
PROGRESS REPORT #2 TO COUNCIL

TOWARDS A SUSTAINABLE FUTURE

Kingston Environmental Advisory Forum

MAY 2002

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1. INTRODUCTION

1.1. Purpose of Report

The purpose of this report is to outline the work carried out and progress made by the Kingston Environmental Advisory Forum (KEAF) and its four working groups since its last report to Kingston City Council in September 2000. Recommendations for future activities by the City and KEAF's offer of participation in those activities are also presented.

1.2. Background and Council's Instructions

KEAF was created by City Council in January 2000 (Appendix A). Council amended its procedural Bylaw 98-1 to have KEAF report to the Committee of the Whole, and provided the resources for KEAF's activities and for KEAF to offer opportunities for public and agency involvement in setting environmental priorities (Appendix A).

The membership of KEAF includes 21 volunteer representatives from academic, government and non-government organizations, and citizens at large, all appointed by Council and all with an interest in providing constructive assistance to the City (Appendix B).

Briefly, the mandate of KEAF is to identify environmental issues and priorities in Kingston. KEAF is also expected to respond to special requests from City Council for advice on environmental issues that might arise. Further, KEAF was instructed to develop a workshop the objective of which would be:

“to arrive at a common understanding of environmental issues and priorities in Kingston by an examination of the history and trends of development in Kingston, an inventory of environmental issues, and a discussion of priorities for action.”

1.3. KEAF's Response to Council's Instructions

To the request to establish a common understanding of environmental issues and priorities in Kingston, KEAF arranged a workshop for invited individuals and agencies on environmental priorities, which took place on 10 June 2000. Seventy participants, representing a wide variety of government agencies, non-governmental organizations and other consultative bodies, engaged in a series of facilitated discussions on a variety of environmental issues.

Following the success of the workshop, a public open house was convened on 28 June 2000 at Memorial Hall to provide an additional opportunity for the public to comment and critique. A further 60 people participated and an issues list was amended and expanded based on this input.

KEAF's previous and first report, entitled *Towards a Sustainable Future: Environmental Priorities for a New City of Kingston* was submitted to Council on Tuesday, 12 September 2000. The list of issues and the recommendations presented in the report to Council were derived from the public workshop and open house (Appendices C and D). All the recommendations in the report were accepted by Council.

1.4. Approach to Council's Acceptance of KEAF's Recommendations

In response to the motion of acceptance passed by Council (Appendix E), KEAF formed four working groups, namely:

- the Environmental Strategy Group (ESG) to deal with **Recommendation 2000-1** - that Council establish a Kingston Environmental Strategy;
- the Forum Learning and Awareness Group (FLAP) to deal with **Recommendation 2000-2** - that Council expand its public environmental awareness program;
- the Inner Harbour Group (IHG) to deal with **Recommendation 2000-3a** - that existing environmental data on the Inner Harbour be assembled and analyzed to establish benchmarks and to identify deficiencies; **Recommendation 2000-3b** - that Council hold a public workshop on the future of the Inner Harbour; and **Recommendation 2000-3c** - that Council adopt a comprehensive plan for the Inner Harbour;
- the Other High Priorities Group (OHPI) to deal with **Recommendation 2000-5** - that KEAF continue to examine the high priority environmental issues identified in the September 2000 Report.

The names of the members of the working groups are given in Appendix F.

[Note: From *Towards a Sustainable Future: Environmental Priorities for a New City of Kingston, September 2000*.

The City of Kingston has a sewer system that has components that are over 150 years old. Pollution Control Study of 1992 was the last comprehensive overview of the system for the old City. KEAF commends the City for the higher priority being given to the sewer system. There is a new master plan under development for better stormwater management and there is a new initiative to improve the operational water and wastewater system. The initiation of the process to consider and select an option for the replacement of the Cataraqui sewer forcemain is an example of proactive environmental planning. **Recommendation 2000-4** was that the City continue to maintain these initiatives as a high priority.]

1.5. Level of Activity

KEAF general meetings were held every month as were working group meetings. Additional general meetings of KEAF and the working groups were held to deal with particular items, for example, establishment of terms of reference, the 401 EA, the pesticide issue, assessment and comment on reports, planning of KEAF workshops and participation in KEAF workshops. Email was also used extensively to further thinking, drafting of documents and to communicate positions in order to arrive at a consensus. To get a sense of the typical level of email activity, the chair of one of the working groups reports having saved about 400 email communications relating to that group's activities since January 2001.

KEAF was asked to provide representatives to sit on other City committees, and KEAF members have a presence on other committees with significance for the environment. Members of KEAF attended or participated in conferences, seminars, lectures, and community meetings to learn more about the information available to the community and to increase their knowledge (Appendix G).

Nine guest speakers came to regular KEAF meetings to provide information on topics of interest. Members toured the Ravensview Water Pollution Control Treatment Plant to see the process for treating Kingston's sewage, visited the King Street Water Purification Plant to learn how water is taken from Lake Ontario, purified and distributed, and visited the Corcan composting facility at the Pittsburgh Institution, Joyceville (Appendix H).

2. PROGRESS REPORTS

2.1. Environmental Strategy Group (ESG)

2.1.1 Mandate

In its September 2000 report to Council, KEAF noted that the public had identified, through public consultations, the need for an environmental strategy for Kingston (Recommendation 2000-1 - that Council establish a Kingston Environmental Strategy). KEAF therefore mandated the ESG to develop a framework that could be used to create an Environmental Strategy. An Environmental Strategy would help City Council and staff to identify environmental priorities and determine options in environmental target setting and action planning. The Environmental Strategy could thus form a basis for the development by City staff of an Environmental Management System (EMS); a system that would articulate roles and responsibilities, compile policies and procedures, and monitor environmental performance in achieving the goals set out in the Environmental Strategy.

2.1.2 Activities and Accomplishments

The ESG members reviewed environmental strategy documents produced by other municipalities, notably: Toronto; Ottawa; Perth; San Francisco, California and Burlington, Vermont. The group decided that the initial focus would be to establish the beliefs and principles upon which Kingston's environmental agenda should be built. Principles in the Environmental Strategy were derived by consulting sources such as the Federation of Canadian Municipalities' *Ten-Point Action Plan for Sustainable Communities*, and through deliberations within the ESG. The draft Environmental Strategy document for the City of Kingston is given in Appendix I. The current environmental activities of the City are given in Appendix J.

In December 2001, it was determined that the work of Focus Kingston, an initiative of City Council, coincided with the work of the ESG to the extent that a single environmental strategy, developed through the Environmental Priority Area of the Focus Kingston process, would provide an efficient and integrated approach to environmental management in Kingston. The work of the ESG could provide the basis for development of the Environmental Priority Area of the Focus Kingston 2002 draft action plan.

2.1.3 Goals

The short-term goal of the ESG is, in co-operation with the OHPI group, to continue to provide assistance to the Environmental Priority Area of the Focus Kingston process in the development and implementation of an Environmental Strategy for the City of Kingston.

2.2. Forum Learning, Awareness and Publicity Group (FLAP)

2.2.1 Mandate

The FLAP addresses Recommendation 2000-2 of KEAF's September 2000 report "that Council expand its public environmental awareness programme".

The FLAP is charged with:

- organizing public meetings to raise awareness of Kingston environmental issues;
- recruiting guest speakers to make presentations to KEAF to improve members' knowledge of scientific, technical and community matters that relate to KEAF's mandate;
- preparing materials – news releases, reports and pamphlets – to inform the public about KEAF's role and activities;

- making KEAF members aware of seminars, conferences, and talks that relate to KEAF's mandate.

2.2.2 Accomplishments

KEAF hosted three public meetings during the period covered by this report, arranged for nine guest speakers to talk to KEAF at general meetings, and arranged for KEAF members to make site visits to the City's Water Pollution Control Plant at Ravensview, the City's King Street Water Purification Plant, and the Corcan composting facility at the Pittsburgh Institution, Joyceville (Appendix H).

FLAP communication activities include the following.

- **Public Notices** - FLAP drafted a variety of news releases and other materials to publicize KEAF public meetings and other events.
- **Web Site** - In the fall, FLAP began working with Cindie Ashton (City Communications Department) to develop materials about KEAF for the City web site. The web site now includes some general information about KEAF with more detailed information to be posted.
- **KEAF Resource Library** - The City has provided a small room at City Hall, where KEAF can store reports and other documents. FLAP will collect, organize the material, and develop a catalogue system for the library so that it becomes an accessible resource for KEAF members, City staff and members of the public carrying out research on City environmental issues.

2.2.3 Goals

During 2002 FLAP plans to:

- prepare KEAF information materials for inclusion on the City web site;
- continue to update KEAF information on the web site;
- set up the KEAF resource library;
- invite guest speakers to KEAF meetings;
- plan and host a series of public information meetings on environmental matters;
- prepare communication materials for KEAF;

- explore ways to better inform the Kingston community of environmental concerns and the choices available to individuals and the community;
- co-ordinate efforts with other community organizations that have interests tied to KEAF's mandate.

2.3. Inner Harbour Group (IHG)

2.3.1 Mandate:

The IHG was formed to address the following recommendations related to the Inner Harbour:

- Recommendation 2000-3a: that existing environmental data on the Inner Harbour be assembled and analyzed to establish benchmarks and to identify deficiencies;
- Recommendation 2000-3b: that Council hold a public workshop on the future of the Inner Harbour;
- Recommendation 2000-3c: that Council adopt a comprehensive plan for the Inner Harbour.

2.3.2 Activities and Accomplishments

The IHG has been working diligently to address Recommendation 2000-3a. Since its formation, the IHG has met at least once a month, outside of the regular KEAF meetings, to fulfill its mandate. There have also been considerable hours spent by individual members to complete tasks and to provide leadership and direction to ensure the successful completion of the IHG mandate. The IHG developed a Terms-of-Reference and commissioned a study to compile all of the existing reports and documents available on the Inner Harbour, establish desired endpoints and perform a gap analysis. To date, approximately 100 reports have been reviewed and summarized; endpoints have been established and a gap analysis has been conducted. The work is presented in *The Kingston Inner Harbour – Great Cataraqui River Data Compilation and Gap Analysis Study*.

Two facilitated technical invited workshops were held to provide a third party review of the study and to ensure its completeness and technical merit. The first workshop, held from 9:00 am to 4:30 pm on 13 October 2001, involved nine technical experts from Queen's University, the Royal Military College (RMC), Department of National Defence (DND), and the City of Kingston staff, one member of Council and eight KEAF members. Each of the different areas of discipline (such as water, sediments, biology) identified in the report was represented. The second workshop, held from noon to 4:00 pm on 5 October 2001, had 12 participants, with

representation from Transport Canada, Environment Canada, Parks Canada, the Ministry of the Environment, the Department of Fisheries and Oceans and the City of Kingston. One member of Council and two members of KEAF attended.

The ideas and issues raised during the two technical invited workshops are summarized in *The Kingston Inner Harbour – Great Cataraqui River Data Compilation and Gap Analysis Study Workshop Report* (13 October 2001 and 5 December 2001). Based on the ideas and information brought forward in the two workshops, *The Kingston Inner Harbour – Great Cataraqui River Data Compilation and Gap Analysis Study* was amended and expanded.

An invited public workshop was held on April 27 from 8:30am to 3:30pm. Approximately 100 people and organizations were invited and approximately 65 people participated. The purpose of this workshop was to share with public the key points of the *Kingston Inner Harbour – Great Cataraqui River Data Compilation and Gap Analysis Study*, and a general understanding of the land use of the Inner Harbour so that the public could vision about the future land and water uses of the Inner Harbour. The day was judged a great success, participants were engaged all day and there was positive press and television coverage of the event.

The Inner Harbour Group will have a poster and a video of the Inner Harbour at the City of Kingston Waterfront Visioning Exercise to be held on May 23rd. There will be an opportunity for the public to provide their vision of the Inner Harbour at this poster session.

2.3.3 Goals

Following the Waterfront Visioning Workshop to be held on May 23rd the IHG will determine if it is necessary to hold a public workshop focused solely on the Inner Harbour. Once the public visions have been compiled and summarized, the IHG will prioritize the information gaps - identified in the Compilation Study and Gap Analysis report – in accord with the public visions. The IHG will then provide a report to Council that will provide the Compilation Study, summary reports of the workshops (invited technical, invited public, and public) with recommendations to address the information gaps and provide the next steps to realize the public's collective vision of the Inner Harbour.

Based on the success of the two peer review workshops held in 2001, the IHG would like to formalize a partnership between RMC, Queen's, Parks Canada, Transport Canada, the Ministry of the Environment, Environment Canada, Ministry of Natural Resources and other interested parties to promote a harmonized approach towards enhanced research within the Inner Harbour.

The IHG looks forward to an exciting and productive 2002. Through partnerships and public input the IHG will assist Council in adopting a comprehensive plan for the Inner Harbour.

2.4. Other High Priority Issues Group (OHPI)

2.4.1 Mandate

The OHPI was created to address Recommendation 2000-5 that KEAF continue to examine the high priority environmental issues identified in the September 2000 report. Those issues are: air quality, biodiversity conservation, outdoor recreation, and rural water quality and quantity. It was also noted that all of these included trans-boundary considerations.

2.4.2 Accomplishments

Beginning in February 2001, an Environmental Issues List was developed (Appendix K). The list organizes environmental issues into a framework under logical headings, or “umbrella” issues. It then breaks down the issues into "actionable elements" or, in other words, into problems for which a unique goal and remedy can be defined. While this list and framework is an evolving document, it has been shared with City staff of the Environmental Services Division and it also forms part of the Environmental Strategy document. Work is continuing in defining issues, goals, remedies and targets.

At the March 2001 KEAF meeting, the OHPI working group recommended that KEAF endorse City staff's proposal to Council that Kingston adopt the Federation of Canadian Municipalities' Partners in Climate Protection program. KEAF supported this recommendation. This program requires the City to reduce its greenhouse gas emissions. The OHPI working group is working with City staff to develop ideas and a program to advance the Partners in Climate Protection initiative.

In April 2001, following a public meeting organized by the FLAP working group on the Ontario Environmental Bill of Rights (OEBR), the OHPI working group undertook to monitor the OEBR Registry. Items pertaining to, and relevant to, the Kingston area are searched for in order to identify issues to which it may be desirable for the City to respond.

Also in April 2001, the OHPI working group led the process for KEAF's Provision for Changing Project Status (Part II Order) - formerly known as a Bump-Up Request - on the Class Environmental Assessment, Highway 401, Median Barrier and Highway Improvements Project (Appendix L). The issue, falling under the OHPI working group's mandate of protecting

biodiversity, was that the proposed construction of a concrete median barrier down the centre of Highway 401 through the entire Kingston area would have detrimental effects on animal movement and mortality. A special meeting of KEAF was held on May 28, 2001 with representatives from the Ontario Ministry of Transportation (MTO) and their consultants. Several communications followed between KEAF and MTO. On June 29, 2001, the MTO agreed to measures that satisfied the majority of KEAF's concerns and at the July 9, 2001 KEAF meeting, KEAF voted to rescind the request for the Part II Order and provide a letter of explanation (Appendix L).

Pesticide use for cosmetic purposes became very topical after the Supreme Court of Canada, in June 2001, upheld a municipality's right to regulate pesticide use to protect citizens' health, (Pesticides Motion by the Council of the Town of Hudson, Appendix M). The OHPI working group began the collection of information on urban cosmetic pesticide use and presented this information to KEAF. Particularly valuable was the report on pesticide use entitled *Pesticides – Making the Right Choice for the Protection of Health and the Environment*, a report of the House of Commons Standing Committee on Environment and Sustainable Development, (Appendix N). KEAF drafted a motion to Council recommending that there be a pesticide by-law dealing with urban cosmetic pesticide use. Council received the motion on September 25, 2001 (Appendix O). The OHPI working group, with input from other KEAF members, has created an explanation of the reasons behind the motion and this document was forwarded to City staff in December 2001 for inclusion in City staff's report to Council on pesticides, (Appendix P).

At the 7 January 2002 KEAF meeting, City staff requested that the OHPI working group review a proposal, made to the City by *Hearthmakers*, for the funding of a program to encourage the reduction of energy and water use by City residents. The OHPI working group is in the process of working with City staff and *Hearthmakers* on revisions to the proposal.

2.4.3 Goals

- The objectives of the OHPI working group and the ES working group have merged on the “Issues and Targets” setting objectives of the Environmental Strategy document. The OHPI working group and the ES working group will work together on this aspect.
- The OHPI working group will endeavor to remain current on environmental issues of concern to Kingston that are topical and important. Sources of information to achieve this will include government and non-government organizations, for example, Environment Canada, Natural Resources Canada, the Federation of Canadian Municipalities, the Ontario Environmental Bill of Rights Registry, the Ontario Clean Air

Alliance, and the Canadian Institute for Environmental Law and Policy. The OHPI working group will assess information and bring issues to KEAF. It is recommended that KEAF advise Council on environmental issues that emerge from sources such as those listed.

- The OHPI working group will continue to focus on all the issues listed in Recommendation 2000-5 of KEAF's September 2000 report to Council. However, as the City has embarked upon the Partners in Climate Protection program and air quality was identified by the public as being of prime concern, then it is recommended that the OHPI working group should make air quality issues a priority.

3. RECOMMENDATIONS FOR FUTURE WORK

3.1. On KEAF's role

Recommendation 2002-1:

That Council instruct KEAF to continue to work on environmental matters of importance to the City and citizens of Kingston while focusing on these priorities:

- an environmental strategy for Kingston;
- the Inner Harbour;
- air quality;
- issue identification;
- public awareness.

3.2. On an Environmental Strategy for Kingston

Recommendation 2002-2:

That Council instruct KEAF to continue to participate in the Focus Kingston initiative (via the Environmental Champions) and through that initiative provide assistance and recommendations to Council on an environmental strategy for Kingston.

3.3. On the Inner Harbour

Recommendation 2002-3a:

As the work conducted by KEAF to date has identified an impressive number of studies, covering a wide spectrum of topics and methodologies conducted within the Inner Harbour, future studies should be conducted with common methodologies and quality assurance standards.

That Council instruct KEAF to assist the City with the bringing together of interested parties to promote a harmonized approach to further research relating to the Inner Harbour. Parties to invite to participate in this Inner Harbour research coordination group include: Environment Canada, Ministry of Natural Resources, Ministry of the Environment, Parks Canada, Queen's University, Royal Military College and Transport Canada.

Recommendation 2002-3b:

That Council instruct KEAF to continue its work on matters relating to the Inner Harbour and assist the City with the development of a comprehensive plan for the Inner Harbour.

3.4. On Air Quality

Recommendation 2002-4:

That Council instruct KEAF to assist the city with the implementation of the Partners in Climate Protection program and identify ways to reduce the emission of gases that are contributing to climate change.

3.5. On Issue Identification

Recommendation 2002-5:

That Council instruct KEAF to gather information on environmental issues of concern to Kingston and to provide relevant and topical information to City staff and Council. Sources for this information may include: Canadian Institute for Environmental Law and Policy, Federation of Canadian Municipalities, National Research Council of Canada, Ontario Clean Air Alliance, Canadian Centre for Pollution Prevention and the Environmental Registry, Environmental Commissioner of Ontario.

3.6. On Public Awareness

Recommendation 2002-6:

That Council commit to producing an annual environmental activities report of City activities to provide the public with information on progress towards meeting its Environmental Strategy goals and that this report be posted on the City's web site.

4. ACKNOWLEDGEMENTS

KEAF would like to acknowledge and offer its warm thanks to all the participants at the technical workshops held to peer review *The Kingston Inner Harbour – Great Cataraqui River Data Compilation and Gap Analysis Study*. The workshops were held at Rideaucrest and City Hall on October 13th and December 5th, 2001 respectively. The reviews of the study were invaluable and added much to the scope and detail of the report and a total of some 170 person hours were donated by attendees. Those who attended and gave freely of their time were, in alphabetical order – Adele Crowder (Queen’s Biology, ret’d), Alice Dove (Environment Canada), Hugh Gale (City Senior Planner), Mark Ferguson (Fisheries & Oceans), Rachael Fletcher (Ministry of Environment), John Hanes (Queen’s Geology), Peter Hodson (Queen’s School of Environmental Studies), Jennifer Hughes (Transport Canada), Wayne Herrick (MOE), Simon Lunn (Parks Canada), Brian Osborne (Queen’s Geography), Allison Rutter (Queen’s Analytical Services Unit), Andrew Wollin (CFB Kingston), Barbara Zeeb (Environmental Sciences Group, RMC). The meetings were also well attended by KEAF members many of whom have specialized knowledge of the subject matter.

Numerous people gave freely of their time, in personal conversations or to give talks and answer questions at public venues or at KEAF meetings. KEAF would like to give thanks to Cindie Ashton, Robert Argue, Carolyn Downs, Dr. Larry Dyke, Joe Gallivan, Gary Halovick, Murray Josselyn, Allen Lucas, Linda Newman, Dr. Kerry Rowe, Steve Rose, George Wallace, Dr. Barbara Zeeb and the Chitteneden Regional Planning Commission (Vermont).

KEAF wishes to thank the members of City staff, who contributed to the section on the “Report on City Activities”, for their detailed responses (Joe Gallivan, John Giles, Paul MacLatchy, Chris Phippen and John Rhodes). Also, KEAF much appreciates attendance at their meetings of members of the City’s Environmental Division, namely Jim English, Paul MacLatchy and Beth Sills

The attendance at every general meeting of KEAF by Ms. Susan Powley, who acts both as recording secretary and a guide to process, is gratefully acknowledged, as is Ms. Powley’s help in the distribution of information to KEAF between meetings.

KEAF would also like to express its thanks to the general public for its attendance at meetings, the queries forwarded to KEAF and the support expressed for KEAF’s work.

5. APPENDICES

A: Amendment by City Council to Create KEAF

- i. Formation of KEAF**
- ii. Terms of Reference**
- iii. General Composition of the Forum**

A (i) Formation of KEAF

Kingston City Council (on January 25, 2000) created the Kingston Environmental Advisory Forum (KEAF) in recognition of the need for the City to develop an environmental strategy. Council also amended its procedural ByLaw 98-1 to have KEAF report directly to Council and provided the resources for KEAF's initial activities and to offer opportunities for public and agency involvement in setting environmental priorities.

Moved by Councillor Jardine

Seconded by Councillor Foster

WHEREAS the City of Kingston recognizes the importance of developing an Environmental Long Term Strategy; and

WHEREAS the City of Kingston has limited financial and staff resources to proceed with a comprehensive plan;

THEREFORE BE IT RESOLVED that:

1. The City of Kingston supports, in principle the Rivercare 2000 initiative to improve water quality of the Rideau River.
2. In recognition of a need for long-term environmental strategy, the City of Kingston authorizes staff to establish an Environmental Capitalization Policy, subject to the approval of Council.
3. Sufficient funding will be allocated to proceed with the Kingston Environmental Forum and RiverCare 2000 and will include:
 - a. \$20,000 for the work completed, by Rivercare 2000, on the communications plan; and
 - b. \$60,000 for interim funding required to immediately proceed with the Kingston Environmental forum

Also at the same meeting;

Moved by Councillor Clements

Seconded by Councillor Downes

THAT Council approve the Kingston Environmental Forum and Kingston Environmental Advisory Board working jointly to develop a workshop, the objective of which would be to arrive at a common understanding of environmental issues and priorities in Kingston by an examination of the history and trends of development in Kingston, an inventory of environmental issues, and a discussion of priorities for action.

AND FURTHER THAT: the Kingston Environmental Forum and the Kingston Environmental Advisory Board amalgamate and establish a smaller joint working group to develop a new mandate and new Terms of Reference.

A (ii) Terms of Reference

The Kingston Environmental Advisory Forum shall report to the Committee of the Whole. The purpose of the Forum is to draw on knowledge within the Kingston community, to broaden public information and consultation on environmental issues, and to provide advice and information. The mandate of the Kingston Environmental Advisory Forum is an advisory one which will:

- 1 Identify and prioritize important environmental issues through public consultation and systematic analysis;
- 2 Assist in the development of a broad-based comprehensive environmental strategy for the city of Kingston and which will also be used as guide to the Forum, it being understood that the intent of an environmental strategy is a general plan of action to determine the basic long-term goals and objectives of the corporation/community and the adoption of courses of action and the allocation of resources necessary to carry out these goals";
- 3 Assist and advise Council on the development of Action Plans to address environmental issues;
- 4 Provide advice to Council on the implementation of specific Action Plans relative to identified environmental issues;
- 5 Advise on environmental issues when requested by Council. The Forum will bring together experts in environmental matters from community institutions, authorities and practitioners and representatives of the public to collaborate, on a volunteer basis, on specific projects designed to provide long range environmental strategies for the City of Kingston.

A (iii) General Composition of the Forum

The Kingston Environment Advisory Forum will be comprised of 21 members, and appointed for the term of Council as follows:

- a. 12 public representatives appointed by Council;
- b. members of Council (which would include the Mayor);
- c. 6 technical/professional representatives as follows;
- d. 2 representatives nominated by Queen's University;
- e. 1 representative nominated by the Royal Military College;
- f. 1 representative nominated by St. Lawrence College;
- g. 1 representative nominated by the Cataraqui Region Conservation Authority;
- h. 1 representative nominated by the Kingston, Frontenac Lennox and Addington Health Unit.

(By-law No. 2000-38 - 2000; 2000-324 - 2000)

B: KEAF Members

The names and brief backgrounds of KEAF members appear below in alphabetical order.

- (i) **Community members - public and institutional appointments**
- (ii) **Council members and City support staff**

Bruce Anderson *Queen's appointment February 2002 to present* research programs focus on the use of natural and engineered biological systems for environmental control, with application to the problems of urban stormwater runoff, and the treatment and discharge of wastewater from small-scale, unserviced areas. Current and recent projects include the use of constructed subsurface flow treatment wetlands and biological filters for stormwater quality management; assessment of eco-toxicological issues associated with stormwater treatment facilities; detoxification of stormwater detention pond sediments by natural biological leaching; use of constructed subsurface flow treatment wetlands and peat/sand filtration for wastewater treatment in unserviced sites; application of a novel engineered biological reaction vessel with a denitrification barrier for commercial wastewater treatment; and characterization and improvement of cold-climate constructed wetland nutrient removal treatment performance through *in-situ* and post-wetland process applications like adsorptive filters. Many of these projects are conducted at the field scale, and are carried out in collaboration with other environmental scientists and engineers. Dr. Anderson is a co-principal investigator in the Queen's/National Water Research Institute Stormwater Quality Enhancement Group, and is principal investigator of the Queen's Natural FLOWS (Functional Low-tech On-site Wastewater Systems) Research Group.

Ugis Bickis *public appointment February 2002 to present* core expertise is in human health risk assessment (HHRA) – the understanding of what (and how) environmental factors cause adverse health effects and, how to quantify the degree of various risks, so as to prioritize their management in a logical manner. He has an academic background in Zoology, Chemical Engineering (Hygiene), and (Inhalation) Toxicology. He is accredited by the Canadian and American Hygiene Boards [“hygiene ... the science dealing with the preservation of health”], and represents Canada on the Board of IOHA, a 20000-member international organization. He is on adjunct faculty at Queen's, RMCC and the University of Ottawa, teaching in a variety of professional and graduate programmes. His main affiliation is with Phoenix OHC, Inc., Consultants in Occupational and Environmental Health, in which capacity he has practised his discipline around the world. He has been a resident of Kingston since 1973.

Shannon Bragdon *public appointment February 2002 to present* completed an Environmental Science degree in 1998 at Brock University. She is currently involved in Commercial Real Estate with JJ Barnicke Eastern Ontario Limited (formerly Rockwell Commercial) as their strategic planning and marketing consultant, responsible for delivering internal advisory services to their management and sales team. She has always shown a concern for environment and is dedicated in working towards a sustainable future for the next generation.

Annette Burfoot *public appointment January 2001 to present* is trained in urban planning and environmental studies and currently works as a Professor in the Department of Sociology,

Queen's University. She was part of the Save our Streams Initiative in Toronto and is committed to promoting environmental awareness in Kingston.

Susanne Cliff Jungling *public appointment January 2001 to present* has a life-long interest in the environment. As a geographer she has developed an appreciation for the inter-connectedness of environmental, social, and economic factors and how global issues manifest themselves in the local community. Susanne is KEAF's representative on the Transportation Master Plan Study

Janet Collins *public appointment from January 2000 to January 2002* is a former nurse and long time environmental activist. She was instrumental in the organization of the First World Conference on Breast Cancer in Kingston in 1997 and remains involved in public awareness raising related to breast cancer, environmental contamination, human health and issues of poverty.

Andy Debchak *Health Unit appointment February 2002 to present*

Robert Foster *public appointment January 2000 to present* is an analytical chemist, who specializes in exploration geochemistry. He has worked at the British Ceramic Research Association, Imperial College, London and the Department of Geological Sciences, Queen's University. He has acted as a consultant for mining companies and for the United Nations in several countries. In Kingston, he assisted with KARC's *First to Fifty* report on recycling, *The Cassandra Report* on CFC emissions and at Queen's, served on the Principal's Committee on Hazardous Waste.

David Grightmire *St. Lawrence College appointment from January 2000 to present* is a teacher of Civil Engineering Technology at St. Lawrence College. He has an interest in residential energy conservation and experience in cost effective residential building envelope design and construction.

Allan Hammond *public appointment February 2002 to present* is an educator who, although retired, continues to undertake occasional curriculum writing and web site projects. During a career in teaching, curriculum development, administration, and educational consulting, he helped write the first environmental studies course for New Brunswick high schools, was a member of the Atlantic Science Curriculum Project that authored SciencePlus (widely used textbooks for grades 7-9 science), and was director of curriculum development for Prince Edward Island for 11 years. A recent arrival in Kingston, he is continuing his long-time interest in environmental issues.

Betty Harlow *public appointment January 2001 to present* is a recently retired Philosophy professor from Ryerson University in Toronto where she designed and taught courses in environmental philosophy.

Ted King *Health Unit appointment from January 2000 to December 2001* was a public health inspector with the KFLA Health Unit, and is now retired. He has a particular interest in public awareness and education related to drinking water and air quality issues. He was one of two KEAF representatives to the Cataraqui Forcemain Replacement Study.

Paula Klink *public appointment January 2001 to present* is an environmental engineer with several years of industrial experience. She has worked with the area universities and is currently

employed by a local engineering company. She is active in programs that introduce science and engineering to young children, particularly girls.

Steve Knechtel *CRCA appointment January 2001 to present* is the watershed management coordinator for the Cataraqui Regional Conservation Area (CRCA). The CRCA is responsible for natural resource management for six watersheds in the Kingston area. Steve is also responsible for advising the municipality and landowners on topics such as soil and water conservation, land-use planning, habitat protection, and water quality and water quantity monitoring.

Akrum Matuk *public appointment January 2000 to present* is an environmental engineer with the federal government. He has 10 years' experience in corporate environmental management, environmental site assessment and remediation, and environmental health. He is also a member of the Kingston Wetlands Working Group and the Kingston Field Naturalists.

Dick Myers *public appointment January 2000 to present* is a high school teacher of history, geography and psychology. He has extensive volunteer involvement and experience in Kingston including 3 years on City Council.

Ken Reimer *RMC appointment from January 2000 to present. Co-chair of KEAF from January 2001 to December 2001 and Chair of KEAF from January 2002 to present* is a Professor in the Chemistry & Chemical Engineering Dept. at the Royal Military College (RMC). He is also the Director of the Environmental Sciences Group (ESG) at RMC and holds a cross-appointment as a Professor in the Queen's School of Environmental Studies and Biology Departments. The ESG is a unique non-profit, cost-recovery multidisciplinary group of more than 50 people that develop and apply environmental solutions - particularly at sites located in harsh climates and/or remote locations. ESG is the technical authority for some of Canada's largest environmental cleanups - these include: the remediation of Canada's Arctic Distant Early Warning (DEW) Line; PCB contamination in Saglek, Labrador; and, the development of arsenic standards for the City of Yellowknife. Dr. Reimer is particularly interested in environmental risk communication and negotiation. He received the 2000 Chemical Institute of Canada Award for Environmental Improvement - the first time this award was awarded to an individual rather than an organization. He is also one of two "environmental champions" on the Focus Kingston 2000 Committee.

Dieter Rohde *public appointment from January 2001 to present and Vice Chair of KEAF from January 2002 to present* has worked as maintenance technician at DuPont of Canada for 29 years. He presently leads the maintenance environmental team at the Kingston site. Dieter is interested in issues of sustainability and alternative energy sources, particularly wind energy. He is a member of the Kingston Wind Power Co-operative .

Vicki Schmolka *public appointment January 2001 to present* is a lawyer, whose practice focuses on communicating technical information in clear language. She has a long-time interest in cycling, composting, and recycling. As chair of l'École Polson Park Public School, she has worked actively on the schoolyard naturalization project.

David Turcke *Queen's appointment and Chair of KEAF from January 2000 to December 2001* is the Head of the Department of Civil Engineering at Queen's University. He has consulting and research expertise in coastal engineering and the use of bamboo as an alternative to engineered wood products.

Gary Vanloon *Queen's University appointment January 2001 to present* is a member of the School of Environmental Studies and the Department of Chemistry at Queen's University. His research focuses on the chemistry of environmental processes including water and wastewater treatment, and also on methods for assessing and measuring sustainability of various human activities.

B (ii) City Council Members and City Support Staff

Cindy Ashton *City Staff* is the Communications Officer for the City of Kingston's Environment, Engineering and Planning Divisions. Prior to joining the City, she worked for Earthling Communications, the authors of the Conceptual Plan for the Lemoine Point Conservation Area (1999), The Foundation: An Inventory of Natural and Cultural Assets: Phase I of the Lake Ontario - St. Lawrence River Waterfront Strategy (1996) and the Lemoine Point Master Plan (Phase I) (1995). She is experienced in environmental communications planning and implementation, issues management, project management, advertising and website design.

Leonore Foster *City Council appointment from January 2000 to present* is the City Councillor for District 12. She is chair of the Solid Waste Task Force and represents the City on the Rivercare 2000 Steering Committee. She has expertise in waste management and won the Recycling Council of Ontario's Waste Minimization Award for 1994. She served for nine years on the Board of the CRCA; from 1994 to 1999 she was a member of the Ontario Environmental Assessment Board; and she sat as a Niagara Escarpment Commission Hearings Officer.

Jim English *City Staff* is the Pollution Prevention Specialist for the Environment Division at the City of Kingston. He has experience in managing biosolids and other wastes, in implementing sewer use by-laws, and inspecting and sampling industrial waste. Previously, he worked for the Cataraqui Region Conservation Authority and private industry.

Steve Garrison *City Council appointment from January 2001 to present* is a local teacher and city councillor for district 8. He is one of four City of Kingston representatives on the Cataraqui Region Conservation Authority and a member of the Lemoine Point Ad Hoc Committee.

Paul MacLachy *City Staff* is the Project Environmental Engineer for the City of Kingston's Engineering and Environmental Services Unit. He is experienced in contaminated site investigation and clean-up techniques, landfill management and closure, groundwater hydrogeology and works on a variety of environmental issues concerning the City of Kingston.

Susan Powley *City staff and recording secretary for the City* is KEAF's Committee Clerk with the Council Support Department of the City of Kingston, prepares and circulates agendas, minutes, correspondence and reports. Susan has been with the Committee since November 2000 to assist in providing a clerical link between KEAF and City Council.

Beth Sills *City Staff* was a public appointment to KEAF from January 2000 to December 2001. In December 2001 she began work for the Environmental Department of the City of Kingston. Prior to this she was an environmental engineer with the KoSa Kingston Plant (formerly Celanese Canada). She has over 10 years of experience in industrial environmental management and environmental consulting. Her work history encompasses the fields of wastewater management, potable water treatment, ground water investigation/remediation, waste management, air emission management, and policy and regulatory development. She was one of two KEAF representatives to the Cataraqui Forcemain Replacement Study.

Isabel Turner *Member and Mayor of the City of Kingston*

To see the complete KEAF members list for the period January 2000 to January 2001 refer to *Towards a Sustainable Future: Environmental Priorities for a New City of Kingston*, September 2000.

C: Environmental Priorities for a New City of Kingston

Excerpt from *Towards a Sustainable Future: Environmental Priorities for a New City of Kingston* submitted to Council, September 12, 2000.

Section 5

ENVIRONMENTAL ISSUES AND PRIORITIES IN KINGSTON

KEAF has compiled a long list of environmental issues for consideration. The list includes the issues referred by City Council, issues raised in KEAF meetings and consultations with environmental specialists, and public concerns that were raised in an invited workshop and public open house. KEAF has then undertaken to summarize these lists without eliminating any fundamental area of concern.

In the public consultations, KEAF provided an initial classification of issues, largely for convenience and to help organize the discussions. “Brown” issues refer to the concerns about environmental pollution and contamination. “Green” issues refer to the need for conservation of natural resources, land-use planning concerns and similar concerns. “Planning” issues refers to the way in which we take decisions about the environment. The results of the public consultations are presented using this simple set of categories.

A. ISSUES ARISING FROM PUBLIC CONSULTATION

i. Pollution or Brown Issues

This list is a summary and consolidation of all the public, agency and academic comment that KEAF has generated from March to June 2000, including the invited workshop and the public open house (the master list of issues is included in Appendix K).

Inner Harbour Issues

City Council specifically requested KEAF to examine environmental issues in the Inner Harbour. Public response to KEAF confirms that the issue is a concern for Kingston residents although there is no apparent consensus on what should take place, other than a clean up. This suggests that a concerted effort to develop an Inner Harbour plan should be a priority for City Council. KEAF suggests an initial approach in the recommendation section of this report.

Sewers

- reduce sewage overflows.
- investigate the condition of the Cataraqui sewer pipe.
- improve public awareness

Contaminated Sites

- remediate the Belle Park landfill
- reduce Inner Harbour water pollution
- remove coal tar deposits
- rehabilitate the Davis Tannery and other old industrial sites
- develop new uses for the old industrial sites

- improve public awareness

Air Quality

- better transportation planning (better public transit, more bike paths)
- expand use of renewable or “green” energy sources
- reduce greenhouse gas emissions
- improve public awareness

Water Quality

- clean up sources of contamination
- improve storm water management
- improve public awareness

Pesticides, Herbicides and other chemicals

- minimize the use of hazardous chemicals especially those used for cosmetic purposes
- minimize the use of road salt
- improve public awareness

Waste Management

- improve collection of household hazardous waste
- improve solid waste management
- expand the recycling system to include municipal composting
- improve public awareness

ii. Conservation or Green Issues

This is a list of issues related to environmental conservation and land use that have been publicly discussed in the recent past, often in the work of the Cataraqui Region Conservation Authority. With the recent amalgamation and the addition of large areas of rural land to the City they take on a new and greater significance.

- examine rural water quantity and quality issues
- develop a plan for renewable energy use
- improve management of Kingston’s “forest” (more tree planting, open space protection, naturalization projects)
- develop a green plan for the City waterfront
- encourage neighbourhood cleanup and beautification programs
- reduce noise and light pollution
- protect endangered plants and animals
- plan and designate a system of protected areas
- protect and rehabilitate more wetlands
- improve the recreational trails system
- support the mandate of the Cataraqui Region Conservation Authority

iii. Planning Issues

These are issues that concern the involvement of people in decision making to; ensure that people have sufficient information to make informed decisions; ensure transparency and accountability in our decision processes; ensure proper dissemination of the results to all affected parties; and ensure that there is an effective and open dialogue among all the parties to a decision.

Public Awareness Concerns

- improve public awareness about environmental issues
- promote ecological citizenship
- develop incentives for good environmental practice
- improve communications between the City government and residents

Planning Concerns

- adopt a policy of ecologically driven growth (development should always be done in a manner which enhances and protects the environment)
- improve land-use planning and the adherence to land use rules
- include stronger environmental policies in the Official Plan
- develop Kingston-specific environmental protection mechanisms for the Official Plan
- improve the environmental information data base
- include environmental components in Kingston's Strategic Plan
- pay more attention to Kingston's effects on its neighbours
- become a good "global" environmental citizen.

Governance Concerns

- develop more environmental expertise and provide a focal point within the City government
- spend more money on environmental issues and concerns
- explore alternative funding sources for environmental cleanups

B. CONCERNS ABOUT THE ISSUES LIST

As KEAF summarized and considered the long list of issues that were raised during the public consultations, several caveats and qualifications arose. These have had an influence over KEAF decision-making and deliberations concerning the advice to be provided to Council.

Several technically trained observers did not agree that a high level of public concern and perception was, necessarily, an adequate reason for an issue to receive high priority consideration. In their opinion, a high level of public attention might indicate a need for better public information and awareness raising, but it should not affect the priority setting, and budgeting, undertaken by City Council. KEAF basically disagrees with this position, noting that both provincial and federal governments include public concern as part of the definition of "significance" for an environmental issue. It is noted, however, that better

public understanding can reduce unfounded concern and focus attention on critical issues requiring citizens' support.

However, there are a number of important environmental issues that have had virtually no public prominence. This is not a rationale for these concerns to receive little or no attention from the City. For example, there is significant concern within the scientific community for the conservation of biological diversity and threatened or endangered species, which may have habitat within the new City. It is important for these natural resources to be properly inventoried and protected.

With municipal amalgamation and the inclusion of large rural areas into the new City, a number of the green issues need greater attention. The quality and quantity of rural water, urban pressure on rural areas, disposal of septic materials, and groundwater contamination are all added to the list of issues the City will be asked to address. They are issues that are not well understood and the information available is limited. Several KEAF workshop participants expressed concern about issues that they felt had been raised many times in the past. They indicated skepticism about commitments that have been made by City officials, but have never been acted on. For example, several commitments have been made in the past to make Kingston a more bicycle-friendly community, yet many recently constructed road upgrades do not include appropriate surfaces.

Finally, there are a number of social policy issues, such as housing that are indirectly linked to environmental concerns, but are not within the immediate mandate of KEAF. Although the linkage is explicitly understood by the KEAF membership, we have chosen to only list these concerns, but not to consider them further.

All these concerns have had a role in the discussions and priority setting exercise that KEAF has undertaken as part of providing advice to Council.

D: Recommendations to Council - September, 2000

Recommendations to Council - September, 2000 (from *Towards a Sustainable Future: Environmental Priorities for a New City of Kingston* submitted to Council, September 12, 2000)

A) A KINGSTON ENVIRONMENTAL STRATEGY

There is a clear need and a well-defined public interest in the establishment of an environmental strategy for Kingston. It should examine environmental conditions and trends in Kingston, identify environmental priorities, and help to determine options for a future environmental agenda and action plan. For example, such an approach, when applied to the Inner Harbour would help identify the desired uses of the harbour, accord priorities to the uses, determine remedial actions and allocate resources. Once in place, a Kingston Environmental Strategy will help to guide informed decision-making, aid in the wise allocation of funds and help to determine the City's long-term policy options. KEAF is willing to assist Council to develop the strategy.

Recommendation 2000-1: that Council establish a Kingston Environmental Strategy.

B) PUBLIC AWARENESS AND INVOLVEMENT

KEAF was encouraged by, and benefited from, the involvement of many well-informed residents and interested groups. However, it is also clear that there is a large demand for information on environmental matters and that there is little environmental information available. This leads to a lack of public awareness of what action has been taken, what action is being taken and what action will be taken. A prime example of this is the public not knowing that there have been no beach closings as a result of pollution since 1990. Council's initiatives should be motivated by a well-informed public. The City should undertake more public awareness raising activities and provide ongoing opportunities for public involvement in environmental decision-making. KEAF is willing to assist the City in this endeavour.

Recommendation 2000-2: that Council expand its public environmental awareness program.

C) THE INNER HARBOUR

KEAF has received considerable information and public comment about the Inner Harbour environment. The City needs to establish a policy on the Inner Harbour. To act on such a policy, the environmental condition of the Inner Harbour needs to be assessed. Existing data needs to be assembled to give a unified picture of the technical information available, to establish benchmarks and to identify deficiencies in the data. The City should begin this process with a public workshop. KEAF is willing to assist City Council in this endeavour.

Until the long-term uses of the Inner Harbour are determined, KEAF supports the remedial action that the City is taking on the Belle Park landfill.

Recommendation 2000-3a: that existing environmental data on the Inner Harbour be assembled and analyzed to establish benchmarks and to identify deficiencies.

Recommendation 2000-3b: that Council hold a public workshop on the future of the Inner Harbour.

Recommendation 2000-3c: that Council adopt a comprehensive plan for the Inner Harbour.

D) SEWERS

The Kingston has a sewer system that has components that are over 150 years old. Pollution Control Study of 1992 was the last comprehensive overview of the system for the old City. KEAF commends the City for the higher priority being given to the sewer system.

There is a new master plan under development for better stormwater management and there is a new initiative to improve the operational water and wastewater system. The initiation of the process to consider and select an option for the replacement of the Cataraqui sewer forcemain is an example of pro-active environmental planning.

Recommendation 2000-4: that the City continue to maintain these initiatives as a high priority.

E) OTHER HIGH PRIORITY ENVIRONMENTAL ISSUES

More effort is needed to compile information on and evaluate issues such as air quality, transboundary pollution, biodiversity conservation, outdoor recreation and rural water quality and quantity

Recommendation 2000-5: that KEAF continue to examine the high priority environmental issues identified in this report.

E: Motion by Council Approving KEAF's Recommendations

Motion by Council approving KEAF's recommendations in KEAF's report *Towards a Sustainable Future: Environmental Priorities for a New City of Kingston, September 2000*. (Taken from Council Minutes, 12th September, 2000)

REPORT NO. 104 OF THE KINGSTON ENVIRONMENTAL ADVISORY FORUM

Moved by Councillor Foster
Seconded by Councillor Reid

That Report No. 104 of the Kingston Environmental Advisory Forum be received and adopted.

REPORT NO. 104

2000-09-12

To the Mayor & Members of City Council:

The Kingston Environmental Advisory Forum (KEAF) reports and recommends:

Council consented to separate Clause 9.

- 1 That the Report of the Kingston Environmental Advisory Forum titled "Towards a Sustainable Future: Environmental Priorities For A New City of Kingston" be accepted; and
- 2 That Council establish a Kingston Environmental Strategy; and
- 3 That Council expand its public environmental awareness program; and
- 4 That existing environmental data on the Inner Harbour be assembled and analyzed to establish benchmarks and to identify deficiencies; and
- 5 That Council hold a public workshop on the future of the Inner Harbour; and
- 6 That Council adopt a comprehensive plan for the Inner Harbour; and
- 7 That the City continue to maintain these initiatives as a high priority. (Note: This refers to the positive steps already taken, or presently underway, on sewer system and stormwater management improvements that are listed and endorsed in the KEAF report.)
- 8 That KEAF continue to examine the high priority environmental issues identified in this report;

CARRIED (17:0)

(See Recorded Vote)

A recorded vote commenced with Councillor Jardine.

YEAS: Mayor Bennett, Councillor Beavis, Councillor Campbell, Controller Clarke, Councillor Clements, Councillor Downes, Councillor Foster, Controller Hawkins, Controller Holmberg, Councillor Jardine, Councillor Matthews, Councillor Meers, Councillor Reid, Councillor Rogers, Controller Rosen, Councillor Stoparczyk, Councillor Sutherland. (17)

NAYS: (0)

F: Members Participating in KEAF's Four Working Groups

Environmental Strategy Group (ESG)

Prior to February 2002

Akrum Matuk (Chair)
Susanne Cliff-Jungling
Bob Foster
Betty Harlow
Dieter Rohde

After February 2002

Akrum Matuk (Chair)
Shannon Bragdon
Bob Foster
Betty Harlow
Dieter Rohde

Forum Learning, Awareness and Publicity Group (FLAP)

Prior to February 2002

Ted King (Chair)
Susanne Cliff-Jungling
Bob Foster
Vicki Schmolka

After February 2002

Susanne Cliff-Jungling (Chair)
Allan Hammond
Vicki Schmolka

Inner Harbour Group (IHG)

Prior to February 2002

Beth Sills (Chair)
Annette Burfoot
Bob Foster
Betty Harlow
Ken Reimer

After February 2002

Ken Reimer (Chair)
Shannon Bragdon
Annette Burfoot
Bob Foster
Beth Sills (*continues as the leader on the IHG report*)

Other High Priority Issues Group(OHPI)

Prior to February 2002

Dieter Rohde (Chair)
Shirley Bailey
Janet Collins
Akrum Matuk
Dick Myers
Gary Vanloon

After February 2002

Dieter Rohde (Chair)
Ugis Bickis
Bob Foster
Paula Klink
Akrum Matuk
Dick Myers
Gary Vanloon

G: KEAF's Presence on Other Committees and Attendance at Conferences and Talks

KEAF was asked to provide representatives to sit on other committees. Susanne Cliff-Jungling is KEAF's delegate to the Kingston Transportation Master Plan Public Advisory Forum and Beth Sills and Ted King represented KEAF on the Environmental Assessment of the Great Cataraqui Utilities Crossing Project

KEAF's members also have a presence on other committees with significance for the environment:

- Cataraqui Region Conservation Authority (CRCA). Councillor Steve Garrison is a member of the board.
- City's Planning Committee. Councillor Leonore Foster is a member of the committee.
- City's Rural Affairs Committee. Councillor Leonore Foster is a member of the committee.
- City's Task Force on Solid Waste Management. Councillor Leonore Foster is chair of the committee.
- Focus Kingston 2000. Ken Reimer, Chair of KEAF, is one of two Environmental Champions.
- Rivercare 2000 Councillor Leonore Foster is the City representative.

Members of KEAF attended or participated in conferences, seminars, lectures, and community meetings to learn more about the information available to the community and to increase their knowledge. During the period covered by this report KEAF members attended:

- Municipal Engineering Association 41st Annual Workshop, Kingston. November 2000.
- Canadian Water Resources Symposium, Queen's University. January 2001.
- The Federation of Canadian Municipalities' Sustainable Communities Conference, Ottawa. February 2001.
- Public information meetings on the Great Cataraqui Utilities Crossing Project. February 2001.
- Regional Composting Roundtable, CORCAN Compost Centre. July 2001.
- Meeting with Chittenden County Regional Planning Commission, Vermont. Discussion of open space plans for the Environmental Strategy Group. February 2001.
- Learning for a Sustainable Future, City Hall. November 2001.
- The Robert & Joyce Jones Speaker Series, Civil Engineering, Queen's University (e.g. of topics: sub-surface groundwater contamination, groundwater-village of Merrickville, EA processes, environmental strategies, landfill design, EcoPerth program). Held on Thursdays at 11.30am throughout the university year.
- CRCA-board meetings and special public meetings. Attendance at several meetings throughout the year.
- Pesticides Reduction Kingston meeting. August 2001.
- Kingston Transportation Master Plan public meetings. Fall 2001.
- Measuring Urban Sustainability – the Case of Kingston, City Hall, Kingston. November 2001.
- Walkerton Hearings. September 2001.
- Environmental Symposium on Urban Air Quality, Queen's University. February 2002.
- The Federation of Canadian Municipalities' Sustainable Communities Conference, Ottawa. February 2002.

H: Events Organized by KEAF

- (i) Public events
- (ii) Guest speakers at KEAF meetings
- (iii) KEAF site visits

(i) Public events

KEAF hosted three public meetings during the period covered by this report.

| Date | Subject | Guest(s) | Location |
|---|--|--|-------------------------------|
| 20/11/00 | Two talks (1) Groundwater Contamination in the Kingston Area (2) Climate Change in Northern Canada | Dr.Larry Dyke, Research Scientist Geological Survey of Canada | Kingston City Hall |
| Approximately 40 people attended the talks. The basic nature of groundwater flow and quality within the Kingston area was discussed. Dr. Dyke also brought a working model to illustrate the movement of water from the surface environment to drilled wells. Very noticeable climate change effects in Canada's north were presented and the consequences discussed. | | | |
| Date | Subject | Guest(s) | Location |
| 26/02/01 | Belle Park Landfill from 1952 to 1974 | Paul MacLatchy, Manager, Environment Division, Planning and Development Services Dr. Ken Reimer, Director, Environmental Sciences Group, Royal Military College Steven Rose, P. Eng, Project Manager, Malroz Engineering Dr. Kerry Rowe, Professor, Civil Engineering, Queens University | Kingston City Hall |
| Over 60 people attended this public meeting regarding the Belle Park Landfill. They learned about landfill practices over the last fifty years and common problems with closed landfill sites. They also heard about the type of garbage dumped in the Belle Park site and the external influences on site. Finally, results of an independent study of some of the environmental effects of the landfill on the local area were presented. The public had an opportunity to ask questions of the presenters. | | | |
| Date | Subject | Guest(s) | Location |
| 19/03/01 | Ontario's Environmental Bill of Rights | Mark Murphy Public Education Officer, Environmental Commissioner of Ontario | Kingston Public Library |
| Approximately 50 people attended this public meeting to learn about Ontario's Environmental Bill of Rights. Mr. Murphy outlined the kinds of actions covered by the Bill of Rights, described the purpose of the Environmental Registry and explained public access to the mechanisms provided by the law. | | | |

(ii) Guest speakers at KEAF meetings

KEAF often invites a guest speaker to its regular meetings to provide information on topics of interest to KEAF. During the period covered by this report, nine guest speakers came to KEAF meetings.

| Date | Subject | Guest(s) | Place |
|--|---|--|----------------------|
| 12/02/01 | Land-use Planning | George Wallace, Senior Planner, Planning Division | Regular KEAF meeting |
| Given the Inner Harbour Working Group's interest in land uses in the Inner Harbour area, Mr. Wallace clarified that most lands within the Inner Harbour area are designated Residential or Open Space with no Industrial designation next to the water. He also explained the four Official Plan and five Zoning By-Laws currently in place within the amalgamated City and described the differences between Environmental Protection and Open Space zonings. | | | |
| Date | Subject | Guest(s) | Place |
| 07/05/01 | How to work towards a sustainable community | Robert Argue, EcoPerth | Regular KEAF meeting |
| For the last three years, EcoPerth has been working with Perth's 6,000 residents to heighten awareness of environmental issues and to implement strategies to reduce the community's negative environmental impacts. Mr. Argue outlined the steps being taken towards making Perth a sustainable community. | | | |
| Date | Subject | Guest(s) | Place |
| 09/07/01 | Committee procedures | Carolyn Downs, Manager of Council Support Division | Regular KEAF meeting |
| Ms Downs distributed copies of the report, <i>Committee Procedures</i> , and discussed By-law 98-1, <i>Council Procedural By-law</i> . She explained the process for KEAF to follow in bringing items forward for Council's attention. | | | |
| Date | Subject | Guest(s) | Place |
| 09/07/01 | Transportation Master Plan | Joe Gallivan, Senior Policy Planner, Planning Division; Linda Newman, Dillon Consulting | Regular KEAF meeting |
| Mr. Gallivan and Ms. Newman presented information on the transportation master planning process and outlined some of the current transportation planning issues facing Kingston. | | | |
| Date | Subject | Guest(s) | Place |
| 13/08/01 | Great Catarqui River Utilities River Crossing | Gary Halovick, R.V. Anderson Consulting Murray Josselyn, Josselyn Engineering Allen Lucas, Engineer, Utilities Technical Service | Regular KEAF meeting |
| The speakers described the results of the sampling that had been done in the crossing area and presented information on the dredging techniques that could be used to minimize disturbances to the river bottom. The consultants will develop a map to indicate 'hot spots' in the river. | | | |

(ii) Guest speakers at KEAF meetings (cont'd)

| Date | Subject | Guest(s) | Place |
|---|--------------------------------|---|----------------------|
| 01/10/01 | Sediments in the Inner Harbour | Dr. Barbara A. Zeeb, Environmental Sciences Group, Royal Military College | regular KEAF meeting |
| Dr. Zeeb presented information about sediments, their accumulation, movement and significance and described sediment sampling techniques. She also explained the difference between federal and provincial Sediment Quality Guidelines. | | | |
| Date | Subject | Guest(s) | Place |
| 05/11/01 | The revised city web site | Cindie Ashton Communications Coordinator | regular KEAF meeting |
| Ms. Ashton outlined the new structure of the city's web site and encouraged KEAF to prepare new materials for it. | | | |

(iii) KEAF site visits

| Date | Subject | Guest(s) | Place |
|---|--|------------|---|
| 03/03/01 | Water quality and water treatment facilities in Kingston | City Staff | Sewage Treatment Plant, Ravensview. Water Treatment Plant, King Street |
| KEAF members toured the water treatment plant to see the process for treating Kingston's sewage. They then visited the water treatment plant to learn how water is taken from Lake Ontario, purified and distributed. | | | |

I: Environmental Strategy, City of Kingston

VISION STATEMENT

Kingston will create a sustainable community by conducting ourselves, individually and collectively, in a manner such that the net effect of our actions is a positive one, as measured by the ability of present and future generations to use and enjoy the world.

1. INTRODUCTION

This Environmental Strategy is an expression of Kingston City Council's commitment to establish a framework to protect, conserve and restore the integrity of the natural environment of the city by example, policy, and by-law. It is also to act in a similar manner to minimize the effects that the city has on the natural environment outside the city limits.

This document is also intended to serve as a guide to assist the Corporation of the City of Kingston in the development of an Environmental Management System for its internal operations in: the development of policy; product and service selection; budgeting and in undertaking day-to-day activities.

In the development of this Environmental Strategy, it was recognized that fundamental to its success is the participation and action by all stakeholders, being individual citizens, community groups, and the industrial, commercial and institutional sectors. Therefore, it is also the intention that this document be used both as a reference source and as a decision-making tool by all stakeholders at all times.

2. BELIEFS

Human beings are part of nature and depend on the natural environment for both physical and spiritual sustenance. In order to meet the long-term needs of our citizens, we must respect the needs of the natural environment.

Human activities, particularly in urban areas, have disrupted the balance of biospheric processes to the point where the planet's capacity to repair and regenerate itself in its present form is threatened. Therefore, there is an urgency to reduce the global environmental burden to a sustainable level.

Traditionally, humans have respected the power and beauty of nature but have also often sought to dominate, control and exploit nature. At the threshold of a new millennium, and at the brink of irredeemable environmental damage, there is hope for a new ecological consciousness which recognizes the dependence of humans on nature, and nature's vulnerability to human impact.

3. STATEMENT OF PRINCIPLES

1. Stewardship

The biosphere's capacity to sustain itself must be preserved. The global environmental burden of human activities must be reduced to operate at a sustainable level within the limits of the biosphere, for the benefit of present and future generations.

2. Quality of Life

The long-term quality of the environment must take precedence over unsustainable short-term social and economic considerations.

3. Think Globally, Act Locally

Local decisions contribute to global solutions. Conversely individuals' and communities' actions should be carefully considered, as they can impact the global community.

4. Government Leadership

All levels of government must show leadership by setting an example with environmentally responsible operations and public involvement on environmental issues.

5. Shared Responsibility

All sectors and all individuals are corporately and personally responsible for minimizing the environmental impacts of their decisions and actions.

6. Consultation and Cooperation

Environmental problems can be managed successfully when communities and stakeholders participate in decision making.

7. Integration

Economic, social and environmental considerations must be integrated in decision making to achieve community sustainability.

8. Prevention and Remediation

The most responsible and effective way to deal with environmental problems is to anticipate and prevent them. Existing environmental problems also need to be addressed.

9. Impact Awareness

Governments and special interest groups have a moral responsibility to educate about the environmental impact and true cost of resource consumption.

10. Understanding

In order to gauge our environmental performance, there is a need to understand our environment and our impact on it through observation, measurement, and the scientific method.

4. ENVIRONMENTAL BACKGROUND

The following sections provide information about the City of Kingston which is environmentally relevant, and highlight the history and current status of the known state of the environment in Kingston. The information has been compiled from municipal documents (see Bibliography, below), and is present here for context and convenience for reference.

Location and Size

The new City of Kingston, which came into being on January 1, 1998, is located on the north shore of Lake Ontario where the lake flows into the St. Lawrence River. Kingston is situated approximately halfway between Toronto and Montreal.

The City extends over 52, 772 hectares, of which 15% is water. The rural land base comprises 78% of the total area.

Geology (and Topography)

Most of the City of Kingston is situated on a limestone plain. Through the north and east, Precambrian rock of the “Frontenac Axis” connects the Canadian Shield to the Thousand Islands and Adirondack Mountains. The three main groundwater-bearing bedrock aquifers are in Precambrian shield, limestone, and sandstone.

Population and Urban Growth Characteristics.

The population of the new City of Kingston is 112, 785 (1996 census), of which 12% is classified rural. Between 1986 & 1996, the populations of the former townships of Pittsburgh and Kingston increased an average of 35%, while the former City of Kingston’s population increased 1.6%.

Highway 401 is a major man-made feature which defines the pattern of urban growth in the City. To the south, urban/suburban growth follows an east-west pattern along Lake Ontario and the St. Lawrence River.

Urban growth has been restricted by natural boundaries, such as the Great Cataraqui River, the Lake Ontario and St. Lawrence River shorelines, and to some extent, the terrain, as well as man-made restrictions such as Highway 401 and the availability of municipal services.

Major industrial operations in urban Kingston include Alcan, Dupont, and Norcom/CDT. Institutional operations in urban Kingston include National Defence facilities, federal correctional facilities, hospitals, post-secondary education institutions, and the Norman Rogers Airport.

According to the 1996 Census, 49% of the 44,405 dwelling units in Kingston are single family detached houses. Of the 9.5 million square feet of commercial space in the City of Kingston, 62% is located in the former City of Kingston, about 37% is situated in the former Kingston Township, and less than 2% is located in the former Pittsburgh Township.

Rural/Agricultural

According to the 1996 census, Kingston has 237 farms, with an average size of 200 acres, employing approximately 500 persons and having total gate sales of \$15.1 million.

Common activities within the agricultural community include the working of fields, the spreading of manure and fertilizers, the planting, cultivating, spraying and harvesting of crops, and livestock operations such as cow-calf (beef cattle), dairy farming, and pig operations. Within the rural areas, there are also a number of small scale commercial and industrial land uses that are largely related to the rural economy. Institutional land uses include a federal correctional reserve and a portion of the Gananoque Airport. Recreational uses (including golf courses and tourist camps) are scattered in the area. An active waste disposal site is located in the former

Pittsburgh Township. The primary industrial uses within the rural areas are pit and quarry operations.

Potable Water

Approximately 70,000 residents are serviced by the water treatment plant on King Street West at Beverly Street. This plant was constructed in 1953, with an expansion completed in 1968. A further 35,000 residents are serviced by the water treatment plant at the south end of Sunny Acres Rd. The remainder of Kingston residents obtain their water supply from groundwater wells, including well fed municipally-run water system in Kingston Mills. Hydrogeological studies were conducted in the former Townships of Kingston and Pittsburgh in 1990 and 1995, respectively to determine areas suitable for development on private services (on a regional scale). Both studies attempted to determine areas of groundwater recharge/discharge and areas of good/poor well yield. Some assessment of groundwater quality was also undertaken.

Sewage

Sewage from approximately 70,000 residents is treated at the Ravensview Sewage Treatment Plant. A second sewage treatment plant at Cataraqui Bay serves a further 35,000 residents. There is also a small municipally-run sewer system and treatment plant in the Kingston Mills area. The remainder of the City is serviced through private septic systems.

Surface Water

Seven natural, and two engineered watersheds drain surface water run-off into Lake Ontario, the Rideau Canal system, and the St. Lawrence River.

Solid Waste

Municipal solid waste in Kingston East is transported to a municipally-run landfill on the 4th Concession Rd., and in the former City and former Kingston Township it is disposed of at the Richmond Landfill Site, which is owned and operated by Canadian Waste Services.

Recyclable wastes are collected through a curb-side blue-box program, and transported to the Kingston Area Recycling Centre (KARC) for sorting and transfer.

Transportation

The community believes that a good quality transportation system is necessary for economic growth and for the quality of community life. The former municipalities now comprising the City of Kingston have conducted various transportation studies, including the Kingston Transportation Study (1978) in the former City of Kingston, as well as specific analyses conducted through Official Plan reviews processes. In this regard, the Official Plan of the former Pittsburgh Township states that "a priority has been placed on ... the development of pedestrian and cycling pathways throughout the Township".

Open/Green Spaces

Kingston's open spaces, parks, recreational facilities, and waterfront are considered important resources, which contribute significantly to the overall quality of life available to the City's citizens and visitors, contributing to a healthier environment and beautify a community.

The Official Plans of all three former municipalities explicitly recognize the importance of special environmental areas, or Environmental Protection Areas (EPAs). “The EPA designation is intended primarily for the preservation and conservation of land and the natural environment. It includes all land having inherent environmental sensitivity and hazards” (3-5, Kingston Township). Generally, the objective is to preserve and maintain EPAs in their natural state. There are slight differences in the definitions. For example, the former Kingston Township includes areas of natural and scientific interest (ANSI) in their definition, while the former City of Kingston established the EPA designation mainly as means “to recognize and protect the flood storage capabilities and the integrity of the natural resource environmental qualities of the City's flood plain and wetland areas” (4.20.1 City of Kingston). The former Pittsburgh Township includes another category altogether, namely the Environmental Resource Areas (ERAs). “The ERA designation is intended to recognize areas where differing environmental resources have been identified such as forests, habitat areas or wildlife corridors, ground water storage or recharge areas, distinct land forms or locally significant wetlands. As an overlay designation the policies of the ERAs are intended to provide a framework to manage development while recognizing the environmental resources in the identified areas. Areas designated ERA recognize that constraints may be present which will effect development of these lands in the manner proposed by underlying land use designation” (2E Pittsburgh). Overall, the three plans all include wetland and flood plain areas. The Plans outline what land uses are permitted; generally these are limited to the purpose of protection and management. The sections on EPAs are detailed with respect to objectives and policies in all three cases.

Community Involvement

Kingston has an extensive network of community-based groups which support government programs or which represent special interest groups, many of which have environmental goals central to their mandates. The following selected environmental groups are presented to demonstrate the range of activities performed in the community. Note that in identifying these groups, the City is not supporting the groups in themselves or over any other group.

Kingston Wetlands Working Group: Formed in 1995 at the initiation of CFB Kingston and the Canadian Wildlife Service, its mission is to protect and restore wetland ecosystems in the Kingston area through public education, stewardship projects, and cooperative action. Past projects include wetlands assessments Greater Cataraqui Marsh, Little Cataraqui Marsh, and at Parrott's Bay; the Frontenac Institution Restoration Project, the Little Cataraqui Creek Buffer Project.

Kingston Field Naturalists: Originally founded in 1949 as the "Kingston Nature Club" and renamed in 1963. A non-profit charitable organization of about (currently) 325 members. Its objective is to stimulate public interest in nature, the protection and preservation of wildlife, and to acquire and provide knowledge of natural history. Organizes field trips and compiles information on sightings of birds, mammals and plants.

Society for Conservation Biology (Kingston Ontario Chapter): An international professional organization for the study of phenomena affecting the maintenance, loss and restoration of biological diversity. Currently promoting community education through a local schoolground naturalization project.

Hearthmakers Energy Cooperative: A non-profit, community based environmental organization whose activities are focused on home energy efficiency, water conservation, wind and solar energy promotion, bulk heating fuel purchasing and education in the support of cooperative values and environmental issues. Currently offering a Green Home Visit program.

Friends of Lemoine Point: A four-year old association which supports the maintenance and enhancement of the trails and ecology of the Lemoine Point Conservation Area.

Pesticides Reduction Kingston: An umbrella educational and advocacy group formed in response to the Supreme Court *Hudson* decision. Working to encourage the City of Kingston to pass and enforce a bylaw, similar to the City of Hudson's 1991 bylaw, to limit the private cosmetic use of pesticides.

Bibliography

1. City of Kingston – City Facts, Third Edition. November 2000.
2. City of Kingston – Transportation Master Plan, Terms of Reference. Strategic & Long-Range Planning, October 2000.
3. Official Plan for the Township of Pittsburgh, July 14, 1997.
4. Official Plan, City of Kingston, July 1991.
5. Official Plan of the Township of Kingston, November 6, 1997

5. PROBLEMS AND TARGET SETTING: A framework for action plans:

In light of the ultimate goal of sustainability, the fundamental environmental problems challenging our community cover a wide range and what follows is meant only as an illustration. The obvious examples include climate change, air quality, water and soil quality, waste management issues and threats to biodiversity. Each of these can generate one or more general long term goals for the City and stakeholders, and the attainment of each goal requires the fulfillment of specific medium term (perhaps ten years) objectives. This process leads to the development of specific action plans to meet specific targets within a shorter three year period. This process will require clear and relevant indicators for measuring and reporting progress and trends towards or away from sustainability. Developing and implementing these action plans will require an environmental management system for coordinating and integrating all relevant city departments and their activities in the effort to achieve these targets.

NOTE The format, objective and numbers outlined below are examples only and are for illustration only:

PROBLEM: CLIMATE CHANGE

Long term goal: a reduction in emissions consistent with or exceeding those agreed upon in the Kyoto Accord. i.e. a minimum of six percent reduction in the emission of global warming gases using 1990 as the baseline year for emissions.

Part 1 Reductions by the Corporation of the City of Kingston

Part 2 Reductions by the City of Kingston as a whole.

PART 1

Baseline to assess success: The estimated emissions of global warming gases by the Corporation of the City of Kingston in 1990 will be used to assess the reduction in emissions.

Initiatives to achieve targets

1. Achieve energy efficient heating and cooling systems in all City owned buildings in order to reduce carbon dioxide emissions.
2. Plant trees to absorb carbon dioxide in their growing period
3. Reduce the emissions of fluorocarbons from refrigeration equipment.
4. Reduce methane emissions from landfill by composting household vegetable waste.

Initiative 1

Ten year objectives:

Reduction by the Corporation of the City of Kingston in fossil fuel use by 19%

Three year objectives:

Reduction by the Corporation of the City of Kingston in fossil fuel use by 6%

Report on last years activities – first year of the ten year program:

New energy efficient equipment installed at the recycling center and the use of windpower to provide electricity to City Hall has resulted in a decrease in the emission of global warming gases by 2%.

Is the initiative on track? The initiative is on schedule

Initiative 2

Ten year objective:

Plant 500,000 trees within the City. The contribution to the reduction of emissions of global warming gases by the Corporation will be 0.2%

Three year objectives:

Plant 150,000 trees.

Report on last years activities – first year of the ten year program:

60,000 trees planted

Is the initiative on track? The initiative is ahead of schedule

Initiatives 3 and 4 etc

Summary on long term goals

The target of a minimum of 6% percent reduction in the emission of global warming gases by the Corporation of the City of Kingston is ahead of target

J: Report on the City's Environmental Activities

KEAF wishes to thank the members of City Staff for contributing the synopses below.

1 OPERATIONS DEPARTMENT

Waste Management - Solid Waste Task Force. A Task Force on Waste Management was approved at the February 20, 2001 Council meeting in order to examine solid waste management issues with a view to establishing policy and strategic direction. The resolution noted that current waste production and methods of disposal are unsustainable and that the new City of Kingston has not determined waste diversion goals and objectives. It also noted that the by-laws pertaining to waste management in the three former municipalities needed to be harmonized and that the services provided need to be examined to determine whether or not they meet the expectations of residents and business. The identified issues are -

- (i) examination of waste management practices and short and long-term improvements;
- (ii) goals for waste diversion that exceed 50%;
- (iii) examination of methods to increase diversion;
- (iv) examination of means to improve public education and awareness;
- (v) examination of new methods of waste management;
- (vi) harmonize the by-laws of the three former municipalities;
- (vii) environmentally sound and fiscally responsible improvements to waste management service.

The process is underway and some key issues have been resolved. Two important ones are -

- (i) the current waste flow method will be used to calculate diversion as it is more reliable and less complicated to administer than a base year method. In addition, the total quantity of residential waste per capita and/or household going to landfill will be tracked.
- (ii) a residential waste audit has been completed which recommends that the City initiate an educational program targeted at increasing the rates of recycling aluminum in the garbage stream and the amount of organic material diverted to backyard composters; that an investigation of potential effects of reduced bag limits and/or implementation of a user-pay system be undertaken; and that a cost/benefit analysis of the curbside collection of organics be undertaken.

Waste Management - Recycling, Municipal Composting and Home Composting

Over 9700 tonnes of recyclables were collected in 2001, and, from all sources, over 10,700 tonnes were processed and marketed, bringing in revenues of slightly over \$1 million. In the same period approximately 4000 tonnes of yard waste and brush were processed and composted. The residential diversion rate of material from landfill was estimated to be 32.5%.

In addition to offering home composters for sale to City residents on a year round basis at a wholesale price of \$30 the Solid Waste Division also organizes a spring "truckload sale". The

2001 event, held in May, saw 700 home composters purchased in one day at a subsidized price of \$20. A similar event is planned for May 2002, and similar results are anticipated. Approximately 75% of annual home composter sales are made during the one day events. Conservative estimates suggest that on average a home composter diverts at least 100 kg/year/household from the residential waste stream. The sale of over 900 home composters in 2001 has probably resulted in the diversion of some 90000 kg/year of organic material from landfill. In addition to the financial benefit of reduced collection and disposal costs, the home composter also eliminates any environmental impact associated with other forms of organics disposal.

2. PLANNING AND DEVELOPMENT SERVICES

There are several projects that are underway in the Planning Division that may have environmental implications. Staff are actively pursuing the following policy initiatives:

- 1 The Waterfront Visioning
- 2 The Transportation Master Plan
- 3 The North Block Central Business District Study
- 4 The Urban Growth Study
- 5 The Kingston Pathways Design & Routing Study

Further to these long range planning initiatives, there are a number of potential development initiatives that will clearly have some environmental implications, including:

1. Davis Tannery site
2. Development of the lands adjacent to the Woolen Mill on Cataraqui Street
3. Development of the lands at the northeast corner of Montreal Street and Elliott Avenue

Environment Division

1. New Staff. In 2001, the City's Environment Division received Council approval to hire two new full-time staff positions- one Environmental Engineer and one Environmental Technologist. The next major staffing challenge for the Environment Division will be to acquire clerical support in 2002. Presently the Environment Division consists of a Manager - Paul MacLatchy, an Environmental Engineer – Beth Sills, a Pollution Prevention Specialist - Jim English. Clerical support is provided on an ad hoc basis by Engineering Division personnel. The Division has an operating budget of approximately \$1.4 million per year that goes to staff salaries and benefits, administrative disbursements and expenses for contractors, consultants, equipment and services for ongoing environmental projects.
2. Project Trackdown is continuing. Project participants to date have been the Ministry of the Environment, Environment Canada, and the City of Kingston. Important input into the project has been provided by Queens University, RMC and KEAF. The main focus of the work done has been to identify if there are any ongoing inputs of PCBs into the Inner Harbour. The MOE has been collecting composite water samples from City storm sewers and from the Inner Harbour for analysis of PCBs using very low detection limits (1ng/L - 1 part

per trillion). Mussels were also placed into small cages and placed at strategic locations to sit over the summer. These mussels were retrieved and will be tested to determine if they bio-accumulated any environmental contaminants during their stay in the Inner Harbour. Sediment samples were also collected from the Inner Harbour and will be analyzed for PCBs, PAHs,

3. The Pesticides Report to Council has not been completed. Consultations have been made with the KFLA Health Unit, Ministry of the Environment, the Federal Pest Management Regulatory Authority, the Canadian Centre for Pollution Prevention, KEAF, local pesticide application firms, Environmental NGOs, pesticide retailers, other municipalities, area land managers and some individual members of the public. Significant correspondence has also been received and archived.
4. The Partners for Climate Protection (PCP) program has been started. The City has become a member of the program and has begun the initial phase of developing an emissions inventory for City and Utilities operations. Environment Division, with the assistance of KEAF also continues to evaluate options for general energy reduction within City operations.
5. City Environmental Management System. The City has proceeded with developing components of an EMS (i.e.. a spills management plan, pollution prevention planning, and internal compliance auditing). Other EMS components to be undertaken in 2002 include policy and procedure development and documentation.
6. Coal Gasification Properties Clean Up. This project is complete. Site Specific Risk Assessment/Risk Management reports have been completed and accepted by the MOE. Some minor administrative tasks associated with registration of the SSRA on title remain to be completed. Any future development on these properties must conform to the accepted risk management plan. Monitoring of groundwater quality at the sites will proceed annually. Samples collected in late 2001 showed some noticeable reduction in PAH concentrations compared to previous results in groundwater from sites adjacent to the former coal gasification properties.
7. Kingscourt Storm Sewer – Sanitary Overflow Event. The cause of the problems reported in the Whig-Standard on September 19th appears to have been a blocked sanitary sewer line which caused back-up of the system and overflow from the sanitary to the storm at a location unknown to City-workers. The blockage was located and cleared on September 20th. The MOE has stated that they are conducting an investigation into the event and so the City cannot provide detailed comment.
8. Storm Water Quality Surveillance Program. In 2001, Environment Division initiated a program of routine inspection and sampling of the City's storm sewer outfalls. The principal goal of this program is to identify storm sewer catchments that are contributing presentably large contaminant loadings to our aquatic environments. In 2001 this program identified three areas of immediate concern. One of these areas was quickly repaired while the remaining two continue to be assessed to determine the source(s) of the problems. This program will continue in 2002 with an aim to prioritizing action based upon actual contaminants loadings.

9. Some upcoming projects of interest

- Removal of underground fuel storage tanks and associated contaminated soil from Kingston West Garages and other City operational areas.
- Clean out of sediment from the Lions Civic Gardens Stormwater Management Pond (to prevent over-contamination of sediments and restore design capacity to the pond).
- Pilot testing of natural passive treatment options for the former Belle Park Landfill Site. These options will include a poplar tree cap to intercept leachate-impacted groundwater before it can flow from the site to the Cataraqui River; and a constructed wetland to potentially polish leachate-impacted groundwater as it flows from the site. These promising technologies will be evaluated along with other more conventional methods in order to select a preferred alternative for long term management of the site that is technically effective, economically sustainable and publicly acceptable.
- Feasibility study for application of poplar tree cap to Kingston East Landfill site. Environment Division in conjunction with the Operations Department will begin evaluating environmentally effective alternatives that could be used when this small rural landfill reaches capacity and must close.

Transportation Master Plan

The Transportation Master Plan project commenced in the Summer of 2001 with Council selecting Dillon Consulting to prepare the master plan. Vision sessions with the public were held across the City from September to November. Beginning in January, 2002, a comprehensive telephone survey was undertaken by the consultants and over 2,500 households were contacted and asked about their method and direction of travel across the City. Additional public meetings will be held this Spring, 2002. In order to allow as much opportunity as possible to keep citizens informed and to get them involved, a web site has been established. (www.ktmp.ca, email info@ktmp.ca) as well as a telephone talk back line (384-1770, ext. 124).

3. UTILITIES KINGSTON

Sewer upgrades - Cataraqui River Utilities Crossing Project

The Provincial Class Environmental Assessment for the water and sanitary sewer crossing has been completed. The study evaluated a number of alternatives for the provision of water and sanitary sewage treatment for the City. While the preferred alternative is twinning the existing pipes by dredging sediments and burying near the existing alignment, additional investigation of the sediment quality is required. Utilities Kingston, as part of the preliminary design, has retained R.V. Anderson and Associates Ltd., in conjunction with Josselyn Engineering and Inspec-Sol Limited, to complete this work. The detailed design phase is expected to commence in early 2002 with the construction on track for late 2002 or 2003, subject to completion of the federal Environmental Assessment and findings of the current work program.

King Street Water Plant Upgrades

The water treatment plant, located on King and Beverly Streets, was originally constructed in 1953. An expansion to the plant was completed in 1968. Most of the equipment, including valves, controls, and instrumentation date back to these construction dates. The plant has been kept in good running order due to the conscientious efforts of the plant staff over the last 50 years. However, due to the age of this equipment, spare parts are now expensive or impossible to get. Continuing repair and rebuilding of outdated equipment is no longer feasible. Replacing the existing filter under drains and media, including Granular Activated Carbon (GAC) forms the first phase of the update, and a contract to perform this work is presently underway. It was of particular concern to have at least a portion of the new GAC in place and functioning prior to the "taste and odour season" expected to begin in late August. This goal was achieved with the four filters containing GAC completely refurbished and on line by early September. The remaining two filters are scheduled for completion by mid-November. This project is proceeding on schedule and within budget. The second phase of the update is presently at tender, closing on October 31st. The scope includes replacing many of the plants valves, and valve actuators, the addition of some backup pumping equipment, and a modern SCADA (Supervisory Control and Data Acquisition) system. The SCADA system will allow real time monitoring of all of the water plant critical operations. New instrumentation to measure, chlorine levels, turbidity, temperature, pressure, chemical feed rates, flow rates, and many other parameters will allow staff to optimize the performance of the plant and improve Kingston's already excellent water quality. With these ongoing updates scheduled for completion in early 2003, Kingston is in an excellent position to continue providing an superior quality supply of drinking water well into the future.

K: Environmental Issues List

Shown below is a framework designed to give organization to a multitude of environmental issues. The major group headings, identified in Recommendation 5 in KEAF's September 2000 Report to Council, are listed below as Umbrella issues. Because Umbrella issues are too broad in scope to be assigned meaningful goals, they are broken down into Component issues and the general goals for the Components are described. The Component issues are further broken down into Actionable Elements where a reason or Cause for it being an environmental issue and a clear Remedy can be defined. Within the examples of possible remedies that are offered, some may be contentious. The general framework is outlined immediately below, in *italics* are descriptions to aid with interpretation. The general framework is followed by the specific environmental issues.

Framework of Following Tables

1. UMBRELLA ISSUE (*Identified in KEAF's Report to Council, September 2000*)

Goal - (*The overall objective of the Umbrella Issue*)

1.1 Component (*One of several aspects of the Umbrella issue*)

Goal - (*The general objectives are stated for each component issue*)

1.1.1

| Actionable Element | Cause | Remedy |
|--|---|---|
| <i>(What is contributing to the problem)</i> | <i>(What we're doing that causes the problem)</i> | <i>• (What we need to do - with some examples of how)</i> |
| <i>(Column 1)</i> | <i>(Column2)</i> | <i>(Column 3)</i> |

1.1.2 Actionable Element (*More actionable elements*)

Specific Environmental Issues

1. AIR QUALITY

Goal – Improve all aspects of air quality

1.1 Climate Change Gases

Goal - Reduce local emissions and reduce extra-boundary emissions resulting from local energy consumption.

| Actionable Element | Cause | Remedy |
|---------------------------|----------------------------------|--|
| 1.1.1 Carbon Dioxide | Combustion | <ul style="list-style-type: none"> • Energy use reduction (building retrofits, car pooling, cycling.) • Energy efficiency (heat pumps, co-generation, fuel cells) • Energy from waste (landfill gas capture, sewage gas capture) • Non-fossil combustion (biomass (wood, straw, vegetable oil) • Non-combustion energy (wind, photovoltaics, passive solar, geothermal) • Sequestration (reforestation, chemical carbon bonding) |
| 1.1.2 Nitrous Oxide | Combustion Chemical Processes | <ul style="list-style-type: none"> • Reduced or altern. energy • Catalytic filter |
| 1.1.3 Methane | Landfills Livestock | <ul style="list-style-type: none"> • Compost diversion (gas capture, aerated compost) • More vegetarianism |
| | Permafrost melt | <ul style="list-style-type: none"> • Stop climate change |
| 1.1.4 Natural Gas | Pipeline leaks | <ul style="list-style-type: none"> • Vigilance |
| 1.1.5 Chlorofluorocarbons | Refrigerant Propellant | <ul style="list-style-type: none"> • Alternative refrigerant, CFC recovery • Alternative/spritzer |
| 1.1.6 Other gases | | |

1.2 Stratospheric Ozone Depleting Substances

Goal – Eliminate the use of stratospheric ozone-depleting substances.

| Actionable Element | Cause | Remedy |
|---------------------------|---------------------------|---|
| 1.2.1 Chlorofluorocarbons | Refrigerant Propellant | <ul style="list-style-type: none"> • Alternative refrigerant • Alternative/ use spritzers |
| 1.2.2 Halons | Fire suppressant | <ul style="list-style-type: none"> • Alternatives |

1.3 Acid rain-causing substances

| Actionable Element | Cause | Remedy |
|----------------------|----------------------------|---|
| 1.3.1 Sulfur dioxide | Coal, Bunker C Gasoline | <ul style="list-style-type: none"> • Reduced or Altern. energy • Use less • Lower sulfur content gas |

1.4 Particulates

| Actionable Element | Cause | Remedy |
|--------------------|---------------------------------|--|
| 1.4.1 Soot | Combustion Wood heating | <ul style="list-style-type: none"> • Reduced or alternative energy • High efficiency units |
| 1.4.2 Dust | Plowing/tilling Vehicles | <ul style="list-style-type: none"> • No till cropping • Reduce evaporation • Wind breaks • Alternatives/public transport |
| 1.4.3 Rubber | Vehicles | <ul style="list-style-type: none"> • Alternatives/public transport • Rail vs truck • Less transport (buy locally) |
| 1.4.4 Salt | Road salting | <ul style="list-style-type: none"> • Reduce salting |

1.5 Non-particulates

| Actionable Element | Cause | Remedy |
|-------------------------|---|---|
| 1.5.1 Carbon Monoxide | Engines | <ul style="list-style-type: none"> • Altern./public transport • Non-motorized yard care |
| 1.5.2 Volatile Organics | Transportation Off-road engines Storage/filling | <ul style="list-style-type: none"> • Reduced or Altern. Energy • Reduced or Altern. Energy • Vapour recovery |
| 1.5.3 Nitrous oxide | Combustion | <ul style="list-style-type: none"> • Reduced or Altern. Energy |

1.6 Persistent organic pollutants

| Actionable Element | Cause | Remedy |
|---|--|--|
| 1.6.1 Dioxins/Furans | Incineration | <ul style="list-style-type: none"> • Recycling • Use glass |
| 1.6.2 Polycyclic aromatic hydrocarbons (PAHs) | Incineration Wood heating | <ul style="list-style-type: none"> • Ban incineration • High efficiency units |
| 1.6.3 Pest/herbicides | Excessive use High wind Cosmetic use | <ul style="list-style-type: none"> • Effective agricultural application • Wait for low wind • Discontinue |

2. BIODIVERSITY

2.1 Alien species

| Actionable Element | Cause | Remedy |
|--|--|--|
| 2.1.1 Cultivars | Nurseries Agriculture Sylviculture | <ul style="list-style-type: none"> • Promote indigenous • Organic farming • Indigenous mixed planting |
| 2.1.2 Genetically modified organisms (GMO) | Agriculture | <ul style="list-style-type: none"> • Organic farming |

2.2 Invasive species

| Actionable Element | Cause | Remedy |
|---------------------------|--------------------------|---|
| 2.2.1 Dogs/Cats | Loose Feral | <ul style="list-style-type: none"> • Fines • Neutering • Euthanizing |
| 2.2.2 Invasive plants | Disturbed soil Mowing | <ul style="list-style-type: none"> • Reduce tilling • Naturalize |

2.3 Habitat destruction

| Actionable Element | Cause | Remedy |
|---------------------------|-------------------------------|---|
| 2.3.1 Development | Space loss | <ul style="list-style-type: none"> • Greater urban density |
| 2.3.2 Agriculture | Space loss | <ul style="list-style-type: none"> • Return natural condition |
| 2.3.3 Wetlands | Draining/trenching Filling | <ul style="list-style-type: none"> • Repair/restore • Ban filling |
| 2.3.4 Greenspace | Overuse | <ul style="list-style-type: none"> • Control users |

2.4 Attack on species

| Actionable Element | Cause | Remedy |
|---------------------------|---------------------|--|
| 2.4.1 Herbicides | Species destruction | <ul style="list-style-type: none"> • Restrict |
| 2.4.2 Pesticides | Species destruction | <ul style="list-style-type: none"> • Restrict |

2.5 Barriers to free movement

| Actionable Element | Cause | Remedy |
|---------------------------|------------------------------|---|
| 2.5.1 Median barrier | Bad design | <ul style="list-style-type: none"> • Improve design |
| 2.5.2 Corridors | Non-contiguous Too narrow | <ul style="list-style-type: none"> • Re-instate and protect routes • Adequate width |

2.6 Species At Risk

| Actionable Element | Cause | Remedy |
|---------------------------------|---------------------------------------|--|
| 2.6.1 Habitat loss | Loss to people Loss to agriculture | <ul style="list-style-type: none"> • Greater developed density • Restrict access • Limit encroachment • More vegetarianism |
| 2.6.2 Predation Hunt/Fishing | Pets People | <ul style="list-style-type: none"> • Control pets • Enforce rules |

3. WATER

3.1 Urban (potable)

| Actionable Element | Cause | Remedy |
|-------------------------------------|---------------|--|
| 3.1.1 Microorganisms | Surface water | <ul style="list-style-type: none"> • Chlorination |
| 3.1.2 Persistent organic pollutants | Polluters | <ul style="list-style-type: none"> • Filtration |

3.2 Urban (surface/storm/waste)

| Actionable Element | Cause | Remedy |
|--------------------|---------------------------------------|--|
| 3.2.1 Sewage | Combined sewers | <ul style="list-style-type: none"> • Replacement |
| 3.2.2 Storm water | Surface run-off Downspout to sewer | <ul style="list-style-type: none"> • Less Pavement • Retention devices • Disconnect |

3.3 Rural (potable) (quality)

| Actionable Element | Cause | Remedy |
|---|--|---|
| 3.3.1 Surface infiltration | Abandoned wells Excess nutrients Pest/herbicides | <ul style="list-style-type: none"> • Find and seal • Nutrient management • Manage use |
| 3.3.2 Septic systems | Tank plugging Tile bed plugging Plumes | <ul style="list-style-type: none"> • Regular tank cleaning • Regular tank cleaning • Reduce water use • Containment |
| 3.3.3 Trichloroethylene | Degreaser | <ul style="list-style-type: none"> • Enforce standards |
| 3.3.4 <i>“Dombind”</i> | Dust suppressant | <ul style="list-style-type: none"> • Ban use |
| 3.3.5 Road salt | Intentional | <ul style="list-style-type: none"> • Switch to sand • Reduce salt |
| 3.3.6 Volatile organic compounds (VOCs) | Spilled fuels Underground tanks | <ul style="list-style-type: none"> • Care and attention • Upgrade tanks |

3.4 Rural (potable) (quantity)

| Actionable Element | Cause | Remedy |
|----------------------------------|--|---|
| 3.4.1 Falling ground water table | Excessive drawdown Reduced recharge | <ul style="list-style-type: none"> • Monitoring • Stop climate change • Manage development |

3.5 Rural (surface)

| Actionable Element | Cause | Remedy |
|-----------------------|-----------------------------|--|
| 3.5.1 Pest/Herbicides | Run off | <ul style="list-style-type: none"> • Effective management |
| 3.5.2 Nutrients | Run off | <ul style="list-style-type: none"> • Nutrient management. |
| 3.5.3 Erosion | No buffer vegetation | <ul style="list-style-type: none"> • Naturalized zones |
| 3.5.4 Microbes | Livestock Septic systems | <ul style="list-style-type: none"> • Fencing • Alternative watering • Enforce standards |
| 3.5.5 Leachate | Dump/brownfields | <ul style="list-style-type: none"> • Leachate capture |

4. OUTDOOR RECREATION

Goal – Improve recreational activities for health, enjoyment and fossil fuel reduction objectives.

4.1 Transportation

| Actionable Element | Cause | Remedy |
|--------------------------|----------------|--|
| 4.1.1 Few walking paths | Not a priority | <ul style="list-style-type: none"> • Designate paths • Require sidewalks • Benches, Water, Toilets |
| 4.1.2 Few cycle routes | Not a priority | <ul style="list-style-type: none"> • Create commuter routes • Create perimeter parking • Provide bike parking |
| 4.1.3 Rollerblade routes | Not a priority | <ul style="list-style-type: none"> • Create commuter routes |
| 4.1.4 No car-free zones | Not a priority | <ul style="list-style-type: none"> • Establish car-free zones |

4.2 Recreation

| Actionable Element | Cause | Remedy |
|---|--|---|
| 4.2.1 Greenspace deterioration | Incompatible uses Insufficient green spaces | <ul style="list-style-type: none"> • Designated uses • More greenspaces |
| 4.2.2 Deteriorated lake swimming facilities | Perception of pollution | <ul style="list-style-type: none"> • Fix facilities • Change rooms, lifeguards • Promote our beaches |
| 4.2.3 Incomplete waterfront trail | Not a priority | <ul style="list-style-type: none"> • Make it a priority • Other trail link-ups |
| 4.2.4 No breakwater use | Liability Cost | <ul style="list-style-type: none"> • Make it a people place |
| 4.2.5 Park monoculture | Outdated ideas | <ul style="list-style-type: none"> • Naturalized areas |

L: Correspondence with MTO on the 401 EA

TO: The Honourable Elizabeth Witmer
Minister of the Environment of Ontario
Fax (416) 314-6748

CC: Director's Office
Environmental Assessment Branch & Approvals
Fax (416) 314-7227

The Honourable David Turnbull
Minister of Transportation of Ontario
Fax (416) 327-9188

The Honourable Gilles Bisson
Ontario NDP Transportation Critic
Fax (416) 325-7111

The Honourable Pat Hoy
Ontario Liberal Transportation Critic
Fax (416) 325-9000

The Honourable John Gerretson
MPP for Kingston
Fax (416) 325-9214

Ministry of the Environment
Kingston Regional Office
Fax (613) 548-6908

Dear Madam,

Below is a letter in response to the Class Environmental Assessment, Highway 401, Median Barrier and Highway Improvements from West of County Road 38 to Highway 15. The undersigned is respectfully requesting a **Bump Up** to an Individual Environmental Assessment. We understand that this is rarely granted. However, we understand that a Bump-Up request is required in order to initiate the process toward a negotiated/mediated settlement of the issues.

TO: Mr. E. Rose, Senior Project Manager
Ministry of Transportation
Eastern Region,
Planning & Design
355 Counter Street
Kingston, Ont. K7L 5A3
Fax (613) 540-5106

Mr. K. Ogilvie, Environmental Planner
Ministry of Transportation
Eastern Region,
Regional Environmental Unit
355 Counter Street
Kingston, Ont. K7L 5A3
Fax (613) 540-5106

**Class Environmental Assessment
Highway 401, Median Barrier and Highway Improvements
From West of County Road 38 to Highway 15**

KEAF's interest in this road project

The Kingston Environmental Advisory Forum (KEAF) is a committee of Kingston City Council. However, in this matter, KEAF is not responding as a representative of the City of Kingston and has no instruction to do so. The views expressed below are those of KEAF alone. KEAF was created in January 2000, with 12 members appointed by City Council and 6 members appointed by various partner agencies (Queen's University, St. Lawrence College, Royal Military College, Cataraqui Region Conservation Authority, and Kingston Frontenac and Lennox & Addington Health Unit). KEAF's mission statement is:

to provide leadership in improving the quality of our lives and the lives of our children through the thoughtful planning and management of our built and natural environments.

KEAF, therefore, is considering the effects of the 401 road expansion and median barrier project on the Kingston environment. Our main concern is the effect that the proposed median barrier will have on animal species that live along, or migrate across, the 401 corridor.

KEAF is requesting a bump up to an Individual Environmental Assessment.

KEAF understands that the Ministry of Transport (MTO) recognizes that wildlife crossing over the highway is a concern. This is shown by the inclusion of two 100-meter sections of thrie-beam median barrier and maintenance and/or improvement of all under-highway animal movement routes in the highway construction proposal.

However, we feel that these provisions are insufficient to deliver a "no negative effect" result from the road improvements with respect to animals in the area and that the many letters stating concerns about this problem, though duly documented, have not been sufficiently taken into account. We feel that there are other portions of the study area where thrie-beam could be installed instead of the concrete barrier without compromising the safety of motorists. We request that this be done. We also request, for other portions of the road where the concrete barrier is in place, that animal fencing be installed on both the north and south sides of the highway to keep animals off the highway and to direct them to the under-highway culverts and corridors.

We do not believe that the Ministry of Transport has adequately considered the impact of the concrete median barrier and highway extension on animals in the area and that more work must be done before final decisions are made concerning the project. That is why we are requesting the bump up.

The arguments supporting these requests

The concrete median barrier will affect wildlife

At present, there is no solid barrier separating the east and west bound lanes of traffic on the 401 west of the Cataraqui River through the City of Kingston area; between the Cataraqui River and

the Montreal Street exit. Through the Greater Cataraqui marsh area, metal poles separate the lanes.

We are concerned that the addition of a concrete median barrier along the length of the study area will result in the death of many small animals which may get trapped on the road and be unable to escape. This applies particularly to turtles and other amphibians, as well as small mammals. The proposed construction plan does call for two short sections of three-beam median barrier instead of the concrete median. This will enable small animals to cross the road in those immediate locations, but we feel that this is insufficient to address the problem.

Wildlife in danger

Parks Canada submitted a brief with respect to the 401 project, dated April 30, 1998 from Doug Stewart, Superintendent, Rideau Canal, which notes Parks Canada's "no net loss" policy and expresses the opinion that the proposed road construction will not meet this policy requirement. In the same brief, Doug Stewart expressed his belief that the median construction will "irrevocably" and "detrimentally" affect wildlife species which live or pass through the areas adjacent to the 401 and which may cross the 401 from time to time. We concur with these conclusions.

Available information

The information concerning wildlife species in the Greater Cataraqui marsh area (one of the two largest provincially-significant wetlands found directly along the Rideau Canal); the Little Cataraqui Creek area; the Lower Collins Creek Wetland complex; and the fields and woodlands adjacent to the 401 is incomplete.

The Ministry of Transport document states that "none of [the identified] wildlife species are considered to be nationally, provincially or regionally significant". However, the documentation lists only three non-bird species -- painted turtle (*Chrysemys picta*), leopard frog (*Rana pipiens*) and bull frog (*Rana catesbeiana*), and fails to integrate information from elsewhere in its report concerning the Lower Collins Creek Wetland Complex. Two studies cited in the report are relevant to this area. One identified the presence of the map turtle (*Graptemys geographica*), red back salamander (*Plethodon cinereus*) and mudpuppy (*Necturus maculosus*) (M.M. Dillin Ltd, 1993) and the other noted provincially and regionally significant herpetiles (Ecoplans, 1994) as living in the Lower Collins Creek Wetland Complex. Further, it is evident from observed roadkill that raccoons, muskrats, skunks, porcupines, groundhogs, and deer inhabit or move through the whole 401 Kingston corridor area.

KEAF believes that there is insufficient information about the species currently in the areas that would be affected by the construction of the 401 median barrier, particularly on such questions as:

- What species live in the neighbouring marshes, waterways and lands?
- What species are crossing over the 401 now?
- How many individuals now make the crossing to the other side successfully?
- At what times of the year is there the greatest species traffic?

- Two extremely vulnerable species have been found in this part of Ontario -- the spotted turtle (*Clemmys guttata*) and the black rat snake (*Elaphe obsoleta*). The black rat snake has been on the COSEWIC threatened species list since 1998. Are individuals of either of these species currently living close to this stretch of the 401? St. Lawrence National Park has been actively working to protect the black rat snake which travels long distances between its hibernation area and its summer grounds and is very susceptible to being killed by vehicle traffic when it crosses roadways.

KEAF is not aware of any study that has been done for the MTO to determine the extent of the increased risk to wildlife posed by the proposed installation of the concrete median barrier.

In light of the lack of complete information, the precautionary principle would dictate that all possible efforts be made to reduce the negative effects of this project.

Proposed solutions to satisfy these requests

KEAF is pleased that the proposed road construction involves maintaining all the under-the-road crossing opportunities. However, KEAF feels that much more thought should be given to protecting species that are likely to cross over the highway.

KEAF recommends that for all portions of the roadway in the study area, where no significant curve or grade exists, modified three-beam be used as the median barrier.

More can be done to keep species away from the 401 in areas where the concrete median barrier is in place, while ensuring that species can successfully move along their water and land highways. Fencing along the outside edges of the highway will keep animals off the stretches that they cannot hope to cross and funnel them towards the stretches of road where the three-beam median barrier is installed or toward under-highway routes. This benefits both motorists (who are less likely to encounter animals on the fenced stretches) and the animals (which will not be able to cross where they might be trapped by the median). Signage can give added protection by warning motorists of the increased risk of an animal crossing in the three-beam areas.

KEAF therefore recommends that animal fencing be installed on both sides of the highway wherever a concrete median barrier is erected, except where rockcuts already prevent animals from crossing the roadway.

Conclusion

If Kingston is to meet the goal of being a “sustainable” city, where actions are taken with a respect for all life, improvements have to be made to the 401 expansion plan.

There are two key elements in balancing the human needs for an expanded and safer 401 with other animals' needs for survival and well-being.

- (1) Do the utmost to ensure that animals are not trapped on the highway by the median barrier and killed by vehicles. This is also a motorist safety issue as swerving to avoid, say, a turtle or skunk can result in an accident.
- (2) Maintain the opportunities for animals to move freely from one area to another, so that their migration, feeding, breeding and hibernation patterns are not destroyed.

KEAF believes that the Ministry of Transport has not completely addressed these environmental concerns and that more work needs to be done to protect the environment before the 401 roadwork goes forward.

Therefore, KEAF requests a **Bump Up** to an **Individual Environmental Assessment**.

KEAF has been advised that an Individual Environmental Assessment is rarely granted but that this is the process by which a negotiated settlement of the issues can be mandated by the Minister of the Environment. We believe that a negotiated settlement is the most timely and cost-effective means to ensure that these issues are properly taken into account. The current highway construction proposal is unacceptable.

Respectfully submitted April 20, 2001 on behalf of the Kingston Environmental Advisory Forum

Ken Reimer
Co-chair, KEAF

Reply messages to: KEAF c/o Susan Powley, Kingston City Hall

June 11, 2001

Rick McLuckie, P. Eng.
Area Engineer
Planning and Design Section Ministry of Transport
Kingston, Ontario

**Response to your letter of June 1, 2001 concerning the Bump Up Request for WP 28-97-00
Hwy 401 Improvements for West of County Road 38 to Hwy 15**

Dear Mr. McLuckie:

The Kingston Environmental Advisory Forum held a regular meeting on Monday, June 4, 2001 at which we reviewed your letter to us, dated June 1, 2001 and the discussions that took place at the May 28, 2001 meeting with you, other Ministry of Transport officials and your consultants. The KEAF meeting was chaired by Dr. Ken Reimer and had a quorum throughout the evening.

We would like to begin by thanking you for the time and attention that you have given to our letter, dated April 10, 2001, and the included Bump Up request. We appreciate the detailed information that you presented to us at the May meeting, your willingness to answer our questions and the concern that you share with us for road safety and environmental protection.

As you know, our primary concern is the environmental consequences of the widening of the 401 and the erection of the Tall Wall median barrier. Much as the information you provided on the median barrier showed it to be a valuable tool in diminishing the horrific consequences of highway accidents, the information you presented to us indicated that you have not adequately assessed the impact of the median barrier placement and road widening on wildlife. This lack of concrete scientific data is of great concern to us, given KEAF's City Council-approved mission of a sustainable city that respects and improves environmental quality.

We understood your message that the Tall Wall median barrier is, in your opinion, the best technology currently available and the Ministry standard for 400-level highways and we acknowledge your sense of urgency, you would prefer not to have any delays in the 401 construction project.

At our KEAF meeting, the Other High Priorities Committee, chaired by Dieter Rohde, was given the mandate to pursue discussions with you, based on the voting that took place at the meeting. The Committee was given the authority to revoke the Bump Up request provided KEAF's instructions to the Committee were adequately reflected in the agreement reached with the Ministry of Transport.

Here is what KEAF told the Committee to say to you.

1. KEAF wants an assurance that there will be an annual inspection of the 28 culverts along this stretch of the 401 with regular maintenance to keep them fully open.
2. KEAF wants to be kept informed of any changes in the planning of the highway construction and to be party to discussions concerning modifications to the current plans, such as those concerning the planned sections of Thrie-beam, the possible location of new culverts and the possible location of fencing.
3. KEAF would like to encourage the Ministry to undertake research on the possibility of including tunnels in the Tall Wall median barrier at regular intervals and would ask that you forward this request to appropriate Ministry officials. Is there a simple and cost-effective way to build-in tunnels when the concrete is set? Will the median barrier maintain an acceptable level of impact resistance if there are regularly spaced tunnels in it?
4. KEAF is pleased that the Ministry has offered to undertake a Wildlife Mortality Study, which will collect one full year of field data. It is our understanding that this study will begin before the median barrier and road widening takes place and will focus on the Catarauqui Marsh stretch of the highway. KEAF, however, would like the Ministry to extend this study so that it includes one year of data collection *after* the road-widening and median construction has been completed. We all need to have better information about the effect of the median barrier and 6-lane highway on wildlife.
5. KEAF discussed asking for the study to extend to three other areas along the 401 stretch: east of Collins Creek; south of the Catarauqui Region Conservation Authority lands between Sydenham Road and Division Street; and near Montreal Street, from culvert 20 to 22 (Exhibit 1 - 14). Members were in favour of gathering data at these locations but were not unanimous in wanting this part of the study to include post-construction data collection, as well. We feel that there is inadequate information concerning the wildlife in

areas other than the Cataraqui Marsh. The Marsh has attracted the greatest attention because of its classification as a Class A Wetland and its position at the mouth of the Rideau Canal system. We should not assume that the wildlife living in the vicinity of the other stretches of the 401 are “insignificant” or adequately protected because of the placement of the highway. We should have animal mortality data for sections of the whole stretch of the 401, from west of county road 38 to Highway 15.

6. Members of KEAF also believe that a mortality study is inadequate to properly assess the wildlife issues involved and want to see a movement study take place as well. However, we understand from your correspondence that the Ministry of Transport questions the cost / benefit value of this research. We hope that we can compromise on this point to ensure that the studies that we believe are the most essential (points 4 and 5 above) go ahead.

We would be pleased to continue this discussion through an exchange of correspondence or to meet with you at your convenience. We are definitely open to rescinding the Bump Up request when KEAF’s concerns have been adequately addressed.

Again, we would like to repeat our appreciation for your attention to our concerns. We look forward to your reply to this letter.

Sincerely,

Dieter H. Rohde
Chair, Other High Priorities Committee
Kingston Environmental Advisory Forum

June 29, 2001

Ken Reimer, Co-Chair
Kingston Environmental Advisory Forum
City of Kingston
216 Ontario Street
Kingston, Ontario
K7L 2Z3

Dear Mr. Rohde:

RE: Bump Up Request for WP 28-97-00 Hwy 401 Improvements from West of County Road 38 to Hwy 15

Thank you for your fax of June 15, 2001 on the above.

The Ministry reasserts that our Environmental Study for this project has adequately assessed the effect of the median barrier on wildlife in this project area. This Ministry has worked with all

external agencies responsible for the resource, and has developed a design that they have endorsed, and that reflects sensitivity to the environment.

Relating to the specific points in your June 15, 2001 fax, I offer the following:

1. The Ministry will ensure these culverts remain fully open. Routine inspection, on at least an annual basis, will be part of that process.
2. As part of our environmental assessment process, for each contract prior to construction (currently envisioned as 4 contracts) the Ministry will issue design start up notification to external agencies and will have a public information centre describing the specifics of each project. In addition, the Ministry will prepare a Design and Construction Report (DCR) for each contract prior to construction. Each DCR will be subject to a formal public and agency review process (including notification in local newspapers). The DCR will document a number of issues including any significant changes in the planned improvements. The City of Kingston will be an important partner in the process.

Subject to endorsement from the City of Kingston, we would be pleased to add KEAF to our external agency contact list for these projects. External agencies receive specific notification of design start up, advance notification of the public information centre and a copy of the DCR for comment.

3. I will bring your concerns relative to wildlife crossings installed in median barriers to the attention of our Highway Design Office, for their review.
4. The Ministry is prepared to consider a post construction wildlife study, should the pre-construction study identify this requirement. In the absence of these results, the Ministry believes it would be premature to make this commitment.
5. The Ministry is reluctant to expand the area for complete study to encompass areas beyond the Cataraqui Marsh. The proposed study area concentrates on the wildlife areas identified by the agencies responsible for the resource.

In the Collins Creek area, there is no median barrier proposed west of the Collins Creek. Given this is the first contract, we believe that a full wildlife mortality survey could delay the delivery of safety improvements at this location.

For the Little Cataraqui Creek area, and the area between Montreal St. and Division St., the Ministry will study these areas as our construction schedule permits. The Ministry will undertake a wildlife mortality study at these secondary locations. Should the Ministry need to accelerate construction, the period of data collection may be shorter in these secondary areas.

6. The Ministry believes that quantifying the number of wildlife successfully crossing Highway 401 would be difficult and onerous. This aspect should not be included in this Mortality study.

Again, we believe that the current Environmental Study Report is comprehensive and sufficiently addresses the requirements of this project, including the issues raised by KEAF. We are prepared to undertake the above measures to bring timely resolution of the bump up request.

Within the last two and a half weeks, there were two cross median accidents on Highway 401 within the City of Kingston; one immediately west of our study and one within our study limits.

These accidents emphasize the urgency that the Ministry sees in resolving the bump up request. Therefore, the Ministry has commenced preparation of its detailed response to the Ministry of Environment in this matter. I welcome KEAF's comments **prior to Monday, July 16, 2001.**

We are prepared to meet with the entire KEAF committee to discuss the Ministry's position in these matters.

Yours truly,

ORIGINAL SIGNED BY

Rick McLuckie, P. Eng.
Area Engineer

cc:

S. Powley, Kingston City Hall (via email and fax)
KEAF membership
B. Meunier, CAO, City of Kingston
P. McLatchie, City of Kingston

27th August, 2001

Minister of the Environment
C/o Environmental Assessment and
Approvals Branch
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, ON M4V 1L5

Attention: Kevin Plautz, Project Officer

RE: Bump Up Request for WP 28-97-00 Hwy 401 Improvements from West of County Road 38 to Hwy 15

Based on a letter dated 29th June 2001 from Mr. R. McLuckie, MTO, KEAF hereby rescinds its bump up request in this matter. **

KEAF is satisfied that the Ministry of Transport (MTO) will make adequate provisions in the planned improvements to Highway 401 in the Kingston area for the protection of wildlife that is found to be crossing over the roadway. The primary and the two secondary study areas will catalogue what animals cross in these areas, and we trust that this information will lead MTO to determine what measures in terms of fencing, under-roadway boreholes, culvert walkways, etc. may be appropriate to lessen and counterbalance the expected increased carnage created by the two additional lanes and the concrete median barrier.

As MTO has suggested, we will ask the City to endorse the addition of KEAF to the external agency contact list.

We are pleased that MTO is prepared to consider a post-construction wildlife study. This study would not only document what effect, if any, the changes to the highway are having on wildlife, but also the effect that these changes might be expected to have in other localities where highway improvements are contemplated.

It is not KEAF's intent that any of the mortality studies that will be undertaken should delay the projects. We do however expect that they will now be expedited on a best efforts basis. While the following is not a requirement, as we are making no further demands, KEAF would be pleased to receive interim reports of the mortality studies, if such reports are produced. This might provide some early indications of what mitigation measures might be required and would also be useful if studies are cut short for timing reasons.

KEAF is still a little concerned that the MTO is making these concessions because of desiring a timely resolution to the bump up request rather than accepting KEAF's contention that it is not possible to know how wildlife may be affected and what control devices need to be put in place to mitigate these effects without adequate knowledge of species in the area and their movement habits.

We look forward to a good interactive relationship with MTO as these project phases now proceed.

Sincerely,

K.J. Reimer
Chair, KEAF

M: Adoption of Pesticides Motion by the Council of the Town of Hudson

Extract of the Minutes of a regular meeting of the Council of the Town of Hudson held at St. Mary's Parish Hall on 6 May 1991, at which the following was adopted:

BY-LAW NO 270

CONCERNING PESTICIDES

WHEREAS Notice of Motion was duly given at the February 4th, 1991 Council meeting;

THEREFORE it is moved by Councillor Chris Wilkin and seconded by Councillor George White and thereafter it is moved by Councillor Pierre Frappier and seconded by Councillor Chris Wilkin that the following By-Law bearing No. 270 be and is hereby adopted and decreed as follows:

By-Law No 327 – Amendment to by-law no 270 concerning pesticides: (adopted on June 5th, 1995)

WHEREAS an objective of the Town of Hudson is the reduction and eventual elimination of the use of pesticides;

WHEREAS the Town of Hudson adopted on May 6th, 1991 By-Law No 270 concerning Pesticides;

WHEREAS article 5 of this By-Law was valid for a period not exceeding 5 years, that is until May 6th, 1996;

WHEREAS the Whitlock Golf & Country Club presented to Council, at the April 13th, 1995 meeting a report of their activities concerning the use of pesticides from 1989 to 1994;

WHEREAS this report indicates that the use of pesticides decreased over this period;

WHEREAS an amendment to this By-Law is required since article 5 is valid only until May 6th, 1996;

WHEREAS Notice of Motion was duly given at the May 1st, 1995 Council meeting;

THEREFORE it is moved by Councillor Huddy Walsh, seconded by Councillor Marie Madeleine Doty that the following By-Law bearing No 327 being an amendment to By-Law No 270 be and is hereby adopted and decreed as follows:

By-Law No 341 – Amendment to by-law no 270 concerning pesticides: (adopted on April 9th, 1996)

WHEREAS the Town experienced a serious infestation of chinch bugs in 1995;

WHEREAS the present regulation concerning the use of pesticides does not permit the use of any products in the case of such infestations;

WHEREAS many complaints were received from citizens in general and also homeowners who experienced the problem concerning the lack of remedy;

WHEREAS the Environment Committee has examined the situation and has recommended an amendment to Council;

WHEREAS Notice of Motion was duly given at the regular meeting held on March 4th, 1996;

THEREFORE, it is moved by Councillor Gordon H. Drewett, seconded by Councillor Albert Pilon and unanimously resolved that By-Law No 341, be and is hereby adopted and decreed as follows:

1. The following words and expressions, whenever the same occur in this By-Law, shall have the following meaning:
 - a) "PESTICIDES": means any substance, matter or micro-organism intended to control, destroy, reduce, attract or repel, directly or indirectly, an organism which is noxious, harmful or annoying for a human being, fauna, vegetation, crops or other goods or intended to regulate the growth of vegetation, excluding medicine or vaccine;
 - b) "FARMER": means a farm producer within the meaning of the Farm Producers Act (R.S.Q., chap., P-28);
 - c) "INSPECTOR": means any member of the Police Department of the Town as well as any other person designated for this purpose by the municipal council.
2. The spreading and use of a pesticide is prohibited throughout the territory of the Town.
3. Notwithstanding article 2, it is permitted to use a pesticide in the following cases:
 - a) In a public or private swimming-pool;
 - b) to purify water intended for the use of human beings or animals;
 - c) inside of a building;
 - d) to control or destroy animals which constitute a danger for human beings;
 - e) to control or destroy plants which constitute a danger for human beings who are allergic thereto;
 - f) as a wood preservative.

Amendment by By-Law No. 341:

1. Article 3 of By-Law No 270 is amended by adding the following:
 - g) to control or destroy insects which have infested property. The infestation must be positively confirmed, in writing, by a qualified individual.

A permit, issued by the Town Engineer or his designate, must be obtained for conditions c), d), e) and g) above."

That, for the purpose of subsections d), e) and g) above;

- a sign, visible from the street, be posted indicating the use of pesticides. This sign must be erected from the day prior until and including the day after the application.
- there be no application of pesticides within five (5) meters of any open watercourses;
- there be no application of pesticides when wind velocity exceeds fifteen (15) km/hr;

4. FARMERS:

Notwithstanding article 2, a farmer using a pesticide on an immovable which is exploited for purposes of agriculture or horticulture, in a hot house or in the open, is requested to

- a) register, by written declaration, with the Town, in the month of march of each year, the products which he stores and which he will be using during that year. Any modifications or additions to the said list must also be registered with the Town as soon as possible.
- b) also provide, in the written declaration at article 4 a), the schedule of application of said products and the area(s) of his property where the products will be applied.

Amendment by By-Law No. 327:

1. That article 5 of By-Law No 270 be replaced by the following:

5. GOLF COURSES:

Notwithstanding article 2, it is permitted to use a pesticide on a golf course as long as the following conditions are met:

- a) The use of the pesticide be done by a licensed applicator only;
- b) The pesticide be stored in a fireproof storage area with containment, ventilation, steel shelving and fireproof sign.

The Golf Clubs must maintain an up to date inventory list which must be available to the Town of Hudson's Environment Committee upon request;

- c) The applicator must have and comply with material safety data sheets available for each product they might apply and they must provide the sheet to any abutter of the Golf Club property;
 - d) That there be no application of pesticides within two (2) meters of the Golf Clubs' property lines;
 - e) That there be no application of pesticides within five (5) meters of any open watercourses;
 - f) That there be no application of pesticides when wind velocity exceeds fifteen (15) km/hr;
 - g) Each year in the month of January, the Golf Clubs must submit to the Town a written report of all the measures which have been taken to control the application of pesticides and produce a detailed inventory of all chemicals used and applied during the year;
 - h) That this report be examined by the Town of Hudson's Environment Committee to establish that the activities enumerated in the said report meet all the requirements of Integrated Pest Management and demonstrate a continuing effort to minimize the use of pesticides. The committee's decision to be submitted to Council on or before March 31st of each year.
6. Notwithstanding article 2, it is permitted to use a biological pesticide to control or destroy insects which constitute a danger or an inconvenience for human beings.
 7. Any person and/or entity must conform to the National Fire Code re the storage of pesticides.
 8. This By-Law binds the Town, its officers and employees as well as any person carrying out works on its behalf or at its request.
 9. Any inspector may visit and examine all moveable and immoveable property, as also the interior or exterior of any house, building or edifice whatsoever, to ascertain that this By-Law

is executed; the owners or occupants of such property, buildings and edifices must admit such inspector.

10. For the purpose of article 8 or the Agricultural Abuses Act (R.S.Q., chap. A-2) an inspector designated by the Town may use a pesticide, notwithstanding article 2 of the By-Law, if there is no other efficient way of destroying noxious plants determined as such by the Provincial Government and the presence of which is harmful to a real and continuous agricultural exploitation.

Amendment by By-Law No. 327:

2. That article 11 of By-Law No 270 be replaced by the following:

11. Anyone contravening a provision of this by-law, or tolerating or permitting such a contravention, commits an infraction and is liable, besides the costs, to the following fine:

1. for a first infraction:

a minimum of THREE HUNDRED DOLLARS (300 \$) and a maximum of ONE THOUSAND DOLLARS (1 000 \$) if the offender is a physical person or a maximum of TWO THOUSAND DOLLARS (2 000 \$) if the offender is a moral person;

2. for a repeat infraction:

a minimum of SIX HUNDRED DOLLARS (600 \$) and a maximum of TWO THOUSAND DOLLARS (2 000 \$) if the offender is a physical person or a maximum of FOUR THOUSAND DOLLARS (4 000 \$) if the offender is a moral person.

VOTE

voted in favour:

Councillor Chris Wilkin
Councillor George White
Councillor Pierre Frappier

voted against:

Councillor Larry Durrell

The majority being in favour, the motion is

CARRIED

By-Law No 270 is signed by Mayor G. Michael Elliott and Town Clerk Louise L. Villandré

Councillor Larry Durrell requests that the following be recorded:

That he be relinquished of any legal or other responsibility resulting from the acceptance of this By-Law by any governing body.

This By-Law will be submitted to the Ministry of Environment for approval.

Certified True Extracts

Louise L. Villandré, o.m.a.

N: Pesticides – House of Commons’ Report

Pesticides - Making the Right Choice for the Protection of Health and the Environment

House of Commons’ Standing Committee on Environment and Sustainable Development, May 2000.

The complete text of the report can be found at and downloaded from –

<http://www.parl.gc.ca/InfoComDoc/36/2/ENVI/Studies/Reports/envi01-e.html>

O: Motion to Council on the Cosmetic Use of Pesticides

From: REPORTS

Report No. 82 of the Committee of the Whole

WHEREAS the Standing Committee on the Environment and Sustainable Development have recommended that municipalities develop a strategy for the gradual phase-out of pesticides used for cosmetic purposes, and

WHEREAS on 28th June 2001, the Supreme Court of Canada upheld the Hudson, Quebec by-law banning the use of pesticides on private property for cosmetic purposes, and

WHEREAS the Supreme Court of Canada held that the municipality acted within its delegated authority to "secure peace, order, good government, health and general welfare in the territory of the municipality", and

WHEREAS the Supreme Court of Canada held that local governments have the authority to respond to new challenges facing municipalities and to pass bylaws to protect the general welfare of residents in their communities, and

WHEREAS at the 17th July meeting of Council, a staff report on the impact of the Supreme Court of Canada decision and the potential use of similar by-laws in the City was requested,

THEREFORE BE IT RESOLVED that the recommendation from KEAF (Kingston Environmental Advisory Forum) encouraging Council to pass a by-law that would be appropriate for the phase-out of pesticides (to include herbicides, insecticides, fungicides, etc.) used for cosmetic purposes,

AND FURTHER that KEAF (Kingston Environmental Advisory Forum) would like to offer assistance to explore options for the most appropriate type of by-law, be received and referred to staff, and that a full public consultation process be followed.

(File No. CSU-P04-00-01)

CARRIED

P: Reasons for a By-law to Reduce the Cosmetic Use of Pesticides

Some of the considerations behind KEAF's recommendation to Council for a by-law to reduce the cosmetic (non-agricultural) use of pesticides are given below.

At its September 2001 meeting, members of KEAF voted overwhelmingly in favour of a motion that advised Kingston City Council to adopt a by-law to reduce the use of pesticides for cosmetic purposes. The vote was taken after much discussion at two separate KEAF meetings and after members of KEAF had carried out some research into the issue. This note sets out some of the reasons KEAF voted in favour of a cosmetic pesticide-use control by-law. (The word "pesticide" refers to pesticides, herbicides, insecticides, fungicides and other chemical products used to kill certain plant and animal species.)

Members of KEAF were guided by the report of the federal government's Standing Committee on Environment and Sustainable Development, *"Pesticides: Making the Right Choice for the Protection of Health and the Environment"*. The parliamentary report considers both current scientific literature and the testimony of a wide range of expert witnesses and advisory bodies. It examines the extent and reasons for pesticide use and the impact on human health and the environment. The report asserts that the protection of human health and the environment must be paramount and that measures dealing with pesticide use ought to be guided by the precautionary approach:

"Appropriate preventive measures are to be taken where there is reason to believe that a pesticide is likely to cause harm, even when there is no conclusive evidence to prove a causal relation between the pesticide and its effect." (Executive Summary, page 4).

The precautionary principle or "precautionary approach" stated above is a normative one: it sets out a standard or norm of behaviour, rather than a description of fact. It recognizes that, at this point, the question of using or banning pesticides cannot be settled through factual scientific investigation alone. Scientific inquiry is by nature open-ended and unfinished; it is always possible to do further tests, to research further causal links. Criteria for interpreting data, testing methodologies and standards for risk assessment can and do vary. With respect to the various chemicals used in pesticides, it can be difficult to identify the synergistic effects of these chemical combinations.

This means that it is currently possible for someone to argue that there is no "conclusive" evidence of human effects from a particular pesticide. So, the practical question is not whether harm can be conclusively proven, but rather, whether there are reasonable grounds for believing that a pesticide may cause harm. Obviously, scientific evidence plays a central role in answering this question. But the concept of "reasonable grounds" involves, in addition to scientific evidence, consideration of other priorities or values. What counts as sufficient evidence of a possible harm will depend, in part, on how serious and important we think the harm is and how much we value avoiding it. For example, we do not wait for "conclusive" evidence before

evacuating a building after a bomb threat; we take the precaution of having everyone leave, even though the vast majority of these threats turn out to be bogus.

Although the report recognizes the lack of “conclusive” scientific evidence, it nevertheless issues the alarm over the mounting evidence that the extensive use of pesticides has significant health effects, particularly on children and vulnerable populations. It includes many recommendations concerning the need for stronger legislative controls of pesticide production and use; tax incentives for organic agriculture; and more funding for research on, for example, the hormone disrupting effects of some pesticides. One recommendation is of particular interest to KEAF:

“The Committee urges the government, in partnership with the provinces, territories and municipalities, to develop a strategy for the gradual phase-out of pesticides used for cosmetic purposes.”

KEAF believes that, if the Standing Committee on Environment and Sustainable Development that has both the research resources and access to the best scientific information available can come to this conclusion after months of study and after extensive open public hearings, it is not reasonable or cost-effective for the City of Kingston to repeat the scientific work. We are satisfied that the Committee came to its conclusion after long and hard thought and that it makes the most sense not to redo the Committee’s work, but to move forward from it.

KEAF agrees with the Standing Committee in placing a very high value on human and environmental health. Those who argue that currently available scientific evidence is insufficient to support a reduction and phase-out of cosmetic pesticides are, in effect, asserting other values and suggesting that other priorities have to take precedence, presumably ones of economics and convenience.

KEAF believes that the necessary next step is to consider how to go about phasing out the cosmetic use of pesticides within the City of Kingston. The June, 2001 Supreme Court of Canada decision in a case involving lawn care companies and the City of Hudson, Quebec, clarified a municipality’s right to pass by-laws to protect the health and welfare of its residents. The City of Kingston has the legal authority to pass a pesticide reduction and phase-out by-law. KEAF believes that the City must begin work on the terms of that by-law and offers its assistance to the City in any way that is deemed appropriate to help with that task.

Kingston Environmental Advisory Forum

November, 2001