AN ENVIRONMENTAL AGENDA FOR ONTARIO February 1999

By world standards, Ontario is a rich province with an able and diverse population and enviable resources. It should have no difficulty ensuring for all its residents the basic requisites for a healthy and rewarding life, and plenty of opportunities for greater accomplishment. Increasingly, however, the ecological and social foundations for well being in Ontario are being strained. Economic shortsightedness, combined with inattention to environmental quality and social justice are undermining our health, security and long term economy. This is unnecessary and unforgivable.

Over the past year, local, regional and provincial environmental and citizen action groups have worked together to assemble a positive and practical response to this situation. In the following *Environmental Agenda for Ontario* and in ten accompanying research papers on major issue areas, we have attempted to be both visionary and comprehensive. We recognise, however, that no single prescription will be sufficient. This Agenda is meant in part to spur further innovative thinking. The Agenda focuses chiefly on actions that should be taken or led by the provincial government as Ontario's main authority for protection and enhancement of the public interest. Again, however, we recognise that the province is not an island and that all Ontario residents have a role to play. We hope the Agenda will indicate a more hopeful path and encourage initiatives by a host of participants.

SIGNS OF TROUBLE

Everywhere are signs of decreased quality of life in Ontario that result from widespread environmental degradation. The following are some examples:

- In May 1998 the Ontario Medical Association stated that "at current levels of exposure, pollutants such as ground-level ozone, inhalable particulates, and total sulphur compounds are responsible for adverse health effects in Ontarians." The Association's report cites estimates that poor air quality results in 1,800 premature deaths and 1,400 hospital admissions each year. Other estimates have placed the annual death toll in Ontario due to air pollution at 6,000.
- Ontario is experiencing a dramatic growth in the generation of hazardous and liquid industrial wastes. The total amounts of hazardous wastes reported as being sent off-site for disposal increased by 50% between 1994 and 1997, from 1.4 million tonnes to a total of more than 2.1 million tonnes per year.⁴

- Five species of animals, fish and plants in Ontario have suffered extinction since European colonisation, and approximately 50 species have been extirpated. Currently 25 kinds of animals and 190 kinds of plants are considered vulnerable to extinction in Ontario.⁵
- Ontario loses over 25 million tonnes of fertile soil from its croplands each year due to erosion resulting from poor farming practices. 6
- At current rates of loss of farmlands to urban development, quarries and roads, one-third of Ontario's existing farmland will be gone in the next 20 years.⁷
- Over one-third of the drinking water wells in rural areas in Ontario contain at least one contaminant at levels that exceed Ontario's drinking water quality objectives.
- The estimated costs of remediating the 6,000 abandoned mines in Ontario range from \$300 million to over \$3 billion. One quarter of Ontario's operating metal mines have failed to meet the requirement that their effluent not be lethal to fish. 10
- Less than 2% of the old growth forests in the Great Lakes basin and less than 30% of the original wetlands remain in Ontario. 11
- Clear-cutting as a percentage of all harvesting by Ontario's forestry industry has increased from 70% to 94% over the past 25 years. ¹² Over the same period, the rate of harvesting has been increasing, while employment levels in the industry have fallen dramatically, ¹³ and there are predictions of a looming timber shortage. ¹⁴
- More than 45,000 people are diagnosed with cancer in Ontario each year. One in four Ontarians will die from cancer. ¹⁵ A growing number of scientific studies link increases in certain types of cancers to environmental contamination. ¹⁶

At the same time, other indicators show a pattern of decline in social and economic conditions:

- There has been a dramatic growth in homelessness and usage of food banks, while there have been deep cuts in social assistance rates and support for essential social services, such as battered women's' shelters. 17
- The number of children living in poverty in Ontario has more than doubled since 1989. 18
- The disparity in income between the well-to-do and the poor in Canada has steadily increased over the past 20 years. ¹⁹ In 1973 the richest 10% of families in Canada made

- 21 times more than the poorest 10% of families. By 1996, the richest 10% of families made 314 times more than the poorest 10% of families. ²⁰
- On-reserve aboriginal people have a life expectancy that is ten years less than Canadians as a whole, and average incomes only one-quarter that of the average Canadian.²¹

These ecological social and economic indicators all point to an Ontario with a quality of life that is already unsatisfactory for many, that is increasingly unpleasant and insecure for others, and that threatens an intolerable future for almost everyone. We do not believe that this is what Ontarians want. And it is not what they need to accept. To reverse the decline, however, the province will have to begin an immediate transition to a more just and sustainable society.

THE ENVIRONMENTAL AGENDA FOR ONTARIO PROJECT

The purpose of the Environmental Agenda for Ontario Project is to develop a comprehensive and visionary environmental agenda for Ontario for the year 2000 and beyond. The project is focused on activities at the provincial level of government. Ten issue-specific research papers have been prepared as background to the Agenda. Both the Agenda and the background papers reflect input from members of the Ontario Environment Network.

The road we have long been travelling is deceptively easy, a smooth superhighway on which we progress with great speed, but at its end lies disaster. The other fork of the road – the one "less travelled by" – offers our last, our only chance to reach a destination that assures the preservation of our earth. The choice, after all, is ours to make.

Rachel Carson, Silent Spring

The environmental agenda that has emerged from this process is ambitious, but not unrealistic. Many of the measures that we propose have already been successfully demonstrated in Ontario, or in other similar locations.

We believe that the implementation of this agenda would reduce the costs of such

things as health care, municipal infrastructure, and environmental remediation, while providing a more stable economic, social and economic foundations for Ontario communities. It would also provide opportunities for those who wish to pursue economic activities in an environmentally sustainable and socially just manner.

The participation of all Ontarians will be necessary to make the transition to the kind of society that we envision for future generations and ourselves. In this Agenda, we focus on the steps that the Government of Ontario can take to foster this transition. We propose the use of a broad range of tools for this purpose, including changes to laws, regulations,

policies and institutions, the reallocation of government resources, shifts in the tax system, and community right to know, economic and educational initiatives.

An ecovillage is a self-identified community committed to living in an ecologically, economically, culturally and spiritually sustainable way.

In such a community, the shared goal is to facilitate the transition to a liveable future for all life on this planet – by exploring new ways to meet the basic human needs for food, shelter, energy, gainful employment, and healthy and joyful lives.

The Ecovillage Network of Canada

Our Agenda also recognizes external trends affecting the province. These include globalization, the dramatic loss of capacity among government agencies at all levels, and the continuing failure of societies like Ontario's to integrate environmental and economic goals.

The breaking down of barriers to a global marketplace and the increasing pressure to 'compete' and attract investment is resulting in governments to reducing or

eliminating regulations and programmes aimed at protecting and enhancing the wellbeing of people and communities.

At the same time, we have seen dramatic reductions or the elimination of environmental programs and major staff reductions by governments, the downloading of responsibilities to lower levels of government, privatisation of public services such as water, transit, and garbage, and a growing reliance on 'voluntary' action by industry to protect the environment. These directions have weakened the protection of the environment, public health and public safety, and reduced public control over public resources and services.

Finally, conventional indicators of success have tended to equate well-being and fulfilment solely with growth in the economy. This approach has two fundamental flaws. First, it fails to recognise that, once basic human needs are met, well-being is not equivalent to consumption. Secondly, it fails to recognise that the environment can become so severely degraded that it will no longer be able to provide the necessities of life for ourselves, future generations, and other forms of life on earth, let alone allow us to continue to live at the level now expected in our society.

GUIDING PRINCIPLES

The guiding principles for the Environmental Agenda for Ontario have been articulated as a series of questions.

Environmental Health

• Does the action contribute to the flourishing of all the diverse life on Earth?

- Does it ensure that the productivity and the diversity of nature are not diminished?
- Does it contribute to all people having healthy, fulfilling lives?
- Does it contribute to the lessening of the negative legacies of the past?
- Does it take a preventive approach that avoids creating problems for the future?
- Does it take into account the needs of other species with whom we share the planet?

Environmental Justice

- Does the action take into account the needs of future generations?
- Does it take into account the rights, needs and desires of the First Nations?
- Does it ensure that the diverse communities and cultures in the province are supported, respected and empowered?
- Does it lead to equitable access by all people to a healthy environment and to the benefits of natural resource use?
- Does it reduce the negative effects of our actions on other parts of the world?

Livelihood

- Does the action contribute to ensuring that all people and communities have sustainable and satisfying livelihoods?
- Does it provide for a just transition to new livelihoods for those whose ways of life and incomes may be negatively affected by the actions?

Democracy

- Does the action support and strengthen community-based initiatives?
- Does the action ensure that decision-making by government and by private corporations will:
 - Provide access to information and provide for meaningful involvement of all those potentially affected by the decision?
 - Ensure that the affected community has the power to control its own future?
 - Require that the activity be stopped or changed if it fails to meet the conditions that were attached to the proposal before it was approved?
 - Ensure the enforcement of commitments and regular reporting on the actions?

The starting point: respect nature. The ending point: imitate nature.

Gunter Pauli, The Road to Zero Emissions: More Jobs, More Income and No Pollution. Our Agenda aims to retain or recover what we believe most Ontarians value: the protection of human health; the securing of healthy, safe and sustainable sources of food and water; the efficient use of energy and material resources; the building of sustainable communities; the

protection and restoration of nature; and the strengthening of democracy.

PROTECTING HUMAN HEALTH

Current Challenges: The linkages between the entry of pollutants into the environment and human health are drawing growing attention in Ontario. The Ontario Medical Association has highlighted the health impacts of the province's growing smog problem, while others have stressed the connections between environmental contaminants and cancer, deformities, and chronic illnesses.

Ontario has made significant progress on reducing air and water pollution over the past two decades through such initiatives as the Countdown Acid Rain Program, and the Municipal Industrial Strategy for Abatement. However, significant gaps remain in Ontario's regulatory framework to prevent air and water pollution. According to Canada's National Pollutant Release Inventory, in 1996 facilities in Ontario reported releasing a total of 55,842 tonnes pollutants to Ontario's air, water and land. This included 5,499 tonnes of toxic and/or carcinogenic substances.²²

Furthermore, Ontario is experiencing a dramatic increase in the generation of hazardous wastes, with a 50% growth in the amounts of waste shipped off-site for disposal between 1994 and 1997. In 1996, this included 4,595 tonnes of toxic or carcinogenic substances.²³ Imports of hazardous wastes into Ontario for disposal have also grown enormously over the past few years.

Our current dependence on burning oil and coal for much of our electricity results in substantial air pollution. This causes acid rain, smog and increased levels of toxic substances in the air, as well as contributing to global climate change. Electricity generated by nuclear power is also a major source of radioactive pollutants. These pollutants are created in the mining of uranium, its processing to create fuel, its use in power plants, its storage as waste and, finally the decommissioning and dismantling of nuclear facilities.

35% of the smog precursors²⁴ and 27% of Ontario's greenhouse gas emissions come from transportation sources, and our dependence on the automobile for transportation is increasing. There are six million cars on the road in Ontario today. If current trends continue, by 2005 that number may exceed seven million.²⁵

Ontarians are exposed to toxic substances in other ways as well. Ontario farmers used over six million kilograms of pesticide active ingredients in 1993. ²⁶ Evidence links exposure to commonly used pesticides with a variety of human health disorders. The use of pesticides in urban areas has also increased significantly over the past decade. ²⁷

At the same time, new problems are emerging. Unless strong new environmental standards are put in place, the introduction of competition into the electricity market is predicted to result in major increases in emissions of precursors of smog and acid rain, and of heavy metals, such as mercury.²⁸

Scientists are also identifying new threats to human health, such as endocrine disrupting chemicals that affect hormonal systems and interfere with the immune, developmental and reproductive systems. In addition, our traditional approaches to setting environmental standards have tended to overlook particularly vulnerable populations, such as children.

An Agenda for Change:

It is the policy of the Parties that ... the discharge of toxic substances in toxic amounts be prohibited and the discharge of any or all persistent toxic substances be virtually eliminated.

United States & Canada Great Lakes Water Quality Agreement

Ontario's approach to dealing with environmental contaminants should focus on reducing the use or generation of polluting substances whether as products, contaminant, or waste. The elimination of toxic substances that persist in the environment should be the highest priority. The

principle of pollution prevention and clean production can be applied in the industrial, energy, agricultural and other sectors, to not only reduce pollution and protect human health, but also produce cost savings to industry through increased efficiency in the use of resources.

Key Recommendations:

Clean Air

 Consistent with the recommendations of the Ontario Medical Association, the Province should extend the Countdown Acid Rain Program to reduce the SO2 emission caps for

Our goal is a day when our factories have no smokestacks and no effluents. If successful, we'll spend the rest of our days harvesting yesteryear's carpets, recycling old petro-chemicals into new materials, and converting sunlight into energy. There will be zero scrap going into landfills and zero emissions into the biosphere. Literally our company will grow by cleaning up the world, not by polluting or degrading it.

Ray Anderson, President, Interface, Inc.

stationary sources under the program by 75% against the 1994 base year by 2015.

• The province should establish mandatory targets and timetables to reduce NOx emissions by 50% of 1995 levels

by 2005 and 75% by 2010, and set an air quality objective for ground level ozone at 50 ppb by the year 2005, and 25ug/m3 for PM10 and 15ug/m3 for PM2.5 (24-hr average).

• Consistent with the recommendations of the Provincial Auditor, ²⁹ the Ministry of the Environment should proceed with the rapid modernization of Ontario's standards for

toxic air pollutants, including heavy metals. Standards should be applied at the 'base of stack' and the cumulative effects of multiple sources should be considered in the standard setting and approvals processes.

Clean Water

- The province should adopt a *Safe Drinking Water Act*. The Act would include provisions for the setting of maximum levels of contaminants in drinking water to protect human health, research on the health effects of drinking water quality, and require reporting to the public of contaminant levels in drinking water supplies.
- The province should complete the Municipal Industrial Strategy for Abatement (MISA) program through the establishment of enforceable pre-treatment standards for industrial discharges to sewers, discharges from sewage treatment plants, and major industrial sectors not covered by the program to date, such as food processing and production.
- The Province, in conjunction with the federal government, should ensure that negotiations on a new *Canada-Ontario Agreement on the Great Lakes Basin Ecosystem*, are completed in time for a new Agreement to be in place when the current Agreement expires in March 2000. The new Agreement should continue to provide the framework for the implementation of Canada's obligations under the *Great Lakes Water Quality Agreement*.

Toxic Substances

- Consistent with Canada's obligations under the *Great Lakes Water Quality Agreement*, the Province should revise its standards for air and water pollutants and pesticides to ensure that persistent toxic are targeted for virtual elimination from the environment and for zero discharge. Zero discharge should be defined, as per the recommendations of the Canada-U.S. International Joint Commission, as stopping the use, generation and release of these substances.
- The Province should review and revise its existing standards for air, water and soil quality and pesticides to ensure that they consider impacts on vulnerable populations, such as children, the elderly, and the chemically sensitive, and provide adequate protection of wildlife.
- The Province should revise its standards for air, water and soil quality and pesticides to consider endocrine disrupting substances, and to provide for the virtual elimination of those endocrine disrupting substances that persist in the environment.
- Consistent with the recommendations of the International Joint Commission, the province should target those radionuclides that meet the definition of persistent toxic substances for virtual elimination in its air and water quality standards.

- The *Occupational Health and Safety Act* should be amended to provide a right to refuse environmentally damaging work, similar to the existing right to refuse dangerous work.
- The Province should enact a *Pollution Prevention Planning Act* that requires facilities to report annually on their use, generation, release, disposal and transfer in product of toxic substances. The *Act* should also require companies to develop and implement a plan for reducing and eliminating their use and generation of toxic substances. Each year, the Province should publish a report that summarises the information gathered under the *Pollution Prevention Planning Act*.

Hazardous Wastes and Materials

- The Province should implement a per tonne charge on the generation of hazardous wastes. Revenues from this charge should be employed to support the delivery of environmental programs by the province.
- The Ministry of the Environment should revise its standards for the disposal of hazardous waste, including the development and implementation of stringent operating and emissions standards for hazardous and biomedical waste disposal facilities, and the implementation of severe restrictions on the land disposal of hazardous wastes.
- The Province should establish a policy and regulatory framework that controls the generation, use, handling and disposal of materials on the basis of their hazardous properties, regardless of whether they are a raw material, product, recyclable material or waste.
- Consistent with the recommendations of the Office of the Fire Marshal, ³⁰ the Ministry of the Environment should strengthen its controls on recycling and other waste and hazardous materials collection, handling and storage facilities. A publicly accessible registry of such sites, including information on the materials that they handle or store, should be established.

Pesticides

• The province should require that pesticide suppliers, including agricultural vendors, file reports regarding the quantity and identity of pesticides sold each year. This information should be made available to the public in a timely and user-friendly manner. The province should make the phasing out of routine pesticide use on parks, school grounds and other public areas a condition of provincial funding to municipalities and district school boards for these properties. Pesticide use on household yards and commercial and industrial properties should be discouraged through the property tax system.

FOOD, WATER, MATERIALS AND ENERGY

Current Challenges: Canada and the U.S. have approximately 5% of the world's population but consume more than a third of the world's resources.³¹ If everyone on Earth were to consume resources at the rate we do in Canada, it would require two extra Earths to provide the materials and energy.³²

Food

The loss of farmland to urban sprawl, expanding highways, and aggregates extraction, in combination with industrial farming practices that encourage erosion, reduce biological diversity and contaminate the land with pesticides and other chemicals, all threaten our

To manage water as if it were separate and apart from us is like cutting off the flow of blood to one part of the body in order to send it to another – the living entity suffers, and, depending on where the diversion takes place, may not survive.

Sandra Postel, Last Oasis: Facing Water Scarcity

ability to secure a safe and sustainable food supply. At the same time, the economic situation for farmers and rural communities continues to decline, making it more difficult for them to continue to grow food and to practice environmental stewardship. Economic power is increasingly

concentrated in fewer hands as agribusiness replaces the family farm.

The spread of intensive mega-livestock operations, particularly in the swine industry, is introducing new contamination problems. One of the most disturbing aspects of this is the presence of antibiotic resistant bacteria and endocrine-disrupting chemicals in streams and on beaches downstream from such operations.³³ In addition, as of 1996, over 200 facilities in Ontario engaged in aquaculture (fish farming). The number of these facilities is expected to grow rapidly. Fish feces, pesticides and antibiotics from aquaculture contaminate water.³⁴

Water

Ontarians are the second highest users and wasters of water in the world, using two to three times as much water per capita as in many European countries.³⁵ In addition to our use of surface waters, it is estimated that there are 500,000 wells in Ontario drawing water, with 14,000 new wells being added each year. Groundwater is affected by run-off from agricultural operations, spills from industrial facilities, and seepage from the over 1 million septic systems in the province. A draft 1992 State of the Environment Report prepared by the Ministry of the Environment and Energy stated that 37% of drinking water wells surveyed in Ontario contained at least one contaminant in excess of provincial water quality objectives.³⁶ Local water shortages require water to be piped over great distances, using valuable energy and expensive infrastructure in the process.

Materials

Ontario households, industrial, commercial and institutional facilities generate approximately 9 million tonnes of municipal solid waste each year.³⁷ Ontario ranks fifth in the world in per capita residential waste disposal, after the U.S., Australia, the Netherlands and Japan.³⁸ Per capita consumption of material resources in our society has increased by 45% in the past twenty years.³⁹

Approximately 80% of the municipal waste generated in Ontario is dumped into landfills. The failure to use material resources more efficiently has resulted in the waste of valuable resources and increased energy use in production processes. Waste disposal results in air pollution from landfills and incinerators, and the contamination of groundwater by landfill leachate.

Energy

On a per capita basis, Canadians are the largest consumers of energy in the world, ⁴⁰ and our current energy system has major effects on human health and the environment. The existing system is a major contributor to air pollution. The use of fossil fuels for power generation and transportation are also the leading sources of greenhouse gas emissions in the province, adding to the problem of global climate change.

The province's heavy reliance on nuclear energy results in the generation of large quantities of high and low level radioactive wastes, and serious concerns have been raised regarding the safety of existing nuclear facilities.⁴¹ The development and operation of Ontario Hydro's nuclear facilities has also imposed an enormous economic burden on the province in the form of the utility's estimated \$39 billion debt.⁴² Large-scale hydroelectric developments have had major disruptive effects on ecosystems as well, particularly in Northern Ontario.

Sun Run Ecovillage Training Centre, near Cameron, Ontario, is a community that is developing self-sufficiency. The Centre generates 85% of its power from the sun and wind; the rest of its power comes from a propane-powered back-up generator. Sun Run is not connected to the provincial power grid. For the people living at the Centre, 85% of their food is grown on the farm. The farm also provides food for other people in neighbouring communities through co-operative arrangements. They are also capturing snow and rain to provide water supplies and are developing a wetland to recycle wastewater.

An Agenda for Change:

To ensure that we have a plentiful, healthy food supply, we need to move towards more sustainable agricultural practices. These include a wide range of low-impact practices such as organic, ecological, biodynamic, regenerative, natural, and permaculture methods. We also need to ensure that farmers are provided with reasonable earnings. Rural communities should have

enough income to maintain or improve the lives of their members, and to care for the rural environment.

Using energy, water and material resources more efficiently is the key to environmentally sustainable economy for the future of Ontario. Energy, water and materials efficiency efforts are typically cheaper, more flexible, generate more jobs, are more secure, and reduce damage to the environment in comparison to generating more energy, extracting new materials or using additional water resources. A \$7.5 million compact-fluorescent lamp factory, for example, saves as much electricity as a \$1 billion power plant makes, while avoiding the plant's fuel costs and pollution.⁴³

Ontario also needs to contribute to Canada's meeting its commitments under the December 1997 Kyoto Protocol on Climate Change to stabilise its greenhouse gas emissions by the year 2008 and reduce its emissions by 6% by the year 2012, against a 1990 base year. This will require significant shifts in the structure of our energy supply. In case of electricity, for example, we will need to increase the role of efficiency measures, convert existing generating infrastructure to natural gas power, and expand renewable energy sources, such as small scale hydro, solar, wind, and methane gas recovery.

Key Recommendations:

Food

- The Province should develop credit, extension and marketing programs to support the transition to sustainable agricultural practices (particularly organic farming) as is now practised in many European countries.
- The Province should establish a policy framework to protect prime agricultural lands including the use of land trusts, conservation easements or agreements, the transfer of development credits, and cross-compliance in program criteria.
- The Province should expand the application of the Provincial Sales Tax (PST) to agricultural pesticides. The revenues generated should be employed to support sustainable agriculture practices, and for pesticide residue and country of origin testing on agricultural products sold in Ontario.
- The Province should adopt an approvals system for aquaculture and other industrial/agricultural operations, such as large scale hog farms, that ensures protection of human health and the environment. The process should provide for public input. The *Farming and Food Production Protection Act* should be amended to establish a fair and effective framework for dealing with the harmful environmental and health effects of industrial agricultural operations.
- The Province should terminate its funding for the genetic engineering of agricultural products, reallocate this funding to support sustainable agricultural practices, and adopt a labelling requirement for food products derived from genetic engineering sold in Ontario.

Water

• The Province should develop a comprehensive water policy that emphasises water conservation and protection. This policy should apply to both surface and groundwater. The policy should stress water efficiency and, in order of priority: the preservation of ecosystem function; the provision for basic human needs including refreshment, food preparation and sanitation; the provision of water for irrigation, recreational, industrial and commercial uses on a proportional basis; and lastly, waste disposal.

Materials

Ecological farming is not a wrong turning; it is the only way to an agricultural situation in which both the soil and the animals are healthy, and in which food is produced without risk.

Petra Kelly

- The Province should set a target of 80% reduction in garbage disposal by 2005 in comparison with 1987, with an interim target of 60% reduction by 2003.
- The Province should adopt requirements that producers accept responsibility for arranging for the

reuse, recycling or disposal of hazardous, reusable or durable products.

• The Province should ban the disposal of refillable, reusable, repairable, recyclable and compostable used items.

Energy

- The Province should commit to meeting or exceeding Canada's commitments under the Kyoto Protocol on Global Climate and develop a strategy for meeting these goals.
- The introduction of competition into the electricity market in Ontario should be accompanied by stringent environmental standards, including a 83% reduction in SOx, 60% reduction in NOx and 40% reduction in Greenhouse gases by 2014, and limits on emissions of heavy metals and particulates consistent with recommendations (air 1 and 2, toxics 1 and 2).
- Electricity suppliers in a competitive market should be required to disclose the sources, emissions and costs associated with the electricity that they provide to their customers and to the public. Consideration should be given to the establishment of a Renewable Portfolio Standard, requiring that a minimum portion of the province's electricity supply be from renewable sources.
- The Province should limit the application of "electricity restructuring charges" under a competitive electricity market to the costs of retiring of Ontario Hydro's existing debt

guaranteed by the province and the safe de-commissioning of the utility's nuclear facilities. The province should not provide resources or loan guarantees for the refurbishing of nuclear plants. Facilities that are currently shut down should not be recommissioned, and the phase-out of the remaining facilities should be scheduled.

- The Ministry of Municipal Affairs should incorporate aggressive energy efficiency requirements into the provincial Building Code.
- The Ministry of Transportation should adopt a policy of basing vehicle licensing fees on vehicle weight, with higher charges for heavier vehicles. Knowledge about fuel efficiency and vehicle maintenance should be required for driver education and licensing.

Eco-efficiency

• The Province should establish an independent task force to review provincial subsidies, grants, tax incentives and other fiscal programmes to identify barriers and disincentives to energy, water and materials efficiency and other environmentally unsound practices, and commit to the removal of these barriers and disincentives.

BUILDING SUSTAINABLE COMMUNITIES

Northern Communities

Current Challenges: Communities in northern Ontario face unique, and in many cases growing, challenges. Eighty-five percent of the land in the north is either crown or First Nations' land.

Community is a very important part of a healthy environment. We create healthy environments by strengthening safe communities, which provide for healthy families. We do this by accepting the responsibilities for ourselves, our families and our communities. Knowledge is the keystone for being able to carry out these responsibilities.

Henry Niwadenhenaraah Lickers

The economies in the north are largely dependent on natural resource extraction, yet decisions about public lands and resources are usually made outside of these communities, often in ways that limit opportunities to diversify the local economic base. These problems are aggravated by growing concentration of corporate ownership, in many cases in the hands of international companies with no ties to local communities or relationships to the lakes, rivers and forests affected

by their operations. The provincial government's moves towards the deregulation of key industries, such as forestry and mining, and the strengthening of the tenure of these industries on public lands through processes like "Lands for Life" is further reinforcing the position of dependency of northern communities.

Over the last several decades, the amount of forest cut in northern Ontario has steadily increased, while the level of employment in the forestry industry has fallen.⁴⁴ This is primarily a result of mechanisation in both timbering operations and mills. The concentration of capital, as smaller companies are bought up by larger ones, and mills being built to have more capacity than there is supply of trees have added to these problems.

In the case of mining, the temporary nature of mineral development is most evident in the estimated 6,000 abandoned mines in the province. Mineral exploration activities have significant environmental impacts. Exploration work has been virtually unregulated since changes to regulations under the *Public Lands Act* adopted in 1996. Mining operations also have major ecological impacts. One-quarter of the operating metal mines in Ontario, for example, have failed to pass requirements that their effluent not be lethal to fish.

An Agenda for Change: Sustainable forest management practices would put long-term integrity of forests first, community well-being and jobs second, and profits third. Decisions should be made for the longer term, with community involvement and scientific support. Local economies should be diversified, with the wild food gatherer, the eco-tourist operator and the logger planning for the shared needs of the community and each other. Timber supplies should be tied to local communities, and value-added and high value wood products should be the focus of an industrial strategy that is value-based rather than volume-based.

In the mining sector, decisions about mineral development should be brought into the realm of public decision-making. Mining activities should be regulated in an open and transparent fashion. Ultimately, we must examine the role that minerals and the mineral development industry should play in a sustainable economy. Gains can be made through reduction in consumption, eco-efficient extraction, production and design, and maximising rates of metals recovery and reuse.

Key Recommendations:

Public Lands

- Consistent with Recommendation (Protect Nature 1), a network of protected areas in Northern Ontario should be completed.
- The public's role in decision-making around activities on crown lands should be strengthened. This should include opportunities for public comment on decisions on the sale of crown lands, forest management activities, and mineral exploration and extraction activities.
- Aboriginal land uses and rights should be secured. Aboriginal communities and First Nation forestry operations should be guaranteed fair access to both timber resources

and resource management decision-making, including decisions related to mineral development.

Forestry

- The Province should establish a process to replace the Sustainable Forest Licences granted to forestry companies operating on public lands with a system of Community Forest Authorities. These community-based bodies would allocate access to the public forests within their jurisdiction. They would be mandated to plan for a sustainable forest, a mixed local economy and a diversity of forest uses, including recreation, scientific study, tourism, gathering, careful timbering, responsible mining and the conservation of biological diversity.
- The Province should require forestry companies to demonstrate that their operations are sustainable as a condition of access to public forest resources. Priority should be given to those operators who bring the greatest benefit to the community through value-added activities and increased and on-going employment, and are the least reliant on the use of pesticides and the expansion of the road network.

Mining

• The Province should establish a permitting system for mineral exploration that provides opportunities for public comment prior to the granting of permits, and requires that exploration areas be rehabilitated. Major mine developments should be subject to the *Environmental Assessment Act*.

MOVE Westwind Forests Inc. is leading the way in Ontario for community decision-making over forest management on crown lands. This Parry Sound based organization is a community corporation that holds the forest license for the Parry Sound and Muskoka area. Using the same section of provincial forestry legislation that has the forest industry taking over responsibility for forest planning, monitoring and silviculture in most of the province, Westwind's board is made up of community representatives, and is developing a new way of doing business – a community way.

- The Province should establish a schedule for full compliance of all mines with the requirements of provincial air and water pollution prevention and control regulations. These regulations should also be applied to inactive mine sites and to tailings deposits.
- The Province should strengthen the mine closure provisions of the *Mining Act*. Host communities should be involved in reviewing plans for mine closures, and adequate and realisable financial securities should be required for advanced exploration and mining operations. The long-term liability of mine operators following mine closure

- should be established. Where possible, companies responsible for inactive mines should be required to complete the mine closure process.
- The provincial subsidies for mineral exploration should be terminated, and the Mining Tax Exemption and Mining Tax Holiday under the Ontario Mining Tax ended. These resources should be re-allocated to strengthen provincial oversight of operating mines and mine closures, and the remediation of abandoned mines.

Southern Communities

Current Challenges: Low-density urban sprawl dominates much of southern Ontario. The impacts of this pattern of development are significant: higher energy consumption and smog and greenhouse gas production, particularly due to reliance on the automobile for transportation; the loss of prime farmland; groundwater pollution; increased stormwater runoff; and the destruction of wetlands and other natural areas. The economic costs of sprawl in terms of infrastructure costs are also enormous. It has been estimated that adopting more compact development patterns in the Great Toronto Area alone could save more than \$1 billion per year. 45

These problems have been made more severe as the Ontario government has revised provincial land use policy to favour growth and development at the expense of natural areas, agricultural lands, affordable housing and the efficient use of infrastructure. The downloading of planning responsibilities to municipalities, and withdrawal of provincial agencies other than the Ministry of Municipal Affairs from the planning process has further weakened the protection of the environment, and the broader public interest in the planning process.

The province has imposed limits on the degree to which municipal governments can require developers to internalise the infrastructure costs associated with new developments, and continues to provide subsidies that encourage the purchase of homes in new developments outside of existing urban areas. At the same time, the failure of the province to establish an effective framework for dealing with sites contaminated with hazardous substances has emerged as a barrier to the redevelopment of former industrial sites in existing communities.

In our cities, approximately half of the land is taken up by roads and parking spaces. Automobile use continues to increase, while the use of public transit is declining.⁴⁶ Provincial funding for public transit has been terminated, making Ontario, the only state or province in Canada or the U.S. not to provide regular funding for public transit services. In some European countries walking, biking and public transit account for 50% of travel, while these modes account for less than 5% of travel in Ontario.⁴⁷

The expanding road system associated with urban sprawl has other effects. The mining of sand, gravel and bedrock by the aggregate industry to build roads, for example, has major impacts on the environment. These include the destruction of natural areas and wetlands, disruption the water tables, and the loss of agricultural lands.

An Agenda for Change: Our vision of a more sustainable urban form is composed of two interlinked aspects: a more compact, mixed-use urban design; and a sustainable transportation system. Mixed-use communities would reduce travel distances to get to work or school or to go shopping, encourage walking and biking, and provide convenient access to public transit in both urban and rural areas.

The transfer of land use planning to municipalities has occurred in the context of very weak provincial policy that is difficult to enforce. Local decision-making needs to occur within the context of a strong provincial policy framework, which ensures that an ecosystem approach is taken to planning, and that the broader public interest is safeguarded. Governments making land use planning decisions need to consider the long term management of land from a public trust perspective, rather than simply facilitating development.

At the same time, the role of municipal governments as sources of a wide range of innovative environmental initiatives around such things as energy efficiency, reduced pesticide use, and waste reduction should be recognised and encouraged.

In Belfountain in Halton Region, a developer planned to build 150 homes, destroying all existing vegetation in the process. Local residents were also alarmed that the homes were to be built on the recharge area for the local water supply. They feared that leaks from the septic tanks that were to be put in for each house would eventually contaminate their water supply.

The community residents decided that the most effective way to change the proposal was by sitting down with the developer and the municipality to develop a better plan. One of the factors that strengthened the citizens' hands was the strong land use planning controls required by the Niagara Escarpment Commission.

The community has succeeded in getting the developer to agree to reduce the units to 66, and to use a clustering method for siting the houses that preserves 70% of the property as greenspace, where the existing trees and vegetation will be untouched. They also changed the sewage system to a communal one rather than individual septic tanks, which will be more protective of the water recharge area.

Key Recommendations:

Land-Use Planning

- The Province should revise the Provincial Policy Statement under the *Planning Act* to ensure that it promotes ecosystem-based planning.
- The province should revise the Provincial Policy Statement to include requirements for: the effective protection of natural heritage features and

functions, biological diversity, and speciality crop lands and other prime agricultural lands; the adoption of urban containment boundaries; and the provision of affordable housing.

- The *Planning Act* should be amended to require that land-use planning decisions be consistent with the Provincial Policy Statement. The Act should also be amended to establish the authority of provincial agencies, including the Ministries of the Environment, Natural Resources, and Agriculture, Food and Rural Development, to comment on and appeal land-use planning decisions.
- The province should provide training and support to municipalities in the implementation of a revised Provincial Policy Statement.
- The provincial Land Transfer Tax Rebate program should be terminated, and the revenues re-allocated to improving the tax treatment of ecologically significant lands, and to support the implementation of the revised Provincial Policy Statement.
- The Province should require that developers provide the full costs of providing transportation, sewer, water infrastructure and schools for new developments outside of existing urban areas.
- The Province should adopt a policy for the cleanup of lands contaminated by hazardous materials. This should include a policy on the allocation of liability for cleanup, the provision for the remediation of "orphan" sites where no responsible party can be found, and the establishment of remediation standards that protect the most sensitive populations, including children. All contaminated sites in the province should be listed on a publicly available registry.

Transportation

- The Province's transportation policies should focus on the interconnections between transportation methods and seek to maximise the use of urban transit, inter-city bus service, and rail service as transportation options. This should be reflected in the revised Provincial Planning Policy Statement.
- The Province should commit to providing on-going provincial funding to municipalities to assist with the capital and operating costs of providing and expanding public transit services.
- The province should adopt a parking lot levy on large commercial and shopping mall lots. The revenues generated by this tax should be dedicated to funding public transit services.
- The full economic, social and environmental costs of highway and road construction, maintenance and operation should be shifted from provincial income and sales taxes and municipal property taxes to levies on gasoline and other fuels, and vehicle licensing fees. Provincial funding and financing for new highway construction should be ended, and these resources re-allocated to public transit programs.

Aggregates

• The revised Provincial Policy Statement should not place non-renewable resource extraction, including aggregates extraction, ahead of other land uses. Aggregates extraction should be not permitted in speciality croplands, ecologically significant areas, or below the water table.

Municipal Environmental Authority

• The *Municipal Act* should be amended to expand the authority of municipal governments to act on environmental matters. The Province should be prepared to provide support for such initiatives in the form of information and technical assistance.

PROTECTING AND RESTORING NATURE

Current Challenges: We are presently experiencing, on a global scale, the first mass extinction since the disappearance of the dinosaurs 65 million years ago, and the first ever induced by the activities of a single species - our own. Since European colonisation, five species of animals, fish and plants in Ontario have suffered extinction and

Biodiversity has always been a local common resource. A resource is common property when social systems exist to use it on the principles of justice and sustainability. This involves a combination of rights and responsibilities among users, a combination of utilization and conservation, a sense of coproduction with nature and of gift giving among members of the community.

Vandana Shiva

approximately 50 species have been extirpated. Currently 25 kinds of animals and 190 kinds of plants are considered vulnerable to extinction. 48 Less than 2% of the old growth forests in the Great Lakes basin and less than 30% of the original wetlands remain in Ontario. 49

Many ecological processes have also been impaired or endangered, resulting in impacts such as increased run-off, soil erosion, reduced rates of nutrient uptake, lack of pollination, eutrophication of water-bodies, and changes in species composition. The

loss of genetic diversity, though not as apparent as species diversity, will have serious consequences on the ability of species to adapt to new stresses such as climate change and the introduction of non-native species.

An Agenda for Change: Our objective is to protect the wild and all living creatures and natural systems both for their own inherent value and for their importance in sustaining and nourishing people. Part of our objective is to fulfil our responsibility for the whole, not just our own direct interests as humans.

The full array of biodiversity values should be maintained across the province and where possible restored, and permitted to evolve naturally. The populations and ranges of current species at risk should be allowed to recover to self-sustaining levels and no further species should be threatened, endangered or extinguished as a result of human activity. A permanent system of protected areas free from industrial use should be established that represents all natural regions and features of the province, permits natural disturbances to continue, and harbours adequate habitat for all native species. Significantly degraded habitats and natural communities greatly reduced in extent should be restored to healthy levels.

Key Recommendations:

Protected Areas

- The Province should complete the system of protected areas, ensuring that Ontario's ecosystems and plant and animal species are fully represented across the province. These areas should be of sufficient size and integrity to allow natural processes to take place sustainably. These areas should be free of mining, logging and hydroelectric development. The province should adopt a policy establishing the maintenance of ecological integrity and the conservation of biological diversity as the overriding goals of the Provincial parks system.
- The Province should undertake and support restoration projects, especially in provincial parks in southern Ontario that have suffered biodiversity loss through over-development, over-use, and the introduction of non-native species.

Biodiversity Conservation

- The Province should amend the *Endangered Species Act* to extend protection to all extirpated, endangered, threatened and vulnerable species and their habitat, and require the development and implementation of recovery plans for all listed species.
- The Province should amend legislation, regulations and policies relating to approval of new projects to require prior assurance that cumulative biodiversity impacts have been considered and that ecological biodiversity will be maintained.
- The Province should expand the favourable tax treatment of lands acquired or held for biodiversity protection purposes.
- The Province should prohibit the intentional introduction of non-native species, including products of biotechnology, without determination that they will not negatively affect biological diversity.
- The Province should transfer responsibilities related to biodiversity protection, including the administration of parks and protected areas, fish and wildlife, the

Niagara Escarpment Commission and Conservation Authorities, from the Ministry of Natural Resources to the Ministry of the Environment.

STRENGTHENING DEMOCRACY

Current Challenges: Over the past four years, there has been an unprecedented dismantling of the mechanisms for public involvement into provincial government decisions that affect the environment. The structures for holding the provincial government accountable for its actions to protect the environment have also been significantly weakened.

The Accountability of the Provincial Government to Ontarians

The extensive use of enabling legislation has marginalized the role of the Legislature by eliminating the need for the cabinet and bureaucracy to seek the approval of the public's elected representatives before taking action. At the same time, decision-making authority over public resources has been transferred to private entities not accountable to the public; freedom of information legislation weakened or undermined; the independence of adjudicative boards, commissions and tribunals eroded; independent advisory committees eliminated; commitments to aboriginal peoples abandoned; and environmental monitoring and reporting programmes drastically reduced. As a result, the exercise of power by the provincial government and its agents has been increasingly separated from accountability to the public for the consequences of these actions.

Public Participation in Decision-Making

Opportunities for members of the public to participate in decisions about the environment and public resources have also been severely affected. Requirements for public hearings before the approval of major projects, such as landfills, for example, have been removed, while the expiry of the intervenor funding program has made it very difficult for citizens and communities to participate effectively when hearings are held. The weakening of environmental assessment legislation has significant implications in terms of the degree to which the potential long-term costs and benefits of major projects and activities will be understood before they are approved.

Environmental Education

A key component of a democratic society is education. Ontario's new curricula for science education in elementary schools, released in 1998, significantly reduced the level of attention to the environment, allocating less than five percent of learning time to environment-related matters. The Ontario Society for Environmental Education concluded that "there is little – and only fragmented – requirement for awareness or knowledge building on environmental subjects in the lower grades." In addition, funding from the Province to support environmental education programmes by not-for-profit environmental and community organizations has been almost completely eliminated.

An Agenda for Change: The public must be able to hold the government of Ontario and its agents to account for the consequences of their policies and actions. This is essential not only to the protection of the province's environment, put also to the basic principles of parliamentary democracy, responsible government and the rule of law.

In addition, members of the public must have the right to be fully involved in decision-making affecting their environment. Access to environmental information, including state of the environment reporting on a regular basis is essential if public participation in decision-making is to be meaningful.

Everyone in Ontario needs to be aware of the state of the province's environment and of the effects of human activities on it. Ontarians also want to know about the actions that they can take to protect and restore the environment. Environmental education in schools and in the community is the key to achieving these goals.

Key Recommendations:

Legislative and Regulatory Process

- Legislation should be adopted to restore and strengthen the accountability of the cabinet and bureaucracy to the Legislature and the public.⁵¹ As an immediate measure, the rules of procedure for the Legislature should be amended to permit the Assembly to disallow proposals to introduce, amend or repeal regulations.
- The Province should terminate the Regulatory Impact and Competitiveness Test passed in 1997 and adopt a new evaluative policy for proposed regulations, programmes and policies that emphasises net gains to the social, environmental and economic sustainability of Ontario society.
- The *Environmental Bill of Rights* model of a public registry, and notice and public comment period requirements should be extended to all proposals to introduce, amend or repeal regulations and major public policies.

Delegated Government Functions

• The Province should adopt legislation to apply the requirements of the *Environmental Bill of Rights, Ombudsman Act, Freedom of Information and Protection of Privacy Act, Audit Act,* and *French Language Services Act* to all private or non-governmental entities to whom provincial governmental functions or decision-making authority have been delegated, and to corporations in which the Crown in right of Ontario is the major or primary shareholder.

Freedom of Information

• The Province should amend the *Freedom of Information and Protection of Privacy Act* and the *Municipal Freedom of Information and Protection of Privacy Act* to widen the application of these Acts, to reduce the scope of exemptions from their requirements, and to provide that the Information and Privacy Commissioner, rather than the heads of agencies, make determinations of when information requests can be rejected on the basis of their "frivolousness" or "vexatiousness."

Aboriginal Peoples

• The Province should re-affirm its commitment in the 1991 Statement of Political Relationship with the province's aboriginal peoples to deal with the First Nations and aboriginal peoples on a government to government basis.

Corporate Environmental Performance

• The Province should amend the *Business Corporations Act* to require that provincially incorporated firms provide information on their environmental performance in their Annual Reports to shareholders. The Ontario Securities Commission should provide this information through its website

State of the Environment Reporting

• The Province should provide the public with a comprehensive state of the environment report for Ontario every two years, and with annual reports on the administration and enforcement of the province's major environmental and natural resources laws.

Environmental Bill of Rights

• The Province should amend the *Environmental Bill of Rights* to enable the Environmental Commissioner's Office to undertake requests for reviews or investigations and to comment on proposals affecting legislation and regulations under its mandate. The Commissioner's Office should also be mandated to comment on the province's state of the environment reports, and the impact of government decisions on the state of the province's environment and natural resources.

Environmental Assessment and Approvals

- The *Environmental Assessment Act* (EAA) should be amended to ensure that:
 - the Act applies to all environmentally significant public and private sector proposals;

- an exemption from the requirements of the EAA is only granted pursuant to clearly articulated statutory criteria and after there has been public comment on the proposed exemption;
- exemption requests are scrutinised by an independent body for a recommendation to the Minister;
- all environmental assessments are conducted pursuant to legislated criteria, which include the purpose of, need for, and alternatives to the proposal; and
- early and meaningful public consultation is required throughout the EA process, including timely notice provisions, free access to relevant information, and the provision of participant and intervenor funding.
- The Province should amend the *Environmental Protection Act* to require a public hearing prior to the granting of approvals for all hazardous or non-hazardous waste disposal sites. Provisions should be made for the granting of public hearings on other types of approvals, such as certificates of approval for air emissions, where they are warranted.

To begin this process of change, we have to create a national debate, community by community, on the nature of our government and our society. We have to explore how people became powerless as the corporations became powerful. We have to discuss why our government protects the right to pollute more than it protects our health. We have to figure out how to speak honestly and act collectively to rebuild our democracy.

Lois Gibbs, Dying From Dioxin

• The Province should renew the *Intervenor Funding Project Act* to enable individuals and groups involved in environmental decision-making procedures to participate effectively. Intervenor funding should be extended to include hearings before the Ontario Municipal Board and the Environmental Appeal Board.

Environmental Education

• The Province should integrate environmental education programmes across the curriculum and strengthen environmental expectations in all science courses. Environmental science should be re-instated as a full credit course.

Teachers should be provided with appropriate support and materials for this purpose.

• The Province should support the environmental education programmes of not-forprofit groups through partnerships and funding.

ECONOMIC BENEFITS

The adoption of the Agenda that we propose would allow the province to avoid significant costs in the future. Among the most important would be in relation to health case costs due to pollution. Reductions in emission of smog precursors in Ontario, for example, have been

estimated to be likely to reduce health care costs for the province by between \$398 million and \$1.2 billion by 2015. The health and environmental savings from a 75% reduction in sulphur dioxide emissions in Eastern Canada and United States, including Ontario, by the same date have been placed at between \$900 million and \$8 billion. 53

Similarly, the adoption of more compact forms of urban development will generate significant long-term savings in terms of reduced infrastructure maintenance costs, air pollution, and losses of ecologically or agriculturally significant lands. It has been estimated conservatively that \$1 billion a year could be saved within the Greater Toronto Area alone, through the adoption of more compact development patterns typical of the older neighbourhoods in every town and city in Ontario. ⁵⁴ Other problems that have resulted in major costs in the past, such as the remediation of contaminated sites ⁵⁵ and closed mines ⁵⁶ due to inadequate regulation and oversight will also be avoided.

Our Agenda will involve significant re-allocations of existing resources by the province. Many of the proposed measures would transfer current expenditures that support environmentally unsustainable activities to more constructive purposes. Tax expenditures under the Land Transfer Tax Rebate program, for instance, would be moved to improve the tax treatment of conservation lands and support the implementation of a revised provincial Planning Policy Statement. Subsidies for mineral exploration would be withdrawn and the resources made available used to strengthen provincial oversight of the mine closure process. Funding currently being provided to subsidise the development of agricultural biotechnology would be used to support sustainable agriculture initiatives instead.

New expenditures would also be required. In order to implement the initiatives necessary to protect human health, for example, the operating budget of the Ministry of the Environment will need to be restored to its pre-1995 levels. Key aspects of the Ministry of Natural Resource's budget related to biodiversity conservation will require additional resources as well. The re-introduction of ongoing provincial support for public transit services has similar implications.

However, the Agenda that we present will not require increases in personal or corporate income taxes, or residential or small business property taxes to achieve these outcomes. Resources will be made available through the removal of subsidies for environmentally unsustainable or uneconomic activities, such as new highway construction, new roads and other infrastructure in new developments outside of existing urban areas.

In addition, new revenues will be realised through the imposition of charges on environmentally undesirable activities. This will include the adoption of a charge on the generation of hazardous wastes, the introduction of a tax on large vehicle parking facilities, and the extension of the Provincial Sales Tax to agricultural pesticides.

This approach is consistent with internationally articulated themes of removing environmentally destructive subsidies, shifting the tax burden onto environmentally damaging or unsustainable activities and away from employment and skills and knowledge

based activities. These concepts have been reflected in the recent report of the federal Minister of Finance's Task Force on Business Taxation.⁵⁷

A CALL TO ACTION

The signs of a degraded environment are all around us. These problems are affecting the physical, social and economic health of people in all parts of this province. If we are to protection the quality of life of present and future generations of Ontarians, we must act now.

We believe that this agenda provides a starting point for ensuring the future that we believe that Ontarians want. We hope that all Ontarians will participate in further developing and implementing the longer-term Agenda that we have presented here.

We commit ourselves to continue and strengthen our work towards the achievement of this Agenda and to work with the citizens' movements throughout Ontario and elsewhere that are bound together by a shared vision:

Move to previous section The value of a sawmill is zero without forests; the value of fishing is zero without fish; the value of refineries is zero without remaining deposits of petroleum; the value of dams is zero without rivers and catchment areas with sufficient forest cover to prevent erosion and siltation of the lake behind the dam.

Herman E, Daly, Beyond Growth

"A planet where all people and all other life are healthy, where everyone has their basic needs met and dignity respected, and where there is strong citizen and community control over decision-making." 58

We call upon the Provincial Government to join us in that work, by adopting the key recommendations in this agenda.

BACKGROUND PAPERS

The following papers were prepared as background for the development of the Environmental Agenda for Ontario. Environmental groups provided substantial input to the authors of these papers. Nevertheless, the content and recommendations in the background papers remain those of the authors and do not necessarily reflect the views of all those who have endorsed the Environmental Agenda for Ontario.

Protecting, Conserving and Restoring Biodiversity – Anne C. Bell & Jerry V. DeMarco At Work in the Natural World: Forestry and Mining – Brennain Lloyd & Catherine Daniel

Human Settlements: Sustainable Land Use and Transportation – Ray Tomalty & Francis Paul

A Green Food & Agriculture Agenda - Rod MacRae & Vijay Cuddeford

The Quality of Air ... What We Can Do – Anna Tilman

A Sustainable Water Strategy – Paul McCulloch & Paul Muldoon

Hazardous Waste Management - Mark S. Winfield

Resources - Not Garbage - John Jackson

Toward a New Energy Strategy - Suzanne Elston

Democracy - Mark S. Winfield & Paul Muldoon

^{1.}J.McPhail et. al., Ontario Medical Association Position Paper on Health Effects of Ground-Level Ozone, Acid Aerosols and Particulate Matter (Toronto: Ontario Medical Association, May 1998) pg.6.

^{2.}Ibid., pg.23.

^{3.} David Suzuki, and Dr. John Last, Dr. Konia Trouton, and Dr. David Pengelly, *Climate of Change: Taking Our Breath Away* (Vancouver, B.C.: David Suzuki Foundation, 1998).

4..Data Provided by the Ontario Ministry of the Environment, January 1999.

⁵ ADD

⁶ ADD

⁷ ADD

⁸ ADD

^{9..}T.Spears, "Waste Clean-up Will Need \$3 billion and 20 years" The Ottawa Citizen, October 25, 1990.

^{10..}CIELAP FOI Request Response.

¹¹ ADD

¹² ADD

¹³ Add reference, Wildlands League.

¹⁴ Environmental Commissioner of Ontario, *Third Annual Report* (Toronto: ECO, April 1998).

¹⁵ Cancer Care Ontario, Ontario's Interim Cancer Report Card, April 1998.

¹⁶ Add Reference - Task Force on Primary Prevention?

¹⁷ UN Committee on Economic, Social and Cultural Rights, December 4, 1998 18..C.Mallan, "Study cites 'alarming' increase in child poverty," <u>The Toronto Star</u>, January 1999.

^{19.} Armine Yalnizyan, *The Growing Gap* (Toronto: The Centre for Social Justice, 1998), p. 64. 20..R.Raphael, "From Increasing Poverty to Societal Disintegration: Economic Inequality and the Future Health of Canada" URL: http://www.interlog.com/-cjazz/brews2.htm#gap2

²¹ Department of Indian Affairs, *United Nations Human Development Report*, 1998.

²² NPRI 1996 Summary Report.

²³ NPRI 1996 Summary Report

- ²⁴ Ontario Ministry of the Environment, Presentation to Pollution Probe and York Centre for Applied Sustainability workshop, York University, April 1996.
- ²⁵ Add reference, enegy/settlements papers

²⁶ Add reference from Food paper.

²⁷ Add reference, contact Janet May, TEA.

²⁸ J.Gibbons and S.Bjorkquist, *Electricity Competition and Clean Air* (Toronto: Ontario Clean Air Alliance,

April 1998).
29..Office of the Provincial Auditor, 1996 Annual Report (Toronto: Queen's Printer for Ontario, 1996), pg.116.

³⁰ Office of the Fire Marshal, *Protecting the Public and Environment by Improving Fire Safety at Ontario's* Recycling and Waste Handling Facilities (Toronto: Ministry of the Solicitor General, August 1997).

³¹ Lester R. Brown and Christopher Flavin, "China's Challenge to the United States and to the Earth," World Watch, (September/October 1996), p. 10.

³² Mathis Wackernagel & William Rees, Our Ecological Footprint: Reducing Human Impact on the Earth (Gabriola Island, B.C.: New Society Publishers, 1996), p. 158.

³³ R.Rae and V.Cuddeford, A Green Food and Agriculture Agenda (Toronto: Environmental Agenda for Ontario Project, 1999).

³⁴ Ibid.

- 35..Environment Canada, Canada and Freshwater, Monograph No.6 (Ottawa; Minister of Public Works and Government Services, 1998).
- 36...Ministry of Environment and Energy 1992 Status Report, pg. 73.
- 37..Recycling Council of Ontario, Recycling Roles and Responsibilities: Final Report (Toronto: RCO, April 1998), Appendix E. 38..lbid.
- 39 Add reference, waste paper.
 40..M.Keating et. al., *Canada and the State of the Planet: Canadina Global eChange Program* (Oxford: Oxford University Press, 1997), pg. 29.
 - ⁴¹ Report to Management: IIPA/SSFI Evaluation Findings and Recommendations (Toronto: Ontario Hydro,
 - ⁴² M.Mittelstaedt, "Ont. Hydro carrying massive debt," *The Globe and Mail*, October 27, 1998.
- Dianna Lopez Barnett with Wm. D. Browning, A Primer on Sustainable Building, RMI (1995), p. 69.
 - ⁴⁴ Add reference, Wildlands League, cited in Natural resources paper.
 - ⁴⁵ P.Blais, *The Economics of the Urban Form*, (Toronto: Great Toronto Area Task Force, 1996).
 - ⁴⁶ Add reference, current edition of Alternatives.
 - ⁴⁷ Add reference, settlements paper.
 - ⁴⁸ Add reference, biodiversity paper.
 - ⁴⁹ Add reference, biodiversity paper.
 - ⁵⁰ Add reference.
 - ⁵¹ See, M.Winfield and P.Muldoon, An Environmental Agenda for Ontario: Democracy Chapter,

Recommendation 4 regarding the specific measures this legislation should contain.

- 52. Dr. John Gray, Ontario Medical Association's Testimony to the Standing Committee on Resource Development, Re: Bill 35 The Energy Competition Act (August 19, 1998), p. 2.
 - ⁵³ NIACC Acidifying Emissions Task Group, *Towards a National Acid Rain Strategy*, (Winnipeg: CCME, October 1997), pg. 50.

⁵⁴ P.Blais, *The Economics of Urban Form* (Toronto, Great Toronto Area Task Force, 1996).

- ⁵⁵ Estimates of the remediating the contaminated sites across Canada, excluding the costs of sites contaminated with radioactive materials, range from \$20 to \$75 Billion. At least one third of these sites are thought to be in Ontario. G. Ford, D. MacDonald, and Mark Winfield, "Who pays for past sins?" Alternatives, Vol. 20, No. 4 (1994), p. 28.
- ⁵⁶ The Mining Association of Canada has given an estimate of \$6billion for the remediation of abandoned mines in Canada.

 57..Report of the Technical Committee on Business Taxation (Ottawa: Department of Finance, 1998), Chapter 9.
- - ⁵⁸ Add reference.