

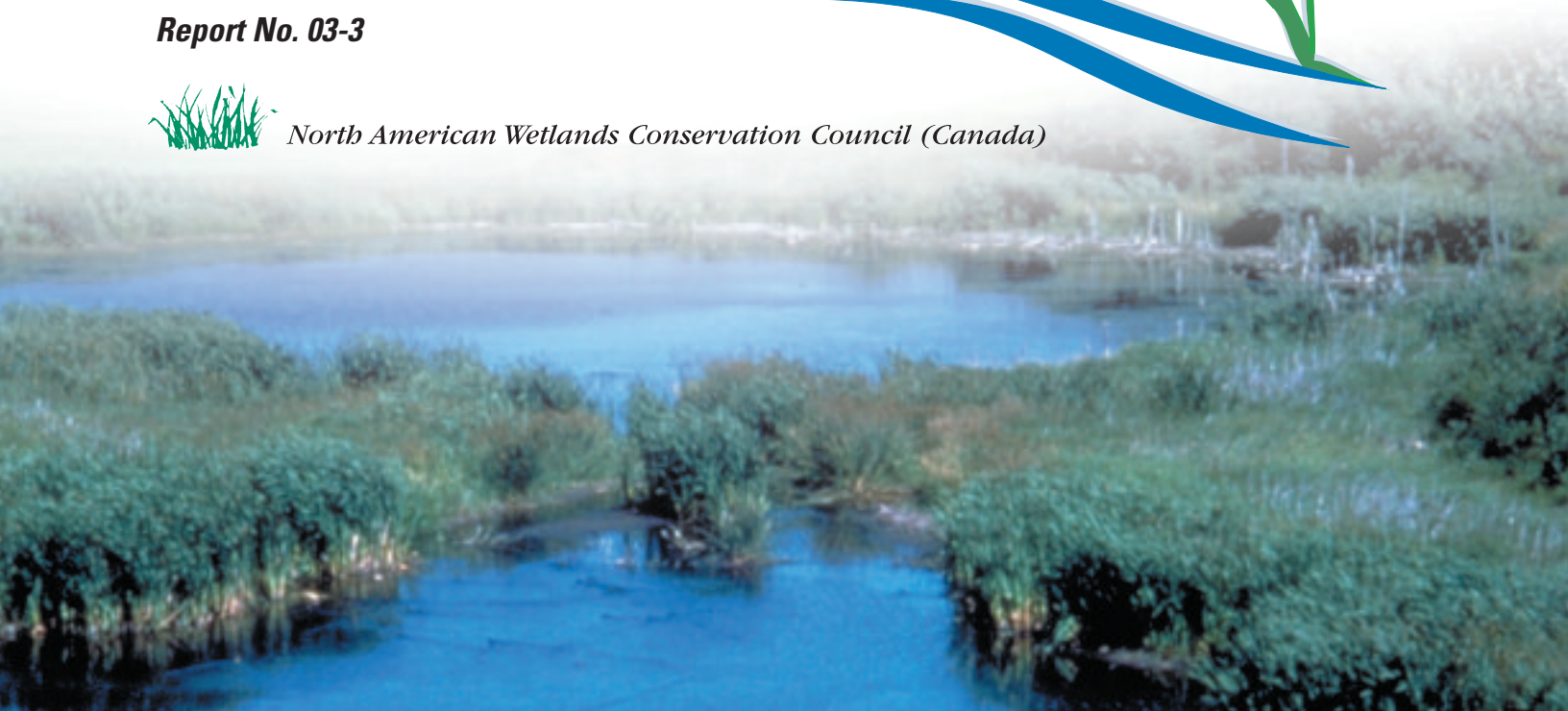
WETLANDS STEWARDSHIP NEW DIRECTIONS

Final Report of the Conference on Canadian
Wetlands Stewardship

Report No. 03-3



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L'intendance des terres humides : nouvelles directions.



PREFACE

The Conference on Canadian Wetlands Stewardship: *Setting a Course, Together*, was held February 3-5, 2003 in Ottawa, Ontario. Hosted by the Federal Wetlands Forum and the North American Wetlands Conservation Council (Canada), the event resulted in many excellent recommendations. These are the result of working group discussions on key issues, barriers and opportunities under the six conference themes – (a) Wetlands in Working Landscapes: An Integrated Approach; (b) Wetlands, Clean Water and Healthy Watersheds; (c) Canada’s Wetland Industry; (d) Innovation and Wetland Technologies; (e) Wetland Inventory and Monitoring; and (f) Wetland Education. These recommendations will drive new directions for environmental sustainability through effective wetland stewardship in Canada over the next decade. This requires the commitment and support of all levels of government, non-governmental organizations, business, industry, academia, landowners, land managers and the Canadian public.

Shortly after the conference, a Wetlands Task Force was established with representatives of the North American Wetlands Conservation Council (Canada), Environment Canada, Wildlife Habitat Canada and Ducks Unlimited Canada. Mandated to facilitate the post-conference process, the Wetlands Task Force has since produced two documents. *An Interim Report: Synthesis of What You Said* (Campbell and Rubec 2003) captures the discussions and draft conference recommendations. A second report entitled *Wetlands Stewardship in Canada* includes background and invited papers produced for the conference (Rubec 2003). Both reports are available on the Internet at www.stewardshipcanada.ca, and from the North American Wetlands Conservation Council in hard copy. This report, *Wetlands Stewardship: New Directions*, is an implementation plan for the conference recommendations and is the product of consultations with the conference partners: the North American Wetlands Conservation Council (Canada), Wildlife Habitat Canada, Ducks Unlimited Canada, Environment Canada, the Federal Wetlands Forum and conference participants.

Kenneth W. Cox
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The Organizing Committee thanks the many sponsors and exhibitors for their generous contributions and help in making this event possible.

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INTRODUCTION

Canada is at a turning point with strong support across jurisdictions for an integrated landscape and watershed approach to the conservation and protection of the nation's wetlands. There is a greater understanding of the social, economic and ecological value of wetlands and this is being translated into broad support for wetland conservation and management. At the policy level, politicians and senior government officials are both pressuring for change and being pressured, by a diversity of organizations, to build ecological services into the national accounting system. This marks a shift away from the traditional protection and conservation approach to one characterized by a business case for the natural environment and the invaluable services it provides.

This shift in approach has been recognized by the National Round Table on the Environment and the Economy (NRTEE). In May 2003, the NRTEE identified wetlands as one of their six Environmental Indicators of Sustainable Development (NRTEE 2003a). This keystone indicator, using remote sensing data, will track changes to the total area and health of wetlands in Canada. It will take about two years to develop this indicator. According to Dr. Harvey Mead, Chair of the NRTEE, it is their recommendation that data bases for the new indicators be developed to complement the present Canadian System of National Accounts. This System overwhelmingly focuses on economic indicators at present. In June 2003, the NRTEE also published its report *Securing Canada's Natural Capital: A Vision for Nature Conservation in the 21st Century*, focusing national attention on the conservation of natural capital (NRTEE 2003b).

It can be argued that Canada's success in meeting wetland conservation and protection goals and objectives, is a product of the degree of public awareness of wetland functions and values. This correlation is reflected in the extent to which wetlands are considered in the policies, strategies and programs for which government, business and industry officials are responsible, directly or indirectly. This level of awareness is a product of a host of variables such as availability of "good" science, information and knowledge, and communication at all scales – from inside organizations and across the country.

Armed with the best information available, the next challenge that faces policy-makers becomes how to take the concept of an integrated approach and translate it into reality "on the ground." Despite significant progress, barriers that continue to impede progress include: the vast geographic expanse of this country; interjurisdictional responsibilities; inconsistent or conflicting policies; sector-based institutional structures; linear decision-making processes; culture and the continuing lack of information on the role and value of wetlands within our watersheds, the economy and communities. Regardless, there is an exciting array of new and expanded initiatives across the country that can serve as a launch pad for future directions in managing Canada's wetlands.



OUR CHALLENGE

This report *Wetlands Stewardship: New Directions* presents a Plan that has been designed to provide stakeholders with the key elements of what is needed, offering a roadmap toward a common national vision for wetlands. Building on the two previous conference reports, it is based on the premise that an integrated approach to the protection and conservation of Canada's wetlands is critical given the multitude of stakeholders, issues, stressors and opportunities. The Wetlands Task Force now challenges you to build one or more of the strategies and actions outlined below into your priorities so we can collectively "make it happen." The Appendix of this report outlines how you and your organization can provide detailed input on the implementation plan outlined below.

WETLANDS 2003: A SNAPSHOT

- The 1990 Sustaining Wetlands Forum led to the adoption of the *Federal Policy on Wetland Conservation* in 1991. The Policy articulates the Federal Government's commitments and strategies to implement its wetland protection goals. Canada was the first country in the world to adopt such a policy, which is based on the principles of the Ramsar Convention on Wetlands. Seven provinces have since adopted similar wetland policies.
- Canada has protected over eight million hectares of its land and water areas. This includes our National Parks, provincial and territorial protected areas, and Environment Canada's network of over 140 National Wildlife Areas and Migratory Bird Sanctuaries. It is estimated that about 14% of these federal protected areas is made up of wetlands.
- Canada has 24% of the world's wetlands, with 29% of this managed on federal lands. The remainder falls under the jurisdiction of provincial and territorial governments and private landowners.
- The degradation and loss of wetlands continues in all parts of Canada.
- Wetlands play a significant role in sustaining biological diversity. Wetlands provide habitat and ecological services to a diversity of species, from polar bears to waterfowl and over a third of Canada's 416 currently listed species at risk.
- Many of our wetland species rely on healthy, functioning wetlands beyond Canada's border, in countries such as the United States and Mexico, underscoring the importance of an international approach to wetlands, personified by the North American Waterfowl Management Plan.
- Healthy water for Canadians is dependent on wetlands in rivers of the nation. Wetlands reduce the impact of flooding, erosion and improve the quality of our water for human uses.
- Wetlands store large quantities of carbon, making them a key resource as attempts are made to address climate change and implement the Kyoto Protocol.
- Emerging policies such as the *Agriculture Policy Framework*, a federal-provincial-territorial agreement, will directly and indirectly impact wetlands, as the policy includes a strong environmental component to promote sustainable agriculture practices. Under the \$110 million Greencover Initiative launched in July 2002, the Framework's critical areas component is expected to enhance the health and function of riparian ecosystems, and reduce agricultural impacts on water quality, quantity and stream stability.
- In a landmark agreement, Ducks Unlimited Canada and Alberta-Pacific Forest Industries Inc. (Al-Pac) committed to watershed-based conservation in Al-Pac's forest management area. This joint conservation planning will provide the basis for the integration of watershed-based conservation priorities with all of Al-Pac's activities within its management area.
- The Federal Commissioner of the Environment and Sustainable Development, in her *Report on the Great Lakes Basin* in 2001 found that "there is not enough information on the current status of wetlands to say whether it is improving or getting worse"; and that "there is no single federal department or lead agency formally responsible for wetlands." She proposed that designating a lead agency would strengthen accountability for monitoring, evaluating and reporting federal action on wetlands.
- It is estimated that the benefits to Canadians generated by wetlands exceed \$20 billion annually.
- Over the last 17 years, the North American Waterfowl Management Plan has produced investments of over \$600 million to promote voluntary stewardship for waterfowl habitats in Canada. Over 850 000 hectares of vital wetland and upland waterfowl habitats have been secured through this Plan.
- *Canada's Stewardship Agenda* was endorsed in September 2002 by the Federal, Provincial and Territorial Ministers of Wildlife, Fisheries and Aquaculture, and Forests. The Government of Canada has committed \$45 million over five years to support hundreds of locally funded and administered stewardship projects under the Habitat Stewardship Program for Species at Risk, many directed at wetlands.
- Environment Canada, in co-operation with the Canadian Space Agency, Ducks Unlimited Canada, Wildlife Habitat Canada and other partners, announced the release of the *Conservation Atlas of Wetlands in the St. Lawrence Valley* in February 2003. A National Wetland Inventory is now underway with four pilot areas completed in 2002-2003.

WHAT IS DRIVING AND SHAPING CANADA'S WETLANDS?

Participants at the conference identified ten primary issues that affect our wetlands:

- Policies, legislation, strategies and programs;
- Institutional structures and decision-making processes;
- Jurisdictional barriers;
- State of knowledge about wetlands, their function, value and role within the landscape and watersheds;
- Natural resource management practices – forestry, wildlife, agriculture, mining and fisheries;
- Resources and capacity – human and financial;
- International trading regimes;
- National accounting system (failure to value natural capital);
- Climate change; and
- Land use practices and activities.

VISUALIZING WHERE WE WANT TO BE

Canada's Wetland Vision is a forward-looking view of where we want to be – a collective destination with each of us having a valuable role to play. To get us there, this vision must encapsulate not only the desired ecological state of Canada's wetlands, but also the way in which they are to be protected and conserved. Put simply, *Canada's Wetland Vision* by 2013 is:



CANADA'S WETLAND VISION

An increase in the quantity and quality of Canada's wetlands where the ecological and hydrological functions are maintained or enhanced for the sustainable use of Canadians and Nature.

IMPLEMENTATION STRATEGIES AND ACTIONS

To realize this vision, Canadians must set clearly defined, agreed upon priorities, timelines, leads, responsibilities; build on successes; be creative and innovative; make changes to existing policies, programs and strategies; forge effective dynamic partnerships; greatly increase public education and awareness of wetland functions and values; inventory and map all our wetlands; and commit financial and human resources to wetland management and conservation.

Conference participants called for a "Canadian Wetland Strategy," based on a landscape and watershed approach, designed to maintain and enhance ecological, sociological and economic benefits. What follows are key elements of this wetland strategy. The Wetlands Task Force has determined that a realistic and timely approach should focus on the recommendations emanating from the conference as outlined in this New Directions Plan.

Each of the following seven "strategies" and, for each several supporting "actions," builds upon one another in a non-linear fashion. It is recognized that it would be ideal to have a comprehensive inventory of Canada's wetlands in place today. However, it is not yet possible to include information on wetland ecological and hydrological functions, class and form on which to make fully informed policy, program and management decisions, as this inventory does not yet exist in all areas of Canada. Rather,

the strategies and actions can be implemented in a parallel and integrated manner ensuring that there is a “feedback loop” built into the implementation process. For example, as progress is made on Canada’s wetland inventory, new information needs to be captured in educational literature, passed up through the policy process and ultimately reflected in program refinements and landowner actions “on the ground.”

As well, these actions alone will not fully deliver the strategies outlined here given the large number of factors required to change the status quo. They are a first step. The next step will require a greater level of detail and more specific action plans. These must build on what is already going on across the country in each jurisdiction, determining key stakeholders, reaching agreement on processes, timelines, roles and responsibilities.

As noted above in *Our Challenge*, a response template is provided in the Appendix to assist stakeholders provide input to the Wetlands Task Force over the next year. The Appendix is a tool to: (a) coordinate the implementation process; and, (b) serve as a framework to report on progress and commitments in implementing these strategies and actions.



This national conference will provide a look ahead in implementing wetland conservation and stewardship initiatives for the forthcoming decade. This conference will also contribute to the implementation of Canada’s Stewardship Agenda that was endorsed by Federal, Provincial and Territorial Resource Ministers in September 2002 and to ongoing stewardship elements of the Species At Risk Act. It is an opportunity to draw wetland conservation initiatives together and set a policy stream in place in the same fashion as the highly successful Sustaining Wetlands Forum held in 1990. That meeting led to major developments in wetland conservation policy and stewardship and it is time to set the course again.

Karen Brown, Assistant Deputy Minister, Environment Canada and Conference Chair



IMPLEMENTATION STRATEGIES

Strategy #1: Changing the Policy Framework

Goal: By 2013, establish a policy framework in Canada that supports Canada's Wetland Vision.

Rationale:

- The state of Canada's wetlands is shaped by the myriad of federal, provincial and territorial policies, regulations and legislation. This impact can be either direct, as in the case of the *Federal Policy on Wetland Conservation* (Government of Canada 1991), or indirect, through industrial development and transportation policies. Currently, policies affecting wetlands do not reflect the socio-economic or ecological values of wetlands to the extent that they should. Across Canada, there is a mix of structural differences in wetlands and/or wetland-related policies. To affect our vision, federal, provincial, territorial and municipal policies should be complementary, and incorporate the principles of "wise use" and "no net loss" of wetlands; accurately reflect their functions and values; and include the economic value of wetland's ecological services.
- In 2001, the Federal Commissioner of the Environment and Sustainable Development's *Report on the Great Lakes and St. Lawrence River Basin* (Office of the Auditor General of Canada 2001) highlighted the need for fuller engagement of, and coordination between, all federal departments on environmental issues (including wetlands). She called for fulfillment of existing commitments; a focus on fewer priorities; and, more effective research, monitoring and measurement systems.
- The timing is right, presenting many opportunities to link policy changes with innovative new initiatives being led by agencies such as the NRTEE and their work on *Ecological Fiscal Reform* and *Environmental Indicators of Sustainable Development* and Agriculture and Agri-Food Canada's *Agriculture Policy Framework*.

Actions: The following six actions, along with other current initiatives, will foster changes to the policy framework and enhance wetland conservation and protection in Canada.

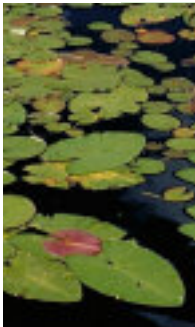
- 1.1 Policy Analysis:** While we already have a general idea of the conduciveness of the current policy framework towards wetland conservation and protection, we need further analysis, particularly that of non-wetland specific policies, legislation and regulations at the federal, provincial and territorial levels. A policy analysis will provide greater clarity on which of these tools support wetlands, directly and indirectly, and which ones do not, and/or work at cross-purposes. The North American Wetlands Conservation Council's *report Wetlands and Government: Policy and Legislation for Wetland Conservation in Canada* (Lynch-Stewart *et al.* 1999), could be applied in this analysis resulting in recommendations for further actions required to bring about changes.
- 1.2 Canadian Wetland Industry Policy:** In cooperation with key stakeholders, develop a policy to support a thriving environmentally sustainable Canadian Wetland Industry both domestically and internationally.
- 1.3 Socio-economic Valuation:** Incorporate the socio-economic value of wetlands into policies, programs and the system of national accounts. For example, data would identify the economic cost of flooding versus the cost of maintaining a wetland in its natural state, taking into account the role wetlands play in flood reduction. Secondly, the economic and social value of wetlands and the role they play in water quality, and this relationship to human health, would be documented and factored into water quality initiatives, policies, standards and technologies.

1.4 Policy Tools – Incentives: Examine incentives that now impact wetlands, directly and indirectly, and, in consultation with key audiences, recommend changes and create new incentives. Specific incentives include those created to:

- Stimulate Canada’s Wetland Industry;
- Encourage innovation and new technologies that directly and indirectly impact wetlands (e.g. waste treatment technologies, agricultural practices, landowner activities and communities).
- Prevent pollution of Canada’s wetlands (e.g. incentives for municipalities to enhance waste treatment facilities).
- Increase stewardship activities to conserve and protect wetlands.
- Foster the development and exchange of Beneficial Management Practices.

1.5 Accountability: In conjunction with the Federal Commissioner of the Environment and Sustainable Development and through federal sustainable development strategies, build an accountability mechanism to enable agencies to track their compliance to ensure that legislative and policy commitments are fulfilled.

1.6 National Standards, Protocols and Agreements: Create national standards, protocols, guidelines and principles and build them into national agreements on wetland technology such as treatment technologies, wetland restoration and construction.



Ducks Unlimited Canada believes that the key to getting all Canadians supportive of wetland stewardship is to change our working paradigm ... the initial paradigm guiding our approach to wetland protection centred on the concept of wetland conservation to protect wildlife, fish and biodiversity. We believe that the new paradigm to guide wetlands protection should be wetland conservation driven by the environmental and economic goods and services that they provide all Canadians. In particular, drinking water sources should be protected by developing watershed-based source water protection plans.

Brian Gray, Director of Conservation Programs, Ducks Unlimited Canada

Strategy #2: Integrated Watershed Management

Goal: By 2013, have in place an integrated landscape and watershed management approach to wetland conservation and protection across Canada, supported by appropriate incentives, policies, partnerships and programs based on accessible science, data and information.

Rationale:

- The decline in wetland quality and quantity can be attributed, in part, to a lack of integration across the policies and programs that impact wetlands; to a failure of organizations, industries, businesses and communities to take into account the multiple and cumulative impacts of stressors imposed by these organizations on wetlands and watersheds; and, to an absence of clearly articulated objectives. For example, a particular watershed or geographic region may have its hydrological and ecological functions impacted by nearby forestry practices, local farm operations and activities of a community. Understanding the direct, indirect, and cumulative effects of these activities on the landscape will provide the information necessary to alter practices, identify appropriate technologies, and data and information needs.
- Success at fostering an integrated landscape approach and stewardship activities will be influenced by peoples' level of awareness of wetlands and the hydrological and ecological role wetlands play in the landscape and watershed. For example, greater understanding of the correlation between healthy wetlands and clean drinking water will inspire the broader public to become better environmental stewards.

Actions: The following two actions will support Integrated Watershed Management planning in Canada.

2.1 National Forum: Conduct a national forum to determine the ecological and economic gaps about wetlands and Integrated Watershed Management Plans. Build information derived from this event into cross-Canada Integrated Watershed Management Plans.

2.2 Integrated Watershed Management Plans: Design and implement, through a comprehensive, multi-resource management planning process, Integrated Watershed Management Plans across Canada.



Agriculture and Agri-Food Canada will offer its continued support in working with Canadian wetland conservation agencies ... through our continued land and water stewardship efforts. We can all work towards our goal of environmental sustainability.

The Honourable Lyle Vanclief, M.P., P.C., Federal Minister of Agriculture and Agri-Food

Strategy #3: National Wetland Inventory

Goal: By 2013, have in place a national, repeatable inventory of Canada's wetlands, one that covers the extent, rarity, class, form and type, health status, function and social, economic and ecological values and aspects of wetlands.

Rationale:

- Without a good understanding of where Canada's wetlands are located, their classification, function, hydrological and ecological role in the watershed and across the landscape, they cannot be effectively managed, monitored nor valued from a social, ecological or economic standpoint.

- Information and data from sources including a National Wetland Inventory will serve as the basis for a comprehensive monitoring program; inform the development of national environmental indicators of sustainable development; help determine the socio-economic value of wetlands; stimulate new policy and program directions; and feed into and shape education, communication and awareness initiatives.

Actions: The following four actions will support the establishment and delivery of the National Wetland Inventory and a monitoring program.

3.1 Lead Agency: Identify a lead agency supported by a clearly defined mandate, legislated responsibility and resources to document and report on the nation's wetlands. The agency, in conjunction with the Federal Wetlands Forum, and potentially through a Working Group or Task Force, would develop a business case, program proposal and marketing plan for a National Wetland Inventory that specifies key users, applications, reporting requirements, and costs and benefits.

3.2 Classification Standards: In partnership with federal agencies, provinces, territories and key stakeholders, develop and deliver a consistent and standardized approach to the identification, classification and monitoring of wetlands including the means to measure net loss. This program would identify the extent, class, type, ecological and hydrological function of Canada's wetlands, and link to other national earth cover programs, such as the National Forest Inventory, and initiatives such as the Canadian Information System on the Environment, and environmental assessment data.

3.3 Social, Economic and Ecosystem Valuation: Create a coordinated research program resulting in baseline wetland ecosystem data, and information on the social and economic value of wetlands. Develop tools and processes through which the information can be shared on a continental basis to inform (e.g. (i) policy and program decisions; (ii) wetland management practices; (iii) Integrated Watershed Management Plans; (iv) a National Wetland Communications and Awareness Strategy; (v) river basin models; and (vi) the Canadian Forest Inventory). This would result in more effective identification of the state of Canada's wetlands, stressors, cumulative impacts, and mitigation and restoration options.

3.4 Indicators: In conjunction with partners such as the National Round Table on the Environment and the Economy and Agriculture and Agri-Food Canada, develop indicators, building on information derived from the inventory, that can be used to: (a) assess and monitor the state and extent of Canada's wetlands, and (b) as a natural capital indicator in the National Accounting System.



The North American Waterfowl Management Plan is delivering what it said it would, and it is doing so effectively, efficiently, economically and in an environmentally sound way. It has shown, in the area of wetlands conservation, that multi-jurisdictional and multi-sectoral programs can work and show success, and this sort of working together cross-sectorally will be absolutely necessary if we are to have any hope of implementing the concepts of sustainable development into our world.

The problems in the Great Lakes start with impaired research, monitoring and measurement systems. This is a symptomatic problem and it affects not only our knowledge and response to problems, but also our capability to develop and use indicators to measure how we are doing with respect to environmental and sustainable development goals. The changing state of wetlands is a good indicator of environmental health, and is being put forth both domestically and internationally as a good sustainable development and biodiversity indicator. One finding I want to highlight... having even more relevance today than in 2001 when I reported... is the need for fuller engagement of all federal departments... there is no single federal department or agency formally responsible for wetlands. Designating a lead department or agency would strengthen accountability for monitoring, evaluating and reporting federal action on wetlands.

Johanne Gelinias, Federal Commissioner of the Environment and Sustainable Development

Strategy #4: Governance and Mechanisms

Goal: By 2013, have in place a governance structure and supporting mechanisms that facilitate wetland conservation and protection.

Rationale:

- A governance structure, decision-making processes and mechanisms shape how Canada's wetlands are managed, and are a reflection of how they are perceived and understood. The trend toward economic valuation of ecological services and management of wetlands through an integrated landscape and watershed approach are not consistent with the current governance system. There is an opportunity for enhancing the current governance structure, establishing clear leads, commitment, roles, responsibilities, processes and outcomes.

Actions: The following four actions will facilitate improved governance and supporting mechanisms for wetland management in Canada.

4.1 National Wetlands Secretariat: Create or build on an existing cross-jurisdictional secretariat/national council or recharge the mandate and resources of an existing mechanism such as the North American Wetlands Conservation Council (Canada). This organization would partner with representatives of academia, non-government organizations, governments, industry, business, the wetland industry and others to develop a strategy for the wise use and sustainability of Canada's wetlands. This mechanism could be responsible through partnerships for facilitating the design and implementation of Integrated Watershed Management Plans. It could also be responsible for coordinating and tracking the implementation of recommendations emanating from the Conference on Canadian Wetlands Stewardship, and fostering the exchange of wetland-related information and stewardship programs, including information on incentives, funding sources, science, and wetland functions and values through a "one-stop-shopping" website operated in partnership with other jurisdictions.

4.2 Centres of Excellence for Innovation and Technology: Create and fund national Centres of Excellence including a national network for wetland innovation and technology, based on regional representation and focused on science and research. Link these Centres to a national lead agency on wetlands to ensure continuity and cooperation.

4.3 Partnerships and Decision-Making Processes: Given the multitude of stakeholders that impact wetlands, promote the use of inclusive decision-making processes and partnerships including:

- Learning from existing processes and tools such as *Building Consensus for a Sustainable Future* (NRTEE 1993).
- Involving key stakeholders – (a) around a particular issue, and (b) within a particular geographic region or watershed.

4.4 Wetland Trading Regime: Establish a "blue-ribbon panel" to explore the feasibility of creating a wetland-trading regime. This panel would be responsible for leading the following in order to:

- Define a national wetland currency based on a "tradable unit" for wetland functions. This is predicated on first determining more accurately wetland functions from an ecological services standpoint.
- Identify land uses and sectors affecting wetland functions to establish a "trading position."
- Examine comparable carbon trading and forest industry initiatives as examples.
- Create a public registry of trading positions accompanied by a wetland inventory.
- Establish a brokerage to facilitate restoration efforts.
- Develop a macro evaluation and certification process.
- Assign a monetary value for privately owned wetlands so landowners can sell wetland units to industry to offset wetland losses from that industry.



Canada has led the world in implementing a policy-driven, voluntary approach to wetland conservation. Much of the success in our approach can be attributed to the adoption of new approaches and mechanisms, including the recognition that the government cannot accomplish its goals alone. We will continue to work in partnership with all of those who are affected by our conservation policies. We will include urban and rural Canadians, Aboriginal Peoples, business, industry and each level of government. All Canadians must be involved as we define and implement Canada's wetland agenda.

Alan Tonks, M.P., Parliamentary Secretary to the Minister of the Environment

Strategy #5: Enhancing Capacity

Goal: By 2013, have in place across Canada the resources, science, knowledge, tools and degree of understanding to provide the means to fulfill *Canada's Wetland Vision*.

Rationale:

- Building the right infrastructure needed to ensure that Canada's wetlands are effectively conserved and protected requires an infusion of resources into technology, science, education, governance mechanisms, decision-making processes and programs.
- While the federal government, in particular, Environment Canada has traditionally been seen as the funding source, the onus is also on other agencies, organizations and levels of government to collaborate on building this capacity and providing financial resources. The benefits to Canadians of wetland conservation are widespread, as should be the costs.

Actions: The following three actions will facilitate capacity building for wetland conservation in Canada.

5.1 Wetland Research Fund: Under the auspices of the proposed national Wetland Council or lead agency, establish a Wetland Research Fund in partnership with government and non-government sectors, and institutions, with a minimum of 25% going to socio-economic research. This Fund would serve as a single window to wetland-related funding for all agencies.

5.2 Federal Funding: Increase federal funding and leveraging to support applied wetland research.

5.3 Non-Traditional Funding Sources: Explore securing a portion of federal funds from non-wetland related initiatives (e.g. from federal infrastructure funding).

Strategy #6: Promoting Wetland Education and Communication

Goal: By 2013, achieve a high level of ecological literacy by Canadians, including a greater understanding of wetland functions and values.

Rationale:

- Decisions at all levels are influenced by the level of understanding of the issues at hand; yet wetlands are still not "on the map" to the extent that they should be to be properly managed.
- While there is excellent science and information already available on the nation's wetlands, Canadians would still benefit from a greater understanding of the many facets of wetlands and the valuable role they play in the economy, society and environment – from agriculture to clean water. A combination of better science and information; access to that information; and communication across the country will contribute to a shift in perception, and subsequently, decisions and actions.

Actions: The following four actions will support development of a National Wetland Education and Communication Strategy.

6.1 National Strategy: In conjunction with partners, establish a National Wetland Education and Communication Strategy with audience-specific components and tools focusing on the multiple benefits of wetlands, healthy watersheds and Integrated Watershed Management Plans. The Strategy should include:

- an emphasis on the principles for sustainable use, wise use and no net loss;
- beneficial management practices (see below);
- data, knowledge and science on wetland functions, values and technological innovation;
- socio-economic value of the ecological services that wetlands provide; and
- information on the social and economic values derived from the wetland industry.

6.2 Beneficial Management Practices: Develop and document watershed and landscape Beneficial Management Plans. Through a combination of incentives and inclusion in the National Wetland Education and Communication Strategy, facilitate their replication across the country.

6.3 Mentorship Program: Create a Wetland Mentorship Program to enable individuals to tap into the wealth of expertise that now exists in Canada, recognizing that many individuals who have been leaders in the field of wetland conservation will retire over the next ten years.

6.4 National Coalition of Wetland Education Centres: Create wetland education centres with a common vision, linked through a centralized system of information-sharing, programs and resources.



We must take seriously the report of this conference's workshop on education, where ecological literacy was seen as requiring action in addition to science. Wetland stakeholders must learn to be even better players in overall society, if they want to see progress.

Harvey Mead, Chair, National Round Table on the Environment and the Economy

Strategy #7: Fostering a Sustainable Wetland Industry

Goal: By 2013, Canada has a thriving, sustainable and internationally-recognized wetland industry.

Rationale:

- Canada's wetland industry is poised to become a more significant player in both domestic and international markets. There are opportunities for greater cohesion, communication and collaboration within and outside the industry, translating into a better competitive edge.
- Fueling this advantage will be greater collection and distribution of information on the value to the Canadian economy of the wetland industry, its sectors, and as a whole.
- With international pressure on countries to produce goods in a sustainable manner, Canada is well positioned to showcase best practices (e.g. by incorporating the principles of "wise use" as per the Ramsar Convention on Wetlands).

Actions: The following action will support development of Canada's wetland industry.

7.1 National Wetland Industry Association: Establish a National Wetland Industry Association to foster greater horizontal collaboration across the wetland industry and undertake the following:

- Work closely with the national lead agency or council to build linkages with other wetland-related initiatives;
- Determine if a national policy pertaining to Canada's wetland industry is necessary;
- Establish a regulatory body or structure to integrate cross-jurisdictional policies that will support wetland industries;
- Examine government policies for (i) opportunities for the wetland industry; (ii) barriers and disincentives and develop targeted recommendations;
- Support the design of new wetland-related technologies, seeking resources from Technology Partnerships Canada and Environment Canada; and
- Develop tools, technologies, guidebooks and research initiatives.

CONCLUSIONS

The North American Wetlands Conservation Council (Canada) and the Federal Wetlands Forum take the significant energy and enthusiasm expressed at the February 2003 Canadian Wetlands Stewardship Conference as a strong indicator of our potential for bringing about new policy and program directions over the coming decade. Since the conference, progress is already evident. This includes the securement of resources allocated to the next phase of the National Wetland Inventory.

With so many linkages between the recommendations, current initiatives and priorities, the synergies support: (a) stimulating, using and exporting new technologies; (b) designing and applying creative new incentives to increase wetland stewardship activities; (c) expanding our understanding of the ecological services wetlands provide – factoring that into traditional economic models and national accounts; and (d), ultimately reaching Canada's Wetland Vision. Let us work together to make the vision a reality over the coming decade!

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APPENDIX: YOUR INPUT TO THIS PLAN IS NEEDED

This report *Wetlands Stewardship: New Directions* provides a set of seven strategies and supporting actions to foster implementation of a forward-looking plan for wetlands stewardship in Canada. Your individual or organization's input to this plan is requested. This implementation plan will act as a tool to coordinate an implementation process; and serve as a framework to report on progress and commitments in implementing these strategies and actions.

A response template is available to respondents to make it easier for you to reply in writing and to transmit this to the Wetlands Task Force. This report in pdf format and the response template in Microsoft Word are available on the Stewardship Canada Portal (see: www.stewardshipcanada.ca). Respondents are asked to:

- Identify **Possible Leads and Mechanisms** for those strategies and actions that your agency could lead or implement through a partnership, noting current or potential partner(s) where appropriate. Where applicable, also specify existing or proposed mechanisms that could be used to take this strategic recommendation forward.
- Identify **Policy and Program Linkages** to your programs, policies and initiatives (or those of other organizations), outlining in greater detail opportunities for sharing in the implementation process.
- Rank the **Priority** for the strategies and actions.
- Indicate, where possible, a **Timeframe** that could be short (two-year), medium (five-year) and long-term (eight-year).

Responses should be e-mailed to the Wetlands Task Force at the North American Wetlands Conservation Council (Canada): nawcc@bellnet.ca in Ottawa.

