) to exempt all raceways from requiring a certificate of approval under section 9 of the EPA.

MOE's response to these applications suggests to the applicants and other residents that the ministry does not place a high priority on enforcing contraventions of section 14 of the EPA caused by noise and odour discharges. In two cases, MOE failed to provide a satisfactory explanation to the applicants of why voluntary measures were taken instead of enforcement measures. Similarly, MOE's decision not to take enforcement action because of the exemption provided by the AER regulation is misguided. The AER provides an exemption only from the requirement to obtain a certificate of approval under section 9 of EPA. It does not exempt anyone from the prohibition on causing an adverse effect to the environment under section 14 of the Act.

In 1996, MOE explored the potential for municipalities to take responsibility for local environmental nuisance problems, including those caused by noise and odours. The ministry received some significant negative feedback in response to this proposal. Some municipalities stated that they lacked the resources and expertise to investigate noise and odour discharges and some industry groups preferred more uniform provincial regulation. Despite this response, in August 1997, MOE implemented the "Procedures for Responding to Pollution Incident Reports." The policy directs staff not to respond to most complaints involving noise and odours, listing a number of sources of air and noise discharges that MOE staff should refer to municipalities when a complaint is received. Furthermore, staff are instructed not to investigate these types of complaints "regardless of whether or not there is another organization that may or may not respond." It appears that MOE made this decision, effectively downloading responsibility for noise and odours to municipalities, despite the concerns raised about the capacity of municipalities to take effective action against these discharges and without adequate public consultation.

MOE should make broad strategic decisions about its enforcement efforts in an open, transparent manner, using the Environmental Registry to consult with the residents of Ontario. MOE has a statutory duty to administer the *EPA* and take enforcement action in response to contraventions of the *EPA* that may cause an adverse effect on the environment. We are not aware that the Ontario Legislature has given the ministry relief from that obligation in these cases. As the abovenoted applications for investigation demonstrate, some people in Ontario are suffering negative impacts from noise and odour discharges. These people rely upon and expect MOE to help them address these problems.

Recommendation 10

The ECO recommends that MOE use the Environmental Registry to consult with Ontario residents when it makes broad strategic decisions about its enforcement efforts.

Electricity Restructuring

In 1999 the ECO received an application for review that raised concerns about potential worsening of air pollution from the electricity sector as a result of the government's restructuring of the electricity market. The applicants requested a review of the need for new limits on total electricity-related air pollution emissions for both domestic and imported electricity. The applicants proposed specific limits for sulphur dioxide (SO₂), nitrogen oxides (NO_y), greenhouse gases (such as CO₂), arsenic, beryllium, cadmium, chromium, lead, mercury and nickel. Because limits on air emissions are regulated under the Environmental Protection Act, the ECO forwarded this application to the Ministry of the Environment.

The ECO also sent the application to the Ministry of Energy, Science and Technology, since the applicants proposed a number of mechanisms that could be used to limit electricity-related emissions that fall under the jurisdiction of MEST. MEST and several of its Crown agencies, such as the Independent Electricity Market Operator (IMO) and the Ontario Energy Board (OEB), are currently developing the rules and procedures for the operation of the new open electricity market. The applicants also raised the issue of the need for the government to encourage fuel switching (switching from coal to natural gas and renewable energy) and energy efficiency and conservation (reducing the demand for electricity) in order to reduce emissions. These policy issues are within the mandate of MEST.

Both ministries decided not to undertake the requested review, saying that the issues raised in the application were already being examined through other processes. At the time of its response in August 1999, MOE said it was currently considering options for limits on emissions from the electricity sector, and working through two different processes with the federal government and other provinces. According to MOE, "under the Canada-Wide Standards process, recommendations will be made on controlling sources of mercury releases to the environment, including the electricity sector," and "under the National Climate Change process, issue tables are examining options for meeting Canada's potential Kyoto commitments. One issue table is devoted to the electricity sector." The ministry also said that any environmentally significant legislation that was developed would be posted on the Environmental Registry for public review and comment.

The ECO accepts MOE's rationale for not carrying out the requested review under the EBR, since other review processes were under way at the time of the application. But the response to the applicants was far too brief, failed to address the applicants' concerns adequately, and ignored some concerns altogether. The ministry did not provide details on the options it was considering for limits on emissions. Nor did MOE's response address the specific pollutants listed in the application, other than mercury. Subsequently, in January 2000, MOE provided notice on the Environmental Registry of three proposed regulations relating to electricity restructuring: new emission limits for NO_v and SO₂, two of the pollutants of concern in this application; and an emission trading system for these two pollutants. Although no new emission limits were proposed for any of the other greenhouse gases or toxic pollutants listed in the application, the ministry did propose mandatory monitoring and annual reporting of emissions of these substances from the largest polluters in the industry, the oil- and coal-fired electricity generation facilities.

It is not clear that any of the review processes referred to by MOE will address the applicants' concerns in a timely manner, nor did the ministry say that it would consider the applicants' proposals or supporting reports in the other review processes under way.

MEST also decided not to carry out the review requested by the applicants, in part because MOE was at that time addressing the main request by considering options for limits on emissions from the electricity sector. MEST's statement that aspects of the application that pertain to MEST "are addressed by the processes for implementing the *Energy Competition Act (ECA)*," was vague and unhelpful, since the ministry did not explain which aspects were being addressed, nor by which processes. The only example MEST provided was a regulation passed in 1999 that does not directly address the matters raised in this application for review. The ministry's response was silent on the applicants' request for a review of the need for fuel-switching and energy conservation, even though these are core MEST strategic directions laid out in its Statement of Environmental Values under the *EBR*.

MEST and MOE Comment:

The ministries note the ECO's expectation that more detail be provided in response to applications for review and will ensure that these expectations are met in future instances. The government is committed to creating a competitive energy sector which is environmentally and economically sustainable. MOE and MEST, working together, proposed several environmental requirements for the electricity sector, including a regulation requiring emissions reporting for electricity generators which is now in place, new NO_X and SO₂ emission caps for fossil power plants currently owned by Ontario Power Generation Inc., emission performance standards for domestic and imported electricity, proposed environmental assessment requirements for the electricity sector and a concept for emissions reduction trading. As the market develops, MEST will examine, as appropriate, the need and extent for adopting energy efficiency measures. With respect to fuel switching, the Minister of Environment has announced a moratorium on the sale of coal-fired plants until options for environmental protection have been reviewed. Those options include conversion of coal stations to natural gas.

MEST has carried out a significant amount of public consultation on its electricity restructuring initiative, using the Registry to solicit public comment when it developed the *ECA* in 1998. But both the ECO and the minister's advisory committee, the Market Design Committee (MDC), recommended in early 1999 that much more work, as well as major policy decisions, were still needed in order to protect the environment in the open market.

Both the MDC and the ECO also recommended that further public consultation was necessary to work out the details of rules to protect the environment. But with MOE, IMO, OEB, and MEST all

working on developing rules and regulations in 1999 and 2000 for different aspects of the opening of the electricity market, public consultation about these important matters has been fragmented and important environmental issues appear to have fallen through the cracks. As the ECO recommended last year, MEST should prescribe relevant portions of the Ontario Energy Board Act and the *Electricity Act* under the *EBR*, so that environmentally significant regulations passed under these laws will be posted on the Environmental Registry for public comment.

MEST Comment:

MEST is committed to keeping stakeholders and the public informed of electricity restructuring in Ontario through publishing a bi-monthly newsletter entitled Power Switch. The Electricity Transition Environment Sub-Committee provides a formal structure through which the government can hear from stakeholders. With respect to the Ontario Energy Board Act, 1998, while much of this legislation is of financial or administrative nature, the Ministry of Energy, Science and Technology is proceeding with a review to determine which aspects have environmental implications.

MOE Comment:

MOE and MEST have kept stakeholders informed and received feedback through a number of mechanisms including workshops, one-on-one meetings and EBR postings. Stakeholder involvement on issues affecting the electricity sector also takes place through working groups under the Anti-Smog Action Plan, the Canada-Wide Acid Rain Strategy Post 2000, Canada-Wide Standards and the Pilot Emissions Reductions Trading Project. The working groups bring together the thinking of government, industry and environmental groups.

The ECO made a number of recommendations to MOE and MEST related to electricity restructuring in the 1998 annual report. Since MOE had not made its decisions on any of the proposals for regulations as of March 31, 2000, and since many regulatory aspects of electricity restructuring are still under development in preparation for the planned electricity market opening in 2001, the ECO will wait to review the ministries' response to our past recommendations and to the concerns raised in this application before making further comments. The ECO will continue to monitor how MOE and MEST handle the environmental effects of electricity restructuring.

Recommendation 11

The ECO recommends that MEST prescribe relevant portions of the Ontario Energy Board Act and the Electricity Act under the EBR so that environmentally significant regulations passed under these laws will be posted on the Environmental Registry for public comment.

Forestry

The ECO has received 16 applications for investigation relating to forestry over the years, alleging contraventions of the *Crown Forest Sustainability Act (CFSA)*, *Public Lands Act, Ontario Water Resources Act, Environmental Assessment Act (EAA)* and the federal *Fisheries Act*. The ECO has observed a significant trend toward two types of applications:

- applications that allege the forest industry companies have contravened the *CFSA*, which is administered by the Ministry of Natural Resources.
- applications that allege that MNR has contravened the EAA, administered by the Ministry of the Environment.

Overall, the ECO has observed continued problems with MNR's forest compliance program, repeated failure of MNR to submit required annual reports on forest management to the Ontario Legislature, and reluctance by MOE to monitor and enforce the terms and conditions of MNR's approval for forestry activities under the *EAA*.

Alleged Contraventions of the Crown Forest Sustainability Act by the Forest Industry

There have been six applications for investigation under the *EBR*, alleging that companies have contravened the *CFSA* – for example, by cutting trees in no-disturbance zones or failing to protect streams. MNR has carried out five of the six requested investigations.

In 1999, applicants alleged that Avenor Inc., Buchanan Forest Products Ltd., and Bowater Inc. had contravened the *CFSA* at 10 separate sites in the Brightsand Forest. As with a similar investigation in 1998, MNR assigned a special independent unit, which conducted a thorough investigation of the allegations, found contraventions at four of the 10 sites, and took appropriate enforcement and preventative actions to correct the problems, including issuing a repair order against Bowater Inc. (See S7 in the annual report supplement for a description of application 199021 and the ECO comment on it.) This is the third time that a request for investigation filed under the *EBR* has resulted in enforcement action under the *CFSA* against a forest company.

MNR Comment:

It is important to note that six of the 10 allegations in the Brightsand Forest investigation were found to be groundless. Although most of the occurrences were minor in nature, MNR takes all compliance issues seriously and takes appropriate action to address the issues.

The ECO commends MNR for implementing the recommendations set out in the report by the staff team which carried out the 1998 *EBR* investigation in the Algoma Forest. MNR addressed all the team's recommendations, including those directed at correcting on-site compliance issues and field operational practices. And the ministry also followed through on recommendations related to

policy. For example, the team identified systemic problems and their remedies, and their findings and recommendations were formally conveyed to all MNR senior management, forest industry associations and all forest industry licence holders. The ministry also corrected internal approval problems, such as "tightening" the procedures by requiring documentation of verbal approvals related to forest operations. MNR also committed to fixing shortcomings identified in a number of forestry guidelines, and expects to post notice of proposed revisions to the guidelines for protecting streams and fish habitat on the Environmental Registry for public comment in 2000.

These investigations illustrate effective citizen use of the *EBR* as well as MNR's commitment to the *EBR* investigation process. The ECO remains concerned, however, that these investigations also illustrate problems with MNR's forest compliance program. In previous annual reports, the ECO has expressed concerns about MNR's ability to monitor whether forest companies are complying with forestry rules, given the ministry's much reduced staffing and its reliance on industry self-monitoring.

In the past the ECO has recommended that MNR review the results of transferring some of its monitoring and reporting responsibilities to the forest industry. MNR did undertake an internal review of their Forest Operations Compliance Program in 1999, providing a report to the ECO. In the review, the ministry found problems with the implementation of the compliance program – for example, confusion about roles and responsibilities for inspections, reporting and determining the significance of infractions. MNR's report contained recommendations to improve the compliance program and reported staff concerns over their capacity to carry out the program because of the ministry's lack of staff and resources.

The ECO is encouraged that MNR has taken steps to strengthen its compliance program, but still urges MNR to report publicly on industry and ministry inspections, audits and forest compliance as required by the Terms and Conditions of its Timber Management Class EA (discussed below). However, MNR has admitted that it is currently unable to report on compliance with provincial forestry and environmental assessment rules. MNR's review of the compliance program concluded that there was still confusion about whether industry or MNR staff were required to provide certain statistics and prepare the annual compliance reports for each forest management unit. Thus, some of the reports were not done, and MNR says it is impossible to collate or analyze the information contained in the reports that were done.

MNR Comment:

MNR is pleased to note the ECO's recognition of steps by the Ministry to strengthen the Forest Operations Compliance Program and will continue to seek improvements in the compliance partnership with the forest industry.

Alleged Contraventions of the Environmental Assessment Act by MNR

The rules the Ministry of Natural Resources must follow under the *Environmental Assessment Act* were set out in the Timber Class EA Approval issued by the EA Board in 1994, after a four-year public hearing. The Ministry of the Environment, which administers the *EAA*, has carried out at least a partial investigation for four of the seven *EBR* applications for investigation that allege MNR has contravened or failed to implement some of 115 terms and conditions of the approval. (See S7 in the supplement to this report for descriptions and ECO comments on applications decided in 1999, including 198009, 198010, 199001, and 199015).

The specific issues raised in the *EBR* applications include rules governing clearcuts, roadless wilderness policy, forestry opportunities for First Nations, public consultation and reporting requirements. MOE's conclusions in most of these investigations, and in their correspondence to applicants in the cases where the ministry decided not to carry out an investigation, was that "MNR is currently in compliance with the terms and conditions of the Class EA."

MOE's reports to the applicants and to the ECO have been very poor. MOE has provided misleading, and in some cases, incorrect information that appears simply to summarize MNR's response to the allegations. Several of the MOE reports acknowledge that MNR has not yet implemented certain conditions, but then merely pass along MNR's promises to develop policy or produce reports "in the near future." Applicants deserve a clearer and more objective response to the allegations of *EAA* contraventions made in *EBR* applications.

Many of the applications for investigation allege that MNR is contravening the Class EA requirement that the ministry submit annual reports on Timber Management to the Legislature. Ordered by the EA Board as an essential part of the environmental assessment approval, these annual reports are intended to allow the public, Legislature and MOE to scrutinize and debate MNR's progress on important forest management and policy initiatives, including all of the matters raised in the *EBR* investigations. MNR has submitted only one annual report since the approval took effect in May 1994. This report, which covered 1995/96, was submitted to the Legislature in 1998, but did not include much of the information required by the Class EA. According to MNR, the processes required to gather that new information had not been set up. And MOE's response to *EBR* applicants regarding this issue appears to be that MNR is not required to submit the reports annually, but has nine years to submit all the annual reports. This is an absurd interpretation of the requirement for annual reports, which the EA Board clearly intended as yearly reports of MNR's progress in implementing the terms and conditions of the approval. The ECO disagrees with MOE's conclusion that MNR is in compliance with the terms and conditions relating to public reporting.

MNR Comment:

The 1996/97 and 1997/98 Annual Reports are scheduled for completion by October 2000. The 1998/99 Annual Report is scheduled for completion by December 2000. Subsequent annual reports will be scheduled for completion within 18 months of the reporting period.

Moreover, MOE has taken actions – outside the *EBR* applications process – which demonstrate that MOE itself is concerned with MNR's implementation of the Timber Class EA decision. But it appears that MOE is reluctant to admit that to the public and to the ECO through the *EBR* applications process. For example, MOE carried out an application for investigation into MNR's policies on clearcut sizes and informed the ECO and the applicants that it had concluded that MNR was in compliance with the terms and conditions of the approval. But, outside the *EBR* process, the Minister of the Environment then issued a Minister's Order under the *EAA* to require MNR to meet the terms and conditions on clearcuts, within strict deadlines. MOE should have informed the applicants under the *EBR* that it had confirmed their allegations and was going to take appropriate action under the *EAA* to remedy the situation. Circumventing the applications process removes the public's rights under the *EBR*.

These *EBR* applications for investigation reinforce concerns that MNR is not fully implementing certain terms and conditions of the 1994 Class EA Decision. A 1998 decision of the Ontario Divisional Court similarly held that MNR violated six terms and conditions of the Class EA by approving three forest management plans without following the required planning process or developing the necessary background documents. This decision was upheld by the Ontario Court of Appeal.

Given resource constraints at the Ministry of the Environment, it is understandable that MOE may have difficulty monitoring MNR's compliance with the Class EA. But the *EBR* investigation process allows the public to assist the ministry in its monitoring and enforcement role, by bringing potential violations to MOE's attention. The ECO is disappointed with MOE's handling of the many applications for investigation of these allegations. ECO urges MOE to investigate fully MNR's compliance with the *EAA*, to take appropriate action with MNR, and to report accurately to the *EBR* applicants and the ECO on its findings.

MOE Comment:

The ministry responded to four requests for an EBR investigation into MNR's Class Environmental Assessment (Class EA) for Timber Management Activities. The Ministry of the Environment has followed up on the pertinent applications under the EBR, and has actively pursued those cases serious enough to warrant an investigation, or that otherwise involved potential harm to the environment. The ministry treats all requests for investigation seriously and each of these requests was thoroughly reviewed and evaluated by the Environmental Assessment and Approvals Branch, whose responsibility it is to oversee the administration of the Environmental Assessment Act. When this Branch determines a formal investigation is warranted, the assistance of MOE's Investigations and Enforcement Branch is solicited.

The request for investigation related to condition 77 of the Class EA was investigated by the Investigations and Enforcement Branch. That investigation report concluded that the Class EA condition, as written by the Environmental Assessment Board, gave MNR nine years (the lifespan of the current Class EA) to demonstrate they are in compliance.

MOE will be fully reviewing MNR's compliance with the terms and conditions of the Class EA when MNR requests renewal of the current parent Class EA which expires in 2003.

For additional ministry comments, see Appendix A.

Recommendation 12

The ECO recommends that MOE respond to EBR applications regarding MNR's alleged contraventions of the conditions of the Class Environmental Assessment for Timber Management by doing thorough investigations, taking appropriate action with MNR, and reporting accurately to EBR applicants and the ECO on the findings.

Hazardous Waste

In 1997, the Canadian Institute for Environmental Law and Policy (CIELAP) submitted an application for review of the hazardous waste management regime of the Ministry of the Environment. MOE denied the application, saying that many of the issues raised in the application were already under review by the ministry as part of its comprehensive plan to reform environmental regulations. In 1998, the ministry gave notice on the Environmental Registry of proposed major revisions to its waste management regulation, but this proposal did not move forward during the review period (see pages 80-81).

Instead, in September 1999, MOE announced a new plan to review Ontario's hazardous waste regulation. This six-point action plan to strengthen Ontario's hazardous waste regulation and requirements for hazardous-waste facilities included a commitment to revise the current regulation so it would be comparable to U.S. rules. The ministry provided little detail in the months that followed on how it was conducting the review of the regulation, or what the review would include.

In December 1999, CIELAP submitted another application for review that asked for immediate reforms to MOE's approvals process and standards for hazardous, PCB, industrial and other "subject" waste disposal sites and systems. Again, MOE decided not to conduct a review, saying that "the matters raised in the application are either currently being examined through various processes already underway or have been considered and final decisions made."

The CIELAP application referred to recent problems at hazardous waste disposal sites as evidence that MOE had approved new and expanded hazardous waste disposal and destruction sites and systems without sufficient evaluation. The applicants also provided excerpts from Environmental Assessment Board decisions that expressed concerns about the way in which the ministry handled approvals of a number of facilities. CIELAP alleged that the current approvals process was inconsistent and inadequate, and was placing the health, safety and economic well-being of Ontario residents at risk.

The applicants also requested a review of the need for new limits on emissions from hazardous waste incinerators. Emission limits for selected pollutants are currently included in certificates of approval for each facility, based on Ontario's existing point-of-impingement standards for hazardous air pollutants. The applicants referred to statements by the Provincial Auditor, the ECO and MOE which suggested that many of the point-of-impingement standards are out of date and do not provide adequate protection for human health and the environment. In fact, MOE developed a new guideline in 1997 that set limits on emissions from non-hazardous waste incinerators, but the ministry does not have guidelines for hazardous waste incinerators.

The CIELAP application referred to the new U.S. emission standards for incinerators and cement kilns burning hazardous waste, finalized in September 1999, and suggested those new standards be adopted as interim standards in Ontario. The new U.S. rules will reduce mercury emissions from hazardous waste incinerators by 55 per cent, dioxins and furans by 70 per cent, cadmium and lead by 88 per cent, four other metals by 75 per cent, and particulate matter by 42 per cent.

MOE responded that it was involved in the setting of Canada-Wide Standards (CWS) for mercury and dioxin that will affect hazardous waste incinerators in Ontario, and could not prejudice its position in the CWS process by adopting interim standards. The Environmental Commissioner believes this response was inadequate, since it addressed only two of the many hazardous air pollutants included in the U.S. standards.

CIELAP also expressed concern over the quintupling of hazardous waste imports from the U.S. to Ontario between 1993 and 1998, while exports from Ontario to the U.S. remained stable. The United States introduced new rules in 1994 essentially banning untreated hazardous wastes from landfills, while in Ontario, limits on the acceptable levels of contaminants are set in the certificate of approval for each landfill site and tend to be many times higher than the U.S. limits. CIELAP alleged that these weaker Ontario standards, and therefore cheaper disposal options, have been a major factor in the increase of imports. In February 2000, both the Canadian Environmental Industry Association and the federal Environment minister expressed similar concerns.

CIELAP requested the ministry immediately adopt the U.S. treatment standards for land disposal of hazardous wastes as an "interim" standard in Ontario while it was conducting its review of the regulation. In its response, MOE did not address the applicants' concern about the growth in imports of hazardous wastes, but did say that "The Ministry is continuing its review of its hazardous waste regulation and further initiatives, including land disposal restrictions, are under consideration."

Although MOE denied CIELAP's application and dismissed most of the concerns it raised, the ministry did say that three matters "are under consideration": designation of hazardous waste sites by regulation under the *Environmental Assessment Act*; new Canada-Wide Standards for mercury and dioxin; and land disposal restrictions.

ECO Comment

MOE's reasons for not carrying out a review under the *EBR* were weak, failing to address some of the evidence and concerns raised by the applicants. While MOE's consideration of these matters is welcome, the ministry's review of the hazardous waste regulation is a "black box." To meet the spirit and intent of the *EBR*, MOE should at least provide the applicants with the expected completion date of this review, commit to considering the applicants' evidence in the ongoing review, and inform the applicants and ECO about the status and outcome of the ministry review.

MOE Comment:

While the ministry is considering formalizing the practice of designating certain types of private sector waste management facilities subject to the EAA through a regulation, we continue to designate individual proposals on a case-by-case basis. While this approach may be more onerous from an administrative perspective, the end result is identical to that which would be achieved through a formal designating regulation. The ministry continues to support the application of environmental assessment requirements for any private sector waste management facility that has the potential to cause significant environmental effects. This goes beyond the focus on hazardous waste only identified by CIELAP.

With regard to Point-of-Impingement Standards for hazardous air pollutants, the ministry began updating its air standards in early 1996 based on the recognition that many of our standards were at least 20 years old and may no longer be protective. The ministry initiated consultation on the first set of 14 air standards developed under the aggressive Standards Plan in January 1997. Decision notices for nine of these standards were posted on December 23, 1998. The information drafts for 18 high priority air contaminants were posted for a 90-day public comment period on January 22, 1999. The ministry has now evaluated comments received and developed proposals for individual standards or guidelines, which were posted for an additional 90-day public comment period on February 21, 2000.

For additional ministry comments, see Appendix A.

Recommendation 13

The ECO recommends that MOE provide the applicants and the public with more detail on its current review of the waste management regulation and requirements for hazardous waste facilities, including the scope, status and expected completion date.

Recommendation 14

The ECO recommends that MOE clarify, using the Environmental Registry, the relationship between its 1998 waste management regulatory reform proposals and the current review, and explain whether the ministry will be implementing the earlier proposal.

Landfills

The 1995 ECO annual report pointed out that landfill management practices would continue to attract the attention of landowners and the public in the future. Since that time, the ECO has received applications every year from residents concerned about the impacts that landfills have in their communities. In this reporting period, the ECO received two applications for reviews and two for investigations relating to the certificates of approval for two township landfills, one in Edwardsburgh and the other in Cochrane. (See S7 of the supplement to this annual report for more detailed information on these applications.)

Two applications asked the Ministry of the Environment to review the approvals granted to the townships because of potential impacts the landfills would have on adjacent areas. In both cases, the applicants asked the ministry to review evidence uncovered after the granting of the Cs of A and to change the site approval to minimize potential environmental impacts.

The ministry denied both requests for review because they were received within five years of the issuance of the C of A. According to the *Environmental Bill of Rights*, the ministry does not have to grant a request for review within this time period unless there is social, economic, scientific or other evidence that failure to review the decision could result in significant harm to the environment – and unless this evidence was not taken into account when the decision was made.

According to MOE, the applicants' evidence, in both instances, did not suggest that failure to review the decision could result in significant harm to the environment.

The ministry also denied the request for investigation into the development and operation of the landfill in Edwardsburgh. Applicants there alleged a total of 39 contraventions of the *Environmental Protection Act*, the *Ontario Water Resources Act* and the C of A for the site, asserting that the contraventions were likely causing contamination to off-site groundwater, drinking water, surface water and air quality, and were likely harming human and livestock health. But the ministry indicated that it was already investigating 15 of the allegations, and would not investigate the remaining allegations for various reasons. These included compliance of the landfill site with the ministry requirements, the lack of evidence provided by the applicants, and lack of ministry jurisdiction to address municipal concerns. However, MOE said it would review any additional information the applicants could provide about adverse effects or non-compliance issues at the landfill site.

In the second application for investigation, which was more successful, the applicants alleged that Cochrane Township failed to comply with a number of *Environmental Assessment Act* and *EPA* conditions of approval, including:

- the establishment of a groundwater monitoring program
- community consultation on the landfill site's groundwater management plan and review of the site's contingency plan
- submission of a stormwater management plan to both the ministry and community representatives.

The ministry undertook the investigation, which revealed there was a contravention of the Environmental Assessment Act, because the township did not allow the landfill site liaison committee, made up of community members, to review both the site's stormwater management and the contingency plan. MOE issued a field order requiring the township to provide these plans to the committee for comments and then provide the comments to the regional MOE director.

During this report period, applicants were able to use the EBR to engage MOE in addressing their landfill concerns and to improve information sharing with the community.

MOE Comment:

On April 4, 2000, the municipality of Edwardsburgh was convicted of four counts of violating the EPA. The municipality was fined \$2000. The sentence was suspended and the municipality donated the amount to the Grenville Land Stewardship Council.

Cochrane Township has complied with the field orders issued by the ministry and is now in compliance with the provisions of the Environmental Assessment Act and the EPA approvals.

Abandoned Mines

In 1999, the ECO received an application for investigation relating to the abandoned Kam Kotia Mine and Mill site near Timmins. Various site owners mined and processed zinc and copper there from the early 1940s through the 1960s. Subsequently, the 240-hectare site was abandoned, and then taken over by the provincial government in the late 1970s.

The applicants alleged violations of the *Environmental Protection Act*, the *Ontario Water Resources Act*, and the *Fisheries Act* at the Kam Kotia Mine. Specifically, the applicants alleged that mine tailings from the abandoned site were polluting both the Kamiskotia Creek and the Kamiskotia River, negatively affecting the health of fish and waterfowl and destroying many hectares of forest wildlife habitat. The applicants also noted that on windy days orange acidic tailings dust caused visible air pollution.

The Ministries of Natural Resources and Environment investigated the allegations and confirmed the severity of environmental contamination to site vegetation, and to sections of both the Kamiskotia and Little Kamiskotia Rivers. MOE confirmed that six million tonnes of mine tailings and 200,000 tonnes of waste rock located on the site have generated acid discharge into the headwaters of the Kamiskotia River and the Little Kamiskotia River. The discharge to the rivers has the following characteristics:

- a pH of 2.5 (highly acidic)
- concentrations of copper exceeding Provincial Water Quality Objectives (PWQO) by 2,000 times
- · concentrations of zinc exceeding PWQO by 1,000 times
- iron content exceeding PWQO by 1,000-2,000 times
- elevated levels of nickel, manganese, aluminum, magnesium, sulphate and ammonium.

In their responses to the applicants, both ministries indicated that the province has attempted to address the mine site's public safety and environmental issues over the years by erecting fences and signs, commissioning several environmental studies, and developing an Action Plan. This Plan was deferred indefinitely due to the government's concerns with the suitability of proposed clean-up "technology and concepts." MOE noted that its several attempts to order former site owners legally to remediate the site proved unsuccessful. During the 1990s some exploratory work on the Kam Kotia site resulted in the development of a baseline environmental monitoring program, diversion of surface and groundwater flows away from Kamiskotia Lake and domestic wells, and rehabilitation and re-vegetation activities on the southern part of the site.

On February 24, 2000, the Ministry of Northern Development and Mines announced that the government was contributing three million dollars over three years from Ontario's new Mine Rehabilitation Program "to begin clean-up" of the Kam Kotia site. According to MNDM, rehabilitation work will stop acid mine drainage from reaching nearby waterways and will also focus on "long-term rehabilitation options."

In their responses to the applicants, MOE and MNR failed to acknowledge violations of the *Ontario Water Resources Act* and *Fisheries Act* and instead relied on the funding commitment to address the applicants' concerns. But three million dollars will not be nearly enough to complete the site's remediation. By some estimates, clean-up could cost over 15 million dollars. While the two ministries will collaborate with MNDM on the clean-up efforts, the ECO is concerned that the responses of both MNR and MOE to the applicants provided few details about the ministries' roles and responsibilities, or about specific goals for the remediation efforts. While the ministries' responses to the applicants should have included those details, staff from the three ministries subsequently met with the applicants and other members of the community to provide more information about the project. The ministries have agreed to keep stakeholders informed at key points in the rehabilitation project.

Abandoned mines are a grave problem, with over 6,000 of these sites located throughout Ontario. The mines are associated with both safety (often unstable ground) and environmental hazards. However, the issues need to be costed separately. Past MNDM reports have estimated the rehabilitation costs for Ontario's abandoned mines at 300 million dollars. The costs of studying the impact of a single well-publicized site, the Deloro mine, were estimated at 12 million dollars. Yet the government's four-year Mine Rehabilitation Program (MRP), announced in September 1999, commits a total of only 27 million dollars province-wide to address both public safety and environmental concerns.

MNDM's plan to assess more than 3,000 former mine sites in the second year of the MRP is unrealistic. It is difficult to understand how it can apply its scarce financial resources to address both public safety and environmental hazards. These two issues need to be costed separately, since, as shown in the case of Kam Kotia, environmental costs alone are enormous.

MNDM needs to address the larger question of how to fund the exceptional expense of abandoned mine rehabilitation. The Kam Kotia mine site is only one of many environmental and public safety hazards caused by abandoned mines across the province. Because the problem of abandoned mines is long-standing and severe, the ECO urges MNDM to focus greater attention on the rehabilitation of abandoned mines and to use public consultation in the coming year to identify workable, long-term solutions.

MNDM Comment:

The \$3 million funding announced is first time funding and is not intended to address the entire site rehabilitation. The first focus is to address acid drainage from the site with other facets of rehabilitation being the secondary issue.

Assessing 3000 sites is achievable and MNDM is confirming the hazards identified in our current records along with securing "ball park cost estimates" to put all sites on a common footing to prioritize using the abandoned mine hazard rating system.

There is no intention at the present for costing separate funding for safety and environmental hazards. Public safety is MNDM's first priority at present.

It should be noted that, where inactive mining sites have a registered owner, the liability resides with that owner. Of the 6000 inactive mining sites, roughly 70% fall in this category. For the balance of Crown held sites, the gross estimate for rehabilitation is approximately \$120 million.

MNR Comment:

MNR received a letter from one of the applicants for the investigation, commending the ministry for its handling of the investigation. MNR regards this letter as support for the conduct and conclusions from the *EBR*. The Ministry will continue to keep stakeholders informed as to the progress of the Kam Kotia Rehabilitation Project.

MOE Comment:

In the *EBR* report and the correspondence to the *EBR* applicants, the MOE referred to impact of both receiving streams as contributing an "adverse effect to the environment", as well as stating that "...the impairment extends to site vegetation." The term "adverse effect" inherently refers to violations under Section 14 of the *Environmental Protection Act (EPA)* and "causing and permitting" the discharge under Section 30 of the *Ontario Water Resources Act (OWRA)*. For this reason, the Ministry has acknowledged violations with respect to the *EPA* and *OWRA*.

The three million dollar allocation by MNDM for site remediation is considered an initial commitment by the Crown. The ministry concurs that much larger resources are necessary to adequately address site rehabilitation and final closure. We are, however, confident that with the current and ongoing efforts among the three ministries (MNDM, MNR and MOE), progressive and staged rehabilitation will take place to address immediate short term environmental impacts to receiving waters and that these remedial measures will further complement site closure requirements under the *Mining Act*.

Recommendation 15

The ECO recommends that MNDM focus greater attention on the problem of abandoned mines and provide separate funding to address environmental issues.

An Effective Environmental Registry:

Explaining the Effects of Public Comment

In posting a decision notice on the Environmental Registry, ministries are required to explain how public comments were considered, notifying the public that their participation in the decision-making process was meaningful.

The Ministry of Natural Resources did an excellent job of explaining how the public's comments were considered in deciding to adopt the Natural Heritage Reference Manual. The decision notice for the manual posted on the Registry listed all the substantive changes that were made to the proposal in response to public comments. MNR also listed all the comments that were received but did not result in changes to the proposal and provided reasons why each suggestion was not adopted.

In other cases, ministries have failed to acknowledge submitted comments, giving the impression that the public's comments were not considered and that their participation in the decision-making process was meaningless. For example, the Friends of the Jock River, a local citizens' group, submitted comments expressing concern over a proposal to issue a permit to take water to a golf course. The Ministry of the Environment decided not to grant the permit, but stated in the decision notice that no comments were received and thus that the public's comments did not influence the decision. However, the ministry later explained to the ECO that the proponent had mistakenly applied for the permit and that the current permit didn't expire for another four years. Staff, in fact, had closed the file. If the ministry had included this information in the decision notice, the public would have understood why their comments did not have an impact on the decision.

Effective decision notices should group the comments into different categories, summarize the nature of the comments in each category, state whether the ministry made any changes as a result of each comment, and explain why or why not for every decision posted on the Registry.

Investigation: Aggregate Resources Act

Sand and gravel (aggregate) extraction is regulated by MNR under the *Aggregate Resources Act (ARA)*, which requires operators to follow the conditions of their site plans. A violation of the *ARA* was alleged in a May 1999 application for investigation. The applicants claimed that The Murray Group Ltd. did not follow their site plan for the Bowman Pit Complex near Elora, excavated below the water table, and damaged a wetland and a woodlot. The applicants also alleged damage to the groundwater sources of cold water trout streams, a violation of the federal *Fisheries Act*.

In response to the application, an independent MNR investigator reviewed documents, visited the site, and interviewed the operator and the applicants, as well as MNR and MOE staff. The investigator found that, although the current site plan contains provisions that protect the wetland and woodlot, no such protection was in place 10 years ago, when the damage occurred. The investigator also found that there was no excavation below the water table, and thus no damage was done to the cold water streams. The ministry therefore concluded that there was no contravention of either the *ARA* or the federal *Fisheries Act*.

The ECO commends the MNR for assigning an independent investigator. The ECO also found the MNR investigation thorough. In particular, the ministry's investigation of the alleged *Fisheries Act* contravention is commendable, since MNR has recently simply referred such allegations to the federal Department of Fisheries and Oceans.

However, we found the summary of the investigation given to the applicants inadequately summarized and, in some places, misrepresented the findings in the investigator's report. For example, MNR stated that "there was no evidence found" that the operator had not completed required remedial work. The summary omitted to say that the reason that "no evidence" was found was because MNR staff did not

visit the site to check on the operator's self-reports of non-compliance in 1997 and 1998. By the time the *EBR* investigation occurred, it was not possible to confirm whether the remedial work had been performed.

Although the operator had reported excavation depth violations in reports dated September 1997 and September 1998, MNR concluded in its *EBR* investigation that no depth violation had occurred. However, the summary of MNR's investigation did not make clear this finding applies only to the time of the investigation, in 1999, by which time the operator had applied for, and received, an amendment to the depth limit and a new site plan. This does not appear to be a reasonable response to a report of non-compliance, nor a fair response to an *EBR* application.

The investigator's report also confirmed the applicants' allegation that MNR staff destroyed the site plan that was in effect until December 1998. The investigator concluded that this was done in accordance with a ministry policy to destroy site plans for aggregate sites once a new site plan is approved, and that no further action was required. This is troubling, since the policy makes it impossible to investigate or prosecute the alleged violations of the site plan in effect just five months before this application was received. MNR should review this policy, as it could hinder future applications for investigation under the *EBR* and prosecutions under the *ARA*.

MNR Comment:

MNR has reviewed practices related to the retention of site plans and has determined that site plans and other documents should be retained for a minimum of five years, and in some cases, for the duration of the licence.

The investigator's report also indicates that MNR does not have sufficient resources, at least in the Guelph District, to regulate the self-monitoring system for aggregate extraction. The ECO's 1997 annual report contained a review of the changes to MNR's regulation of pits and quarries, including the move from annual inspections by MNR staff to annual reporting by licence-holders. At that time, MNR was intending to audit or field check 20 per cent of licences in 1997/98 and a minimum of 50 per cent in following years. This investigation found that ministry policy in 1999 was to field check 10 per cent of licences, but that Guelph District did not field check any in 1997/98 or 1998/99, due to inadequate staffing, and was planning to inspect only 25 (or 8 per cent) of the 334 licences in the District in 1999/2000.

The ECO encourages MNR to review the effectiveness of its Aggregate Resources Compliance Reporting Program, to determine how well inspections are being conducted by the different district offices, to see whether there are systemic problems with the program, and to develop remedies and put them in place. This would be a positive result from this *EBR* investigation, similar to the ministry's response to the 1998 forestry applications for investigation, which resulted in a review by the ministry of its Forest Operations Compliance System (see pages 95-96).

MNR Comment:

MNR has recognized the workload disparity within the Guelph District and has realigned the area of responsibility for the adjacent aggregate resources inspectors to help balance the workload.

In 1999/2000, MNR staff was required to conduct a minimum of 10% field audits for licensed sites and 100% office review and verification of Compliance Assessment Reports. This amount has increased to a minimum of 15% field audits for 2000/01 and will eventually increase to a minimum of 20%. The minimum of 20% is necessary to ensure that every site is inspected within the five-year window for prosecutions, as per the Aggregate Resources Act. These are minimum requirements and some MNR districts may audit a significantly higher percentage of sites. MNR's 2000/01 Business Plan commits the Ministry to a review and audit program to assess the effectiveness of the Aggregate Resources Compliance Reporting Program. The review that is being undertaken is due in part to findings of this investigation and in part as a normal requirement of implementing new legislation and policy.

Recommendation 16

The ECO recommends that MNR review the effectiveness of its Aggregate Resources Compliance Reporting Program, to determine how well inspections are being conducted by the different district offices, to see whether there are systemic problems with the program, and to develop remedies and put them in place.



Ontarians have other opportunities for using the *Environmental Bill of Rights (EBR)* in addition to having the right to comment on government proposals, ask for a review of current laws, or request an investigation if they think someone is breaking a significant environmental law. Those additional opportunities include:

- the right to appeal certain ministry decisions;
- the right to sue if someone is breaking, or is about to break, an environmental law and is harming a public resource;
- the right to sue for damages for direct economic or personal loss because of a public nuisance that is harming the environment.

Ontario employees are also protected, under the *EBR*, against reprisals for reporting environmental violations in the workplace or for using the rights available to them under the *EBR*.

Appeals

The *EBR* gives Ontarians the right to apply for leave to appeal ministry decisions to issue certain instruments, such as the permits, licences or certificates of approval granted to companies or individuals. The person seeking leave to appeal must apply to the proper appeal body, such as the Environmental Appeal Board (EAB), within 15 days of the decision being posted on the Environmental Registry. They must show they have an "interest" in the decision, that no "reasonable" person could have made the decision, and that it could result in significant harm to the environment.

During this past reporting period, concerned residents and environmental groups filed leave to appeal applications on a range of ministry environmental approvals. They include permits to take water (PTTWs) and orders for preventative measures made by the Ministry of the Environment. Discussion of some of these leave to appeal applications is set out below. (Further details on these applications are provided in S8 in the supplement to this report.)

Status of Appeals

At the beginning of 1999, there were no applications for leave to appeal under the *EBR* pending before the EAB, which hears appeals of MOE instruments. Ten appeal applications were initiated during the reporting period; six were denied and four were granted. Two

appeals, commenced when applicants were granted leave in 1997 and 1998, were withdrawn during the reporting period.

Forty-one "instrument holder" notices of appeal were also posted on the Environmental Registry during the reporting period. The *EBR* requires the ECO to post notices of these appeals, which are launched by companies or individuals who were denied an instrument or were unsatisfied with its terms and conditions. The notices alert members of the public who may decide to become involved with an appeal.

To ensure that the appeal process does not unduly hold up approvals, the *EBR* requires appeal tribunals to make decisions on whether to grant leave to appeal within 30 days after an application is filed. However, in practice, the 30-day time limit is difficult to meet because of extensions requested by the parties, the large amount of background documentation required, or the need to provide an opportunity to the other parties to respond or for the applicant to reply further to these responses. During the past year, according to information provided to the ECO by the EAB, the time between filing and decision-making ranged between 29 and 99 days. The average time required for the EAB to make a decision was 52 days.

Cottagers Appeal Water-taking Permits

The majority of the leave to appeal applications this year were related to permits to take water (PTTWs). Many of the leave applications were brought by cottagers and local residents unhappy with PTTWs issued by MOE. For example, in February 1999, the Soyer's Lake Ratepayers Association (SLRA) sought leave to appeal a PTTW that allowed the Woodlands Ranch to take up to 4,540 litres of water per minute, or 2,724,000 litres per day, from Little Soyers Lake. The EAB granted the leave to appeal application, finding MOE issued the permit on the basis of questionable and flawed assumptions. After the SLRA appealed the decision, a settlement was reached and a set of conditions addressing SLRA's concerns were drawn up by MOE and attached to the permit.

Another successful leave to appeal application was brought by Walter Schneider and other property owners on Hamer Bay/ Lake St. Joseph, appealing the Clublink Capital Corporation's PTTW for its Rocky Crest resort on Lake St. Joseph. Clublink received the PTTW to irrigate its two new 18-hole golf courses on the property. The appellants were granted leave on the basis that the ministry failed to impose conditions that would prevent the impacts irrigation would have on water quality, and that an ecosystem approach should have been used in making the decision whether or not to grant a PTTW. The cottagers withdrew the appeal after negotiating a settlement with MOE and Clublink, in which conditions for monitoring water quality were set out in a sewage works certificate of approval issued to Clublink.

An Effective Environmental Registry:

Decision Notices

Once a ministry has provided notice of a proposed decision on the Environmental Registry and considered the public's comments, the ministry may decide either to proceed as originally proposed (such as granting an approval or filing a regulation), to proceed with modifications to the original proposal, or not to proceed. In each case, the ministry needs to describe the nature of the decision and post a decision notice on the Registry that explains the outcome to the public.

Ministry descriptions tend to be quite brief, sometimes simply stating that the decision is "to proceed with the proposal." This can happen even in situations where a ministry's decision differs from the original proposal. This can be misleading. In one case, on the basis of the decision notice, a resident initiated a leave to appeal a decision by the Ministry of the Environment to issue a permit to take water. The decision notice simply stated that the "permit had been issued" without explaining that the decision was significantly different from the original proposal. It was later discovered that the ministry had in fact issued the permit for only one well for one year, not for two wells for a period of 10 years as originally proposed. In its decision on the leave to appeal application, the Environmental Appeal Board noted that the ambiguity could have been misleading and may have been a factor contributing to the appeal.

To make the Registry work effectively, ministries should clearly explain the nature of a decision. Decision notices should include the date on which the decision was made, the date on which it becomes effective, and an explanation of whether the decision differs from the proposal and how.

Naturalists Fight Application of Dombind to Roads

The Federation of Ontario Naturalists (FON) was partially successful in seeking leave to appeal an order issued by MOE to Norampac Inc. regarding the application of Dombind to roads. Dombind is a by-product of paper mill processing that Norampac wanted to use as a dust suppressant. The EAB found that Dombind had potentially harmful effects on the environment, and granted leave to appeal to the FON on the ground that MOE's order did not have a mechanism for adequate enforcement of its own rules for applying the Dombind. The FON subsequently settled with Norampac and MOE after the parties came to an agreement on amendments to MOE's order.

The Right to Sue for Public Nuisance

Any person in Ontario who experiences direct economic or personal loss because of a public nuisance causing environmental harm may sue for damages or other personal remedies under the *EBR*. Individuals in almost every other area of Canada can sue only if certain conditions based on common law rules are met. The *EBR* eliminates the need to get the Attorney General to take the case on behalf of the plaintiffs or to get the consent of the Attorney General to undertake an action. The *EBR* also clarifies that direct damages are recoverable and specifies that the person does not have to suffer unique economic damages or personal injuries to make a successful claim.

Update on Keele Valley Landfill Public Nuisance Case

As reported last year, in 1997 a class action law suit alleging public nuisance and other grounds was filed in Whitby on behalf of 30,000 residents in Maple and Richmond Hill. The residents were suing the City of Toronto over its operation of the Keele Valley Landfill site. In order to proceed, the action had first to be certified by a court as a class action. Initially, the case

was certified, but the City of Toronto appealed the original decision, and the appeal court refused to certify the class on the basis that the evidence did not support the position that all 30,000 residents had suffered nuisance impacts from the landfill. In 1999, the Ontario Court of Appeal upheld this decision. Leave on this preliminary matter is being sought from the Supreme Court of Canada. The ECO will continue to monitor this case.

The Right to Sue for Harm to a Public Resource

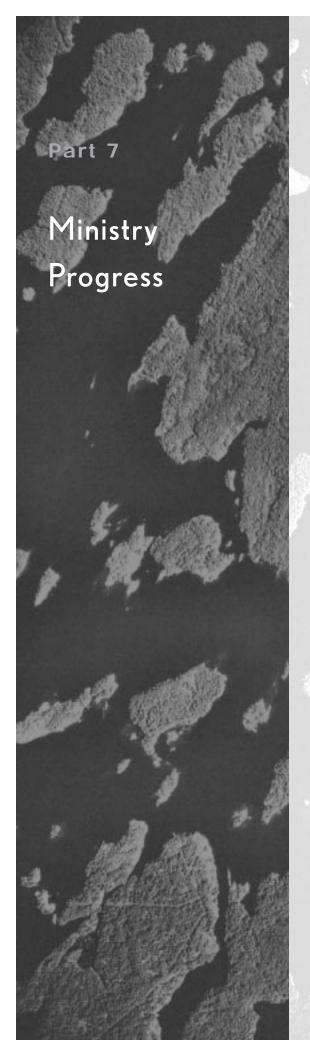
The *EBR* gives Ontarians the right to sue if someone is violating, or is about to violate, an environmentally significant Act, regulation or instrument, and has harmed, or will harm, a public resource. Last year the ECO reported on one such case – the legal proceedings brought by the Braeker family against the Ministry of the Environment and Max Karge, the owner of a property adjacent to the plaintiffs' farm, in relation to an illegal tire dump on Karge's land.

In 1991, Karge, under the supervision of MOE staff, buried more than 33,000 scrap tires at the site. Testing done in 1997 found water at the site to be contaminated with chemicals in concentrations greatly exceeding levels permitted under the Provincial Water Quality Objectives. In March 1998, MOE announced that the tires would be removed, and contractors hired by the ministry began work in the summer of 1998. However, when MOE refused to remediate the contaminated groundwater as well, the plaintiffs pursued their action, alleging harm to a public resource – specifically that the dump has contaminated nearby subsoil, groundwater, and surface water, including their well water. They allege that MOE bears considerable responsibility for the situation because ministry staff were negligent in their authorizations, monitoring and inspection of the property, and failed to enforce pollution laws in relation to activities at the dump.

Notice of the action was posted on the Environmental Registry in November 1998, and the action is ongoing. The ECO will continue to monitor this case currently pending before the court.

Whistleblower Rights

The *EBR* protects employees from reprisals by employers if they report unsafe environmental practices of their employers or otherwise use their rights under the *EBR*. There were no whistle-blower cases in the reporting period, between January 1, 1999 – March 31, 2000.



Ministry Responses to Recommendations Made in the ECO 1998 Annual Report

Each year, the Environmental Commissioner follows up on the progress made by the ministries in implementing recommendations made in previous years. The ECO staff has conducted a detailed review of ministry progress on several 1998 recommendations, including the use of the Environmental Registry, a groundwater strategy for Ontario, and an air pollution action plan. In many cases, these recommendations have been implemented. However, in several cases, progress has been slow or is ongoing.

In these reviews, I have used reports submitted by ministries to the ECO as well as analyses carried out by my staff.

Use of the Environmental Registry

All ministries were asked to comment on their progress in implementing improvements to the Environmental Registry.

Most ministries are complying with the requirements of the *EBR* with respect to posting environmentally significant policies, Acts and regulations on the Environmental Registry. However, some ministries' postings must be improved to ensure that members of the public are well informed and have an opportunity to comment on environmentally significant decisions. In the past few years, many residents have contacted the ECO because they are concerned with the lack of information contained in Registry notices, the fact that notices on the Registry are the only form of notice provided, and that the effect of their comments on the decision-making process was not adequately explained.

Ministry of the Environment

The Ministry of the Environment stated that it continues to improve the content of Registry postings. However, the reviews conducted by the ECO do not support MOE's assertion. Contact names were missing in numerous postings. Descriptions in many permit to take water (PTTW) proposals were often brief and lacked detail, impeding the public's ability to make meaningful comments. Some PTTW decisions did not contain hypertext links to the actual permits. Information about the changes to the PTTW review process was not posted on the Registry for public notice and comment.

Ministry of Natural Resources

The Ministry of Natural Resources stated that it conducts at least two quality checks before notices are posted on the Registry, that the majority of Registry notices contain hypertext links, that information is always available at a minimum of two ministry locations and that all MNR notices contain a contact person name and phone number. The ECO's review supports MNR's assertions. The ECO applauds MNR for the quality of its Registry postings. MNR proposal and decision notices are often the most comprehensive and informative postings on the Registry. The ECO also recognizes MNR's use of hypertext links in most of its postings and encourages MNR to continue providing such links. The ECO does suggest, however, that MNR provide hypertext links directly to the actual proposals referred to in postings, instead of providing links to its homepage or the Publications Ontario general Web site.

Ontario Ministry of Agriculture, Food and Rural Affairs

OMAFRA reported that it posted very few notices on the Registry in 1999. The ECO encourages OMAFRA to post all environmentally significant policies, Acts and regulations on the Registry and to ensure that the content of these postings are detailed and contain all the requisite information to provide the public with an opportunity to participate in the decision-making process.

Management Board Secretariat/Ontario Realty Corporation

ORC stated that it reports properties listed for sale, by region, on the public ORC Web site and that ORC has established a link from its Web site to the Registry. ORC also reported that any properties that are considered Category C or D under the Class EA receive an individual posting and that it posted the Class EA Renewal Project - Draft Terms of Reference on the Registry for public comment.

MBS/ORC did not list land sales during the 1999/2000 reporting year. As well, no properties were considered as Class C or D during that time period. However, the ECO is not satisfied that the proper screening process was followed. The ECO remains concerned that ORC is not carrying out adequate public consultation or environmental assessments.

In summary

The ECO encourages all ministries to post all environmentally significant policies, Acts and regulations on the Registry for public comment. The ECO also encourages all ministries to include comprehensive descriptions of the proposals or decisions, including complete contact information, hypertext links, impact statements and descriptions of how public comments affected decisions. Where a posting is not required under the *EBR*, the ECO encourages ministries to use information postings on the Registry as a means of providing the public with an opportunity to participate in the decision-making process.

Groundwater Management Strategy for Ontario

The Ministries of the Environment, Natural Resources and Municipal Affairs and Housing were asked to describe their progress in developing a groundwater strategy.

MOE outlined the following initiatives: Provincial Water Protection Fund; Ontario Water Director's Committee; O. Reg. 285/99 (Water Taking and Transfers Regulation); Revising PTTW Guidelines and Procedures Manual (for April 2000); Drought Management Strategy (for spring 2000); Groundwater video; Aquifer mapping and monitoring; and Land & Resources workshop. Both MNR and MMAH stated that MOE was the lead authority in developing a groundwater strategy and that they will continue to be active partners in the process.

The ECO stresses that these initiatives do not constitute a coherent, comprehensive groundwater strategy to protect Ontario's groundwater resources. The ECO strongly encourages MOE, MNR and MMAH to develop such a strategy and asks those ministries to provide the public and the ECO with information on when they anticipate the strategy will be completed and to provide a timetable for its implementation.

Nutrient (Manure) Management Strategy

OMAFRA was asked to describe its progress in implementing nutrient (manure) management and pesticide reduction strategies. OMAFRA stated that it continues to work with the Ontario Farm Environmental Coalition (OFEC) to deliver its nutrient management strategy, which includes encouraging municipalities to create bylaws regulating nutrient management. OMAFRA also stated that it provides third party review of Nutrient Management Plans (NMP) for large livestock/poultry farms, where required by bylaws, and that ministry staff are working with OFEC on the implementation and enforcement of NMPs. OMAFRA reported that during January and February 2000, the ministry conducted public consultation on new legislation to give municipalities more power to regulate nutrient management. It also referenced the Food Systems 2002 as a comprehensive program to assist growers to reduce their use of pesticides by 50 per cent over a 15-year period.

The ECO is encouraged by the fact that OMAFRA posted the proposal on Intensive Livestock Operations on the Registry and is undertaking public consultation with respect to legislation that is expected in the fall of 2000. The ECO urges OMAFRA to post any reviews or changes to the Food Systems 2002 program on the Registry.

Action Plan for Hazardous Waste

In response to the ECO recommendation that MOE develop a strategy to curb the generation of hazardous waste in Ontario, the ministry reported that it passed Regulation 460/99, implementing the mixture rule, and that it posted a proposal to amend Regulation 347. MOE also reported that it is reviewing and revising certificates of approval to impose more stringent restrictions on waste stabilization and waste disposal for many facilities.

The ECO points out that MOE's actions do not include a strategy to curb hazardous waste. As well, MOE failed to address the status of the proposal to amend Regulation 347, which was posted on the Registry two years ago and which was the subject of an application for review.

Action Plan on Air Pollution

In response to the ECO recommendation that programs be developed to reduce smog-causing pollutants from area sources and industrial emissions, that regulatory standards for air contaminants be updated, and that resources be allocated to ensure enforcement, the Ministry of the Environment was asked to describe its progress in developing an action plan on air pollution.

MOE outlined the following initiatives: Anti-Smog Action Plan; air emission reduction initiatives (emissions monitoring and reporting, emission reduction trading program, and a regulation under the *EAA* for electricity sector activities); new standard-setting plan including new standards for benzene and mercury; and the Pollution Prevention Pledge Program (P4).

The ECO has a number of concerns. MOE has laid out a general framework for standard-setting for air, water, soil and sediment standards and has also committed to updating many standards. Standard-setting is a complex undertaking which has to take into account both scientific and socio-economic factors. The ministry has recognized the need to involve stakeholders in this decision-making, and has taken a number of helpful steps to improve information sharing and public consultation. However, the ministry should explain why progress on standard-setting has been so much slower than expected, and should set realistic timelines for finalizing new air standards. MOE has also not explained why certain air standards (such as arsenic, cadmium, chromium VI and nickel) are still in development, even though they were considered high priority and originally scheduled for completion in 1996/1997.

MOE should provide more detail on how the risk management component of standard-setting will work, and specifically how the public will be involved. This information should be posted on the Registry for public comment.

The ECO also points out MOE's failure to take action on the proposed smog plan policy posted on the Registry in 1998. The ECO encourages the ministry to post a decision notice with respect to this proposed policy immediately. The ECO also encourages MOE to post promised updates and changes to the plan on the Registry in a timely manner.

Action Plan on Climate Change

In response to the ECO recommendation that the Ministry of the Environment develop an action plan on climate change, MOE outlined the following initiatives: Ontario Climate Change Fund (\$10 million); 32 per cent reduction in emissions from government operations; electricity restructuring; Drive Clean program; landfill management regulations to capture methane; conservation tillage farms; Ontario's Building Code; *Shortline Railway Act* to preserve freight rail; Stop Idling program; and participation in the national climate change process.

The ECO is concerned that these initiatives do not add up to a coherent Ontario action plan for climate change and that Ontario has not adopted emission reduction targets to reflect our Kyoto commitments. MOE also failed to consult with the public on its climate change policy.

Transportation Planning

In response to the ECO recommendation that the Ministry of Transportation reconsider its role in supporting public transit across the province and encourage integration of neighbouring local transit systems, the ministry was asked to describe its progress incorporating public participation and environmental considerations into transportation planning. MTO stated that the new Class EA recently approved by MOE has ensured public participation and also ensured that the environment is considered. MTO also stated that it fully recognizes the linkages between transportation, land use and the environment, and that this relationship is incorporated within all of MTO's planning endeavors.

The ECO has concerns about the lack of MTO support for public transit and encourages the ministry to ensure that its policies and priorities support public transportation efforts. MTO should also consider the role it can play in encouraging integration of neighbouring local transit systems. The ECO reminds the Ministry of Transportation of commitments in its Statement of Environmental Values, particularly its commitment to promoting an integrated transportation system and the use of public transportation and other alternative forms in Ontario, including non-motorized transportation options.

Electricity Restructuring

The Ministry of Energy, Science and Technology was asked to describe the ministry's progress in building environmental protection into electricity restructuring and ensuring that EBR public participation requirements will apply. MEST stated that it is working with MOE in the development of a policy to ensure environmental protection in conjunction with electricity restructuring and that MOE posted three regulations on the Registry related to electricity generators. With respect to public participation, MEST made reference to its bi-monthly newsletter, Power Switch, and the Electricity Transition Environmental Sub-Committee. MEST also referenced the Electricity Transition Consumer Education Sub-committee and stated that workshops on electricity restructuring were provided for municipalities and that the public was provided with an opportunity to comment on "green" electricity certification. As well, MEST reported that it distributed inserts in electricity bills with respect to consumers' ability to choose the type of electricity they wish, such as solar or wind.

The ECO is concerned with MEST's lack of attention to the environmental impacts related to electricity restructuring. Little progress has been made with respect to the 1998 ECO recommendations that MEST develop regulations to limit CO2, mercury and toxics emissions from electricity generators; report annually on progress in meeting its goals and targets for energy efficiency and renewable energy; track and report annually on the "mix" of electricity generation in the province; set targets for the increased production of renewable energy and develop programs that will encourage the development of renewable energy; establish and carry out programs to reduce energy demand and support energy efficiency initiatives; and develop, in consultation with the public, mechanisms necessary to protect the environment. The above reported initiatives do not address ECO concerns.

Real Estate Activities

MBS/ORC was asked to describe the ministry's progress in ensuring that real estate activities are consistent with *EBR* requirements.

During this reporting period MBS took some of the corrective action it promised the ECO, but their compliance with the *EAA* and *EBR* further deteriorated in many ways (see pages 23 and 26). Some of the MBS commitments to the ECO were prominently featured in the Ontario Realty Corporation's 1999/2000 Corporate Plan and the 1999/2000 Realty Services Management Agreement between MBS and ORC. Unfortunately, none of these commitments were actually carried out in 1999/2000.

The ECO is primarily concerned that ORC has continued to market, rezone, subdivide and sell government land holdings affecting environmentally significant lands without adequate environmental study or public consultation.

The ECO's review has found broad disregard to environmental legislation by ORC and MBS. The ECO continues to urge MBS, ORC and MOE to address these *EBR* and *EAA* compliance issues.

Progress in Implementing Changes to Forestry Practices

The ECO recommended that MNR should promptly implement the recommendations of its staff who investigated the Algoma Highlands application into forest harvesting practices. MNR provided a detailed report to the ECO that listed all the changes the ministry made in response to the report that followed the investigation. The ECO applauds MNR for implementing the recommendations set out in the report by the staff team that carried out the 1998 *EBR* investigation in the Algoma Forest. MNR addressed all the recommendations, including those directed at correcting on-site compliance issues and field operational practices, as well as other policy-related recommendations.

However, the ECO remains deeply concerned with MNR's response on enforcement activities and on the effectiveness of the industry self-monitoring program. MNR's response to the ECO indicated that the forest operations compliance program is adequately resourced and supported financially and firmly founded. Upon further discussion with MNR staff and a review of an MNR internal report on their Forest Operations Compliance Program (FOCP) done in 1999, the ECO has concluded that MNR's response to the ECO recommendations is not accurate. Overall, the ECO has observed continued problems with MNR's forest compliance program and repeated failure of MNR to submit required reports on forest management. The MNR internal review found that while the FOCP is structured appropriately, there are problems with its implementation, such as confu-

sion about roles and responsibilities for inspections, reporting and determining the significance of infractions. The review also indicated that MNR staff are concerned about their capacity to carry out the compliance program due to a lack of staff and resources. As well, MNR admitted that it is currently unable to report on operations compliance with provincial forestry and environmental assessment rules.

MNR Classification Regulation

In 1998, the ECO recommended that MNR promulgate its instrument classification regulation. The ECO is deeply troubled that, despite working on the project for a number of years, MNR has not yet fulfilled its *EBR* obligation to finalize an instrument classification regulation that would classify environmentally significant instruments under the various Acts it administers. The *EBR* requires MNR to develop an instrument proposal within a reasonable time after April 1, 1996. The failure of MNR to finalize this regulation means that the public is not able to scrutinize MNR proposals for specific instruments, such as land use licences, and may not exercise their rights to comment on these proposals or apply for reviews or investigations. MNR's delay in promulgating its instrument classification regulation is unreasonable, and the ECO strongly encourages the ministry to finalize and promulgate its Instrument Classification Regulation immediately.

Statements of Environmental Values and Business Plans

Ministries were asked to respond to the recommendation that all *EBR* ministries should incorporate SEV commitments into their business plans, and track and report on progress towards meeting those commitments.

Most ministries stated that although these links are not always explicitly described in their public business plans, consideration of their SEV commitments form an integral part of their business planning process. The Ministries of the Environment, Natural Resources, and Health were the only ministries that explicitly referred to their SEVs in their 1999-2000 business plans. The ECO encourages all ministries to explicitly incorporate their SEV commitments into their public business plans.



New ECO Initiatives - 2000

The ECO Multi-Stakeholder Advisory Committee

In the first quarter of 2000, the Environmental Commissioner of Ontario established a Multi-Stakeholder Advisory Committee. The nine members of the Committee are drawn from a cross-section of Ontarians who are concerned about the environment and sustainability. They will be able to provide a broad range of knowledge, experience and expert advice to support the activities of the Commissioner and his office.

The Multi-Stakeholder Advisory Committee members serve as individuals acting in their own right and are appointed by the Commissioner for a three-year term.

The ECO Recognition Award

This year for the first time, the Environmental Commissioner of Ontario is formally recognizing ministry programs and projects that either best meet the goals of the *EBR* or are considered best internal *EBR* practices. The ECO asked the 13 ministries prescribed under the *EBR* to submit programs and projects that met either of these criteria. Four responded to our request with a total of 12 projects for the ECO to choose from. An arm's length panel reviewed the submissions and made suggestions for the one that should be selected for inclusion in our 1999 annual report.

As a result of this process, the ECO is pleased to recognize the efforts of the staff of the Ministry of Municipal Affairs and Housing in educating professionals and the public in order to minimize the impacts of smaller on-site sewage systems more commonly known as septic systems.

In 1998, MMAH assumed responsibility for administering the regulatory framework covering septic systems. This responsibility included amending the *Building Code Act* and the Ontario Building Code to include new design, construction, inspection, operation and maintenance standards. In order to ensure the proper installation, approval and maintenance of high quality septic systems, MMAH developed a certification and training program for septic contractors and inspectors.

The development of the certification/licensing framework was intended to increase the technical competency of those who construct, approve and inspect septic systems. By raising the level of knowledge and ensuring technical proficiency by requiring each person to pass an MMAH-administered examination, the ministry expects the result to be higher quality septic systems throughout the province. By extension, this should also mean fewer negative impacts on the natural environment associated with improperly installed systems, reduced septic system failure rates over the longer term, an increased ability for contractors and inspectors to identify and correct problems, and more certainty for property owners when they engage qualified installers.

Among its objectives, the program ensures that septic systems are sized properly to avoid discharges; that proper materials are used in construction to avoid future operation and maintenance problems; and that appropriate systems are installed commensurate with site conditions and soil characteristics.

To date, approximately 2,400 installers and inspectors have been certified under this MMAH program. The training and certification program is ongoing.

In support of the new operation and maintenance standards included in the Ontario Building Code, MMAH also wrote, published and distributed a brochure aimed at property owners and cottagers who own septic systems. The information in the document reinforces these owners' responsibilities to ensure the proper functioning of their systems. The brochure describes the different components of a typical septic system and how the system works. It lists common septic problems and advises on how to recognize them and provides tips on proper system maintenance and use. The brochure also details the importance of regular septic tank cleaning and inspection by qualified persons and provides details on who should be contacted to carry out this work.

The brochure's information focuses on the need for water conservation so the septic system's capacity is not overloaded; reducing the use of phosphate-based detergents that can escape the septic system and impair water quality; and eliminating activities which can impair the functioning of the leaching bed. Over 25,000 copies of the brochure have been distributed since November 1999.

The ECO applauds the effort put forth by MMAH staff to improve the quality of septic systems in the province. A commemorative tree has been planted in the GTA in honour of the work done by MMAH staff.

Cooperation from Ontario Ministries

Staff at the office of the Environmental Commissioner rely upon cooperation from staff in Ontario's provincial ministries to carry out our mandate. ECO staff are in constant contact with staff from the prescribed ministries with requests for information. Clear, prompt responses enable us to conduct our reviews in an efficient and straightforward manner.

Staff at the prescribed ministries are generally quite cooperative in providing information when it is requested. The 13 prescribed ministries and the Technical Standards and Safety Association each have one staff person who is designated as an *EBR* coordinator. All the coordinators take the time to field calls from ECO staff and respond appropriately. The Ministry of the Environment has put a system in place whereby the ECO makes monthly requests for information to the ministry's EBR office, which saves time for staff at both ends. Staff at the EBR office always reply to these requests in a punctual manner.

The ECO tends to contact operations staff at the Ministry of Natural Resources directly with specific requests for information. Individuals are almost always cooperative in supplying the information requested. When the ECO requests information of a more general nature from MNR, the *EBR* coordinator is always helpful and makes every effort to assist the ECO. Similarly, staff at the other prescribed ministries almost always respond to requests for information in an accommodating manner.

The ECO is particularly satisfied with a decision by MOE and MNR to allow ECO staff to view investigation reports conducted by ministry enforcement staff in response to requests for investigation. This is a positive development that enables the ECO to review thoroughly the ministries' responses to these applications. It also assures applicants of the integrity of the application for investigation process.

An Effective Environmental Registry:

Making Information Available

The Environmental Registry provides only a brief summary of the nature of a proposed decision. Those residents who wish to make detailed comments on the proposal will often require more detailed information in order to understand the nature of the proposal and its impacts upon the environment. Residents can obtain further information from the contact person listed in the Registry notice.

However, in some cases, residents may be denied access to key supporting documentation when the proponent requests that the information be kept confidential under the Freedom of Information and Protection of Privacy Act (FIPPA) because it was supplied in confidence and its release would harm the proponent's commercial interests. Nevertheless, these factors must be balanced against the public's interest in obtaining the information necessary to understand the environmental implications of the proposal. Ontario's Information and Privacy Commissioner (IPC) was asked to rule on a case where the proponent had asked that supporting documentation be kept confidential. In 1999, an IPC adjudicator ruled that the public interest in disclosure for the purposes of enhancing environmental protection and public health and safety clearly outweighed the proponent's interests in that case.

Obtaining information under FIPPA generally takes longer than the EBR's 30-day comment period, presenting an obstacle to residents exercising their EBR rights. The IPC adjudicator noted this potential problem and advised that ministries "should not as a matter of general policy direct members of the public seeking information for the purpose of an EBR consultation to FIPPA, but should address the issue using its own expertise and statutory powers." The ministries should require residents to file an application under FIPPA to obtain information only where there is a clear basis for doing so. Otherwise, the effectiveness of the Registry is diminished because residents cannot access the information necessary for making meaningful comments on proposed decisions.

One ministry did not cooperate fully with the ECO during the reporting period. Management Board Secretariat failed to submit an annual report to the ECO reporting on its activities over the past year and outlining how the ministry intends to respond to some of the recommendations contained in the previous year's ECO annual report. MBS also never formally responded to an ECO request for information regarding the ministry's failure to post an environmentally significant decision on the Registry. Furthermore, the ministry was not forthcoming with information about the activities of the Ontario Realty Corporation. The ECO entered into discussions with MBS in spring 2000 in an effort to resolve these concerns.

Other ministries were uncooperative in only a few isolated instances. For example, the ECO wrote directly to the Deputy Minister of Natural Resources asking for clarification on the ministry's response to a request for investigation. The ECO asked very specifically whether, as a result of the investigation, the ministry had found a contravention of section 36(3) of the federal Fisheries Act. Yet the Deputy Minister failed to provide a clear answer. MNR also took more than six months to respond to a request for information regarding the ministry's failure to post an environmentally significant decision on the Registry. This response time is excessive.

Most of the routine interaction between the ECO and the ministries occurs via the ministry EBR Coordinators, which we consider key positions with respect to EBR implementation. Over the past year, there has been a very rapid turnover of ministry coordinators in many ministries, often without timely notice being provided to us. Due to their importance in the process, we urge that the Coordinator position be considered a more permanent assignment and that the ECO be immediately informed of any changes.

MBS/ORC Comment:

MBS is committed to ensuring compliance with environmental legislation and to working cooperatively with the ECO to achieve this end. We are also committed to maintaining open lines of communication with the ECO to assist us in the interpretation of aspects of the EBR and their application to MBS.

MNR Comment:

MNR is committed to meeting EBR obligations and to responding to the ECO's requests for information in a timely manner. With respect to the ECO's reference to the investigation, the ministry regards this as an instance where the ECO and MNR have taken different views with respect to a complex legal matter.



In the following pages, the Environmental Commissioner of Ontario draws attention to how ministries are missing the ecological perspective on a number of issues. When Ontario ministries consider environmental concerns, they tend to focus on human health connections rather than ecosystem health. In fact, there does not appear to be a public policy structure capable of addressing ecosystem health in the broader sense. This policy blind spot poses a real risk both for ministries and the Ontario public, because unforeseen problems may erupt without warning. We illustrate this concern with three issues that are relevant to the mandates of the Ministries of the Environment, Natural Resources, and Agriculture, Food and Rural Affairs. However, the failure to make decisions on an ecosystem basis is a pervasive problem across Ontario ministries.

Ecosystem Monitoring

To protect the environment effectively, the public, business and governments need the capacity to discern early warning signs and unexpected trends in environmental degradation. There is widespread agreement that we should anticipate and prevent environmental damage wherever possible. But we cannot hope to anticipate damage if we fail to monitor our ecosystems, including those elements without apparent economic value.

Ecosystem monitoring is an important tool – arguably the only tool – for discovering unexpected ecological trends and detecting early warning signs of environmental harm. For example:

- It was ecosystem monitoring that allowed scientists first to understand the impacts of acid rain in the 1970s.
- It was ecosystem monitoring in the 1990s that let researchers piece together the facts on high mercury concentrations in loons.
- The decline of certain frog populations world-wide is also a phenomenon that was first noticed and then tracked through ecosystem monitoring.

Data collected by monitoring for ecosystem health and integrity provide a basis to evaluate the status of an ecosystem as a whole. Ecosystem monitoring measures key attributes of the system such as the quantity and health of species, the food chain, the location

and extent of forest woodlots, or changes in forest cover. Carefully chosen indicators can give an overall indication of problems that may be developing, analogous to data received from an annual check-up that individuals receive when they visit the doctor.

In Ontario, the Ministry of the Environment and the Ministry of Natural Resources are both entrusted with the stewardship of the province's ecosystems, and both ministries acknowledge this responsibility. For example, MNR lists as the first objective of its Statement of Environmental Values (SEV) "to ensure the long-term health of ecosystems by protecting and conserving our valuable soil, aquatic resources, forest and wildlife resources as well as their biological foundations." Similarly, MOE's SEV states that "the ministry will adopt an ecosystem approach to environmental protection and resource management." However, the majority of both ministries' monitoring programs do not indicate that either ministry has a serious interest in the ecosystem perspective. In fact, relative to the amount of monitoring data collected by both ministries, they do very little ecosystem monitoring.

Instead, ministry monitoring programs tend to be client-driven and focused on species that have economic value. As a result, ministries have a sporadic knowledge of ecosystem health and only for limited areas of the province, as indicated by the examples below. This lack of knowledge often precludes taking steps to prevent or avoid damage to ecosystems and thereby creates the potential for unforeseen ecosystem collapse similar to what occurred to the East Coast cod fisheries.

For aquatic ecosystems, MOE collects broad information for the Great Lakes but more limited information for inland lakes through its aquatic monitoring programs. MOE operates an integrated nearshore ambient monitoring program in the Great Lakes in which lakes are sampled on a lake-by-lake basis over a multi-year cycle. Data have been used to assess long-term trends in eutrophication, climate change and the impacts of invading exotic species in the Great Lakes. MOE tests sport fish for a number of contaminants in over 1,500 lakes and locations in the Great Lakes as a part of the Sport Fish Contaminant Monitoring program. The results are published every other year in the "Guide to Eating Ontario Sport Fish." However, this is limited information and cannot be described as an ecosystem monitoring program.

MOE Comment:

The MOE also undertakes long-term aquatic monitoring of selected, representative inland lakes at its Dorset Environmental Science Centre, in the greater Sudbury area and in Killarney. Monitoring at each site is done in partnership with other agencies, such as the MNR, universities and industrial partners. Information collected at these sites is integrated with similar data collected by Environment Canada and the Department of Fisheries and Oceans. Taken together lakes in these reference areas are representative of conditions in the southern portion of the Canadian Shield in Ontario and have been used to assess impacts associated with eutrophication, acid rain, toxic contaminants (mercury), climate change and the invasion of exotic species.

MNR collects considerably more of this type of information as part of the Fish Assessment Monitoring Program. This program, conducted at the Great Lakes and at eight additional sites, is designed to represent the types of sportfish in Ontario and the kinds of stresses that fish communities are exposed to. These stresses include exploitation, eutrophication, acidification, changes in water levels and habitat alteration. Each site has a core data program to be followed that includes a five-year baseline, water quality parameters and some monitoring of the biological community. Data is also collected on benthic invertebrates and zooplankton, on occasion. These programs also include long-term monitoring of key commercial and recreational fish species, some other important species in the fish community and Ontario's progress in rehabilitating species such as lake trout. Not all aspects of fish community are monitored nor is the entire geography of the lakes covered. The historical data allow MNR to monitor variability at the site and are useful in sorting out other stresses. However, MNR staff acknowledge that the eight sites are not a very good representation of the province as a whole. They are oriented toward coldwater fish types and geographically biased towards the south-central area of the province.

For terrestrial ecosystems, MNR's approach to monitoring and information management has changed radically in the past few years. In most terrestrial program areas, including natural heritage, aggregates, forestry and wildlife management, MNR staff no longer do resource inventories or field work to collect data. Instead, the ministry has entered into partnerships with industries, user groups, conservation organizations and others, who provide data which is limited in scope and quantity. MNR then manages this information in its computerized geographic information systems.

In 1996, MNR staff identified a concern about planned cuts to forest science and information management staff and budget: "The collection of little or no new Ontario data for science could lead to a reduction in fundamental knowledge and understanding of Ontario's forest ecosystems in the long-term." MNR still has at least an intention to monitor and report on the condition and trends of forest ecosystems in the areas of the province supporting the forest industry, but no corresponding plan to assess the condition or trends in southern Ontario terrestrial ecosystems or ecosystems with low economic value. Similarly, while they are scaled back significantly, MNR still carries out some long-term forest ecosystem research studies at its Centre for Northern Forest Ecosystem Research, located at Lakehead University and at the Ontario Forest Research Institute in Sault Ste. Marie, but the ministry does not appear to have many projects applying to southern Ontario ecosystems.

To improve Ontario's ecosystem monitoring, ministries will need to consider some fundamental questions, e.g., what existing information frameworks are available to build upon, what new frameworks need to be established, what are minimum acceptable levels of monitoring, and how partners can be involved in gathering information. It will also be important to ensure that information is published promptly and regularly, to be useful in decision-making. Ecosystem monitoring information should be considered as important as financial information whenever decisions are made about Ontario's environment and natural resources. Moreover, the precautionary principle argues against making any significant environmental decisions in the absence of reliable ecosystem monitoring information.

As the pressures on Ontario's ecosystems build, especially in southern Ontario, MOE and MNR need to ensure that provincial decision-makers have adequate current information on the health of those systems. This information would allow decision-makers to create scientifically defensible rationales for pollution abatement and habitat protection activities, to evaluate the effectiveness of current and future activities, and more importantly, to identify new issues as they emerge.

For additional ministry comments, see Appendix A

Recommendation 17

The ECO recommends that MOE and MNR ensure that provincial decision-makers have information on the health of ecosystems which is current and of a sufficient quality to permit the development of scientifically defensible rationales for habitat protection activities and to allow the identification of emerging ecological problems.

Genetically Modified Organisms in Agriculture

Genetically modified organisms (GMOs) are created by altering genes and/or transferring genes isolated from one organism to another in order to add new properties to the recipient organism. GMOs – particularly corn, soybeans, and potatoes – are seeing increased use in agriculture.

Crops are frequently bio-engineered to increase resistance to common pests. For example, Bt corn, which is widely grown in Ontario, has been modified to include the natural insecticide Bt, making it toxic to the European corn borer. Other crops are modified to become resistant to herbicides, allowing farmers to apply herbicides while crops are growing rather than before planting. Corn, cotton, rice, beets and more than half of the U.S. 1999 soybean crop have all been engineered for resistance to Monsanto's Roundup® herbicide. In Ontario in 1999, about 25 per cent of the soybean crop, 35 per cent of the corn crop, 60 per cent of the canola crop and about 200 hectares of potatoes were genetically modified. According to the Canadian Food Inspection Agency, approximately 60 to 75 per cent of all Canadian processed food contains genetically engineered ingredients.

The bio-engineering of livestock species is also an active area of research at facilities such as the University of Guelph. Researchers there are investigating numerous concepts, including transgenic chickens that produce eggs containing custom-designed antibodies that would protect people against diseases. With the support of the Ontario Ministry of Agriculture, Food and Rural Affairs, researchers are also pioneering cell manipulation technologies such as in-vitro embryo production of pigs. The technique uses eggs harvested from slaughtered young sows that show superior meat quality.

The development of some types of GMOs may have positive environmental effects. GMOs that resist insects and diseases may reduce the need for applications of pesticides. However, crops that are modified to increase their resistance to common herbicides may result in increased herbicide use. As well, there is potential for herbicide resistence genes in genetically modified crops to be transferred to weeds, making control of those weeds more difficult and also resulting in increased herbicide use. Canola is one crop that is closely related to several weeds such as wild mustard, and researchers have found that its pollen can travel as far as two kilometers. Researchers have also found that transgenic canola readily breeds with a weed relative, and that the resulting weedy plants are herbicide resistant.

There is also a concern that insect pests will become resistant to the toxins that have been inserted into transgenic crops, especially since large acreages are now being grown. For example, researchers agree that it is just a matter of time before the European Corn Borer becomes resistant to Bt corn. In Ontario, growers are encouraged – but not required – to plant at least 40 per cent of their crop as non-Bt corn, to slow down the development of resistance to the insecticide Bt.

The federal government is the primary regulator of GMOs used by farmers and other food producers. Health Canada, which is responsible for ensuring foods are safe for humans, has approved more than 40 genetically modified foods. The companies and researchers who develop GMOs generally conduct reviews and tests of the products they wish to introduce into the Canadian food market, with the federal agencies reviewing the results. The Canadian Food Inspection Agency (CFIA), an agency of the Department of Agriculture and Agri-Food Canada, assesses the potential environmental risk of genetically engineered organisms.

Although Ontario does not regulate which genetically modified crops may be grown, OMAFRA's role as an advisor to Ontario farmers allows the ministry to influence the adoption of GMOs. OMAFRA is also the lead Ontario ministry on agricultural issues under the new international Biosafety Protocol Agreement, the goal of which is to reduce risks to the environment and biodiversity arising from trade in Living Modified Organisms. Living Modified Organisms (LMOs) are treated as a special category of GMOs by regulators since they are genetically modified plants, animals and microorganisms that are capable of metabolic activity. LMOs would include viable seeds, for example, but not the flours or oils produced from them.

OMAFRA informed the Environmental Commissioner in March 2000 that it will "continue to participate in, and to advocate for, open public consultations on all LMO and GMO issues." OMAFRA is also working with concerned industry sectors and its public sector partners on issues regarding GMOs and other new products of biotechnology.

While OMAFRA says that the public's priorities in this area focus mainly on human health safety, there are also important environmental issues to be considered. Currently these issues are not part of any public debate in Ontario, perhaps due in part to the limited information available on ecosystem impacts. Ontario needs to fund independent research and thinking on some of the fundamental questions around GMOs. The ECO looks forward to the details of OMAFRA's consultations on LMO and GMO issues.

The Ministry of Energy, Science and Technology (MEST) also promotes biotechnology research through its Challenge Fund, and on April 5, 2000, the ministry announced it would invest up to \$75 million over five years in genomics research at several universities, including the University of Guelph. The ministry also recently announced the creation of a new Ontario Science and Innovation Council, which is to advise the government on policy initiatives, including ethical questions related to biotech and genetically engineered foods. It is not clear whether this advisory council will address environmental issues.

Ontario lacks a provincial advocate for ecosystem protection capable of addressing GMO issues. To avoid conflict of interest, this advocate should be separate from OMAFRA and MEST, since these ministries actively promote GMO technology.

OMAFRA Comment:

While OMAFRA does not categorically oppose an advocate for ecosystem protection related to GMOs, it is OMAFRA's view that there are adequate private sector and NGO organizations active in this debate to ensure that all viewpoints are considered. Perhaps a more appropriate solution would be to have an advocate to encourage the dissemination of balanced information on issues, including environmental issues, related to the use of GM technologies. OMAFRA opposes the need for an Ontario regulatory agency related to GMOs, whether for food safety or environmental preservation. This is a federal responsibility, and OMAFRA is satisfied that the federal authorities are managing this issue in an appropriate manner.

MEST Comment:

In MEST's view, a provincial advocate is unnecessary and unwarranted in light of the national sciencebased food regulatory system. Health Canada is responsible for the composition and safety of foods sold in Canada and the Canadian Food Inspection Agency (CFIA) inspects and monitors registered food products to ensure they continue to meet quality and safety standards. In addition, CFIA regulates plants with novel traits by requiring field trials, designed to assess the impact of plants on the environment prior to their introduction into the food and feed system.

For additional ministry comments, see Appendix A

Recommendation 18

The ECO recommends that the Ontario government establish a provincial advocate for ecosystem protection capable of addressing GMO issues. This provincial advocate should be independent of OMAFRA and MEST.

Recommendation 19

The ECO recommends that the Ontario government fund independent research and thinking on some of the fundamental ecological questions related to genetically modified organisms.

Ecosystem Fragmentation

Ecosystem fragmentation is a serious problem in southern Ontario. It began with extensive forest clearing for agriculture in the 19th century, but has accelerated in the late 20th century with increased pressures from home-building, road construction and other aspects of urban sprawl. A 1999 study of southern Ontario woodlands concluded that "forest fragmentation is more dramatic in Ontario south and east of the Canadian Shield than in any region of comparable size in the Great Lakes Basin." A 1994 report by the Ministry of Natural Resources on the natural heritage of southern Ontario described the massive transformation of croplands, forests, and wetlands into built environments as "the most significant ecological 'experiment' on the landscape." There is a pressing need for the province to monitor, study and manage the impacts of this ecological experiment.

Fragmentation is the division of a contiguous natural forested landscape into many smaller remnant woodlots. Natural vegetation becomes fragmented into small isolated patches or "islands" with more edge and less forest interior. One comprehensive study in an area between Brantford and Lake Erie found that in 1991 forest cover in the study area had been reduced to 26 per cent of the land surface, in 6,989 patches ranging in size from 0.09 hectares to 3345 hectares. The study found that 75 per cent of the patches were less than 3 hectares, and that fewer than 1 per cent of the patches were larger than 1,000 hectares. The study concluded that 98 per cent of the forest patches had no functional forest interior.



Forest Fragmentation in Southern Ontario

A study on a portion of the Niagara Escarpment, south of Peel, found that while forest cover increased between 1977 and 1995, the number of smaller forest patches increased, and the amount of forest interior declined by 24 per cent. A 1999 draft state of the environment report by York Region concluded that "forest cover in York Region has decreased from 23 per cent of the total land base in 1977 to 15 to 18 per cent in 1991. The forest that remains suffers from being fragmented into more than 4,000 woodlots. Southern areas of York Region have much less forest cover than the more northerly areas of the region. Cover ranges from 1.5 per cent in Markham to 28.1 per cent in Georgina." Nine years later, in this rapidly growing region just north of Toronto, there is probably much less.

Ecological research has shown that diversity of plants and animals is lower in small isolated forest patches, because of the lack of interior sheltered forest cover and invasions into forest cores by predators and non-native plants. Loss of interior habitat and competition from aggressive species bring about decreases in populations of rare and uncommon species, which can lead to extinction. For example, several recent Ontario studies show significant declines in the numbers of migrating and breeding populations of forest-interior bird species, and many studies have found distinct relationships between forest birds and woodland patch and size patterns. Many species of plants and animals are at risk of extinction due to loss of their woodland habitats in southern Ontario. Fragmentation of the landscape also modifies the cycling of nutrients and water, and can radically alter the biological communities in headwater streams that depend on forests for their cooling shade and organic inputs. Fully functioning, intact ecosystems have immense value, not least because they represent the product of millions of years of evolutionary fine-tuning. But it appears that Ontario's natural heritage is eroding, without the responsible ministries even being able to track the rate of erosion accurately.

Fragmentation is particularly troubling in southern Ontario, not just because of the speed and scale of landscape conversion, but also because the forest ecosystems are unique. For example, deciduous Carolinian forests in southwestern Ontario are very diverse, containing many species of plants and animals at the northern edge of their range found nowhere else in Canada. Unfortunately, these are the most threatened forest ecosystems in Ontario, with forest cover in some counties reduced to as low as 3 per cent.

The Ministry of Natural Resources, which is responsible for biodiversity conservation and protection of the province's natural heritage, has focused on identifying the best remaining natural heritage sites, with the intention of preserving the most significant sites. To date MNR has not looked at the overall state of the southern Ontario landscape, or assessed changes in forest cover or health. For example, MNR cannot adequately answer the following questions: How much forest have we lost, particularly in the last 20 or 30 years of rapid growth? How much forest do we have left in particular areas? How much do we need for functioning forest ecosystems? Are all forest ecosystem types adequately represented across southern Ontario? How much interior forest and how many connecting corridors do we need for wildlife habitat? How has forest structure or species composition changed?

MNR has very poor data on southern Ontario forests and woodlands. The Forest Resource Inventory (FRI) for southern Ontario is over 20 years old – most of southern Ontario was last inventoried in 1978. In 1997, MNR stated that the FRI was under review for southern Ontario because it did not address the resource management needs of the south. The FRI was designed for large scale classification of forests for timber and other forest industry purposes, but is of little use in southern Ontario where there are fewer and smaller patches of forest, and more complicated planning needs. In 1998, however, MNR staff said they were no longer planning to update the southern Ontario FRI, since all efforts and resources were being put to land use planning and forest industry needs in northern Ontario.



Loss of Woodlands in Southern Ontario

A 1999 study by the Federation of Ontario Naturalists and MNR's Natural Heritage Information Centre (NHIC) used historical FRI data to calculate the distribution and losses of total woodlands in southern Ontario. The study concluded that by 1978, more than 80 per cent of woodlands had been lost across southern Ontario, and that only about 30 per cent of the remaining woodland area could be considered original woodland rather than replacement woodland. In other words, only about 5 per cent of original, pre-settlement woodlands remain, and almost all of the original area has been disturbed, cut-over and altered. The study could not measure trends since 1978, due to the lack of data coverage for most of southern Ontario.

There are some tools in the *Planning Act (PA)* and Provincial Policy Statement (PPS) of 1996 that could be used to address ecosystem fragmentation. Under the *PA*, municipalities must have regard to matters of provincial interest, such as "the protection of ecological systems, including natural areas, features and functions." Municipalities must also have regard to the Natural Heritage policies of the PPS that state that natural heritage features, including significant woodlands south and east of the Canadian Shield, will be protected from incompatible development, and that the diversity of natural features in an area, and the natural connections between them, should be maintained and improved, if possible. MNR's Natural Heritage Reference Manual, which provides guidance to municipalities in applying these policies, is discussed on pages 68-69 of this report. ECO is concerned, however, that the tools in place do not appear to be working to prevent ecosystem fragmentation.

Ecosystem fragmentation is a measurable phenomenon, given adequate resources, and MNR has the responsibility and capability to measure ecosystem fragmentation. In 1998 the NHIC proposed a multi-year data maintenance and analysis project covering southern Ontario, "in recognition of the need to have current, high-quality information to conduct informed land use planning and conservation planning in Canada's most heavily populated and heavily developed region." Unfortunately, adequate funding could not be obtained from MNR or other partners, and only a few small projects were undertaken.

Some fragmentation mapping has now been carried out in southern Ontario, but only in a few selected areas where the information is urgently needed. A 1999 study funded by several agencies used MNR data and geographic information systems technology to map essential core natural areas, existing corridors and potentially restorable links between the cores near Point Pelee National Park, one of Canada's most endangered ecosystems. Similar mapping was done by MNR in 1999 and 2000 for the Oak Ridges Moraine area, which identified areas of provincial natural heritage interest, including significant woodlands, regenerating areas and connecting lands, to ensure ecological function.

Of utmost importance in dealing with ecosystem fragmentation is the immediate need for detailed and well-funded research. The scale of the problem needs to be better defined. The research must occur under the direction of MNR and the Ministries of the Environment and Municipal Affairs and Housing, the provincial ministries responsible for land use planning and natural heritage, because most municipalities do not have adequate capacity to carry out sophisticated ecological inventory and planning, and cannot address ecosystem concerns that transcend their boundaries. Once the scope of the problem is defined, ministries will be able to evaluate and select management options to slow down or even reverse the damage caused by ecosystem fragmentation. With enough time and commitment, restoration of ecosystems is possible. However, in the short term the responsible ministries must show leadership, because this issue too often is caught in jurisdictional ping pong. Ministries must assist municipalities to ensure that ecosystem fragmentation is adequately considered in land use planning decisions and that provincial interests in protecting natural heritage and functioning woodland ecosystems are safeguarded.

MNR Comment:

MNR recognizes the need and importance of establishing tools to monitor the long-term nature and value of terrestrial ecosystems and is currently working with partners such as MMAH, Ducks Unlimited and conservation authorities to develop effective technical indicators. MNR is also developing and transferring methods for measuring forest cover using recent advances in satellite imagery.

Recommendation 20

The ECO recommends that MNR, MMAH and MOE research the scope of ecosystem fragmentation in Ontario and evaluate and select management options to slow down or even reverse the trend.

Recommendation 21

The ECO recommends that the ministries assist municipalities to ensure that ecosystem fragmentation is adequately considered in land use planning decisions and that provincial interests in protecting natural heritage and functioning forest ecosystems are safeguarded.

Financial Statement

Office of the Provincial Auditor of Ontario



Bureau du vérificateur provincial de l'Ontario

Box 105, 15th Floor, 20 Dundas Street West, Toronto, Ontario M5G 2C2 B.P. 105, 15e étage, 20, rue Dundas ouest, Toronto (Ontario) M5G 2C2 (416) 327-2381 Fax: (416) 327-9862

Auditor's Report

To the Environmental Commissioner

I have audited the statement of expenditure of the Office of the Environmental Commissioner for the year ended March 31, 1999. This financial statement is the responsibility of that Office. My responsibility is to express an opinion on this financial statement based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statement is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, this financial statement presents fairly, in all material respects, the expenditures of the Office of the Environmental Commissioner for the year ended March 31, 1999, in accordance with the accounting policies described in note 2 to the financial statement.

Toronto, Ontario June 9, 1999

Erik Peters. FCA Provincial Auditor

Ein Potos

Statement of Expenditure For the Year Ended March 31, 1999

	1999	1998
	\$	\$
Salaries and wages	1,009,484	991,767
Employee benefits (Note 4)	175,118	185,930
Transportation and communication	53,438	42,409
Services	363,229	307,155
Supplies and equipment	88,552	82,251
	1,689,821	1,609,512

See accompanying notes to financial statement.

Approved:

Environmental Commissioner

Notes to Financial Statement March 31, 1999

1. Background

The Office of the Environmental Commissioner commenced operation May 30, 1994. The Environmental Commissioner is an independent officer of the Legislative Assembly of Ontario, and promotes the values, goals and purposes of the Environmental Bill of Rights, 1993 (EBR) to improve the quality of Ontario's natural environment. The Environmental Commissioner also monitors and reports on the application of the EBR, participation in the EBR, and reviews government accountability for environmental decision making.

2. Significant Accounting Policies

a. Basis of Accounting

The Office uses a modified cash basis of accounting which allows an additional 30 days to pay for expenditures incurred during the period just ended.

b. Capital Assets

Capital assets are charged to expenditure in the year of acquisition.

3. Expenditures

Expenditures are paid out of monies appropriated by the Legislature of the Province of Ontario.

Certain administrative services are provided by the Office of the Assembly without charge.

4. Pension Plan

The Office of the Environmental Commissioner provides pension benefits for its permanent employees (and to non-permanent employees who elect to participate) through participation in the Ontario Public Service Pension Plan (PSPF) established by the Province of Ontario.

The Office's contributions to the Fund during the period was \$62,646 (1998 - \$60,520) for matching contributions and \$0 (1998 - \$31,408) for unfunded liabilities. Starting in the current year the Office is no longer required to contribute to unfunded liabilities.

5. Lease

The Office has a lease agreement with its landlord for its current premise. The lease payments for the next five years are as follows:

	\$ 444,232
2003	103,969
2002	113,421
2001	113,421
2000	113,421

6. Uncertainty Due to the Year 2000 Issue

The Year 2000 Issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effects of the Year 2000 Issue may be experienced before, on or after January 1, 2000, and, if not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to condict normal business operations. It is not possible to be certain that all aspects of the Year 2000 Issue affecting the entity, including those related to the efforts of suppliers, or other third parties, will be fully resolved.

Office of the Provincial Auditor of Ontario



Bureau du vérificateur provincial de l'Ontario

Box 105, 15th Floor, 20 Dundas Street West, Toronto, Ontario M5G 2C2 B.P. 105, 15e étage, 20, rue Dundas ouest, Toronto (Ontario) M5G 2C2 (416) 327-2381 Fax: (416) 327-9862

Auditor's Report

To the Environmental Commissioner

I have audited the statement of expenditure of the Office of the Environmental Commissioner for the year ended March 31, 2000. This financial statement is the responsibility of that Office. My responsibility is to express an opinion on this financial statement based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statement is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, this financial statement presents fairly, in all material respects, the expenditures of the Office of the Environmental Commissioner for the year ended March 31, 2000, in accordance with the accounting policies described in note 2 to the financial statement.

Toronto, Ontario June 30, 2000 J.R. McCarter, CA Assistant Provincial Auditor (Acting)

Statement of Expenditure For the Year Ended March 31, 2000

	2000	1999
	\$	\$
Salaries and wages	1,098,605	1,009,484
Employee benefits (Note 4)	251,864	175,118
Transportation and communication	58,637	53,438
Services	305,672	363,229
Supplies and equipment	139,497	88,552
	1,854,275	1,689,821

See accompanying notes to financial statement.

Approved:

Environmental Commissioner

Notes to Financial Statement March 31, 2000

1. Background

The Environmental Commissioner, which commenced operation May 30, 1994, is an independent officer of the Legislative Assembly of Ontario, and promotes the values, goals and purposes of the *Environmental Bill of Rights, 1993 (EBR)* to improve the quality of Ontario's natural environment. The Office of the Environmental Commissioner monitors and reports on the application of the *EBR*, and participation in the *EBR*, and reviews government accountability for environmental decision making.

2. Significant Accounting Policies

a. Basis of Accounting

The Office uses a modified cash basis of accounting which allows an additional 30 days to pay for expenditures incurred during the period just ended.

b. Capital Assets

Capital assets are charged to expenditure in the year of acquisition.

3. Expenditures

Expenditures are paid out of monies appropriated by the Legislature of the Province of Ontario.

Certain administrative services are provided by the Office of the Assembly without charge.

4. Pension Plan

The Office of the Environmental Commissioner provides pension benefits for its permanent employees (and to non-permanent employees who elect to participate) through participation in the Ontario Public Service Pension Plan (PSPF) established by the Province of Ontario.

The Office's contributions to the Fund during the year was \$68,993 (1999 – \$62,646).

5. Lease

During the period, the Office entered into a lease agreement with its landlord for its current premise. The lease payments for the next five years are as follows:

	\$
2001	113,421
2002	113,421
2003	103,969
	\$ 330,811



The Environmental Registry: Quality and Availability of Information

MOE Comment re: Comment Periods

The proposal for (RA00E0005) Regulation to apply environmental assessment (EA) requirements to electricity sector projects in the new competitive electricity market was posted January 24, 2000 for 30 days comment, then posted again on June 2, 2000 for 32 days comment (comment period ended July 4, 2000.) The ministry re-posted the proposal to provide new information for the public to comment on, including a draft of the proposed regulation and a screening guideline for electricity projects.

MMAH Comment re: Description of Proposals (Instruments)

This Registry posting (notice for an official plan amendment) is a notice of a planning proposal; it is not the planning application itself. By providing a notice of proposal on the registry, MMAH has fulfilled the requirements under the EBR. The proposal description included in this posting generally restates the "Purpose" statement of the OPA as adopted by the municipal council. If EBR Registry users feel they require additional information, the Proposal Notice provides a direct telephone number and a toll-free telephone number to contact Ministry staff.

MNR Comment re: Access to Supporting Information

MNR is taking further steps to ensure notices clearly indicate the information that readers can access through hypertext links.

MOE Comment re: Environmental Impacts

The purpose of the regulation (Ozone Depleting Substances posting RA9E0012) was to allow current holders of Ozone Depletion Prevention (ODP) cards to continue to operate their businesses in an environmentally responsible manner and to allow cards to be issued to people who complete the appropriate environmental training in handling ODS. In addition, the Environmental Registry notice provided the web address (URL) to a comprehensive ODS information page on the Ministry's website as well as the phone number for an information hotline which offers up-to-date information on the ministry's programs.

Significant Issues, 1999-2000

MOE Comment re: Protecting Ontario's Groundwater

The MOE is currently updating internal procedures which will document directions to staff related to recent changes in program legislation and policy. As an example, one such change already implemented is that the Ministry has directed staff to ensure that all permits that are issued have an expiry date.

The MOE is also involved in an ongoing initiative to georeference all PTTWs. These data along with data generated from the new Provincial Groundwater Monitoring Network as well as the existing Water Well database will be used with sophisticated GIS (Geographic Information System) technology to enable staff to more accurately assess the cumulative effects of groundwater takings from a watershed.

MMAH Comment re: Protecting Ontario's Groundwater

Groundwater is an integral part of an overall water management approach being discussed by a group of staff from provincial ministries, including MMAH. The legal/legislative framework for groundwater management in Ontario is provided primarily by three Acts:

- · Ontario Water Resources Act
- · Environmental Protection Act
- Planning Act

The first two Acts are administered by MOE and the third by MMAH.

Under the Ontario Water Resources Act, MOE regulates water taking permits and other activities that directly impact groundwater resources. MOE has internal groundwater policies on these matters. The Environmental Protection Act deals with sources of contamination that may impact groundwater. MOE regulations address these. The Planning Act is the legal/legislative framework for land use planning and development in Ontario. Under 2(e) of the Planning Act, the conservation of water is identified as a matter of provincial interest that all planning authorities "shall have regard to". Section 34 (1) 3.1 of the Planning Act provides zoning powers to municipalities to specifically prohibit any land use or buildings in sensitive groundwater recharge areas, head-water areas, and sensitive aquifers.

A single, coordinated policy framework is provided by the Provincial Policy Statement (PPS), issued in 1996 under section 3 of the Planning Act. It includes specific policies on the protection of the quality and quantity of groundwater as well as the function of sensitive groundwater recharge/discharge areas, aquifers, and headwaters in Ontario. All planning authorities, such as municipalities and the Ontario Municipal Board, are required by the Planning Act to have regard to the PPS in all activities and decisions related to municipal land use planning.

Municipalities incorporate the PPS into their local planning policy framework (i.e. official plans and zoning by-laws). The fifth paragraph of the section "The Role of Other Ministries" addresses the PPS and incorrectly states that "the policy is not legally binding" and must only be considered by municipal planners and developers.

In exercising any authority that affects a planning matter (or in providing comments, submissions and advice that affect a planning matter), a municipality, local board, planning board, minister, Ministry, board, commission or agency of the government, including the Ontario Municipal Board 'shall have regard to' provincial policy statements. 'Have regard to' means that a decision-maker is obligated to consider the application of a specific policy statement when carrying out its planning responsibility. Failure to conscientiously apply the 'shall have regard to' standard could result in the approval authorities, members of the public, or the province intervening to ensure that this standard is considered. This involvement could include an appeal to the Ontario Municipal Board on land use planning applications. Land use planning decision makers are responsible for ensuring that this aspect of the Provincial Policy Statement is adequately considered.

As previous ECO Annual Reports have noted, coordination of this issue is important. MMAH, along with other provincial ministries, continues to support the water management approach.

MOE Comment re: Canada Ontario Agreement

As reported in the Third Report of Progress under COA, many actions have been taken in Areas of Concern. Even though only 13 per cent of beneficial uses have been completely restored, incremental improvements indicate more than 50% recovery overall. Collingwood Harbour has been fully restored and has been delisted as an Area of Concern. More than 60 per cent of actions necessary to restore other AOCs have been implemented, and in some cases, implementation is nearing completion. In fact, for Spanish Harbour the full plan has been implemented and beneficial uses are recovering. Though governments, organizations and individuals have taken many actions, the environment needs time to respond.

To date four of the eight targeted primary sewage treatment plants have been or are in the process of being upgraded. COA's target for capital works also sets out the goal of optimizing effluent quality and sludge generation at a further twelve points in areas of concern. Eleven plants have been completed and three more are in progress.

The MOE and the Ministry of Intergovernmental Affairs are leading the re-negotiation of a renewed Canada-Ontario Agreement (COA) to ensure that Ontario's interests in the Great Lakes continue to advance. We are committed to Great Lakes rehabilitation, protection, and conservation.

The ministries began stakeholder consultations on the renewed COA in August 2000, to ensure the views of the public are carefully considered prior to signing a renewed Agreement. The province will renegotiate a COA that has clearly assigned roles and responsibilities, and a mechanism to hold signatories accountable to the purposes of the Agreement.

MNR Comment re: Protection of Species at Risk

In addition to planning authorities' obligation to "have regard" to the Provincial Policy Statement, MNR believes that complementary programs such as the Conservation Land Tax Incentive Program (CLTIP), developed to encourage stewardship by private landowners, are effective tools for promoting the protection of Ontario's species at risk. Over the years, MNR has worked with many Ontario landowners who share in the vision of protecting the province's natural heritage legacy. The government acknowledges that the public regards the protection of Ontario's natural heritage legacy as a high priority. To this end, MNR is committed to a significant investment in Ontario's species at risk and parks and protected areas programs under the Ontario Living Legacy initiative. Currently, MNR is working in partnership with a range of organizations to develop and implement Recovery Plans for at least 24 species at risk across Ontario. Recovery Plan implementation, species monitoring and habitat improvement and restoration are just some of the projects under way, focusing on a number of endangered, threatened and vulnerable species and ecosystems in the province. The commitment to additional investment will further our achievements in these areas and provide new opportunities to work with our many partners.

MMAH Comment re: Protection of Species at Risk

Once again, it should be noted that the "have regard to" standard does not mean that the PPS can be ignored. While the "have regard to" standard does give municipalities flexibility in how they observe the PPS, our experience over the years is that planners and decision-makers know what this means and they take provincial policy statements seriously.

The Planning Act requires that planning authorities 'shall have regard to' the PPS when exercising any authority that affects a planning matter. Municipalities have the responsibility to implement the policies of the PPS through their local official plans and planning decisions.

OMAFRA Comment re: Intensive Farming

The proposed legislation will include among other things: developing standards for agricultural practices, including manure handling, storage and application; providing strict enforcement authority; and setting penalties and fines for infractions.

The Minister of Agriculture, Food and Rural Affairs also released a summary report of consultations held earlier this year on intensive agricultural operations in rural Ontario. These consultations were held by Dr. Douglas Galt, Parliamentary Assistant to Mr. Hardeman and Mr. Toby Barrett, Parliamentary Assistant to the Minister of the Environment.

Ministry Environmental Decisions

MNR Comment re: Ontario's Living Legacy - Land Use Strategy

The public consultation process that was used to develop Ontario's Living Legacy Land Use Strategy was unprecedented in terms of the opportunities for the public to provide input. There will be many more opportunities for the public to have input in implementing Ontario's Living Legacy, including local public meetings, open houses, media notices, an internet site and notices on the Environmental Registry. Broad public consultation, including notices on the Environmental Registry, would take place prior to any discussion regarding potential hunting opportunities in the wilderness parks affected by the Land Use Strategy.

Part 5

Reviews and Investigations

MNR Comment re: Forestry

The Minister of the Environment's order concerning clear-cut directions was issued to impose additional conditions and not on the basis of MNR non-compliance with existing conditions. The Minister's order simply advances the deadline, and is not indicative of MNR being in a position of non-compliance, or that MOE's investigation and Minister's order show inconsistencies.

MOE Comment re: Hazardous Waste

On February 3, 2000 the Minister announced additional revisions to the hazardous waste regulation to strengthen Regulation 347 to be compatible with U.S. regulations. The proposed changes were posted on the Environmental Registry for a 90-day public comment period.

The ministry proposes to:

- a) adopt the Toxicity Characteristic Leaching Procedure with an expanded leachate criteria list resembling the federally-proposed list.
- b) add a derived-from rule to Regulation 347 similar to that of the U.S. EPA.
- c) update its hazardous waste listings in Schedules 1, 2A and 2B of Regulation 347 by amending them to include the wording currently used in U. S. EPA regulations.
- d) The 90-day consultation period closed on May 3, 2000. The proposed regulation has been supported by a number of stakeholders. It is hoped that the regulatory amendments could be finalized and posted on the EBR registry in the fall of 2000.

The Ministry is committed to further reviewing its hazardous waste regulation and further initiatives, including the banning of untreated hazardous waste being landfilled.

Developing Issues

MNR Comment re: Ecosystem Monitoring

MNR has a number of programs that currently monitor the various components of the ecosystem. For example, the Ministry carries out fish and wildlife population and habitat assessments, ecological land classifications, and forest growth and yield initiatives. MNR also has numerous partnerships focusing on the long-term monitoring of components of the ecosystem, including a forest bird monitoring program and forest insect and disease surveys. In an effort to strengthen the Ministry's current inventory, monitoring, assessment programs, as part of implementing Ontario's Living Legacy, MNR: is establishing a framework for a Parks and Conservation Reserves ecological monitoring program; will undertake additional monitoring and assessment of water quantity/supply using parameters such as precipitation, stream flow, groundwater levels, lake and reservoir levels, etc.; will collect better information on water demand/use for improved decision making during critical periods of low water conditions; will report on lake trout and walleye fisheries based on long-term monitoring programs; will assess and report on Great Lakes fisheries; and, is looking at new technologies to support inventory, monitoring and assessment work (e.g., remote sensing, infrared techniques, satellite imagery).

MEST Comment re: Genetically Modified Organisms in Agriculture

Ontario does not regulate GMO technology and has no jurisdiction over approvals as this is a federal responsibility. A provincial advocate is unnecessary in light of the national science-based regulatory system.

The newly formed Ontario Science and Innovation Council, an independent arms length body, has been created to provide the government with long-term strategic advice on science, technology and innovation policy. The Council's agenda has yet to be determined; however it is anticipated the Council will be addressing some of the issues on biotechnology.

OMAFRA Comment re: Genetically Modified Organisms in Agriculture

It is OMAFRA's view that Ontario government agencies and ministries should present a balanced view on the issue of Genetically Modified Organisms (GMOs). They should ensure that adequate regulatory procedures are in place to protect public and environmental safety, and that information is available for Ontario citizens and businesses to make their own choices on the use of GMOs.

Abbreviations and Acronyms

Terms and Titles

AER	Approval Exemption Regulation	HCFC	Hydrochloroflourocarbon
AMPs	Administrative monetary penalties	IC&I	Industrial, commercial and institutional
BSC	Better, Stronger, Clearer		(waste)
Bŧ	Bacillus thuringiensis	IEB	Investigations and Enforcement Branch
ССМЕ	Canadian Council of Ministers of the	IJC	International Joint Commission
	Environment	IMO	Independent Electricity Market Operator
CCPA	Canadian Chemical Producers Association	LFL	Lands for Life
CFC	Chloroflourocarbon	LMOs	Living Modified Organisms
CIELAP	Canadian Institute for Environmental Law and Policy	MBS	Management Board Secretariat
CLTIP	Conservation Land Tax Incentive Program	MCZCR	Ministry of Citizenship, Culture, and Recreation
со	Carbon Monoxide	MCCR	Ministry of Consumer and Commercial Affairs
co ₂	Carbon Dioxide	MDC	Market Design Committee
COA	Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem	MEST	Ministry of Energy, Science and Technology
COSEWIC	Committee on the Status of Endangered Wildlife in Canada	MFIP ₃	Metal Finishing Industry Pollution Prevention Project
COSSARO	Committee on the Status of Species at Risk in Ontario	MISA	Municipal-Industrial Strategy for Abatement
000071110		MOE	Ministry of the Environment
C of A	Certificate of Approval	МОН	Ministry of Health
EA	Environmental Assessment	MOL	Ministry of Labour
EAB	Environmental Appeal Board	MOU	Memorandum of Understanding
EBRO	Environmental Bill of Rights Office, Ministry	ММАН	Ministry of Municipal Affairs and Housing
	of Environment	MNR	Ministry of Natural Resources
ECO	Environmental Commissioner of Ontario	MNDM	Ministry of Northern Development and Mines
EPP	Enhanced Public Participation	MRP	Mine Rehabilitation Program
ESA	Environmentally Significant Area	МТО	Ministry of Transportation of Ontario
FOCP	Forest Operations Compliance Program	NEC	Niagara Escarpment Commission
FON	Federation of Ontario Naturalists	NEP	Niagara Escarpment Plan
FRI	Forest Resource Inventory	NHIC	Natural Heritage Information Centre
FTP	File Transfer Protocol	NHRM	Natural Heritage Reference Manual
GLWQA	Great Lakes Water Quality Agreement	NO _x	Nitrogen Oxides
GMOs	Genetically Modified Organisms	ODP	Ozone depletion prevention
GTA	Greater Toronto Area		

Legislation

			Legisiat	ion
	ODS	Ozone-depleting substances	ARA	Aggregate Resources Act
	OEB	Ontario Energy Board	BCA	Building Code Act
	OFAAB	Ontario Forest Accord Advisory Board	CFSA	Crown Forest Sustainability Act
	OLL	Ontario's Living Legacy	EAA	Environmental Assessment Act
	OMAFRA	Ontario Ministry of Agriculture, Food and	EBR	Environmental Bill of Rights, 1993
		Rural Affairs	ECA	Energy Competition Act
	ОМВ	Ontario Municipal Board	EEA	Energy Efficiency Act
			EPA	Environmental Protection Act
	OPAC	Ontario Pesticides Advisory Committee	ESA	Endangered Species Act
OI	ORC	Ontario Realty Corporation	FA	Fisheries Act (federal)
	OWDC	Ontario Water Directors Committee	FFPPA	Farming and Food Production Protection Act
	PCBs	Polychlorinated Biphenyls	FIPPA	Freedom of Information and Protection of
	PLUS	Proposed Land Use Strategy		Privacy Act
	POI	Point of Impingement Models	FWCA	Fish and Wildlife Conservation Act
	PPS	Provincial Policy Statement	NEPDA	Niagara Escarpment Planning and Development Act
	PTTW	Permit To Take Water	01//04	,
	REVA	Recognizing and Encouraging Voluntary	OWRA	Ontario Water Resources Act
		Action	PA	Planning Act
	REP	Responsive Environmental Protection	PLA	Public Lands Act
	SAR	Standardized Approval Regulation	PPA	Provincial Parks Act
	SEV	Statement of Environmental Values		
	SLDF	Sierra Legal Defence Fund		

 SO_2

TCA

TOR

TSSA

VTEEE

VOCs

Sulphur Dioxide

Trichloroethane

Terms of Reference

Technical Standards and Safety Authority

Vulnerable, Threatened, Endangered, Extirpated and Extinct Species of Ontario

Volatile organic compounds

Index

Access to Information Cooperation by Ministries, 125 Decisions, 18 Freedom of Information and Protection of Privacy Act – FIPPA, 125 Information and Privacy Commissioner, 125 Instruments, 17 Proposals, 15	Ministries, 87 Overview of Applications, 87 Role of the ECO, 87 Themes, 88 Approval Exemption Regulation – AERs Air, 71 Noise and Odours, 90
Acid Mine Drainage, 105	Areas of Concern – AOC, 43 (Also See Great Lakes)
Advisory Committee on Environmental Standards, 78	Arsenic, 77
AERs – See Approval Exemption Regulations	Auditor's Report of the ECO, 141
Aggregates	Bear Hunt, 70
Aggregate Resources Compliance Reporting Program, 109	Better, Stronger, Clearer: Environmental Regulations for Ontario, 80
Application for Investigation, 108	Biddulph Township, 53
Niagara Escarpment Plan Area, 22 Self–Monitoring, 109	Biodiversity Biodiversity Strategy (Canada), 50
Aggregate Resources Act, 39 Application for Investigation, 108	Ecosystem Fragmentation, 136
Agriculture (Also See Intensive Farming) Genetically Modified Organisms, 132	Bio-engineering, 132 (Also See Genetically Modified Organisms)
Living Modified Organisms, 133	Biomedical Waste, 30
Air Electricity, 82	Bottled Water Groundwater Impacts, 35
Smog Plan, 81	Boundary Waters Treaty, 43
Recommendations by the ECO in the 1998 Annual Report, 119	Cadmium, 77, 83
Air Standards, 74	Canada-Ontario Agreement - COA (Also See Great Lakes), 44
Algoma Forest, 95	Canada-Wide Standards
AOC – See Areas of Concern Appeals Dombind, 114	Electricity Restructuring, 92 Hazardous Waste Incinerators, 101 Ozone and Fine Particulate Matter, 82
Environmental Appeal Board, 112	Caribou, 84
Keele Valley Landfill, 114 Leave to Appeal, 112 Nuisance, 114 Right to Appeal, 112 Status of Appeals, 112 Time Periods, 112, 113 Water Taking Permit, Clublink, 113	Certificates of Approval Approval Exemption Regulations – AERs, 71 Emergency, 28 Exemptions, 71 Hazardous Waste, 100 Incinerators, 100 Landfill Sites, 28
Applications for Investigation Aggregate Resources Act, 108 Forestry, 95	Noise and Odours, 90 Posted on the Environmental Registry, 16 Standardized Approval Regulations – SARs, 71
How Many, 87 Landfills, 103	CFSA – See Crown Forest Sustainability Act
Mining, 105	Chatham, 53
Ministries, 87	Chromium, 78
Noise, 90 Odour, 90 Overview of Applications, 87 Role of the ECO, 87	Class Environmental Assessment Forest Management Plans, 25 Timber, 61, 96
Themes, 88	Climate Change
Applications for Review CofA Issued Within Five Years, 103 Electricity Restructuring, 92	Electricity Restructuring, 92 Recommendations by the ECO in the 1998 Annual Report, 119
Hazardous Waste, 100	CLTIP – See Conservation Land Tax Incentive Program
How many, 87 Landfills, 103	COA- See Canada-Ontario Agreement

Coal Coal-Fired Power Plants, 82 Coal Tar Contamination, 54 Electricity Restructuring, 92	Education ECO Publications, 32 Educational Initiatives by the ECO, 31 Summary of ECO Educational Activities, 33
Cochrane, 103	Edwardsburgh, 103
CofA – See Certificates of Approval	Electricity
Comments By Public on Proposals Posted on the Environmental Registry, 15 Description of Comments in Decision Notice, 19 Time Period, 15	Application for Review, 92 Market Design Committee, 93 Public Consultation, 93 Recommendations by the ECO in the 1998 Annual Report, 120 Restructuring, 92
Committee on the Status of Endangered Wildlife in Canada – COSEWIC, 49	Smog, 82 Electronic Links – See Hypertext Links
Committee on the Status of Species at Risk in Ontario – COSSARO, 49	Emergency Exception Notice, 26, 28
Conservation Authorities Act, 39	Certificate of Approval, 28
Conservation Land Tax Incentive Program – CLTIP, 51	Emissions Trading
Conservation Strategy for Old Growth Forests, 84	Electricity Restructuring, 92
Contact Names Proposals on the Environmental Registry, 15	Employee Protection – See Whistleblower Rights
Contaminants Air, 74	Endangered Species Application for Review, 49 Biodiversity Strategy (Canada), 50
Cooperation by Ministries Access to Information, 125	Conservation Land Tax Incentive Program – CLTIP, 51 Endangered Species Act, 48, 51 Fish and Wildlife Conservation Act, 48, 51
COSEWIC – See Committee on the Status of Endangered Wildlife in Canada	Forest Management Planning Manual, 49 King Rail, 50
COSSARO – See Committee on the Status of Species at Risk in Ontario	National Accord on the Protection of Species at Risk, 50 Prothonotary Warbler, 50 VTEEE Species, 49
Crown Forest Sustainability Act Alleged Contraventions, 95 Ontario's Living Legacy – OLL, 61	Endangered Species Act – ESA, 48, 51 Energy Act, 94
Decisions Posted on the Environmental Registry	Enviro-Med, 30
Access to Decision Documents, 18 Date Decision Becomes Effective, 18 Date Decision is Made, 18 Decision Not Posted, 80, 82, 83 Description of Decisions, 18, 114	Environmental Appeal Board – EAB Appeals, 112 Groundwater, 38 Waste Disposal in North Bay, 31
Description of Public Comments, 19 ECO Reviews of Decisions, 60 General, 15 How Many Posted, 60 Ontario's Living Legacy – OLL, 60 Unposted Decisions, 22	Environmental Assessment Class Environmental Assessment, 25 Equivalent Public Participation, 28 Exemption, 54 Hazardous Waste, 101 Ontario Realty Corporation, 56, 58
Deloro Mine, 106	Sale of Public Land, 56 Terms of Reference, 14
Dombind Appeal, 114	Environmental Assessment Act Alleged Contraventions by MNR, 97
Downloading to Municipalities Noise and Odours, 91 Drainage Act, 39	Forestry, 95 Environmental Bill of Rights
Drinking Water (Also See Great Lakes, Groundwater) Standards, 76	Appeals, 112 Applications for Investigation, 87 Applications for Review, 32, 87
E-coli, 52 (Also See Intensive Farming)	Education, 32
Ecosystem Fragmentation, 135	Environmental Registry, 12 General, 10
Ecosystem Monitoring, 128	Ministries Prescribed under the EBR, 11

Proposals on the Environmental Registry, 15 Public Comments, 15	First Nations Forestry, 97
Purpose, 10 Rights Under the EBR, 11, 15, 87, 112, 114, 115 Statement of Environmental Values, 10	Fish and Wildlife Conservation Act, Endangered Species, 48, 51
Suing for Harm to Public Resource, 115 Suing for Public Nuisance, 114	Fisheries Act Aggregate Extraction, 108 Forestry, 95
Environmental Bill of Rights Office – EBRO, 12	Kam Kotia Mine, 105
Environmental Commissioner of Ontario – ECO Library, 32 Multi–Stakeholder Advisory Committee, 123 New Initiatives, 123 Publications, 32 Recognition Award, 123 Role of, 10, 15, 32, 80, 87 Web site, 32 1–800 Number, 32	Forestry Algoma Forest, 95 Annual Reports by Ministry of Natural Resources, 97 Applications for Investigation, 95 Ecosystem Fragmentation, 135 Ecosystem Monitoring, 130 First Nations, 97 Forest Accord (1999), 23, 61 Forest Accord Advisory Board (OFAAB) –
Environmental Farm Plan Programs, 39, 53	See Ontario Forest Accord Advisory Board
Environmental Protection Act – EPA Intensive Farming, 53 Noise, 90, 91 Odours, 90, 91 Spills, 65	Forest Management Guidelines for the Conservation of Woodland Caribou, 84 Forest Management Plans, 25 Forest Operations Compliance Program, 96 Forest Operations Prescriptions Guidelines, 84 Old Growth, 84
Environmental Registry Access to, 12	Policies, 84
Acts, 16	Recommendations by the ECO in the 1998 Annual Report, 121
Comment Period, 15	Freedom of Information and Protection of Privacy Act, 125
Decisions, 15 Emergency Exception Notice, 26 (Also See Emergency) Environmental Assessment Home Page, 14 Exception Notices, 26 (Also See Exception Notice)	Gasoline Handling Act Environmental Registry Notices, 17 Groundwater, 39
Information, Access to, 125	Genetically Modified Organisms, 132
Information Notices, 25 (Also See Information Notices) Information Requirements, 15	GMO - See Genetically Modified Organisms, 132
Instruments, 16, 29 (Also See Instruments) Network 2000 Strategy, 12 PTTWs – See Permits To Take Water Policies, 16	Golf Courses Groundwater Depletion, 37 Irrigation, 30 PTTWs – See Permits To Take Water
Proposals, 15 (Also See Proposals) Public Comments, 15, 19, 108	Great Lakes
Recommendations by the ECO in the 1998 Annual Report, 116 Regulations, 16 Template, 17, 26 Unposted Decisions, 22 (Also See Unposted Decisions) What it is, 12	Areas of Concern – AOC, 43 Boundary Waters Treaty, 43 Canada–Ontario Agreement – COA, 43 (Also See Canada–Ontario Agreement) Drinking Water, 43 Ecosystem Monitoring, 129 Great Lakes Renewal Foundation (Ontario), 46
EPA – See Environmental Protection Act	Great Lakes Water Quality Agreement, 43
Equivalent Public Participation, 28	Guide to Eating Sport Fish, 129
Exception Notice	Need for Action, 43 Remedial Action Plans – RAPs, 43
Emergency, 28 Equivalent Public Participation, 28 General, 26 Tamplete Information Nations and Evapation Nations, 26	Greenhouse Gases Electricity Restructuring, 92
Template – Information Notices and Exception Notices, 26	Green Workplace Program, 23
Farming (Also See Intensive Farming) Genetically Modified Organisms, 132	Groundwater Bottled Water, 35 Composition for Croundwater, 27
Farming and Food Production Protection Act – FFPPA, 53	Competition for Groundwater, 37 Contamination, 35
FFPPA – See Farming and Food Production Protection Act	Depletion, 37
Financial Statement, 140	Farming, 36
FIPPA – See Freedom of Information and Protection of Privacy Act	General, 34, 35 Ontario Water Directors Committee - OWDC, 40

	1
Recommendations by the ECO in the 1998 Annual Report, 118	Recommendations by the ECO in the 1998 Annual Report, 118
Septic Tanks, 35	International Joint Commission - IJC, 45
Strategy, 36 Water Taking and Transfer Regulation, 38	Internet
Uses, 35	Environmental Registry, 12
"Have regard to", 39, 68, 69	Hypertext Links, 15 Publications by Government, 18
Hazardous Waste	Investigations – See Applications for Investigation
Application for Review, 100	
Canada-Wide Standards, 100 Imports, 101	Kam Kotia Mine Application for Investigation, 105
Mixture Rule, Regulation 347, 26	Keele Valley, 114
Recommendations by the ECO in the 1998	Kitchen Creek Golf Course, 31
Annual Report, 118 United States, 100	Kyoto
	Electricity Restructuring, 92
Hope Township, 54	Landfills
Hunting Bear Hunt, 70	Application for Investigation, 103
Hunting in Parks, 24, 61	Application for Review, 103 Emergency Certificates of Approval, 28
Hypertext Links	Keele Valley, Appeal, 114
General, 15	Lead, 83
Links to PTTWs, 18	Leave to Appeal, 112
Imports Hazardous Waste, 101	Licences
Incinerators	Posted on the Environmental Registry, 16
Application for Review, 100	London Hydro, 54
Canada-Wide Standards, 101	Main Street Ontario Program, 26
Information and Privacy Commissioner, 125	Management Board Secretariat
Information Notices	Land Sales, 35
Air Standards, 78	Ontario Realty Corporation, 56 Statement of Environmental Values, 56
Comments, 26 Emergency, 26	
Exception Notice, 26	Manure – See Intensive Farming
Forest Management Plans, 25	Mapping Ecosystem Fragmentation, 138
Main Street Ontario Program, 26 What are they, 23	Market Design Committee, 93
Information on the Environmental Registry, 15, 125	Markham-Pickering Agricultural Land Preserve, 56
IJC – See International Joint Commission	MBS – See Management Board Secretariat
Instrument Classification Regulations	MCCR – See Ministry of Consumer and Commercial Relations
Ministry of Municipal Affairs and Housing, 30	MCzCR – See Ministry of Citizenship, Culture and Recreation
Ministry of Natural Resources, 29, 30	
Recommendations by the ECO in the 1998	Mercury, 83
Annual Report, 122	MEST – See Ministry of Energy, Science and Technology
Instruments Access to Instruments, 17	Millennium Projects, 26
Appeals of, 112	Milling Operations Noise and Odours, 90
Classifying, 29	Mining
Ministries that Post Instrument Proposals on the Environmental Registry, 16	Abandoned Mines, 105
Planning Act, 30	Application for Investigation, 105
What are they, 16, 29	Deloro Mine, 106
Intensive Farming,	Kam Kotia Mine, 105 Mine Rehabilitation Program, 106
Definition of Intensive Farm, 52 E. coli, 52	Parks, 61
E. con, 32 Environmental Farm Plan, 53	Ministry of Agriculture, Food and Rural Affairs (Ontario) -
Groundwater Impacts, 36	OMAFRA
Manure, 52 Normal Farm Practice, 53	Drainage Act, 39 Environmental Farm Plan Programs, 39
Prosecutions, 54	Genetically Modified Organisms, 132
	Groundwater Strategy, 36

Statement of Environmental Values - SEV, 55 Development Act Ministry of Citizenship, Culture and Recreation - MCzCR Network 2000 Strategy, 12 Main Street Ontario, 26 NHRM - See Natural Heritage Reference Manual Ministry of Consumer and Commercial Relations - MCCR Niagara Escarpment Technical Safety and Standards Authority, 39 Aggregate Operations, 22 Ministry of Energy, Science and Technology - MEST Ecosystem Fragmentation, 135 Acts that Should be Prescribed, 94 Niagara Escarpment Commission - NEC, 22 Electricity Restructuring, 92 Permits, 72 Genetically Modified Organisms, 132 Trees, 72 Living Modified Organisms, 133 Niagara Escarpment Planning and Development Act - NEPDA, 72 Statement of Environmental Values, 93 Nickel, 78 Ministry of the Environment - MOE Nitrogen Oxides Downloading, 91 Electricity Restructuring, 92 Ecosystem Fragmentation, 135 Smog, 82 Ecosystem Monitoring, 129 Electricity Restructuring, 92 Groundwater Strategy, 36, 37 Applications for Investigation, 90 Noise and Odours, 90 Enforcement, 90 Spills, 65 Exemptions from Certificates of Approval, 71 Statement of Environmental Values, 67, 129 Nuisance Impacts, 90 Ministry of Health - MOH, 47 Normal Farm Practices Protection Board, 53 Ministry of Municipal Affairs and Housing - MMAH Ecosystem Fragmentation, 138 Exemptions from Certificates of Approval, 71 Groundwater Strategy, 36 Noise Impacts, 90 Instrument Classification Regulation, 30 Odours, 90 Natural Heritage Reference Manual, 68 Rights to Sue, 114 Recognition Award, 123 Nutrient Management, 52 (Also See Intensive farming) Ministry of Natural Resources - MNR Oak Ridges Moraine, 56 Annual Reports on Timber Management, 97 Odours, 90 Aggregate Operations in the Niagara Escarpment Plan Area, 22 OEB - See Ontario Energy Board Bear Hunt, 70 OFFAB - See Ontario Forest Accord Advisory Board Biodiversity, 136 Ecosystem Fragmentation, 135 Official Plan Amendments Ecosystem Monitoring, 129 Posted on the Environmental Registry, 16 Groundwater Strategy, 36 Old Growth Forests, 84 Instrument Classification, 29 OLL - See Ontario Living Legacy Natural Heritage Reference Manual, 68 Ontario Living Legacy - OLL, 62 Ontario Energy Board, 92 Statement of Environmental Values, 70, 129 Ontario Energy Board Act, 94 Ministry of Northern Development and Mines - MNDM Ontario Forest Accord (1999), 23 Deloro Mine, 106 Ontario Living Legacy - OLL Kam Kotia Mine, 105 Forest Accord (1999), 23, 61 Ontario Living Legacy, 62 Ontario Municipal Board - OMB, 68 MISA - See Municipal Industrial Strategy for Abatement Ontario Realty Corporation - ORC Mixture Rule for Hazardous Waste - Regulation 347, 26 Annual Reports, 58 Model Sewer Use Bylaw, 83 ECO Findings (1998), 56 Monitoring Recommendations by the ECO in the 1998 Ecosystem, 128 Annual Report, 121 Electricity Restructuring, 93 Ontario Water Directors Committee - OWDC, 40 Need for, 34 Ontario Water Resources Act - OWRA Self-monitoring, 96, 109 Forestry, 95 Multi-Stakeholder Advisory Committee, 123 Groundwater Management, 37 Kam Kotia Mine, 106 Municipal Industrial Strategy for Abatement - MISA, 78 Permits To Take Water, 37 National Accord for the Protection of Species at Risk, 50 ORC - See Ontario Realty Corporation Natural Heritage Reference Manual - NHRM Orders Ecosystem Fragmentation, 135 Posted on the Environmental Registry, 16 Ontario Municipal Board, 68

NEPDA - See Niagara Escarpment Planning and

Intensive Farming, 52

OWDC – See Ontario Water Directors Committee	Racetracks
OWRA - See Ontario Water Resources Act	Noise, 71, 90
Ozone, 82	Rankin's Back Lake, 48
Parkway Belt, 56	RAPs - See Remedial Action Plans
Particulate Matter, 82	Recognizing & Encouraging Voluntary Action – REVA, 63
PCBs – See Hazardous Waste	Recommendations Made by the ECO in the 1998
Permits To Take Water – PTTWs Access to PTTWs, 18, 38 Appeals, 112 Conflicting Groundwater Uses, 37 Examples of PTTWs, 31, 48, 49 Groundwater Depletion, 37 Moratorium, 38 Posted on the Environmental Registry, 16	Annual Report Air Pollution, 119 Business Plans, 122 Climate Change, 119 Electricity Restructuring, 120 Forestry, 121 Groundwater Management, 118 Hazardous Waste, 118 Manure Management, 118
Plain Language, 15	Ministry of Natural Resources Instrument
Planning Act Ecosystem Fragmentation, 135 Instruments, 30 Natural Heritage Reference Manual, 68 Provincial Policy Statement – PPS, 39 Point–of–Impingement Standards	Classification Regulation, 122 Ministry Responses, 116 Real Estate Activities, 121 Statement of Environmental Values, 122 Transportation, 120 Use of the Environmental Registry, 116
Hazardous Air Pollutants, 100	Recycling Plants Noise and Odours, 90
PPS – See Provincial Policy Statement	Registry – see Environmental Registry
Privatization, 56	Regulation – Instrument Classification
Proposals Posted on the Environmental Registry, 15 Acts, 16 Decisions, Proposals With No, 80, 82, 83 Contact Names, 15 Descriptions, 16	Ministry of Municipal Affairs and Housing, 30 Ministry of Natural Resources, 30 Recommendations by the ECO in the 1998 Annual Report, 122
Environmental Impacts, 18 Examples, 48, 49 Information Required to be Posted, 15 Instruments, 16 Policies, 16 Regulations, 16	Regulations Proposals for, 16 Regulation 328, 49 Regulation 347 – Hazardous Waste, 26, 80, 100 Regulation 675/98 – Spills, 65 Regulation 828 – Niagara Escarpment Planning and Development Act, 72
Prothonotary Warbler, 50	Regulation – Better, Stronger, Clearer, 80
Provincial Policy Statement – PPS Ecosystem Fragmentation, 135 "Have regard to", 39, 48, 68, 69 Natural Heritage Reference Manual, 48, 68 Policy 2.3, 69	Regulation – Waste Management, 80 Regulation – Water Taking and Transfer, 38 Remedial Action Plans – RAPs, 43 (Also See Great Lakes) Responsive Environmental Protection, 65
PTTWs – See Permits To Take Water	REVA- See Recognizing and Encouraging Voluntary Action
Public Comments	Reviews – See Applications for Review
Description of Comments, 19, 108	Right to Sue, 114, 115
Positive Effects of, 73 On Proposals Posted on the Environmental Posistry, 15	Risk Assessment/Management, 75, 77
On Proposals Posted on the Environmental Registry, 15 Time Period, 15, 125	Rouge Park, 56
Public Lands Act, 95	Sale of Public Land
Public Participation Environmental Registry, 15 Equivalent Public Participation, 28	ECO Findings (1998), 56 Recommendations by the ECO in the 1998 Annual Report, 121
Forestry, 97	SARs – See Standardized Approval Regulations
Natural Heritage Reference Manual, 68 Niagara Escarpment, 73 Ontario Living Legacy – OLL, 61, 62 Ontario Realty Corporation, 56 Standards, 77	Self-monitoring Aggregate Extraction, 109 Forestry, 96 Septic Tanks
Standards, 77	Certification/Licensing, 123 Groundwater Impacts, 35

SEV - See Statement of Environmental Values Sewer Use Bylaw - See Model Sewer Use Bylaw Shooting Ranges, 71 Sierra Legal Defence Fund (SLDF), 24 SLDF - See Sierra Legal Defence Fund Smog, 81 Spills, 65 Spring Bear Hunt - See Bear Hunt Standardized Approval Regulations - SARs, 71 Standards Advisory Committee on Environmental Standards, 78 Air, 76 Canada-Wide Standards, 82 Composting, 76 Drinking Water, 76 Point-of-Impingement Standards, 100 Public Consultation, 75 Surface Water, 76 Statement of Environmental Values General, 10 Management Board Secretariat, 56 Min. of Agriculture, Food and Rural Affairs, 55 Ministry of Energy, Science and Technology, 93 Ministry of the Environment, 67, 129 Ministry of Natural Resources, 70, 129 Spills, 65 Recommendations Made by the ECO in the 1998 Annual Report, 122 Status of Proposals and Decisions Proposals With No Decisions, 80 Stormwater, 103 Suing for Harm to Public Resource, 115 Suing for Public Nuisance, 114 Sulphur Dioxide Electricity Restructuring, 92 Smog, 82 Technical Standards and Safety Authority - TSSA, 39 Template of Notices on the Environmental Registry, 17, 26 Timber Management, 96 Right to Sue for Harm to Public Resource, 115 Toronto Sewer Use Bylaw, 83 Transportation Recommendations by the ECO in the 1998 Annual Report, 120 Trout Lake, 30 TSSA - See Technical Standards and Safety Authority **Unposted Decisions** Aggregate Operations in the Niagara Escarpment Plan Area, 22 Green Workplace Program, 23 Hunting in Parks, 24 Ontario Forest Accord (1999), 23

Voluntary Action Forestry, 96 Recognizing and Encouraging Voluntary Action - REVA, 63 Walkerton, 36, 52 Waste Management Regulation, 80 Water Bottled Water, 35 Contamination by Kam Kotia Mine, 105 Drinking Water Standards, 76 Great Lakes, 32 Groundwater, 35 Ontario Water Directors Committee - OWDC, 40 PTTWs - See Permits To Take Water Surface Water, 76 Water Taking and Transfer Regulation, 38 Web Site ECO Web Site, 32 Environmental Registry, 12 File Transfer Protocol - FTP, 13 Hypertext Links, 15 Wetlands Ecosystem Fragmentation, 135 Whistleblower Rights, 155 Zoning Orders, 25

ECO Staff 1999/2000

Karen Beattie	Legal Analyst
Robert Blaquiere	Systems, Webmaster & Case Manager
Darla Cameron	Policy & Decision Analyst
Maureen Carter-Whitney	Legal Analyst
Ann Cox	Library Assistant
Bev Dottin	Administrative Assistant
John Ferguson	Public Education Officer
Rohan Gaghadar	Policy Analyst/Economist
Liz Guccione	Communications/Public Affairs Coordinator
Elaine Hardy	Policy & Decision Analyst
Joel Kurtz	Senior Policy Advisor
Peter Lapp	Executive Assistant
Paul McCulloch	Policy & Decision Analyst
David McRobert	Senior Policy Analyst/In-House Counsel
Mark Murphy	Public Education Officer
Damian Rogers	Researcher
Cynthia Robinson	Coordinator, HR, Finance & Administration
Ellen Schwartzel	Coordinator Research & Resource Centre
Lisa Shultz	Policy & Decision Analyst
Ivy Wile	Acting Commissioner (September 1999 - January 2000)



Environmental Commissioner of Ontario

1075 Bay Street, Suite 605

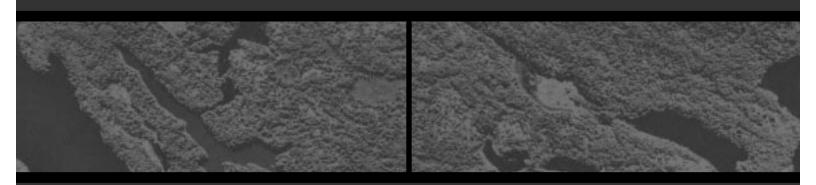
Toronto, ON Canada M5S 2B1

Telephone: 416-325-3377

Fax: 416-325-3370

Toll Free: 1-800-701-6454

www.eco.on.ca



Changing Perspectives

Disponible en français ISSN 1205-6928