

---

# WETLAND POLICY IMPLEMENTATION IN CANADA

*Proceedings of a National Workshop*

---

*Published in partnership with:*



**Environnement  
Canada**

**Canadian Wildlife  
Service**

**Environnement  
Canada**

**Service canadien  
de la faune**



**Manitoba  
Habitat  
Heritage  
Corporation**



**Canards Illimités Canada  
Ducks Unlimited Canada**

***Report No. 94-1***



***North American Wetlands Conservation Council (Canada)***

Published 1994  
Ottawa, Ontario

ISBN 0-662-22-720-4  
Cat. No. CW69-10/1-94-1E

The *NAWCC (Canada) Reports* are published by the Secretariat to the North American Wetlands Conservation Council (Canada). These reports are devoted to the publication of information concerning wetland management, policy and science issues. The objective is to make people in Canada and elsewhere more aware of the importance of the wise use and conservation of wetland ecosystems and their natural resource values.

Funding and support for the production of this report were provided by the following agencies:

- Alberta Water Resources Commission
- Canadian Wildlife Service, Environment Canada
- Ducks Unlimited Canada
- Manitoba Habitat Heritage Corporation
- North American Wetlands Conservation Council (Canada)

Copies of this report are available from the:

Secretariat  
North American Wetlands Conservation  
Council (Canada)  
Suite 200, 1750 Courtwood Crescent  
Ottawa, Ontario K2C 2B5

Également disponible en français.



Over 50% recycled paper  
including 10% post  
consumer fibre

Plus de 50 p. 100 de  
papier recyclé dont 10 p.  
100 de fibres  
post-consommation

---

**WETLAND POLICY IMPLEMENTATION  
IN CANADA**

***Proceedings of a National Workshop***

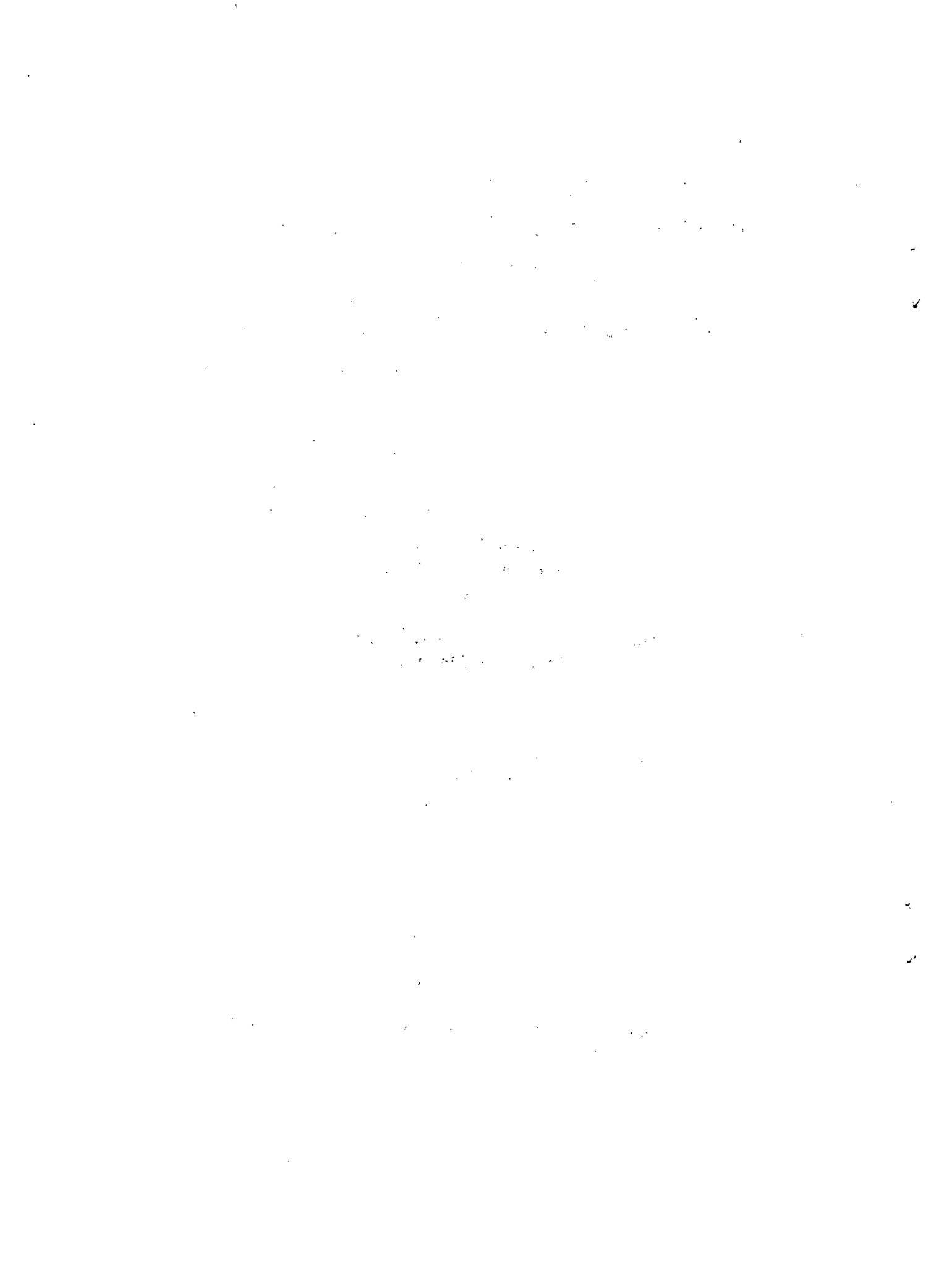
---

**June 12, 1994  
Winnipeg, Manitoba  
and  
June 13-14, 1994  
Oak Hammock Marsh Conservation Centre  
Stonewall, Manitoba**

**Compiled by  
Clayton Rubec**

**Report No. 94-1**

**North American Wetlands Conservation Council (Canada)**



---

## ***ACKNOWLEDGEMENTS***

---

The following agencies provided funding and support for this National Workshop:

- Alberta Environmental Protection
- Alberta Water Resources Commission
- Canadian Wildlife Service, Environment Canada
- Ducks Unlimited Canada
- Manitoba Habitat Heritage Corporation
- North American Wetlands Conservation Council (Canada)
- Oak Hammock Marsh Conservation Centre

The Organizing Committee for the workshop comprised: Ron Coley, Ducks Unlimited Canada; Ken Cox, NAWCC (Canada) Secretariat; John Lilley, Alberta Water Resources Commission; Clayton Rubec, Canadian Wildlife Service, Environment Canada; and Sam Thornhill, Alberta Environmental Protection. Advice and assistance in preparing the agenda and organizing logistics for this meeting was provided by Pauline Lynch-Stewart of Lynch-Stewart and Associates and Theresa Dupuis of Ducks Unlimited Canada. Pauline Lynch-Stewart, Catherine Rostron and Steven Kearney acted as session rapporteurs, providing written summaries of working group discussions. Catherine Rostron prepared a draft overview and summary of the meeting for inclusion in these proceedings.

Considerable attention was paid to the provision of excellent facilities at the Oak Hammock Marsh Conservation Centre by the staff of the Centre, for which the Organizing Committee is most grateful.

---

## ***CONTENTS***

---

Acknowledgements	ii
Preface	v
Opening Remarks - Ken Cox and Gerry Lee	1
The Evolution of Wetland Policy in Canada - Clayton Rubec	5
Achieving Policy Commitments and Cooperation for Wetland Conservation - Robert Sopuck	19
Welcome to Oak Hammock Marsh Conservation Centre - D. Stewart Morrison	31
Challenges Facing Wetland Policy Implementation in Alberta's Agricultural and Forested Landscapes - John Lilley	33
Experience with the Implementation of the Federal Policy on Wetland Conservation - Pauline Lynch-Stewart and Gerry Lee	41
Experience with the Implementation of the Ontario's Wetlands Policy Statement - Kevin Loftus	49
Development of a Wetland Policy for New Brunswick - Pat Kehoe	61
The Wetland Evaluation Guide: A National Tool for Mitigation Assessment and Wetland Decision-Making - Ken Cox	67
Wetland, Agricultural and International Trade Policy Interactions - Jim Patterson	69
Implementing Wetland Policy: Lessons from the United States - Kirk Andries	77
Observations on the Workshop:	
• Rich Goulden, Manitoba Habitat Heritage Corporation	87
• Joseph Larson, University of Massachusetts	91
• Caroline Caza, Wildlife Habitat Canada	95

Summary of Group Discussions and Workshop Recommendations - Catherine Rostron and Clayton Rubec	99
Appendix 1: Agenda for Meeting and Working Group Questions	113
Appendix 2: List of Participants	117
Appendix 3: Wetland Policy Documents and Source Agencies	121

---

## **PREFACE**

---

Wetland conservation and management policies across Canadian government jurisdictions and industry sectors have evolved rapidly in the last several years in Canada. Six Canadian provinces, the federal government and several major resource-based industries have now brought forward or implemented wetland policies. In this regard, Canadians have made significant advances that are internationally-recognized and models for other nations.

The Canadian Wildlife Service and its partners in this workshop, the Alberta Water Resources Commission, Alberta Environmental Protection, and the Manitoba Habitat Heritage Corporation as well as Ducks Unlimited Canada, share a common interest and vision for wetland conservation. Conservation policy, of course, remains only one of the varied and successful opportunities we collectively pursue to ensure wise use, restoration and sustainability of our nation's wetlands for a wide range of biodiversity values. Canada's network of Ramsar Wetlands of International Importance, the Western Hemisphere Shorebird Reserve Network, and the Pacific Coast, Prairie Habitat, and Eastern Habitat Joint Ventures of the North American Waterfowl Management Plan are some of the foremost examples of wetland conservation partnerships in this nation.

The Secretariat to the North American Wetlands Conservation Council (Canada) has provided a timely summary of the National Workshop on Wetland Policy Implementation with these Proceedings. This report, *Wetland Policy Implementation in Canada: Proceedings of a National Workshop*, presents the text of 14 invited presentations at the meeting. A summary of working group discussions and workshop recommendations are also provided. The agenda for the meeting, a list of participants, and wetland policy documents and source agencies available across Canada are presented as appendices to these proceedings. We hope this report serves as a valuable reference to those involved in bringing forward wetland policy in Canada and elsewhere.

James D. McCuaig  
Director  
Water and Habitat Conservation  
Environment Canada

---

## ***OPENING REMARKS***

***Kenneth W. Cox***

***Secretariat***

***North American Wetlands Conservation Council (Canada)***

***and***

***Gerry Lee***

***Canadian Wildlife Service***

***Environment Canada***

---

## ***REMARKS BY KEN COX***

Thank you very much for taking the time to come to this meeting. It is getting more and more difficult to assemble a group of people from across Canada. With restricted budgets, fewer and fewer people are doing at least the same amount of work, if not more. The first and last national meeting on wetland policy was held in Toronto in 1987 and co-chaired by Nancy Patterson and myself. This was a meeting of non-government organizations to advise government on wetland policy development. At that time there were no wetland policies in Canada. In 1987, governments in Canada were working on two such policies (one federal, one provincial) and now there are three approved and four or five more being developed.

Clayton Rubec and I have been talking for nearly two years about holding a national wetland policy meeting. To that end, I would like to give special thanks to Alf Birch from the Alberta Water Resources Commission, who came into our office one day and said, "You know I do not understand why the Council isn't holding a national wetland policy workshop." We said, "Well, we have been thinking about it but we need some partners to help us." Alf offered his help right there. I would just like to thank him for the nudge.

I would like to thank the main sponsors of these sessions: the Alberta Water Resources Commission, Alberta Environmental Protection, the Canadian Wildlife Service of Environment Canada, Ducks Unlimited Canada, and the Manitoba Habitat Heritage Corporation. I would also like to thank the Organizing Committee: Ron Coley from Ducks Unlimited Canada, John Lilley from the Alberta Water Resources Commission, Clayton Rubec from the Canadian Wildlife Service, and Sam Thornhill from Alberta Environmental Protection for their work in putting the workshop together. I would also like to give special thanks to Clayton Rubec for all the work he did in organizing the program and logistics of the meeting.

## **OBJECTIVES OF THE WORKSHOP**

The three objectives of this workshop are:

- (1) To encourage the exchange of experience with wetland policy implementation in Canada.
- (2) To discuss strategies and approaches with respect to issues involved in implementation procedures and guidelines for these wetland policies.
- (3) To prepare a national summary paper for distribution to participants, their agencies, and the wider audience of wetland managers and the public in Canada.

You have been invited as experts in the field of wetland policy/wetland management and not necessarily as a representative of your organization. So please speak freely from your experience and knowledge of wetland management issues, and help us explore the state of the art of wetland policy formation in Canada.

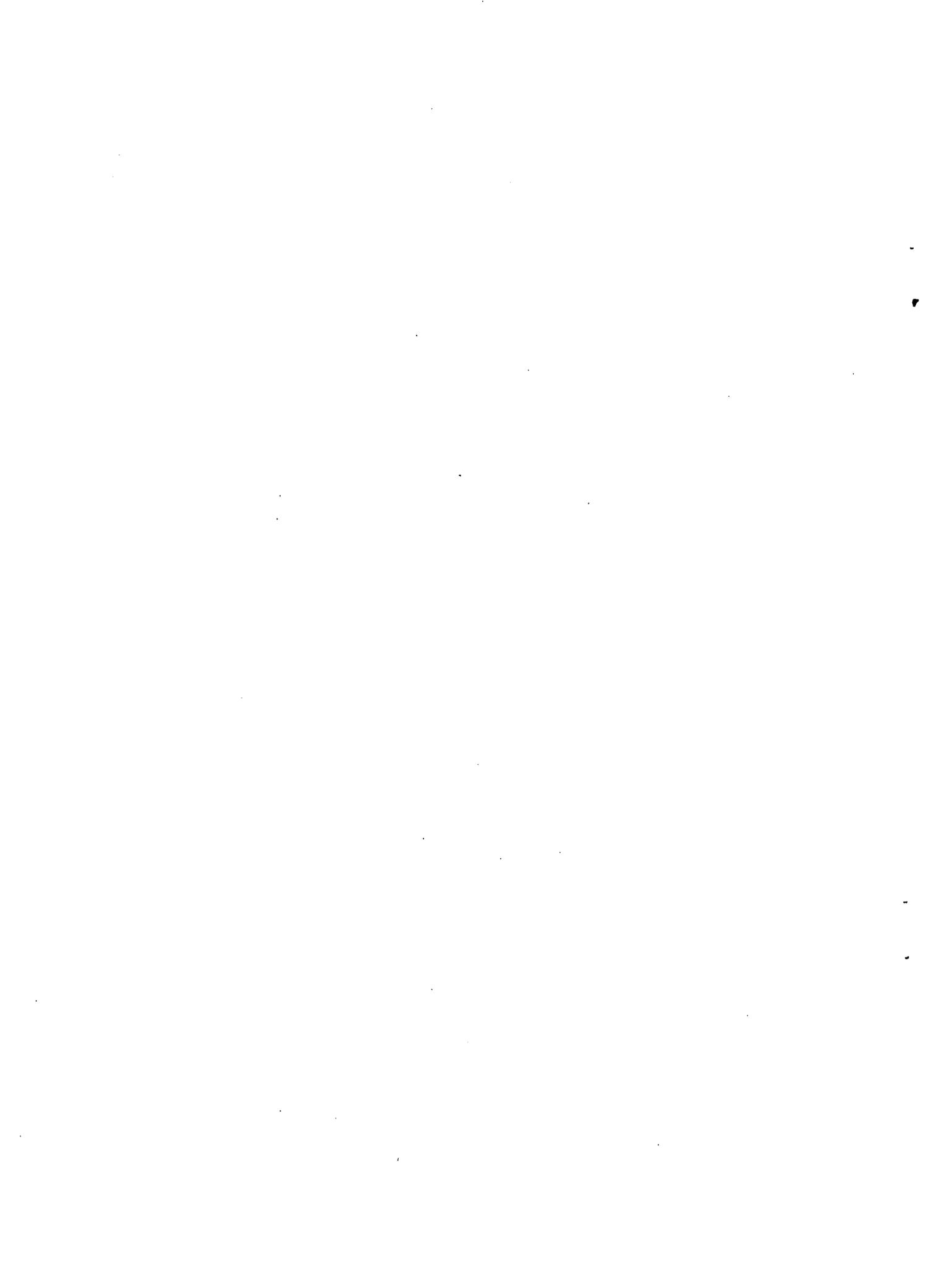
## **REMARKS BY GERRY LEE**

The federal government, as you are all aware, has had *The Federal Policy on Wetland Conservation* in place now since early 1992. In recent months we have run into that thorny issue of having to apply something we have written. It is one thing to be able to sit in an ivory tower and draft a policy, pass it around the country, and get reactions. I think many of you here had an opportunity to actually review our draft policy a couple of times and some of your comments, not all of them but some of them, actually made it through into the way it now appears. In the cool light of reality, when you have to start applying these things on the ground you do run into some problems.

I will just give you a short comment on an experience I had just last week. I'd stopped in to get some gas on the way to work. The gas attendant, this is a full-serve, was anxious to tell me all about the problems with the Rae government in Ontario. He was whining and complaining that we were becoming Communists. The rest of the world has just got rid of Communism and we are taking it on in Ontario he said. I listened to him for a few minutes and then he said even the farmers are starting to lose their lands now. I said, "How are they losing their lands?" He said, "Well, with that wetland policy, they can't do anything on their farms now; they are going to have to give up farming because they can't do anything on those wetlands." So I listened to him rant and rave a little bit more. Of course I didn't tell him who I was with or what I was about.

The point I want to make here is that wetland policy and its implementation, are not just something that we in the room here are dealing with alone. These issues are on the lips of the people on-the-ground. We have seen on television in the Ottawa Valley, and I'm sure others have seen it in other provinces, where people are going to the microphone at public meetings

and complaining about the fact that some of their lands are now being tied up under wetland policies. They are quite concerned about it; they view it as, one speaker referred to it as "outright theft." These are the kinds of things that I think we need to start addressing in this workshop because we run the risk of these policies all falling on the rocks if we don't begin to address them in some fashion.



---

# ***THE EVOLUTION OF WETLAND POLICY IN CANADA***

***Clayton Rubec  
Canadian Wildlife Service  
Environment Canada***

---

## ***INTRODUCTION***

In the last 200 years, about 14% (or 20 million ha) of the wetlands in Canada have disappeared from the landscapes in which we live. Canada has a special position in the World; a quarter of the wetlands that now remain on the face of the Earth are in our country. About 15 years ago, Canadians saw a need for a wider variety of tools to focus on wetland conservation. Today many different ways are used to address that issue in Canada and policy is one way we are proceeding.

We are faced with a battle of not only dealing with wetlands as a threatened landscape in many areas of Canada but also conserving overall biodiversity in these ecosystems. Wetland conservation is linked to many of the current environmental and socio-economic issues in our nation. The range of factors that are involved and the agencies that must become involved in finding solutions to wetland decline are many - including our fisheries, water, wildlife, parks, and forestry sectors for example (see Figure 1). In the last several decades we have seen major initiatives related to conservation of the functions of our wetlands. The protection of migratory birds and their habitats, for example, is being undertaken through initiatives such as the North American Waterfowl Management Plan and the Western Hemisphere Shorebird Reserves Network.

There has been increased recognition of the value of wetland ecosystems in recent years. Wetland loss due to agriculture, urbanization, industrial development, water management projects, and a variety of related activities has made wetland conservation an issue in many jurisdictions. Modification or loss of wetland ecosystems has been extensive in some regions. For example, over 70% of the wetlands in the southern portions of the central Prairies, southern Ontario and the Fraser Lowland in British Columbia have been converted to other land uses. However, wetland disturbance has been minimal in lightly populated areas of Canada such as the boreal zone where most of our forested wetlands are found.

Figure 2 is a map focusing on where wetlands and their related biodiversity values are at greatest risk in Canada. The dark (black) areas on the map depict the areas where land use pressures from agriculture and urban development on wetlands are at their greatest. The stippled (grey) areas are where agriculture and forestry as well emerging issues such as hydro-electric development pose threats to wetland integrity. These areas also include coastal

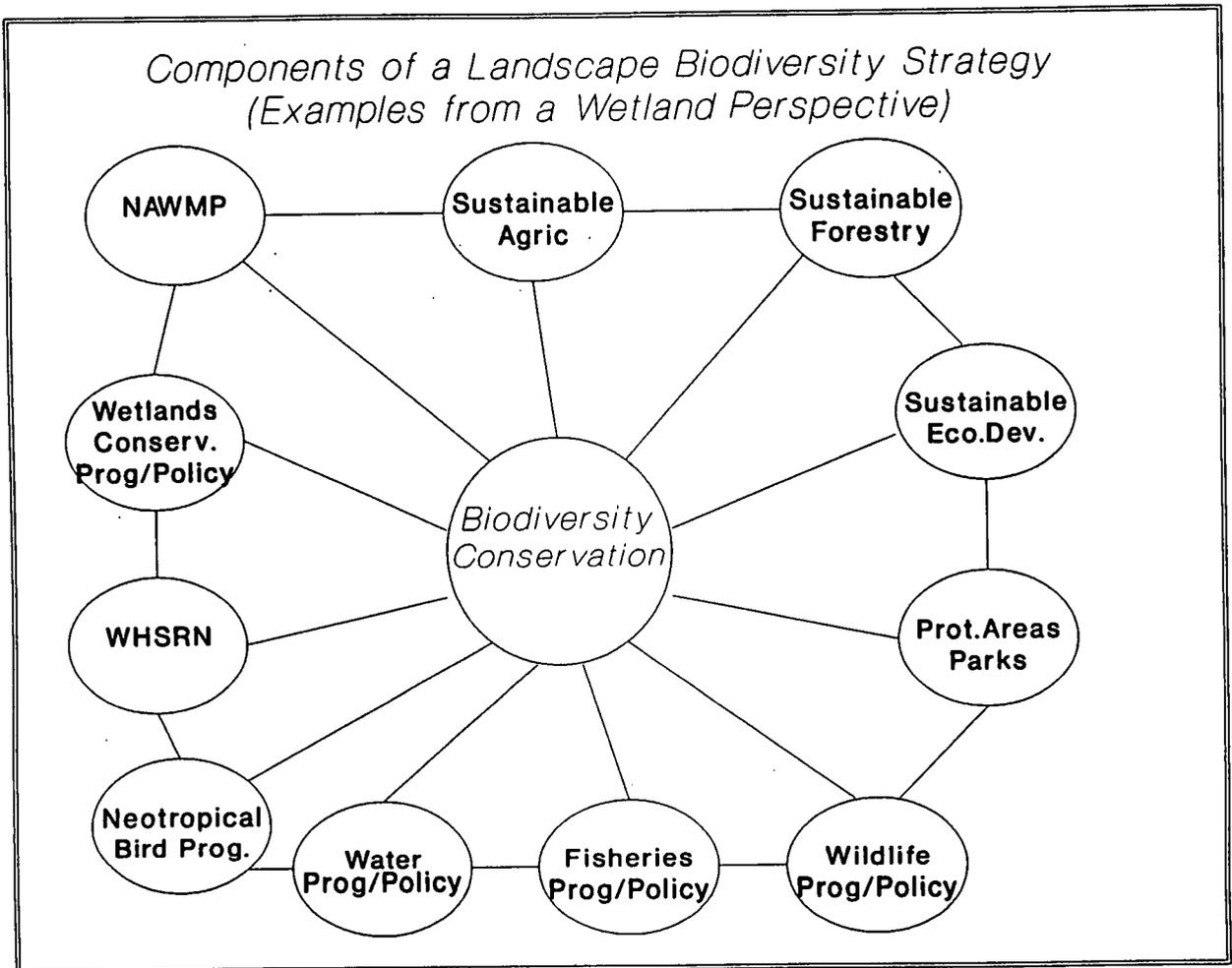


Figure 1: Elements of Biodiversity Conservation from a Wetland Perspective

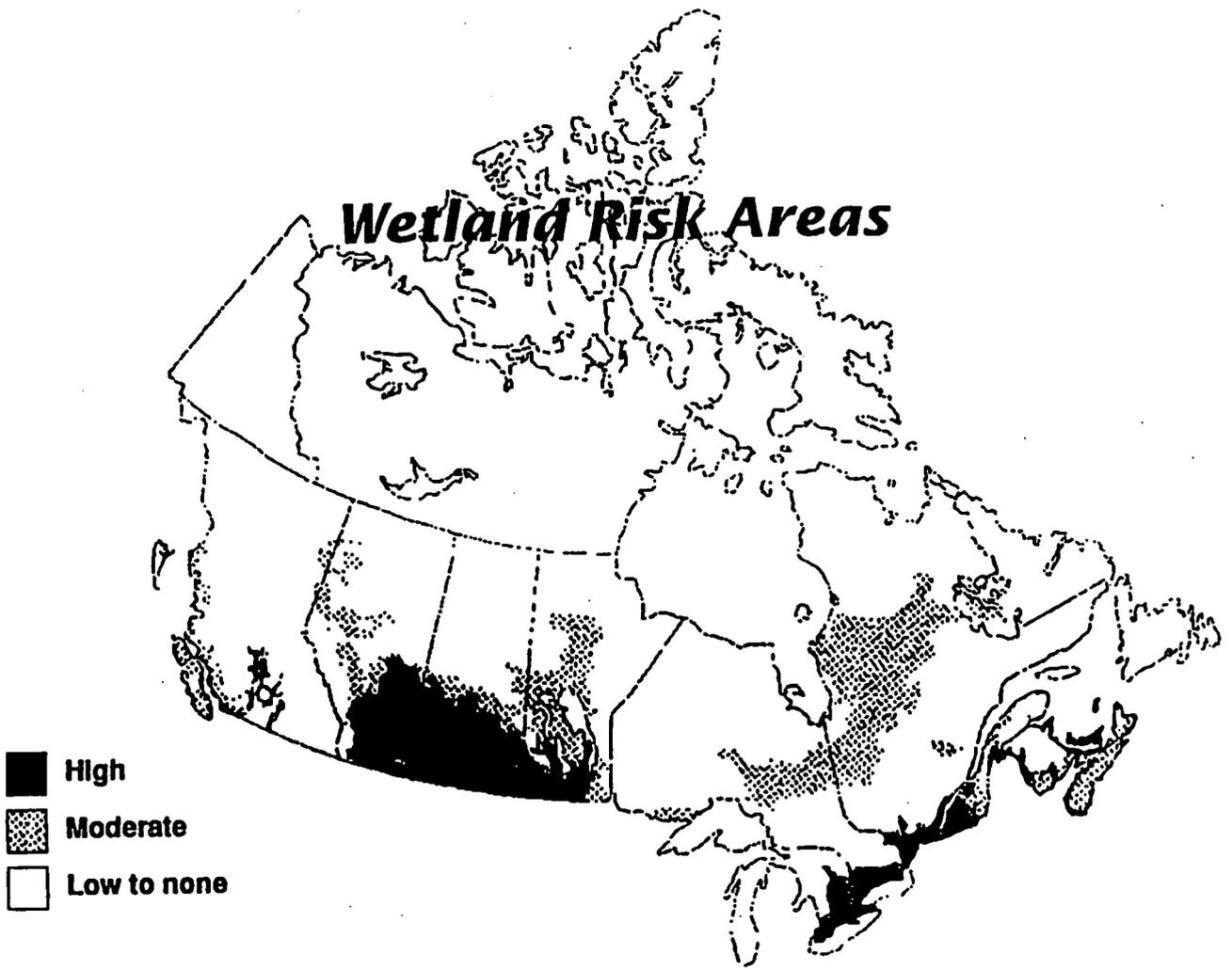


Figure 2: Areas of Relative Risk to Wetland Ecosystems in Canada

zones where there has been extensive development for ports of harbours. The lightest (white) areas have minor or no threats to wetland resources.

## ***THE CANADIAN APPROACH TO WETLAND CONSERVATION***

During the last ten years a major shift in conservation programs and policy has been unfolding with regard to the use and management of the wetland resources of Canada. The governments of Canada and six Canadian provinces to date have in place, or are developing, wetland policies. In our ten provinces and two territories, lie an estimated 127 million hectares of wetlands. Conservation policy is focusing on sustainability of the resources that Canadians and our world markets use from these systems, including forest products, wildlife, peat moss, and other goods. These provide billions of dollars in benefits to Canadians each year. The functions and values derived from our wetlands are important to our economy, an ecosystem vital also to our people and, indeed, the World.

Canadians and their governments, as well as the industries working in these landscapes, appear committed to sustainable development and wise use of our wetlands within a voluntary and non-regulatory framework. This is different than other areas of the North American continent in which we live. The key to the successful implementation of this approach has been the creation of effective management partnerships and political will, transcending sectoral and jurisdictional boundaries.

There are five major aspects to the Canadian approach to wetland conservation, each of which is briefly discussed below. These aspects are:

- Wetland securement and protection;
- Wetland restoration and enhancement;
- Designation of important wetland sites;
- Modification of sectoral policies; and
- Development of wetland policies and/or legislation.

### **Wetland Securement and Protection**

One of the political objectives of all governments in Canada is protection of at least 12% of our landscapes. In Canada over half the land area secured for conservation objectives has been driven by wildlife habitat objectives, not for parks or public recreation objectives. A study was recently undertaken by Rick Bryson and Associates (1993) funded by Environment Canada and the Canadian Forest Service. This revealed that the Government of Canada to date has protected over 7.1 million hectares of wetlands in its network of federal protected areas. The study included 180 federal sites: National Wildlife Areas, National Parks and Migratory Bird Sanctuaries. Provincial and territorial government initiatives likely would match the federal leadership in this area but hard statistics are difficult to compile. This would

suggest that about 15 million ha of wetlands, or 12.5% of all our nation's wetlands, are under a protected or conservation management status in Canada today.

### **Wetland Restoration and Enhancement**

Canadians are involved in many habitat restoration or enhancement programs such as the North American Waterfowl Management Plan (NAWMP) in cooperation with the United States and Mexico, the Great Lakes Wetland Action Plan, Plan 2000 in the St. Lawrence River system in Quebec, and the Fraser River Action Plan in British Columbia. These are examples of large enhancement and restoration programs. Environment Canada has provided significant funding and support for these federal-provincial cooperative "flagship" programs involving wetland conservation. NAWMP is one of the largest land use programs in North America's history, having already expended in the area of CA\$ 187 million in Canada over the 1987-1994 period. It has resulted in securement of over 830 000 ha of wetland and upland habitat across Canada so far.

The North American Waterfowl Management Plan, initiated in 1986, was developed jointly between Canada, the United States, and Mexico to reverse or modify activities that destroy or degrade waterfowl habitat, primarily wetlands. This multilateral initiative proposes to invest over \$1.5 billion in wetland conservation and management in Canada. The Plan recognizes that, in the face of major alterations to the landscape by people, the continued maintenance and restoration of wetlands is necessary to provide suitable habitat for waterfowl and many other wildlife species.

### **Designation of Important Wetland Sites**

Canadians are also using site designation initiatives such as the Ramsar Convention to assist in securing wetlands. There are many additional mechanisms also used to identify significant or sensitive wetland areas. One of the responsibilities of the Canadian Wildlife Service is tracking activities in Canada under the Convention on Wetlands of International Importance (the Ramsar Convention). Canada is one of the most active countries in the World in terms of use of this mechanism to identify and secure wetlands of importance. There are 32 Ramsar sites in Canada covering over 13 million ha in total, individually ranging in size from 244 to over 6.2 million ha. Of the 650 Ramsar sites in the World, Canadian sites represent about one third of the global total area designated under the Ramsar Convention. Hence, Ramsar is one mechanism that all the governments in Canada use to identify and highlight sites that are of particular interest not only to Canadians but the World.

### **Modification of Sectoral Policies**

In the last several years we have seen major undertakings to modify existing economic and resource management policies and programs in sectors such as forestry and agriculture, to globally benefit wetland biodiversity. The implementation of GATT and NAFTA and inter-

national trade negotiations are viewed as opportunities to substantially influence wetland conservation in Canada (Patterson and Rubec 1993, Patterson 1994).

### **Development of Wetland Policies and/or Legislation**

The functions that wetlands provide are important to Canadians. Virtually all wetland conservation and management policies to date in Canada have focused to some degree or entirely on the functions that our wetland systems provide. The main areas have been: water quality and flood damage reduction; resource harvest from wetland sites; and the recreational values of our wetlands. These are the functions that Canadians value the most and derive the greatest amount of direct and financial benefit from, estimated to exceed CA\$10 billion annually.

In the mid-1980s, our federal and provincial governments, as well as the industry and private sectors, recognized that in addition to our initiatives for wetland protection, restoration, enhancement and designation, we needed to do more. We needed to put wetland conservation at the forefront as a matter of public policy. In the 1986-1987 period, government and other sectors in Canada started to create wetland policy, relative to their own jurisdictions, industry groups or private sector groups. However, they recognized that we could do not this as one single national initiative. It would have to be done sector by sector and jurisdiction by jurisdiction, within some kind of framework that we could all agree upon. That led to a series of workshops from 1987 through 1990.

In early 1987, Environment Canada sponsored a Non-Government Organizations Workshop on Wetland Conservation Policy. This workshop developed a series of recommendations directed to all governments in Canada concerning the need for wetland policy. These recommendations were sent to all Environment and Natural Resource Ministers across the country. The Federal-Provincial Committee on Land Use in June 1987 produced a report entitled *A Framework for Wetland Policy in Canada*. This report was endorsed by the full committee and members agreed to encourage use of this framework, as appropriate, in their own jurisdictions. Also in early 1987, the Federal Interdepartmental Committee on Land identified the need to develop a wetland policy statement to supplement the "wise land use" provisions of the *Federal Policy on Land Use*. The *Federal Water Policy* adopted in 1987 also identified wetland conservation as a significant water resource issue.

Another major event in 1987 was the Third Meeting of the Contracting Parties to the Ramsar Convention, held in Regina, Saskatchewan. One result was the drafting of a document called *Wise Use Principles* for the wetland resources of the World. A commitment that Canada adopted when endorsing those principles was the development of wetland policies.

Subsequently, a major national policy conference, the Sustaining Wetlands Forum (1990), produced recommendations for action including a call for all jurisdictions in Canada to adopt mutually supporting wetland conservation and management policies. This conference included a keynote address by the Prime Minister of Canada who called for urgent action to

conserve the nation's wetland resources. Subsequently, *Canada's Green Plan* announced the federal government's commitment to adopting a federal wetland policy.

## ***THE FEDERAL POLICY ON WETLAND CONSERVATION***

One of the original considerations in the development of the federal wetland policy was that it should be crafted to deliver Canadian commitments to the Ramsar Convention on Wetlands of International Importance wherever possible. It was also apparent that greater influence on land use decisions by federal departments and agencies would assist in meeting Canada's commitments under the North American Waterfowl Management Plan. More recently, following Canada's endorsement of the International Convention on Biodiversity in 1992, it is expected that Canada's federal wetland policy will form a portion of implementation initiatives for this important and far-reaching international agreement.

The federal government initiated a consultation process toward this federal wetland policy in late 1987. The development of the North American Waterfowl Management Plan and the Federal Water Policy were ongoing in that period. We consulted with our partners across Canada in developing that policy and it was publicly announced in March of 1992. The Sustaining Wetlands Forum and the federal policy recognized that wetland conservation is an economic opportunity for Canada that must involve the private sector. The federal initiative was designed to complement what other governments would do and the wide range of activities that the federal government has with regard to wetland management and conservation. It was also meant to demonstrate leadership; we think it has done that. Canada was the first government in the World to announce a wetland policy. Today, at least 30 other countries are developing national or federal level policies.

The *Federal Policy on Wetland Conservation* (FPWC) announced by the Government of Canada on March 9, 1992 focuses on the sustainable wise use of wetlands in Canada, consistent with the "Wise Use Principles" developed by the Ramsar Convention. The federal policy applies to all of its agencies, programs and projects. It is being implemented through existing programs and budgets. The Canadian Wildlife Service of Environment Canada acts as an inter-agency advisor assisting departments in the design of mechanisms to implement the Policy in their programs. Environment Canada is currently leading interdepartmental consultations on a draft report entitled *Implementing Wetland Policy: A Guide for Federal Land Managers* to accompany this Policy (Lynch-Stewart 1994).

### **Goals of the Federal Wetland Policy**

The stated objective of the Government on Canada as articulated in this new Policy with respect to wetland conservation is:

*"to promote the conservation of Canada's wetlands to sustain their ecological and socio-economic functions, now and in the future."*

In support of the above objective, the Government of Canada, in cooperation with the governments of its ten provinces and two territories as well as the Canadian public, will strive to achieve the following goals:

- . **maintenance** of the functions and values derived from wetlands throughout Canada;
- . **no net loss** of wetland functions on federal lands and waters;
- . **enhancement and rehabilitation** of wetlands in areas where the continuing loss or degradation of wetlands or their functions have reached critical levels;
- . **recognition** of wetland functions in resource planning, management and economic decision-making with regard to all federal programs, policies and activities;
- . **securement** of wetlands of significance to Canadians;
- . **recognition of sound, sustainable management practices** in sectors such as forestry and agriculture that make a positive contribution to wetland conservation while also achieving wise use of wetland resources; and
- . **utilization** of wetlands in a manner that enhances prospects.

The FPWC focuses on areas of federal jurisdiction and management of wetlands under direct federal authority. Because Canada is a federal state, wetlands in its ten provinces are generally under provincial regulation except on federal lands such as national parks. However, in its two northern territories, most wetlands are under federal management. Hence, while the Policy will apply directly to an estimated 29% of Canada's wetland base (its federally managed wetlands), it also will touch on how the federal government affects other wetlands through its federal programs, policies and shared fiscal programs with the provinces and territories.

One of the goals of the federal policy is to ensure that its programs, policies and expenditures do not result in a net loss of wetland functions. "No net loss of functions" includes balancing unavoidable losses of wetlands with mitigative action such as replacement so that further reductions to wetland functions may be prevented. In general, this means that, where development of particular wetlands in critical areas must proceed, wetland loss must be mitigated by replacement of wetland functions in close proximity. This may have a significant effect on federal expenditures related to federal-provincial development agreements. In implementing this concept in Canada, guidelines will call on the expertise and experience developed in "no net loss of habitat" applications in other jurisdictions. To this end the federal government in cooperation with the North American Wetlands Conservation Council (Canada) has published a report synthesizing North American experience and recommendations for implementing "no net loss" in Canada (Lynch-Stewart 1992).

### **Policy Strategies for Wetland Conservation**

*The Federal Policy on Wetland Conservation* outlines seven strategies to provide for the wise use and management of wetlands so that they can continue to provide a broad range of functions on a sustainable basis. These strategies are aimed at building on past achievements and working in concert with ongoing initiatives for wetland conservation, in particular the North American Waterfowl Management Plan. The Policy promotes a non-

regulatory, cooperative approach. The strategies set out direction to put the federal house in order, to manage federal wetlands, and to ensure delivery of effective wetland science and public awareness actions both nationally and internationally. The seven strategies focus on:

1. *Developing Public Awareness*
2. *Managing Wetlands on Federal Lands and Waters and in Other Federal Programs*
3. *Promoting Wetland Conservation in Federal Protected Areas*
4. *Enhancing Cooperation with Federal, Provincial, Territorial and Non-government Partners*
5. *Conserving Wetlands of Significance to Canadians*
6. *Ensuring a Sound Scientific Basis for Policy*
7. *Promoting International Actions*

### ***A NATIONAL WETLAND COUNCIL***

To promote wetland program coordination in Canada, the Federal Minister of the Environment created the *North American Wetland Conservation Council (NAWCC) (Canada)* in April, 1990. This council, working closely with a parallel council in the United States and provincial and non-government partners, acts as the senior Canadian body for coordinating implementation of the North American Waterfowl Management Plan. The NAWCC (Canada) mandate also includes promotion of awareness of wetland science, management and policy issues within Canada and coordination of Canadian involvement in international wetland conservation initiatives. It has also established a national Secretariat and is publishing a new report series entitled the "Sustaining Wetlands Issues Papers" on wetland science, management and policy topics of national interest.

### ***THE NATIONAL SCENE***

Governments in most Canadian provinces have promoted a non-regulatory approach to wetland conservation. The introduction of non-regulatory wetland management and conservation policies is proceeding. Each of the provincial governments has developed a public review or consultation process for their wetland conservation strategies or policies. In two provinces, Prince Edward Island and New Brunswick, complementary regulatory procedures that result in consideration of wetlands in the environmental assessment process are also used.

Ontario has announced both policy and legislation through the provincial *Planning Act* on wetland conservation and management. Alberta has a policy concerning the southern parts of the province, the southern "white zone" and is actively pursuing a policy that will effect the forested "green zone," or northern part, of the province. This has been emulated in Saskatchewan where wetland policy is undergoing public consultation for the southern parts of the province. Manitoba has established a wetland policy, tied to water and sustainable

development programs. In Atlantic Canada, wetland policy development is occurring in Nova Scotia and New Brunswick. Prince Edward Island has specific legislation on wetlands protection through the 1989 *Environmental Protection Act*.

In the private sector, several major industry groups that utilize peatland resources have brought forward industry-specific wetland management policies. The Canadian Sphagnum Peat Moss Association, whose member companies produce over CA\$100 million in peat products each year, established a *Peatland Restoration Policy* focused on peatland reclamation and restoration after resource harvesting and cooperation with environmental interests and regulators. In 1992, the Canadian Pulp and Paper Association (CPPA) released a *Wetlands Policy Statement*. This statement lays out a series of sustainable development commitments on use of wetland ecosystems by one of the nation's largest employers. The CPPA noted it is committed to sustaining wetlands through integrated resource management and to maintenance of the ecological and socio-economic functions of wetlands over the long-term; and that it supports a coordinated, cooperative approach involving all stakeholders.

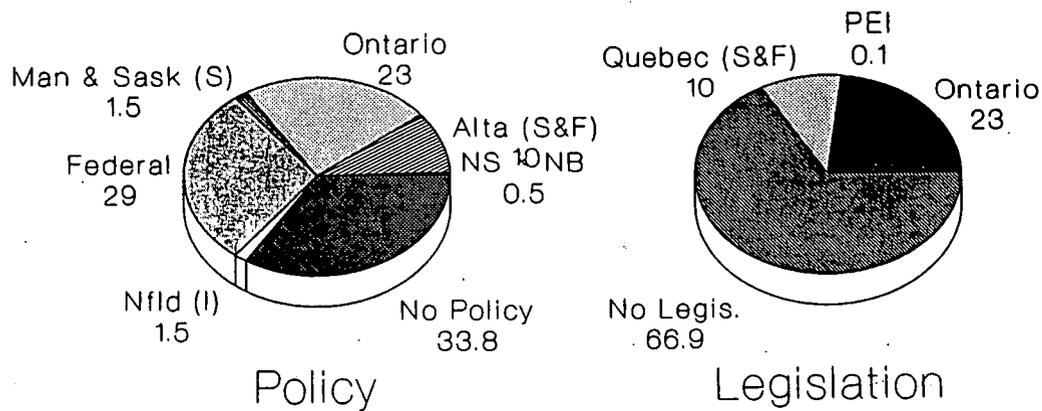
Looking across the nation on an area basis, Figure 3 summarizes the status of policy and legislative mechanisms for wetland conservation. Wetland management or conservation policy now applies to about two thirds of all the wetlands in Canada. On the legislative side, it reveals that less than one third of our wetlands are covered by a legislative approach. Hence, the dominant approach so far in Canada has been use of policy to achieve wetland conservation. In some provinces such as Ontario, a combination of policy within a legislative approach is underway.

### ***CONCLUSIONS: POLICY IMPLEMENTATION THROUGH A COOPERATIVE APPROACH***

Wetlands have become an important component in the development of conservation strategies across Canada. Through the preparation of provincial, territorial and federal wetland policies and programs, a common focus on the global themes of sustainable development and partnerships has emerged. Wetland and waterbird conservation are inextricably linked to these themes at the international, national, regional and local levels. In Canada, these linkages are achieved through the multitude of agreements and partnerships that complement jurisdictional arrangements and achieve cooperation in conservation.

Canada has established many commitments to wetland conservation that are far-reaching nationally and internationally. *The Federal Policy on Wetland Conservation* is but one example of the federal government's interests in wetlands. The Government of Canada is also committed to furthering the strong cooperation inherent in the North American Waterfowl Management Plan with the United States and Mexico. On the global scene, Canada's long standing support and interest in the Ramsar Convention and the principles of "wise use" have been well recognized.

## Policy and Legislation Affecting Canadian Wetlands



S - Settled; F - Forested; I - Island

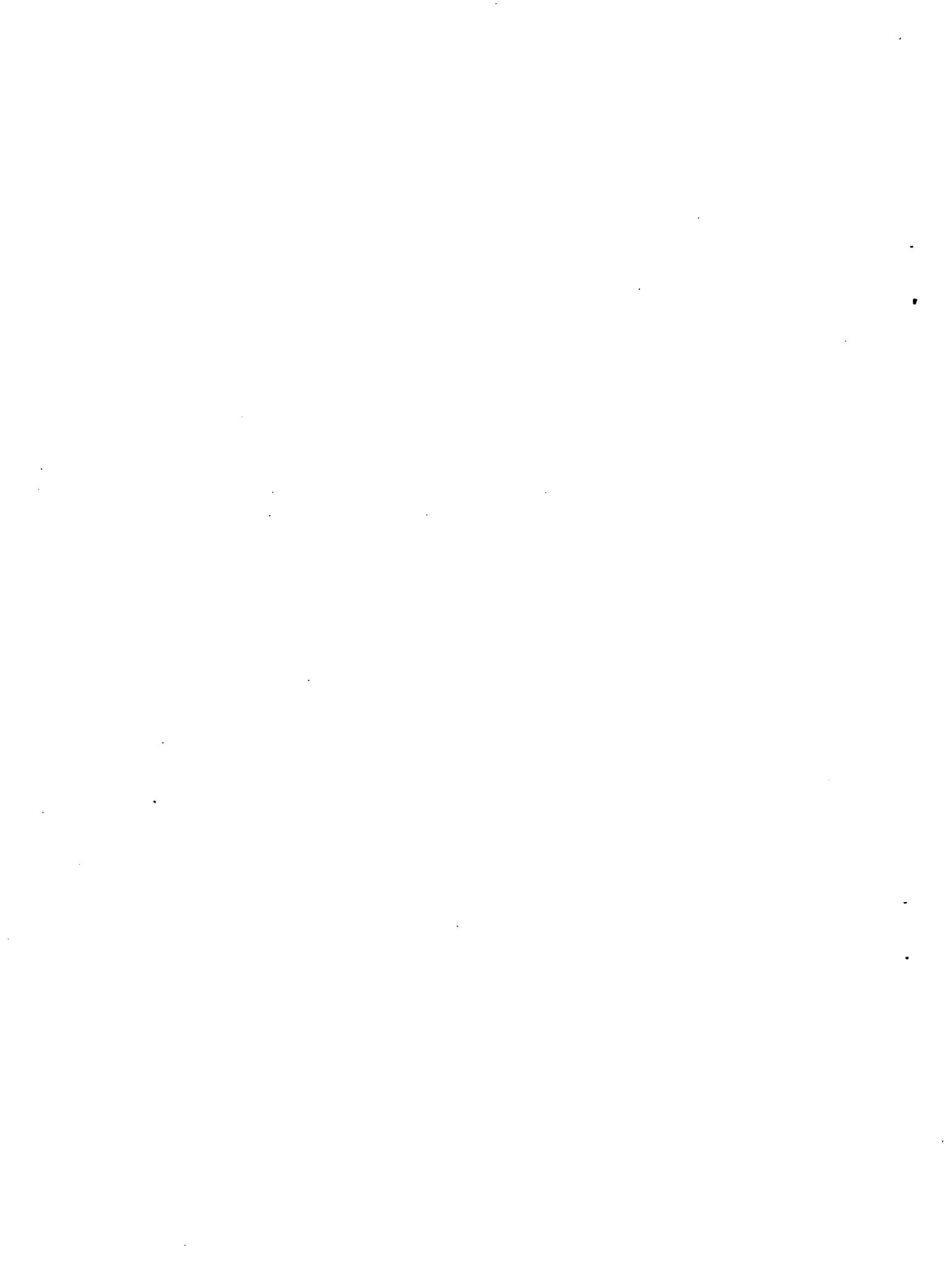
Figure 3: Policy and Legislation Affecting Wetlands in Canada

## **REFERENCES**

- Rick Bryson and Associates. 1993. *Forest and Wetland Attributes for Highly Protected Conservation Areas in Canada*. Contract Report. North American Wetlands Conservation Council (Canada). Ottawa, Ontario.
- Government of Canada. 1991. *The Federal Policy on Wetland Conservation*. Environment Canada. Ottawa, Ontario. 14 p.
- Lynch-Stewart, P. 1994. *Implementing Wetland Policy: A Guide for Federal Land Managers*. Consultation Draft. Canadian Wildlife Service, Environment Canada. Ottawa, Ontario. 46 p.
- Lynch-Stewart, P. and G. Lee. 1994. Experience with implementation of the Federal Policy on Wetland Conservation. *In Wetland Policy Implementation in Canada: Proceedings of a National Workshop*. Rubec, C. D. A., compiler. Report No. 94-1. North American Wetlands Conservation Council (Canada). Ottawa, Ontario. pp. 37-44.
- National Wetlands Working Group. 1988. *Wetlands of Canada*. Ecological Land Classification Series, No. 24. Environment Canada and Polyscience Publications Inc. Montreal, Quebec. 452 p.
- Patterson, J. H. 1994. Wetland, agricultural and international trade policy interactions. *In Wetland Policy Implementation in Canada: Proceedings of a National Workshop*. Compiled by C. D. A. Rubec. Report No. 94-1. North American Wetlands Conservation Council (Canada). Ottawa, Ontario. pp. 65-72.
- Patterson, J. H. and C. D. A. Rubec. 1993. Agricultural trade and biodiversity: a win-win opportunity for environment and economy. *Waterfowl 2000* 5(1):1.
- Rubec, C. D. A., P. Lynch-Stewart, I. Kessel-Taylor, and G. M. Wickware. 1988. Wetland utilization in Canada. Chapter 10 *In Wetlands of Canada*. Ecological Land Classification Series, No. 24. Environment Canada and Polyscience Publications Inc. Montreal, Quebec. 452 p.

## QUESTIONS

- Q. One of the things that is of interest to me is the question of whether Canada is going to take the same approach as the Americans, becoming a litigious society? Or are we going to continue to work on wetland conservation and our wetland policies through what has actually become a round table approach? This is the kind of approach that we have always used in the past. I know there are a number of environmental law associations in Canada that have either draft legislation or are working on portions of draft legislation that they would like to see initiated. While it isn't a specific topic of this workshop, it is something that I'm very personally interested in as to how that will get us further towards our goals. Or, will it take us away from the long-term goal of wetland conservation? I think it is something we should start paying attention to. I would also be interested in hearing if you know of municipalities that are establishing wetland policies. I have heard of two or three in Ontario that are being developed. I have a feeling that, as the federal policy and the provincial policies get more well-known, we are going to see more and more municipal policy development. It is probably something we should be thinking about down the road.
- Q. A question of clarification. When you refer to the legislation of Prince Edward Island, are you referring specifically to something called wetlands legislature or is it part of their environmental legislation?
- A. There is a section in the Provincial Act that specifically uses the word wetlands in it. It specifically gives direction for protecting wetland systems and river systems on the island. It is very specific legislation. It is one of the few pieces of legislation to use the word wetland in Canada. The Canadian Wetlands Conservation Task Force did a very useful review of all the legislation and policies in force in Canada. Its report is called *Wetlands: A Celebration of Life*.
- Q. Could you give me the name of the Act?
- A. The *Environmental Protection Act*; it is not a specific wetland act but it has a specific section referring to wetlands.



---

## ***ACHIEVING POLICY COMMITMENTS AND COOPERATION FOR WETLAND CONSERVATION***

***Robert Sopuck  
Sustainable Development Coordination Unit  
Government of Manitoba***

---

### ***INTRODUCTION***

We like to think of ourselves as the centre of the country and perhaps from time to time we are. I took the topic that I was given quite literally: achieving policy commitments and cooperation for wetland conservation. How do we get policy commitments, and get people throughout society to cooperate in the business of wetland conservation? I intend to zero in on that portion of the landscape that Clay Rubec pointed out is in the greatest jeopardy regarding wetlands and land use, that is the agricultural or "working" landscape. I am convinced that the problems and policy solutions on the private-land landscape are totally different than on the public-land landscape. I think that the two are almost different policy universes when it comes to dealing with the issue of wetland conservation. I will also deal with the issue, approaching the topic of wetland conservation from a macro policy viewpoint.

I guess I am one of these trickle down types who believes that if you get first principles right, then everything else will follow. So what are those first principles? Well, before we can come up with first principles for wetland conservation, we have to ask ourselves questions such as "What causes wetland losses on the private land landscape and the agricultural landscape?" The primary cause is quite obviously socio-economic. Wetlands are lost and destroyed and otherwise altered because of changes in agricultural markets and changes in agricultural policies. That is what causes wetland loss. That leads to the obvious conclusion that solutions are socio-economic at the same time. These solutions are not biological and not ecological. The solutions are related to rural renewal, the rural landscape, the rural economy, and the place of wetlands within that context.

### ***CONTEXT***

The next question that we have to ask ourselves is about place, or context. So what is the context for wetland policy? There are a number of them; I sketched out three. The first context is the ecological context for wetlands. Wetlands are part of nature's hydrological cycle; there are wetlands, rivers and streams and well defined lakes that we don't classify as wetlands. So we have to look at the wetlands in an ecological context. What is their place within the great hydrological scheme of things out there? The second context is a socio-economic context in terms of the southern working landscape.

The wetlands on the private-land agricultural landscape are part of a landscape that delivers and provides economic benefits for all of society, i.e. the inhabitants that live on that landscape and those of us that purchase the products of that landscape. The third context for wetland conservation is the socio-political context. Gerry Lee talked about the emotions that are raised in Ontario for example, regarding wetland policies. As Buzz Holling, the ecologist that all of us read when we took our schooling has pointed out, policy equals politics. So what is that political context within which wetlands exists? The flip side of that socio-political context is, how can wetland policies solve problems, that is, political problems for decision-makers and the problems of society that decision-makers in our political world have to deal with? We have to look for strategic opportunities that many of us, based upon our education as biologists or resource managers, etc. are somewhat uncomfortable with. Again, it goes back to the point I made initially, that if you first get the first principles right, the solutions will drop out. I would like to use the Manitoba approach to achieving consensus for policy and cooperation, just as an example, not because it is the best by a long shot, but because it illustrates the approach that we took here, one that I strongly advocate.

Wetland or water policies in Manitoba are quite clearly within the context of sustainable development. We make no apologies for that. Our Premier, as Chair of the Manitoba Round Table on the Environment and the Economy, has made a deep and personal political commitment to the concept of sustainable development. Everything we do is subsumed under the principles of sustainable development. Sustainable development is very clearly a people first orientation to the landscape and it is all about the integration of the environment and economy to meet people's needs. What that particular context does is solve a number of issues for decision-makers and those of us who advise decision-makers. It deals with the environmental issues that are still fairly strong, and it says solutions to environmental issues will be put into a context that fulfills human needs. I think that it's best if I illustrate it with a diagram and this will show you the context within which we have our wetlands and water policy. We have an overall strategy that puts forth broad principles of sustainable development. Underneath this we have our various policy areas. For example, we have energy and so on. We have a very important category called "land and water" and under this we have a number of sub-policy areas dealing with forests and natural lands. Wetland policy is in there. Under water policies we have flood control, drainage and, of course, wetlands. So wetlands now has a context as opposed to looking at the issue of wetlands from what are you going to do about wetlands. Hence, we started there and worked down. I know it is politically correct to talk about the bottom-up approach but I think in this case the top-down approach is clearly preferable.

## ***THE CONSULTATION PROCESS***

Once we had the broad conceptual framework established, the next question was "What policies should be filled in to ensure that our goals would be met" and "how do we get people to buy into those policies?" I am going to talk about our water policy development. Development of our water policy started in late 1988. A number of government departments

met and drafted water policies. These were quite clearly draft policies. We took these out to the public in the form of a work book, called "Land and Water Strategy, The Process Begins." We made every effort, because the public is quite cynical these days. I see a few nods in the audience there. When you go out there and say, "These are *draft* policies" and "We would like your comments," people don't believe you. They say, "You've made up your mind and this is what you want to do. This is just some nonsense that you want to foist upon us and you will do what you want to do anyway." Often, it's how you say something that is as important as what you say. These draft policies were summarized at the back in the form of a questionnaire that people filled out.

We held about 30 meetings looking at all of these policies and policy areas, including wetland, drainage, flood control, conservation and anything to do with water and water management in Manitoba were dealt with.

The next step in policy development was achieving consensus. The public gave us their feedback, participated willingly and enthusiastically, and we were quite gratified with the response. About 150 submissions came from people of all walks of life. We analyzed what was said. If any of you have tried to analyze anecdotal information and responses to anecdotal questionnaires, you can understand that when the responses are not quantified, it is an extremely difficult task. We went ahead and did it anyway, producing a document called *What You Told Us*: Every comment from Manitobans who provided some feedback on the document was put in here. We also pointed out comments, for example regarding flooding on what the draft policy was. One thing we got criticized for was that the comments that we put in were much too detailed. However, we felt very strongly that anybody could look through this and should be able to find what they said. The people were listened to.

On this side, we had suggested water policies. So we had the old, draft text, the public comments, and the new text of the policy. Everybody who participated was given a copy of what we were told. We wrote them and said what do you think about these new ones? We then had only a few responses, not many. So now we feel very strongly that we have a broadly-supported set of water policies. What is important is to show the public that they were listened to and that things will change as a result of their input. People whose comments we just could not accept for a variety of reasons, didn't demonstrate at the legislature or anything. They accepted the second set of policies.

The next question is what do you do? Hence, the third step in the policy development process is something called the *Water Applications Document*. It takes the new water policies, analyses them, and comes up with statements of, for example, a policy on ground water, and the policy that was accepted by everybody - "ground water development and utilization shall be managed for the long-term sustainability" and so on. In terms of the applications, it says here that the Manitoba government "will", local authorities "can", and land owners "shall." This document has received Cabinet approval; with the broad public buy-in, it was very easy to get this approval. In this document is a section on wetlands and wetland conservation. However, it is in an economic and ecological context that is broadly supported politically.

## **OPPORTUNITIES**

So where are we now and what are the opportunities? Well just because you have a set of book policies, it certainly does not mean you are home free. You will have to be nimble and fleet of foot and mind in order to deal with the crises and the changing conditions that are out there. I think the Chinese are extremely wise because in their language the symbol for crisis is a mixture of the two symbols, chaos plus opportunity. For every crisis there is clearly an opportunity. Let's look at some of the crises that are out there right now, and by crisis I don't necessarily mean something that is bad, but events that are changing very rapidly in unexpected ways.

One of the unexpected crises that happened recently is the dramatic decline in environmental interest by the public at large. Membership in environmental groups is declining, contributions to environmental groups are going down, and viewership of environment television shows has declined significantly. The number of articles you see on the environment (Clacquot Sound notwithstanding), throughout Canada has declined, based on quantitative media analyses. We who care about wetlands will say, well that is something that is very bad for us. That poses some problems I suppose, and one of which is the urgency for environmentalism just isn't there anymore. It is all to do about jobs and getting people back to work again. The opportunity that that poses, in my view, is that it provides an opportunity for a much more rational debate about these issues. We don't have to listen to the fringe groups anymore to be quite blunt; their influence has declined dramatically. We can sit back and have rational, solid policy debates with the people who can really make a difference.

One of the things that has greatly concerned me in my time in government over the last six years is the deep rural-urban split in Canada regarding a wide range of issues. Gun control is a very obvious one, views of the environment being another very important one. If we are dealing with the issue of wetland conservation on private land, we must also deal with the socio-economic/socio-political/socio-cultural attitudes that exist out there. As someone who was born and raised in Winnipeg not too far from here, and migrated to the country 14 years ago, I feel that I've got my foot in both camps. The differences between the views of both of those populations, they are almost separate cultures, are akin to being in downtown Toronto or Drumheller. They are all Canadians, but with extremely different points of view.

I would like to quote to you from an important paper called *Taming the Wilderness Myth*, where two anthropologists detail the failure of urban-based environmentalism in dealing with real environmental issues. Let's face it, when we are dealing with wetland conservation, we are dealing with the issue of the rural landscape. The authors of this paper said, "The perspectives of the rural populations are missing in our concepts of conservation. Many environmental education programs are strongly biased towards elitist urban perceptions of the environment and issues of the urban world. This approach is incomplete and insufficient to deal with the complex context of conservation efforts at home and abroad. It neglects the perceptions and experience of the rural population - the people most closely linked to the land who have a first-hand understanding of their surrounding, natural environment as a teacher and

a provider. It neglects those who are most directly affected by current policy decisions made in urban settings regarding natural resource use. It neglects those who feed us." I think that is a telling comment. I am definitely not even close to being from the left end of the political spectrum. However, I must say that I do like to quote Mao Tse Tung from time to time. During the cultural revolution in China, he sent the intellectuals to the countryside to learn from the peasants. Well, you know, the old helmsman was not too far wrong when he did that and if any of you have that opportunity I would urge you to take it.

The first crisis we just talked about is the decline of environmentalism. The second crisis is that markets are changing all the time. The markets for agricultural products go up and down and they change for all kinds of reasons. The problem that faces us when we want to deal with wetland conservation (I was not convinced of it even six or eight months ago, but I am becoming more and more convinced) is that world food demand will rise dramatically. In Western Canada, some of our wetlands are situated on very prime, fertile farmland. What I am afraid of is, if world food demand far outstrips the ability of much of the World to produce its own food, we may see an incredible assault on some of our wild lands in Western Canada.

Right now the price of canola is \$10/bushel. It has not been there for about 15 years and the demand almost seems infinite, although anybody that deals with the economy knows there is no such thing as infinite demand. Nevertheless, we are in a period of very high oil seed prices in Western Canada. In my view, this will very significantly affect the North American Waterfowl Management Plan when we try to lease habitat, because farmers, being rational individuals, always maximize their return. The opportunity that changing markets gives to us, however, is that grain, in Western Canada especially, is being replaced in some cases by livestock production. Livestock, especially cattle production, is much more friendly to wetlands and waterfowl conservation. Most ranchers would just as soon have a number of sloughs in the middle of that big pasture. If that land were converted to cereal crops, those sloughs would disappear. So I think that the rise in cattle prices that has occurred is a real opportunity for us.

The third crisis or event that is occurring is changes in the world trade rules. The problem this causes is that less opportunity exists for national control of our policies. The great opportunity that that provides us is that we may now be forced to change the subsidy process and solve some of the problems that have plagued us on the agricultural landscape. One cannot blame farmers for doing what they did when we as a society are paying them to do so. However, I am still quite astonished at the failure of conservationists given what has happened with the GATT being signed and given the recent conflict regarding Minister Young talking about the fact that transportation subsidies in Western Canada are going to have to go. Not once have I heard during the whole debate over the last number of months the notion that environmental conservation could be a product of these subsidies. Changing the way that the subsidies are paid so that dollars go into landowners' pockets to provide the ecological services that the rest of us seem to want. I view that as a key strategic opportunity that if we change the nature of subsidies and how they are paid, not decreasing the amount of money that goes

on the landscape, but changing how it is paid, we will get more wildlife and wildlife habitat and biodiversity on the agricultural landscape than we have ever seen before.

That particular approach stands the test of the issues that I talked about earlier. It provides support for the farm and rural community in a manner that will be allowed no matter what is in the final GATT agreement. It greens agriculture. It solves difficult land use conflicts on private land. This approach should appeal to the urban majority and it is very cost effective. I view that as a strategic opportunity that we should grasp as soon as possible.

## **QUESTIONS**

Q. Did the landowners who might potentially be affected understand how they could be affected? Did they know that they had wetlands that might be regulated?

A. Regulation is something that we do not do here. We very clearly, did not regulate, did not put regulation as an option. I would like to just define to you the draft policy, if you will just bear with me for half a second. The draft policy clearly said, "Soil conservation, wetland retention and the application of the appropriate land use practices shall be promoted by the provision of incentives." So we obtained landowner support for that. That is why, for example, we were able to get the North American Waterfowl Management Plan off the ground in Manitoba because we had this approved policy and we had the North American Waterfowl Management Plan structure just coming into being. That was a perfect step.

Q. Your program is incentive based?

A. Yes, very much so.

Q. Have there been landowner complaints? I think it happened in Ontario, but I wasn't around when the policy was being developed.

A. There was a lot of consultation that went on — four or five different consultation phases. Some landowners are now saying they didn't know about this. So the question is raised, how could they not know about this?

Q. Maybe what was discussed was so draconian they just didn't believe it. I think it is a matter of who was consulted. There are 890 municipalities in the Province of Ontario. They all received the policies but it didn't go the next step.

A. Yes. It's much easier to consult in Manitoba because we are a much smaller jurisdiction.

Q. What types of incentives are you using in Manitoba?

A. The primary one right now for wetland conservation is the North American Waterfowl Management Plan. Secondly, a non-financial incentive - we undertook a very simple change to the property tax form. Landowners often told governments, "look I am paying taxes on these sloughs, I am going to drain them." They really weren't, but when they got their tax bill it was just one lump sum for their area of land. John Scarth was heavily involved in doing this when he was in government. We itemized on their demand for taxes something called "conservation land" with a note saying how little they paid in tax on that land.

Q. Ontario has a rebate. What do you think of that approach?

A. Well that makes sense, but we're not quite there yet. In terms of wetlands, the amount of tax landowners pay is about one dollar an acre or less a year.

Q. You mentioned that you saw the decline in environmentalism as a positive thing. Can you expand on that?

A. The radical environmentalists scared a lot of people off from wanting to deal with environmental issues, so I am hoping against hope that they are out of this particular debate on wetlands. One problem with the decline in environmentalism is that it did pose the questions that allowed sustainable development to emerge as an answer, one we very much subscribe to here. Also, without the sense of urgency environmentalists created, it is somewhat difficult to get the attention required about these kinds of things.

Sustainable development is a bit of a long term view of things. When, and not if, environmentalism comes back, those jurisdictions who have implemented the concept of sustainable development will be in great shape because, ideally, under a sustainable development framework, issues of the environment are dealt with right up front.

Q. I would just like to add to your point a little. I sense what you are saying that it isn't that the environment movement has been silenced, or is likely to be silenced, it is that the very high noise level that was being dealt by the radicals has dimmed or diminished somewhat. The more senior views and voices within that group now have an opportunity to engage government in a very positive way. It is probably true that it may now be more difficult to get the attention of government if we go about it the right way, approaching it from the standpoint of how we can link wetland maintenance (in this case), to a secure economy in the countryside. I think we actually have an opportunity now that we probably did not have before because of the very high tension level that existed.

A. Yes, it is a huge opportunity. While economists are notorious for not making the right predictions, we should probably, as a profession, consult with them from time to time.

Of course, as someone once said, if all the economists in the world were laid end to end, it probably would be a good thing.

- Q. I do not think that we can underestimate the power of that other side. Very often it is the screaming from the other side that prevents a certain amount of complacency.
- A. The problem for them though is that the public is not listening anymore. When you lose the public as an audience, you have really lost. Let's take the issue of wetland conservation on private land, which I am still convinced is the most serious issue here. If an environmental type threatens the property rights of a landowner, of course you will alienate that individual. Utilizing the approach of the North American Waterfowl Management Plan is taking it and saying, "We have a product that the rest of society wants. Let's do a deal for this product." The farmer would probably say, "You know, I drained a whole bunch of sloughs and I guess I had to do it but I sure would like to keep that one, but I just can't afford it." What the North American Plan does, is help that person afford it. So the ecological services get delivered, and the problems for the farmers are solved. I mean that is a win-win for everybody. That is the only approach that will work. Quite frankly, in Western Canada an approach where private land is regulated would encourage the drainage of wetlands. By the time that that bill was passed the bulldozers would have been out there. We have such a tradition in Western Canada of private land ownership. In my view, the farmers just wouldn't do it, they would not obey the law. And then where are you? Because even though they are small in number, they control a huge chunk of real estate.
- Q. Are your incentives large enough that a landowner, who has some property adjacent to the municipality, a large urban centre and has a choice of selling this land and perhaps filling in a wetland or draining a wetland is prevented from doing that? That is exactly the situation we have in southern Ontario. It is one thing to provide tax incentives of a few thousand dollars; it is another thing for the landowner to make a few million dollars by selling the land.
- A. Your situation is so different from ours. In Manitoba we would like some more urban growth; we could use some. So send it our way. I don't want to sound flippant about it but we do have a lot of land here. Our big urban centres, such as Brandon, Winnipeg and so on, other than specific areas, are really not in prime wetland areas. Even if Winnipeg were to double in area, it would make little difference to the wetland situation. So you have a lot more problems than we do.
- Q. There is a significant number of Saskatchewan producers who, if they thought their taxes would be paid on that land, would assume about 30% of it. Would you consider that enough to warrant such an approach for wetlands?
- A. It is amazing, considering the size of these vast western farms, how little it takes to secure some of this land. You are absolutely right.

- Q. On your list of crises and opportunities, how would you describe the fiscal situation?
- A. I think there are a lot of opportunities for wetland conservation because we just can't afford these kinds of agricultural subsidies anymore. So it is an opportunity. Although I suppose the money won't be there to purchase highly significant wetlands, and fund the big projects like the Oak Hammocks and the Quill Lakes.
- Q. My question concerns the GATT discussions and what it might do for wetlands. What do you think has prevented national and provincial conservation groups from having picked up on this and what would it take to get them to do that?
- A. There are problems. First is not placing conservation into the socio-economic context in which it exists. The second point, primarily for those of you who are in government institutions or conservation institutions, is the failure of not being able to penetrate the institutions and initiate the cross-sectoral thinking that must occur. The solution is staring Agriculture Minister Ralph Goodale and Finance Minister Paul Martin right in the face on agricultural subsidies. It is the issue of changing the way the subsidies are paid in ways that are not countervailable under GATT. The institutions are structured in such a way that they can't deal with this. The purpose of an agency like Agriculture Canada is not to deliver ecological services. Their purpose is to deliver food for society. While I'm being very simplistic here, Agriculture Canada does not have a mind set to deal with the issue of landscape health and the health of rural societies and how we can assist rural societies. So how can they assist rural societies in order to better themselves and solve environmental issues at the same time? The problem is context and institutional failure.
- Q. What about the National Round Table? Do we have a role to play here?
- A. The document that Ken Cox and Jim Patterson and I worked on was done for the National Round Table on the Environment and the Economy. For the two Prime Ministers under which the National Round Table has existed, the Round Table has had a tough time getting their attention. With the current decline of environmentalism, it is going to be even more difficult. Somebody has got to get to the financial people in the federal government and say, this is the answer. I am still convinced that it's the answer, because it passes all of the tests.
- Q. You made a statement that mixing policies with politics was one of the things that the senior leaders in the country don't seem to understand. That is partly our fault for not pointing it out to them. What we have been trying to point out, in a number of ways, is that almost all of the European nations under GATT already have major policies underway. A lot of them provide not only ecological services, but provide religious services in keeping the churches, architectural services, keeping up the cultural aspects of the landscape, subsidizing stone fencing, and hedge rows. These will all have to come in front of the General Director of the GATT's committee. We should be

developing these policies because we are going to run into a problem with the European nations who already have this. The problem might be that they are putting too much money into non-commodity specific subsidies. We should be preparing the rural landowner in a time of change, through a changing product mix or through changing international mixes in GATT and NAFTA. We must encourage incentives to try and keep wetlands and waterfowl habitat on the land until the broader policy changes can take place. We have to get the message up there because the other major nations in Europe already have programs.

- A. If I could quote from the amended Article 19 of the GATT. Article 19 concerns aid for the introduction or the maintenance, and this is in Europe now, of farming practices compatible for the protection of the environment or natural resources, or with the preservation of the landscape and the countryside. Bavaria in Germany has made extensive use of Article 19 and has implemented the Bavarian Cultural Landscape Program whose aims are: the protection of surface waters and ground waters from pollution; protection of soil from erosion; maintenance and improvement of the scenery and structure of landscapes. Europe, as Ken Cox quite rightly points out, is moving very quickly in this direction. It is clearly a cultural matter as much as it is an agricultural and economic matter. Again, this is something that the United States, with their export enhancement program and their fights with Europe, obviously cannot object to. Because they are doing the same thing with the Conservation Reserve Program.

I think we should join that particular club and do the same thing with our agricultural subsidies. We would make Manitoba and Canada a lot better place to live, and save money. For those lands that are under crop and commodity production, let the marketplace decide the price and the supply. That is what this particular approach gives you; then you could have more market-oriented mechanisms.

Q. What can the farmers do here?

- A. The farm community very much understands this. I am talking about the grass roots level. The neighbours close to where I own a farm indicated that if city people want this they have to pay. That is the simplistic way but they say we have to be supportive in this way if we are going to maintain this. They have their own institutional issues. In Manitoba, Keystone Agricultural Producers, in Canada the Canadian Federation of Agriculture, the various dairy and poultry organizations and so on, they all are very fixated on those single commodities and don't often look at the whole issue of the rural landscape. From time to time, they come up to you and say, "Well how do we deal with these environmentalists?" They ask the question, they know the pressures are there, but what do they do? The issues are complex but they have their own institutional difficulties to deal with.

- Q. We know about the need to protect wetlands. We also know that we have lost a lot and we have created a lot. What role does the Manitoba policy plan to take?
- A. Wetland reclamation is clearly encouraged under our policies and again, I will refer back to the North American Waterfowl Management Plan. Right now it is the only program that we have, although under the Canada-Manitoba Agreement for Agricultural Sustainability, there are sections in there on water retention, for flood control and stock watering and that kind of thing. There are important wetland benefits in doing that.



---

## ***WELCOME TO OAK HAMMOCK MARSH CONSERVATION CENTRE***

***D. Stewart Morrison  
Ducks Unlimited Canada***

---

On behalf of Ducks Unlimited Canada and the Manitoba Government welcome to the Oak Hammock Marsh Conservation Centre. I am very pleased that you are holding your national workshop at Oak Hammock. You have participation from right across Canada. I see many people I have worked closely with in the audience as well so it is good to see you all. We are very proud of this facility and we take every opportunity we can to show it off. Both the interpretive centre and also the very outstanding wetland that is out there, both in terms of wetland and upland habitat, which was created by the federal, and provincial governments and Ducks Unlimited. After you have toured the facilities and had a look at the wetland, I am sure you will agree that the negative publicity that surrounded the development of this centre was much "to do" about nothing. This is the overriding comment we receive from people who come here. Just out of interest, last week the court case against the federal government was dismissed and Ducks Unlimited was awarded court costs, even though we weren't the respondent, so I think that was very good news for us.

I won't go into any of the detail on the building and the educational programs as the staff will provide you with that information this afternoon. I do, however, want to explain why the centre was built. A lot of people have asked that question of us. Ducks Unlimited has a long and successful history of protecting and enhancing millions of acres of waterfowl habitat in Canada, much of it in cooperation with the agencies that you people represent here. However, we came to the conclusion that all of the on-the-ground work that we might do together wasn't in itself enough to swing the tide in terms of wetland preservation. We felt that we had to get involved in education and to promote the broader ecological and social reasons for keeping wetlands. To do that you obviously have to ensure that people understand what the problems are and what the solutions were. So that is what led us to become more active in education. While the Oak Hammock Marsh Conservation Centre is the flagship of that program, it will be joined by educational displays and programs in many other interpretive centres that currently exist across Canada. Where opportunities with existing facilities are not available then we will consider developing our own facilities although certainly not on the scale of this particular one. As a matter of fact, just recently, I had the opportunity to participate in a dedication of a display in Creston, British Columbia. We also were a partner with the Northwest Territories Government and the Girl Guides of Canada in one up near Whitehorse. There have been a number of these kinds of things and we hope more will unfold.

We feel that your work here for the next two days is not unlike educational programs. You will be learning from the experience of others on the value of wetland policy, how to go

about developing one, and the pitfalls to be avoided. Based on our experience there are three important ingredients to a successful wetland policy in addition to the obvious need to protect wetlands. First of all and probably the most important: the policy must be supported by the landowner, not just the urban public. Ways must be found within such policies to encourage stewardship and reward those who have wetland habitats on their property. A heavy-handed approach could simply penalize conservation minded landowners and lead to further loss to habitats through a legal means. Secondly, the policy must be clear and simple for all sectors of society. We would not wish to see such policies lead to increased bureaucracies, the need for an expensive and lengthy environmental assessment process, or an increased polarization among various sectors of society. Without simplicity and fairness as cornerstones of such policies, the lawyers and consultants will surely benefit, but our society and eventually our wetlands, may not. Thirdly, the policy must be supportive of wetland restoration, rehabilitation, and management activities, such as being delivered under the North American Waterfowl Management Plan. With the tremendous historical and ongoing damage that our wetlands have sustained, such policies would be negligent if they did not encourage such conservation initiatives.

We wish you well in your deliberation, and again thank you very much for considering Oak Hammock as a venue for your meeting. As I said, it is very good to see some old acquaintances and friends. I look forward to making the acquaintance of each and every one of you that I have not had a chance to meet yet.

---

# **CHALLENGES FACING WETLAND POLICY IMPLEMENTATION IN ALBERTA'S AGRICULTURAL AND FORESTED LANDSCAPES**

**John Lilley**  
**Alberta Water Resources Commission**

---

## **INTRODUCTION**

The province of Alberta and the Alberta Water Resources Commission have been working on a wetland policy since the late 1980s. Work began with an inventory of the drainage potential in the agricultural portion of the province. Instead of leading to increased drainage, the research made it clear that significant areas of slough/marsh wetlands, about 60%, have been lost in Alberta, and that a policy was required for wetland management in the agricultural part of Alberta. Public consultations were held in 1990, and an interim policy to address management of slough/marsh wetlands in the Settled Area of Alberta was approved by provincial cabinet in 1993. Implementation of this interim policy is being undertaken under the direction of a director-level interdepartmental committee chaired by Alberta Environmental Protection.

The work on a wetland policy for the agricultural area also identified a need for a policy to address peatland management. Therefore, a second phase of policy development was initiated to address peatlands throughout the province, and other wetlands in the forested part of the province. Public consultation on a draft policy for these forested areas occurred in the fall of 1993. The intention is to produce a single comprehensive policy which addresses marsh wetlands and peatlands anywhere in the province.

Currently, the Alberta Water Resources Commission and its interdepartmental wetland policy steering committee are in the final stages of developing this comprehensive wetland policy. It combines the interim policy for the agricultural or settled area and the policy directions developed for the forested or non-settled area.

The policy goal is to ensure that the environmental, economic, and social benefits that wetlands provide are sustained, now and in the future.

## **MAJOR DIFFERENCES BETWEEN AGRICULTURAL AND FORESTED LANDSCAPES**

To explain the challenges we encountered in policy development and implementation, it is necessary to understand the major differences between the agricultural or Settled Area wetlands, and those in the forested, or Non-settled Area (Table 1). These are factors that must all be accommodated by Alberta's policy and hence were a major influence on the structure and content of the policy.

**TABLE 1: MAJOR DIFFERENCES AFFECTING ALBERTA'S WETLAND POLICY**

<b>FACTOR</b>	<b>AGRICULTURAL AREA</b>	<b>FORESTED AREA</b>
* wetland type	* slough/marsh	* peatland
* land ownership	* private	* public
* wetland extent	* isolated features	* extensive complexes
* information	* some	* very little
* development pressures	* agriculture urban expansion	* resource development
* development extent	* 60% loss	* unquantified, less extensive impact
* perceptions	* understood, valued	* not understood not as highly valued

### **AVAILABLE TOOLS**

The tools available for the management of wetland resources fall under three main categories: monetary, legislative, and persuasion (Table 2).

### **MAJOR CHALLENGES IN IMPLEMENTING WETLAND POLICY**

It is the role of the provincial government to provide direction for the management of resources in the provincial interest. It has at its disposal a variety of tools, as shown further in Table 2.

**TABLE 2: TOOLS FOR POLICY IMPLEMENTATION**

<b>MONETARY</b>	<b>LEGISLATIVE</b>	<b>PERSUASION</b>
* subsidies incentives	* laws/regulations	* education information
* taxes	* approval process	* research
* compensation	* policies guidelines	* monitoring reporting
* purchase ...	---	* demonstration projects

However, the government also provides an administrative framework within which these policies must work. The current Alberta framework is one of fiscal restraint and deregulation, and the maintenance of the "Alberta Advantage." Under these conditions, the use of incentives or regulation as policy tools is limited. Hence, the first major challenge.

**Working around provincial restraints**

It is unlikely that the provincial government will provide new incentives for wetland conservation or management. However, existing programs are likely to continue and might be refocused to address policy needs. In addition, it may be possible to remove costly incentives that encourage wetland destruction, specifically some of the agricultural incentive programs, or alter the way wetlands are taxed at the local level.

Similarly, no new legislation or extensive regulations are foreseen, but the existing regulations could be more vigorously enforced. Current project approval processes could take wetlands into account more explicitly. The impending changes to the *Water Resources Act* should help strengthen the role of environmental considerations in water management decisions.

Recognizing that incentives and regulation are not the only ways to achieve the wetland goal, some of the other tools available to government, in particular education, will take on an even more significant role. The government must adopt more creative means and a stronger educational perspective to develop the attitudes and the partnerships necessary to ensure the policy goal is achieved.

## **Maintaining flexibility**

Those developing and implementing policy should not rule out any possible tools, even if they are not currently available for use. As well, the policy should not be dated by excluding desirable actions which may only be available for implementation at some future date. Conditions may change and the policy and implementation procedures should be flexible enough to take advantage of changing conditions. For example, the Landowner Habitat Program may find more funding that would allow it to pay incentives for wetlands protection on private land.

Wetland policies must deal with public land management issues. This may require implementation to focus on the government's project referral and approval system in the forested area, as well as develop an educational campaign aimed at conserving slough/marsh wetlands on private land where the government has less direct control and influence.

## **Ensuring consistency between provincial and regional levels**

The policy was developed at a provincial scale and will be overseen by provincial staff. However, a basic principle of policy is that it will be implemented on a regional basis in a way that will allow the resource managers to take into account the regional variation in wetland abundance, value and possible impacts.

Implementation should be managed in a way that ensures that regions are working toward the provincial goal, and not, for example, allowing total wetland destruction on the premise that wetlands are being protected in another region.

In implementation, the impacts of other government policies need to be considered to reduce conflict between objectives and actions. In Alberta this is being done through an Implementation Committee and Regional Committees. The various programs that most directly affect wetland management are being reviewed and compatibility problems are being identified.

## **Developing a decision-making process**

Implementation actions should include a process that will allow resource managers to make decisions based on the same principles and values and to provide some degree of order for making subjective decisions comparing environmental, economic and social benefits.

## **Overcoming perceptions about wetlands**

Education is one of the government's strongest tools for creating change in attitudes and activities affecting wetlands, particularly on private land. But education within government also is important for making decisions about activities on public lands.

The perceptions that need to be changed include:

- wetlands (particularly peatlands) are abundant and do not need to be protected;
- there is no need to address peatlands until there is a crisis;
- peatlands are just wasteland or muskeg of no value; and
- protection will shut down all economic development, and the converse, all development is bad for Albertans.

### **Ensuring departmental commitment**

It is important to have all affected departments on-side so the policy can be implemented in a consistent, coordinated fashion and retain the political support necessary for success. There is no legal mandate to force departments to cooperate. Therefore, considerable effort should be dedicated to obtaining "buy-in." Commitment of the various departments is improved by their involvement in drafting the policy.

### ***TABLE 3: MAJOR CHALLENGES IN IMPLEMENTING WETLAND POLICY***

---

- \* provincial restraints
  - \* maintaining flexibility
  - \* ensuring consistency
  - \* developing a decision-making process
  - \* overcoming perceptions
  - \* ensuring departmental commitment
- 

### ***CONCLUSIONS***

The Alberta Water Resources Commission's work in Alberta leads to two major conclusions. First, it is critical to maintain as much flexibility in wetland policy and its implementation as is possible. Individual wetlands are different, wetland problems vary, and management conditions change. Wetland managers should make use of as many of the available tools as possible, always keeping an eye open for opportunities to advance the cause of wetlands. Relying on a single tool, such as regulation, will not work in all situations. Wetland management is too complicated for simple solutions.

Second, it is important to recognize that government has different roles to play in wetland management, and to tailor activities according to the situation. On public land, where government is the land manager, or for projects requiring government approval, the referral and approval system should take into account wetland values and issues. On private land, education, and to some extent incentives, should be the focus of government activities, to create the attitudes necessary to ensure the policy goal is achieved.

## QUESTIONS

- Q. Just a comment and a question. I don't know if we should consider the trend toward deregulation as a negative. As government backs out of a lot of harmful activities it used to do, I think that is a positive. Secondly, I was wondering why you would consider fiscal restraint as a constraint to wetland conservation. Maybe the days of massively and publicly subsidized drainage programs are now coming to an end and fiscal restraint is something that we, as wetland conservationists, should look at as an opportunity.
- A. I agree. Fiscal restraint is not necessarily a detriment. However, if you were planning to use incentives for wetland conservation and to encourage certain behaviour or to purchase wetlands, that is not going to happen. On the other hand, I agree, you can turn that around because it means that programs that encouraged drainage are no longer supported either. We need to refocus. If there is money that has come free from shifting subsidies in one area, refocus them and make sure that they are working towards wetland policy interests.
- Q. I was interested in your comments on the lack of pressures on and the lack of knowledge about peatlands in northern Alberta. I know we have somebody from the peatlands group here and he may want to chip in later. I was curious to what extent your peatlands are threatened or used at this time. Do you have much activity there?
- A. That depends on the kinds of activities. I may have simplified our lack of knowledge. We know certain things about peatlands but there are certain things we don't know; for instance, the impacts of road construction, forest harvesting, oil pipelines on the hydrology of peatlands and the long-term effects. Those things we may not know. I do not think we know enough about reclaiming areas where peat has been harvested. As far as the extent of development, we do have extensive forestry operations, and extensive oil and gas pipelines, roads and exploration. Peat harvesting operations are concentrated in the fringe areas, near the southern part of the forested area. In the southern part of the peatland distribution is also where some peatlands are under private ownership and there is conversion from a forested landscape to agricultural use. Peat is quite often burned off or drainage is required to improve agricultural use.
- Q. Not to detract from what you have said, and as a point of information, in Alberta, there are probably four or five thousand acres of peatland developed for peat harvesting out of roughly ten million hectares. So it is a very very small amount relative to the amount of peatland. Most harvesting is in the southern part of our green zone because the market area is closer. We are moving further north in developing new areas. But the industry is dedicated to harvesting in a responsible way and leaving enough peat so that peatlands will return to functioning wetlands when harvesting is finished. We think it is fairly accurate that our long-term goal is to return the peatland back to a functioning wetland. We have seen good examples; most will eventually and naturally

return to peatland. We are also doing a tremendous amount of research to find ways of speeding up the process to return it to a peatland sooner than it would naturally. Just to set the stage so that you don't imagine the peat industry as taking huge percentages of what is going on in Canada; in all of Canada, with 110 million hectares of peatlands, we are harvesting on about 16 000 hectares. In 50 years of our industry, we've only finished harvesting or left 2 000 to 3 000 hectares of peatland. So it is a very slow-moving industry. The industry is not active on very much of the resource. However, we are probably the focus of most of the attention when it comes to what people are doing with peatlands because we are the only ones who consume the product.

A. I accept your points about avoiding legislation. But the point is you cannot expect regulators, and the people that issue permits, licences for developments or drainage, to do their jobs without some form of guidelines or at least a policy. Without a policy, regulators cannot operate. It will be difficult to get a consistent message unless governments have a policy.

Q. You talked about the need for a framework that would allow consistent implementation of policy but one that is also sensitive to regional variation. I am wondering if you could give a couple of examples from Alberta of how you have tried to implement or incorporate strategies for that into your policy?

A. This is one area we are still working on. The policy itself - and this is where it is nice to be on the Commission because the Commission does not get involved in the implementing of the policy, we turn it over to Alberta Environmental Protection to do the implementation - says that it recognizes regional variations and that regional wetland management objectives will be developed. These will be developed in consultation with the local public and local authorities, and will address local needs. We are in the process of trying to figure out how to do that. Alberta Environmental Protection has established regional committees to determine what the needs will be at the local level. Maybe the main reason is that, as well as recognizing that we have regional variability, when you are dealing with private land, much of the authority for decisions that affect private land is held at the local level through municipal plans. Therefore, it is essential to involve those municipalities in implementing the plan or else you are left solely with only an education tool. The decisions on development, for instance, are made at the local level. We have attempted to say that we are going to recognize the regional differences; and we are going to involve the local authorities in making decisions about what is going to happen in those regions. We are still working on how that is going to happen.



---

## ***EXPERIENCE WITH THE IMPLEMENTATION OF THE FEDERAL POLICY ON WETLAND CONSERVATION***

***Pauline Lynch-Stewart  
Lynch-Stewart and Associates***

***and***

***Gerry Lee  
Canadian Wildlife Service  
Environment Canada***

---

### ***INTRODUCTION BY GERRY LEE***

I will just explain where this next subject came from. When we went through the development of the federal wetland policy and circulation of the draft policy to the various federal, provincial and non-government groups, we found that, with time, we could explain to these groups what the policy was all about. The problem with that approach is that you are usually talking (in the case of the federal government) to headquarters people. Headquarters people get to review Memoranda to Cabinet all the time. They will ask a standard set of questions and what they are going to do to us and you appease those questions. They go away reasonably happy or at least they do not object to what you are trying to do. The policy then gets approved and you are then faced with delivering the intent of the policy. While you may have talked to people at Transport Canada headquarters for example, and they listened to your presentation before the policy was improved and said, "Yes, it looks all right," suddenly you are faced with a question from a manager of an airport. They are saying, "Okay, I have this policy that I've been told by my headquarters that we have to implement. We have to account for what we are doing, but what is it we are supposed to do?"

If you are lucky that question will arrive without an issue on the plate. Usually it doesn't; it is usually, "I have a problem, somebody has knocked on my door, and they are talking about taking this to a full panel discussion next week. What am I supposed to do with the federal wetland policy?" That is when you start to get into some problems. In the process of developing the policy, you seldom have looked far enough down the pipe, sorting out a lot of these standard questions and finding out where it is you want to go and how you want to implement it.

We recognized that what was needed was guidelines that we were going to provide, not only to our own department in terms of how to provide advice to other departments, but also to the other departments themselves, i.e. how to get this to the person who is actually managing the land out there and how they are supposed to react and interpret the policy. So we set in

motion a study to examine how the policy might be implemented by these people, to try and anticipate some of their questions and get some kind of a standard approach to deliver the policy to the federal level. This is just one part of the policy. Our policy talks about doing things on federal land but it also talks about programs that impact on wetlands anywhere in the country, i.e. subsidy programs. This presentation will only deal with the federal lands aspect of it. So without giving anymore clues away as to what Pauline is going to talk about here, I will let Pauline do that herself.

### ***OPENING REMARKS BY PAULINE LYNCH-STEWART***

As Gerry Lee has mentioned, I am going to talk about the first draft of the guidelines aimed at federal land managers for implementing *The Federal Policy on Wetland Conservation*. Before starting to draft the guide, I talked to seven or eight federal departments, having responsibility for the majority of federal lands. We must keep in mind that we are talking about a real range of federal properties: from Central Mortgage and Housing Corporation lands that are to be developed for affordable housing; to Department of National Defense training areas; to ports and harbours and airports; to national parks; to the Greenbelt in our National Capital; to areas in the North; to other properties set aside for agricultural experimentation, or for the conservation of wildlife habitat. We are also looking at a real range of skill packages when we are talking about the managers that manage those lands. I talked to managers who were base commanders with extensive military careers behind them, to other managers who had "real property" backgrounds, who were buying, selling, leasing lands, and to other managers who were seasoned ecologists. We are writing one guide for all of these lands and all of these people.

In addition to consulting land managers, I also consulted the Canadian Wildlife Service (CWS) regional offices. I know that they are now Environmental Conservation regional offices, but for ease of delivery I hope people will excuse my referring to CWS Headquarters and regions today in my talk. I asked all of these people a few questions: What experience have you had in implementing the policy to date? What questions or issues came up when you were trying to apply it? How did you cope with those questions and issues? and, What do you need in this guide to carry on with your job?

We have just completed the first draft of a guide for federal land managers, entitled *Implementing Wetland Policy: A Guide for Federal Land Managers* (the *Guide*). It is a general guide to field some front line questions about the process or administration of implementing the policy: When and how should the policy be brought to bear on these many federal land management issues? What does the policy mean to real property transactions, environmental assessments, federal master planning processes? How does the federal policy relate to provincial policies? Where can federal land managers get further advice, help or assistance in applying the policy? It is intended, like the recent guide that was released by the Canadian Environmental Assessment Agency on their new Act, to be used by federal departments to

develop their own customized departmental plans and directives for implementing the federal wetland policy.

The first draft of the *Guide* provides policy interpretation, explaining the wording and intent of key policy statements related directly to federal land management. It also provides practical information on the roles and responsibilities of both federal land managers as well as the Canadian Wildlife Service and on processes and tools for delivering on those responsibilities. References and resources are identified to assist land managers in carrying out their responsibilities.

There are three major sections to the *Guide*. The first is, "Understanding the Wetland Policy." It answers such questions as: Why does the government have a policy on wetlands, Who is responsible for implementing the Policy, and, What does it all mean? The second major section is, "Advanced Preparation and Planning." It encourages federal land managers to take a proactive approach to delivering on the policy by conducting wetland inventories and evaluations, developing wetland conservation guidelines, establishing networks of contacts to assist in making timely and informed decisions about their resources, and gaining an understanding of conservation partnerships. The third major section is, "Operational Delivery." It identifies the ways and means of implementing the processes, through mechanisms such as environmental assessment, real property transactions, and using federal legislation for environmental protection.

I will comment only on the outline of the *Guide* rather than getting into the substance, because the substance has not yet been reviewed by the Canadian Wildlife Service.

## ***UNDERSTANDING THE WETLAND POLICY***

In the first main section, "Understanding the Wetland Policy," the first question that we answer is, Why does the federal government have a policy on wetlands? In this section we deal with issues such as the importance of wetlands, the value of a federal policy, and the "enforcement" of the Policy. We also have an inset in this first section on "what is a wetland?"

Next, we consider, "Who is responsible for wetland conservation in the federal government?" This describes the special advisory role of the Canadian Wildlife Service Headquarters and Regional offices. It clarifies their distinct roles. It emphasizes the role of expert departments under the *Canadian Environmental Assessment Act*. It provides addresses and phone numbers of all headquarters and regional contacts of the CWS. A related Appendix also comments on the application of provincial policies to federal land management, a big question that came up in the consultation.

The third question we consider in the *Guide* is: What does the policy say about wetlands and federal land management and what does it mean anyway? This reproduces the two key strategies in the policy that deal with federal land management, and focuses on the

phrases that require further explanation, such as: "exemplary practices," "sustainable wetland use," "wetland functions," "enhancing wetland functions," and "no net loss of wetland functions." We define these terms and explain why we chose those terms for the policy.

The last question considered is: What do I have to do and how do I do it while achieving my own line responsibilities or departmental objectives? This section refers managers to the next two sections which are designed to help them implement the policies through advanced preparation and planning, and operational delivery. There is also an inset that describes the distinct approach to applying the policy in Canada's North.

### ***ADVANCED PREPARATION AND PLANNING***

The second main section in the first draft of the guide discusses "Advanced Preparation and Planning." This deals with inventory and evaluation. This element of the *Guide* defines, describes, and gives examples of inventory and evaluation projects. It really makes the case for inventory and evaluation, indicating how it will make the lives of federal land managers easier in the long run, and listing the considerable environmental and economic benefits in doing advanced inventory and evaluation. It also identifies where help is available in pursuing wetland inventory and evaluation in the format of actual assistance or existing information.

Conservation guidelines are also discussed in this section. The *Guide* points out that advanced preparation for wetland conservation can also focus on activities that are commonly carried out by the department and the design or communication of management practices for carrying out those activities while protecting wetlands. For example, the federal authority might want to develop or adapt existing standard conditions for operating in and around wetland areas to be attached to permit approvals which may affect wetlands. Or they might want to develop mitigation guidelines, or codes of practice for particular types of activities such as forest harvesting, shoreline stabilization projects or routine maintenance in and around wetlands. This section also gives references to existing guidelines or sources for developing guidelines.

The advance preparation section also emphasizes that an established network of contacts can be an invaluable aid to conserving wetlands. A network can keep federal land managers informed of plans, policies or land use changes that might effect their own federal land holdings or can inform them on who they can go to for advice on wetland management. We list a number of parties in that section that can help federal land managers.

We also try to familiarize federal land managers with "conservation partnerships." This section describes potential partnerships that provide a range of opportunities to supplement and support federal efforts. We review several types of partnerships and provide, where possible, examples of conservation agreements that include federal partners. We look at agreements with non-government organizations, multi-jurisdictional agreements, private land stewardship

and land trusts. We also provide selected references for further information on conservation partnerships.

## ***OPERATIONAL DELIVERY***

The third and final section of the *Guide* is "Operational Delivery." This focuses on building wetland considerations into program or project management on a daily basis. This section illustrates that environmental assessment is the main vehicle for working towards the objectives of the policy. The majority of federal land management responsibilities require environmental assessment under the *Canadian Environmental Assessment Act* (CEAA). (The *Guide* assumes that the Act is proclaimed.) The ways and means of implementing the policy through environmental assessment (EA) are described and federal land management responsibilities that don't require an EA under CEAA are also discussed.

Initially the *Guide* focuses on when and how to deal with wetland considerations in the self-directed assessment process of the environmental assessment process. It does this in two ways. First, the objectives of the policy are translated into a structured approach to mitigation. Using a hierarchical sequence of mitigation options - avoidance, minimization, and compensation - that are defined and have criteria related to each one of them. By working through this sequence, federal land managers can determine the acceptable course of action when wetlands may be affected by their project. The mitigation sequence is the key to achieving the policy objectives within the EA process. We also show how the mitigation sequence fits into the EA process. The guide to the *Canadian Environmental Assessment Act* identifies eight steps to be taken by federal authorities to complete the EA process. Our *Guide* shows how our mitigation sequence fits into that step-by-step process. It also deals with the issue of whether or not compensation can be used to reduce the assessment of the significance of adverse effects. Finally, the *Guide* looks at other decision processes for which environmental assessment under the *Canadian Environmental Assessment Act* is not required. First, we look at policy, plans, and programs which are covered by Cabinet Directives. Such directives require an environmental assessment process to be applied to policy and program proposals that are submitted to Cabinet for consideration and approval. We indicate how wetland objectives can be met through that process.

Second, we consider how the policy can be implemented through real property transactions that are undertaken in the absence of a specific project plan. The disposal, acquisition, or lease of properties, undertaken when the essential details of a project are not known, don't require environmental assessment under the *Act*. Hence, we provide alternatives for realizing the objectives in that context.

Thirdly, we look at environmental quality monitoring and enforcement. We remind federal land managers that wetland conservation should not be confined to considering the ecosystem in the context of possible developments but that the ongoing health of the wetlands on their properties has to be monitored and signs of deterioration dealt with. If the impacts

are the result of actions from adjacent lands, we suggest several avenues that are open to them for pursuing the conservation objectives. Lastly, we look at regulatory actions that may affect off-site, non-federal wetlands. If federal authorization is required, either on federal or non-federal land, the potential environmental effects of wetlands which would result from that authorization, be it a permit, a licence or whatever, can only be considered if the affected wetland is on federal land or if the potential effects are within an area of federal jurisdiction. We suggest ways that they can meet the wetland objectives of the policy outside of the environmental assessment process.

## **CONCLUSIONS**

In summary, I feel that the *Guide* just scratches the surface of practising wetland conservation. It focuses on the process or the administration of the policy and not the ecological or technical considerations that need to go hand-in-hand, to truly see the objectives of the policy met. This includes defining not only what we mean by functions, but ways that we can measure or evaluate those functions. Have we really even started to identify the special considerations within the environmental assessment process specific to wetlands? ... everything from how to describe a wetland in an environmental assessment, to assessing impacts on it. Perhaps we also need a guide to successful mitigation measures, and enhancement and rehabilitation efforts. Sources of this kind of information should be included as references in this guide.

## **QUESTIONS**

Q. When do we all get a chance to look at the draft *Guide*?

A. I think Clayton Rubec will answer that.

A. This draft document has only been completed this week; so you are getting a chance to see it first hand. The process that we envisage occurring now is that first, we want to edit the document ourselves and make sure it is all spelled right. Secondly, we must translate it into French and make it available to all our colleagues in Environment Canada. We are soon going to start the consultation process with our regional offices. We also wish to consult with other federal agencies as to the content of this document, as to whether it is acceptable, whether it reflects what the requirements and needs are of our management agencies. In addition, it assumes that the *Canadian Environmental Assessment Act* has been proclaimed by Parliament, which actually will not occur until January 1995. The document of course would not be finalized in its current form if it did not go through Parliament. We have always accepted a philosophy with the federal wetland policy of openness and open consultation. However, we must go through an internal process within Environment Canada and CWS first. Our colleagues must be comfortable with what we are saying are their responsibilities and roles. We must also

properly put to paper what the responsibilities of other departments of the federal level are. In reviewing this document, I am very comfortable with it so far, but it is not for me to decide on its final form. We want the document to become a public document; one that we are willing to share with all jurisdictions in Canada. That will come fairly quickly we hope as we do not expect the consultation phase to be dragged out. Gerry Lee, do you have any other thoughts on that?

The only thing that I would add is that if there are any other processes that are underway at the provincial level that might help us in comparing notes, we would be quite pleased to receive any of those as well. Because there is no great font of knowledge here, we are learning as we go. We would certainly value your comments, but we would also like to hear what some of you are doing in the same kind of situation.

Q. I appreciate your last point. You mentioned the off-site influence of site problems. I think you should look the other way at it. How can we react to developments on non-federal lands off-site that are going to affect federal lands? The two really should go hand-in-hand. I have not seen what you have prepared but I am sure it is good. But think about that; we must have a way of controlling impacts on federal land from outside.

A. That was one of the biggest issues in the consultations, in the top three issues that federal land managers felt needed to be dealt with. We have attempted to provide alternative ways of getting at those issues. I am really looking forward to the review by the regional staff because they are the ones that are dealing with these issues on a day-to-day basis in the field. The suggestions that we make in the *Guide* are practical but are they the best that we can include? We are looking forward to comments on that.

Q. I was just wondering what was the reason behind not involving other federal departments in the development of this guideline? I assume that one of your objectives is to get buy-in from other departments and sometimes the best way is to get them involved right at the beginning.

A. Absolutely. However, we did consult seven or eight federal departments involved in federal land and water management. We did as much as we could with the time and money possible.

We started with other departments and our own department in terms of the questionnaire. The approach that Pauline took in her contract was to interview managers in a wide range of federal agencies but there were some limits in terms of time and money. But that process now starts again. Once our internal process is finished in Environment Canada, we are going to reach out to all federal agencies that

could have an influence or effect on wetlands, and ask for their response to this document and their input before the whole process is concluded.

Often, one needs to put something on the table before you really get reasonable comments and input on what is necessary. Many federal land managers simply said, "Let me look at your first draft." So this is just the start of involving all the parties.

- Q. Will the *Guide* be addressing the potential disposal of federal lands and the implications for loss or retention of wetlands?
- A. Yes, but that is a legal mine field. I have consulted lawyers on the possibility of placing conditions in the case of leases or caveats, easements on the legal documents involved in disposal and transfer of lands. I don't think that the lawyers have decided whether or not something like that would stand up in a court of law. Easements are a different matter but just some kind of a condition on a transfer; to try and ensure the conservation of the wetland on a property, is pretty dicey business. But we are looking into that.
- Q. How does the *Guide* address uplands in the case of prairie habitats? I think the peat bogs and the sloughs are fairly insular, but in the case of Pacific Coast estuaries, you are really dealing with hydrology and the impacts of surrounding activities and not necessarily the actual wetlands. So that is a consideration. I am wondering if you have included that in your document?
- A. I think that the message of considering the wetland in an ecological context comes through loud and clear in the policy itself. Certainly the main vehicle for implementing the policy, the *Canadian Environmental Assessment Act*, will also take that into consideration. We feel comfortable that we have covered that issue.
- Q. I would urge extreme caution when you are dealing with the issue of federal involvement and control on lands outside federal lands. We have some specific examples - one I am very familiar with is Riding Mountain National Park. There are a lot of wetlands outside that federal land that are being changed, affected, or improved because of land management activities by a whole host of agencies out there. The notion of federal policy or control on lands outside those federal lands is something that would cause us extreme difficulty, so I do not know if it is a policy area you even want to deal with. In reality, we know very well that these wetlands are in a complex and do not respect boundaries. If you recall the issue of when Riding Mountain National Park talked about a buffer zone around the park, it almost provoked a violent reaction. So I think those kinds of issues are areas to be entered very, very carefully and with extreme sensitivity to local concerns and provincial jurisdiction.

---

## **EXPERIENCE WITH THE IMPLEMENTATION OF ONTARIO'S WETLANDS POLICY STATEMENT**

**Kevin Loftus**  
**Aquatic Ecosystems Branch**  
**Ontario Ministry of Natural Resources**

---

### **INTRODUCTION**

The purpose of my talk is to convey some of Ontario's experience with the implementation of its Wetlands Policy Statement. As background, I will provide an overview of the history of the development of the Policy, what it says, including its goals and objectives, its implications for development, and a synopsis of how it is to be implemented. I will also provide some definitions and discuss Environmental Impact Study (EIS) requirements. I will then discuss how well the Policy is working, provide an overview of the implementation-related problems and/or issues that we face and finish off with a discussion of some lessons that we have learned that might be useful to others who plan to develop similar wetland policies.

Most of you are aware why Ontario needs a Wetland Policy. In the southern part of the province we have lost over 75% of the wetlands that existed at the time of European settlement. In the northern part of the province, wetland losses are much less extensive than in the south, but they are building, particularly in the coastal areas. The province has had other measures in place to protect wetlands, most notably the 1984 *Guidelines for Wetlands Management in Ontario*, which encourages municipalities to protect wetlands through the land use planning process. While this and other measures have been of some benefit, they have not been strong enough and wetland losses have continued.

### **DEVELOPMENT OF ONTARIO'S WETLAND POLICY**

Ontario has been working towards the development of a wetlands policy for more than a decade. The process began in 1981 with the release of a document called *Towards a Wetlands Policy for Ontario*. This document tested the waters, i.e., it explored the level of interest and commitment within the public for the protection of wetlands.

In 1983 and 1984, Ontario released the 1st and 2nd editions of the *Wetland Evaluation System* for the southern part of the province. The evaluation system provides an objective tool for comparing wetlands and for identifying those which are deemed to be of particular importance, i.e., provincially significant wetlands. To date, the 2nd edition has been used to evaluate more than 2800 wetlands in the southern part of the province. In 1993, the 3rd edition of the southern manual was released as was the 1st edition of the northern manual.

In 1984, as part of its policy development process, the Ministry of Natural Resources (MNR) and the Ministry of Municipal Affairs (MMA) jointly released *Guidelines for Wetlands Management in Ontario*. This document encouraged municipalities to protect wetlands through the land use planning process. Within a few years of its release, it became apparent that the guidelines were not strong enough and MNR and MMA started drafting the Wetlands Policy.

The first draft of the Policy was produced in 1989, the second draft in 1991, and the approved *Wetlands Policy Statement* came into effect in June of 1992. There were extensive consultations with municipalities, interest groups, and others at each stage in the development of the policy. In November 1992, a few months after the release of the *Wetlands Policy Statement*, we released the *Manual of Implementation Guidelines for the Wetlands Policy Statement*. This manual provides detailed guidelines to be used in conjunction with the Policy.

The *Wetlands Policy Statement* was jointly prepared by the Ministry of Natural Resources and the Ministry of Municipal Affairs and was issued under Section 3 of the *Planning Act*. It identifies the protection of wetlands as a matter of provincial interest. It directs municipalities, planning boards, public agencies, including the Ministry of Natural Resources, Ministry of Environment, Ministry of Agriculture and Food, other ministries, and the private sector to protect wetlands. The Policy applies to provincially significant wetlands and the adjacent lands that surround those wetlands.

The *Planning Act* requires that planning bodies "have regard" to the Policy in making any decision that affects any planning matter. "Having regard" to the Policy does not mean having to follow the policy to the letter in all situations. The "have regard" provision was intended to provide a measure of flexibility in the manner in which the Policy is implemented in recognition of the fact that many factors, not just wetlands, must be considered when making land use planning decisions.

The Policy is implemented on private land through the land use planning process. MNR's role in this process is to evaluate wetlands and identify those which are provincially significant. Wetlands are evaluated using the wetland evaluation system. The scores derived from the evaluations are then compared against criteria to determine which wetlands are provincially significant. Following evaluation, maps are produced which are transferred to municipalities. The Ontario Ministry of Natural Resources, in its role as a commenting agency, reviews development applications where the *Wetlands Policy* is involved and makes recommendations to the municipality. The role of the municipalities in implementing the Policy is to incorporate the provisions of the Policy into their official plans, zoning by-laws, etc. The maps provided by MNR are used by municipalities in the zoning process. The maps are also used to identify areas where a development proposal has the potential to impact a wetland or its adjacent lands. The municipalities are the decision-making authority and, as indicated above, they are required to "have regard" to the Policy when making their planning decisions.

## **TERMINOLOGY**

The *Wetlands Policy Statement* includes several definitions:

- "Wetlands" are *lands that are seasonally or permanently covered by shallow water as well as lands where the water table is close to or at the surface. In either case, the presence of abundant water has caused the formation of hydric soils and has favoured the dominance of either hydrophytic or water tolerant plants.*
- "Adjacent lands" are *those lands within 120 metres of an individual wetland and those lands connecting individual wetland areas within the complex. Adjacent lands are not the same as buffers. Many people think of them as the same thing, but they're not. Buffers tend to be no development zones. In contrast, adjacent lands are areas where development may be permitted if certain conditions can be met, as demonstrated in an environmental impact study (EIS).*
- A "wetland complex" is *two or more individual wetlands along with their adjacent lands that are related in some functional manner and are grouped within a common boundary.*
- "Development" means *(a) the construction, erection, or placing of a building or structure; (b) activities such as site grading, excavation, removal of topsoil or peat and the placing or dumping of fill; and (c) drainage works except for the maintenance of existing municipal and agricultural drains.*

The *Wetlands Policy Statement* is "triggered" any time an approval under the *Planning Act* is required. Many development applications require such approvals. However, some of the activities identified in the definition of development do not require *Planning Act* approval. As such they do not "trigger" the Policy.

## **CONTENT OF THE POLICY**

Ontario's *Wetlands Policy Statement* identifies separate policies for the Boreal Region of the province and for the Great Lakes - St. Lawrence Region.

### ***Policy Goals***

The goals of the Policy are: (1) to ensure that wetlands are protected through the land use planning process; and (2) to achieve no loss of provincially significant wetlands. It is important to note that the goals are "no loss" as opposed to "no net loss".

## ***Policy Objectives***

The objectives of the Policy are: (1) to ensure no loss of wetland function or wetland area of provincially significant wetlands in the Great Lakes-St. Lawrence Region; (2) to ensure no loss of wetland function of Provincially Significant Wetlands in the Boreal Region; and (3) to encourage the conservation of other (non-provincially significant) wetlands.

## ***Great Lakes - St. Lawrence Region Policies***

In the Great Lakes St. Lawrence Region, there are three policies.

1. Development shall not be permitted within Provincially Significant Wetlands.
2. On adjacent lands, development may be permitted only if it does not result in any of the following: (a) loss of wetland functions; (b) subsequent demand for future development which will negatively impact on existing wetland functions; (c) conflict with existing site-specific wetlands management practices; and (d) loss of contiguous wetland area.

This shall be demonstrated by an Environmental Impact Study (EIS), prepared in accordance with established procedures, and carried out by the proponent addressing (a) to (d) inclusive. The Ministry is now struggling with the practical implications of demonstrating no loss of wetland function.

3. On adjacent lands, established agricultural activities are permitted without an EIS.

## ***Boreal Region Policies***

1. In Provincially Significant Wetlands and adjacent lands, development may be permitted only if it does not result in any of the following: (a) loss of wetland functions; (b) subsequent demand for future development which will negatively impact existing wetland functions; and (c) conflict with existing site-specific wetland management practices.

This shall be demonstrated by an Environmental Impact Study (EIS), prepared in accordance with established procedures, and carried out by the proponent addressing (a) to (c) inclusive.

2. On adjacent lands, established agricultural activities are permitted without an EIS.

## ***Policies Related to Utilities and Facilities***

1. New utilities/facilities shall be located outside Provincially Significant Wetlands wherever possible. Approval authorities shall consider alternative methods and measures for minimizing impacts on wetland functions when reviewing proposals to construct transportation, communication, sanitation and other such facilities/utilities in Provincially Significant Wetlands.

This policy recognizes that it is impractical to avoid all wetlands all the time.

## ***ENVIRONMENTAL IMPACT STUDIES***

As indicated above, the *Wetlands Policy Statement* requires that environmental impact studies (EIS) be conducted in support of development proposals. The *Manual of Implementation Guidelines for the Wetlands Policy Statement* includes a short section which outlines how EISs should be conducted. However, more detail is required and we are in the process of developing more detailed guidelines. Our intention is to produce guidelines that result in EISs that are both reasonable in relation to the magnitude of the proposal and the risk it poses, and defensible. The Policy, and the EIS guidelines that are being developed, recognize three types of EISs: (1) comprehensive EISs which are normally appropriate in support of large scale planning studies, such as watershed studies; (2) full site EISs which are appropriate for assessing the effects of large scale development proposals (e.g. subdivision proposal); and (3) scoped site EISs for addressing the potential impacts of minor development proposals, such as single lot severances, where common sense says impacts will be minor. Scoped site EISs may also be appropriate to address the potential impacts of larger proposals if other more detailed studies, such as a comprehensive EIS, are available.

The Policy also recognizes that some development proposals are reviewed under other legislation. Rather than requesting duplicate EA or EISs, we ask that the EIS requirements of the *Wetlands Policy Statement* be folded into these other EA documents.

## ***IS ONTARIO'S WETLANDS POLICY STATEMENT WORKING?***

It is difficult to determine, with certainty, how well the *Wetlands Policy Statement* is working. This is because it is difficult if not impossible to determine, for example, the number of developers who have decided not to submit development applications in or adjacent to Provincially Significant Wetlands because they recognize that their proposals are going to be rejected. Despite that limitation, we have good evidence that the Policy is saving wetlands.

## ***IMPLEMENTATION ISSUES***

### ***Property Rights and Compensation***

The *Wetlands Policy Statement* restricts what landowners can do with their land. Some would argue that, in doing so, it has caused land values to decline. As a result, some landowners now think of wetlands as liabilities, and some are threatening to destroy their wetlands. This is a serious concern because, in most cases, neither a *Planning Act* approval nor any other approval is required in order to clear, drain or fill a wetland. Without a *Planning Act* application, the *Wetlands Policy Statement* cannot be applied.

While it would be easy to deny that the *Wetlands Policy Statement*, or other similar policies which restrict what can be done on a piece of land, can impact property values, I think we have to admit that such impacts are possible. For example, it is possible that some landowners will experience genuine reductions in property value, and this is unfortunate. Others will express concern that property values have been affected where, in reality, no market for such wetlands existed anyway. On the positive side, we are beginning to see evidence that the presence of provincially significant wetlands can enhance property values, particularly in urban fringe areas.

The Government of Ontario's position on compensation is that it does not compensate for any reductions in property value that might arise from any decision that it makes that is made for the public good or public safety. However, it does offer some compensation in the form of the Conservation Land Tax Reduction Program which provides a 100% rebate on any taxes paid on any land area identified as provincially significant.

### ***Trespass***

In some cases in the past, Ministry staff have failed to obtain landowner permission prior to entering onto private lands to evaluate wetlands. Some landowners are now accusing the government of trespass. Some argue that they would not have allowed the government onto their lands to evaluate their wetlands had they known that it might ultimately have led to restrictions on what could be done on their land.

### ***Implications of the Policy for Wetland Management***

There is a perception that the Government of Ontario is using the *Wetlands Policy Statement* and other policies and programs to preclude the management of wetlands. This is not so, and it is not what the Policy says. At the same time, where management is appropriate, we have to manage carefully. As a government, we have to accommodate a broad range of policy and program requirements in making decisions as to when and where management might be permitted. Our mandate is broader than that of most of the interest groups that are involved in wetland management. The challenge for us and for our partners in wetland management is to identify a set of decision criteria that are mutually acceptable that enable us to determine

when and where management will be permitted, and what type of management will be acceptable. The Ministry of Natural Resources is firmly committed to developing such criteria in consultation with our partners.

### ***Misinformation/Misinterpretation***

The most serious issues that the Ministry of Natural Resources and the Ministry of Municipal Affairs face in regards to the implementation of the *Wetlands Policy Statement* are related to misinformation and misinterpretation of what the Policy says.

**Training** - When the policy was first released, both government and municipal staff, the people who were to be involved in implementing the Policy, received training in its implementation. This was an excellent first step. Since that time, however, we have not provided adequate follow-up support. In the absence of adequate follow-up training or support, inconsistencies have developed in how the Policy is being applied. These inconsistencies result from differing interpretations of the wording within the Policy and its implementation guidelines.

**Communications** - In retrospect, the Government of Ontario may have done a poor job of communicating the *Wetlands Policy Statement*, and its implications, to the public, and to rural landowners in particular. In the absence of clear communications materials, rumours and misinformation have ruled. The result has been that the impacts of the Policy on landowners has been seriously overstated. For example, some farmers have concluded, erroneously, that the Policy will seriously limit their ability to farm, perhaps to the point of going out of business. In reality, the Policy will have virtually no impact on the ability of farmers to farm.

### ***Resolution of Policy Interpretation Questions***

I joined the Ministry roughly one year after the Policy came into effect. Since that time, we have been faced with a number of issues related to the interpretation of the Policy. Most of them, in my view, are/were not that difficult to resolve. However, we've been slow to resolve many of them largely because the workload is excessive. The result is that some of the problems have "snowballed". Some of the problems that we have faced might have been prevented with better communications and training programs.

Interpretation questions are inevitable, even when a policy is developed over a long period of time as was the *Wetlands Policy*. It simply isn't possible to identify all of the issues in advance. The challenge is to be able to deal with the issues quickly and thoroughly when they arise, so that they do not grow into larger problems. To be able to address problems efficiently one needs (a) adequate staff resources and time, and (b) the right mix of people and expertise (biological, planning, legal) to address each issue. The province has recently formed an inter-ministerial committee, known as the Wetlands Policy Support Team, to address complex policy implementation questions.

The most serious issue that the government has faced in regards to the implementation of the *Wetlands Policy Statement* is its application to agricultural lands. In large measure, this issue has resulted from confusion over the intent of the wording in the Policy and in the associated implementation guidelines.

### ***Other Issues***

Many landowners argue that they were not adequately consulted when the Policy was being developed. In fact, the Ministries of Natural Resources and Municipal Affairs went to great lengths to consult with the public, other agencies, municipalities and interest groups on several occasions during the policy development process. The problem, unfortunately, is that the landowners, i.e. the people who would be most affected by the Policy, were not effectively consulted. Very few of them knew about the Policy until a year or so after it was introduced.

In recent months, several groups have begun to challenge the province's Wetland Evaluation System. Most challenges have been relatively simple to deal with, but others have not. There are two important issues related to environmental impact studies that are proving difficult to resolve. The first problem relates to the development of decision criteria for determining what functions should be addressed in an EIS. The second relates to determining, in a practical sense, what constitutes a loss of wetland function. One of the functions that is identified in the *Wetlands Policy Statement* that is difficult to deal with in a practical manner is the provision of habitat for fish and wildlife. For example, adjacent lands often provide habitat for waterfowl. How do you deal with loss of function in those areas? Does the loss of nesting habitat for one pair of mallards constitute a loss of function? When assessing loss of function, one must address direct, indirect and cumulative impacts.

### ***LESSONS LEARNED***

Some of the problems that Ontario has faced in trying to implement its Wetlands Policy were, in hindsight, preventable. Others were not. Based upon Ontario's experience, I would recommend the following when developing and implementing similar policies:

- Ensure effective communications and consultation during the policy development process.
- Ensure effective communications to all potentially affected groups once the policy is released - produce high quality communications materials.
- Ensure high quality (initial and ongoing) training of those responsible for implementing the policy.
- Ensure that there is a mechanism in place to deal with policy interpretation problems as they arise and to communicate resolutions to those who need to know.

- Anticipate problems in advance (solicit input from field staff and interest groups).
- Maintain flexibility so that creative solutions are possible.
- Recognize the capabilities of your partners in policy implementation.
- Recognize the workload implications of implementing the policy on your own staff.

## **QUESTIONS**

- Q. Regarding the line you showed across the North Bay area where the Policy applies or does not apply, I think you have a problem with some of your Ministry staff in Eastern Ontario. At a recent meeting of the Madawaska Highlands Advisory Committee, there was a statement made that the Policy did not apply in this area and that is well below that line. You have to bring your staff up to speed. That is a specific example of where it has to be brought back into the picture.
- A. I would be amazed if they did not at least know that.
- Q. Well, there is a lot of discussion. One of the questions that was raised was why did you need ANSIs when you had all of these other rules that already applied to the land. They talked about the upland, the forest and the water and somebody asked "what wetland policy covers that?" The statement that was made was that the *Wetland Policy* doesn't apply in this area, that is just agricultural land.
- A. I know what they are thinking. The Madawaska Highlands is agricultural land and the Policy does not apply to those lands. I think they were trying to convey that.
- Q. How did you come up with the criteria of prioritizing your wetlands, i.e. their significance? Did you use local people or did you do it in-house? What criteria were used to prioritize your wetlands? Also, what scale of mapping did you use for your plans to show people where your significant wetland areas are in the province?
- A. First of all, we developed our first Evaluation System for the southern part of the province in 1983; it was revised immediately in 1984 and that was the so-called Second Edition of the Evaluation System. The Evaluation System has a hydrological component, biological component, social component, and a special features component which includes rare and endangered species and so on. Because we hadn't evaluated many wetlands back in 1984, probably less than 100, we didn't really have any good basis for deciding what should be significant and what shouldn't. Essentially, as I understand it, some experts were put together and asked what they thought reasonable criteria would be. At that time, they decided that for the wetlands that scored 600 points or more in total, or 200 or more in any one of the four components, would be

considered provincially significant. That was in place until we had the new Evaluation System just this past year, at which time we revised the provincial significance criteria. In terms of mapping, we tried to provide municipalities with maps on a scale of 1:10 000, that is the typical Ontario base map scale, in the southern part of the province. The problem with that is that at that scale, 1:10 000 a line can be 50 metres wide. It is a problem that we are aware of and we are working to resolve it. We also provide the municipalities with the larger scale maps that we actually produce at the time of the survey. We polish those up a bit. But mapping has been a problem.

Q. One of the issues you addressed is the poor degree of consultation with private landowners and resource users of wetland resources in Ontario. Do you have any thoughts on how you would like to revisit that now or what you'd like to do, from this point on, in terms of consultation with those groups? How are you going to get out of the box?

A. Getting out of the box will certainly be a challenge. We are in the process of finally putting together a communications plan. I think the most important thing is to get some accurate information out there. I have given presentations to the Ontario Cattlemen's Association, and the Ontario Federation of Agriculture, and at the end of those meetings the people who were pretty upset at the start of the meeting, walked away literally being quite relaxed. They were amazed at how different the reality was from their perception. We have to get that message out there. That's really the main group where misinformation is an issue. Groups like Ducks Unlimited, the Ontario Federation of Anglers and Hunters, and the Federation of Ontario Naturalists have occasionally been misinformed as well. They have construed us as using the Policy to prohibit the management of wetlands. That is not our intention. I can understand why they have been led to think that, but I think we have worked hard to clarify that.

We simply have to get out there and communicate. We have to solicit the help of groups like the Ontario Federation of Agriculture (OFA). We have to make better use of our staff and train them better so that they can deal with misinformation when it starts.

The Ontario Ministry of Agriculture and Food - we've also got to use them better; making sure that they understand the Policy better because they are the first contact for the agricultural community. I think what we really have to do is start using the farm organizations and other interest groups as allies, to help us. They may not agree with the Policy in full, but I think they would have to acknowledge that accurate information is better than misinformation. If we can get them to start to help us with some accurate information, that will help.

We are still going to have a problem with those landowners who are affected financially by the Policy and the fact that there is no compensation. We have to stop beating around the bush and tell them as a government, under the *Planning Act*, that we do

have the authority to impose restrictions on land use and unfortunately some of them are going to be affected. Personally, I would like to see some form of compensation where it is truly warranted. In the perspective of the rural landowner, you have 95% of the population living in urban centres, creating policies that affect 5% of the population, the farmer in the rural landscape. It is the people in the rural landscape that end up paying for these things. It is not necessarily equitable.

- Q. I would like to take off on that last point of yours. I did not get from your presentation that there was really an opportunity within the Policy for developers or private landowners who are exactly in the situation you just described. They do not have any alternatives to suggest mitigative opportunities as an alternative to the taking of those lands, or those wetlands and functions out of production. Is it just that clear? Are there any mitigation opportunities here? Can a developer or a landowner put forward a proposal and say, this particular wetland is in the middle of a large dollar development and is of very big importance to this local little community. If you will allow us to go ahead, we will create 37 other wetlands nearby, or something like that. Does that possibility exist?
- A. Our Policy does not allow that approach. It just says, no loss. In terms of having regard to the Policy, I can imagine a scenario where that would make sense. But that is not the direction the government chose when it developed the Policy. I think the reason it was frightened of that approach is because of what it interpreted as some bad experiences in the United States. Whether or not that was accurate or not I don't know. I think there is a small percentage of cases where it does make sense to go a no net loss. I think most cases you should just try and stay out of wetlands.
- Q. I wanted to follow-up a little bit more on this compensation issue. I guess I am wondering what is being compensated for? Whether you are actually taking away rights from somebody or are you simply telling them that in the future their anticipated development of this land should no longer be anticipated? I had a bit of involvement with the City of Edmonton and their environmentally significant and sensitive areas within the city. They are trying to protect these areas and the developers are saying, if you do this, we won't be able to develop that land for housing. It is though the land that they have bought that is currently zoned for agriculture use has attached to it some implied development right sometime in the future, just because it is in proximity to the urban area. I wonder whether in fact we may be compensating for what is speculative gain as opposed to a real right that is being taken away.
- A. The Policy itself is not retroactive. However, we do recognize that in some parts of the province a particular piece of land may already have some policies around it in the official plan and it may already be zoned residential - a plan of subdivision, for example, may be coming due or pending. In those situations, we will apply the Policy to a lesser degree. If all the approvals are in place, we just can't apply the Policy and they can go ahead. It was recognized that you have to be fair to those who are part

way through the approvals process. So we did try and consider that. Now with regards to compensation, we do have a Conservation Land Tax Reduction Program, which does provide some tax incentives to landowners. It works in those situations where the landowner can't make a whole bundle more by selling the land to a developer. If you are in a part of the province where there is no development pressure, the Conservation Land Tax Reduction Program will help. But if you are in the outskirts of Toronto or one of our big urban centres, the Conservation Land Tax Reduction Program may not be enough of an incentive.

---

## ***DEVELOPMENT OF A WETLAND POLICY FOR NEW BRUNSWICK***

***Pat Kehoe***

***Fish and Wildlife Branch***

***New Brunswick Department of***

***Natural Resources and Energy***

---

### ***INTRODUCTION***

I would like to present a bit of background on New Brunswick and where we are at with our wetland policy. The New Brunswick Wetlands and Coastal Habitat Program began in 1986. Prior to that time there was no provincial program or interest directed at wetland conservation. Over the last eight years we've grown from the point of having nothing to having six staff that are working on various wetland projects associated with the North American Waterfowl Management Plan and so on. We are just getting into the phase of working on a wetland policy.

There are several major obstacles that we have to overcome before we even start thinking about public consultation processes. We have some real internal education to do not only within our Department of Natural Resources and Energy, but also across government. The way we are trying to sell wetland conservation and the need for wetland policy in the province is based on conservation. Our Wetland Program is administered by the Fish and Wildlife Branch; I am the Program Manager. Our main interest is the diversity of wildlife that wetlands support. Wildlife includes not only the traditional harvested species such as deer, but some of the rare, non-game species and plants which are becoming of more interest to our department.

In New Brunswick, because of the settlement pattern largely being focused along our coastline and river valleys, wetlands have come under increasing pressures. Let me relate to you a prime example of the kind of interdepartmental communication that we need. In 1989, a sewage lagoon was constructed in the middle of a wetland by our Department of Environment. That 40 hectare site ended up drained and a two-hectare sewage lagoon sits in the middle of it still today. We now have an ad hoc interdepartmental committee on wetlands. We include our department, the Department of Environment, and the Department of Municipal Affairs, Culture and Housing. These are the three line departments that have interests in wetlands, either through regulatory mechanisms or through programs such as mine. We are basing our arguments for wetland conservation and need for policy on the same sort of values and functions that have been illustrated in Ontario and other provinces.

One of the key things that we are selling in New Brunswick is the value of salt marshes in terms of biomass export to marine ecosystems. Of course, there is a great tradition of

hunting and fishing in New Brunswick. About one-seventh of the population hunts; it's one of the highest proportions of active hunters in the country. Recreational interests and ecotourism are growing.

## **DEFINITIONS**

We have established the following definition of wetlands:

*Wetlands are lands transitional between terrestrial and aquatic systems, where the water table is at or near the surface, or the land is covered by shallow water at some time during the growing season. Wetlands are characterized by poorly drained soils and predominantly hydrophytic or water tolerant vegetation.*

We feel that this covers some of the agricultural concerns that were mentioned by Kevin Loftus in Ontario by having characteristic hydrophytic vegetation, it excludes seasonally flooded areas that are in agricultural use. Our intention, as in Ontario, is not to limit agricultural activities in floodplains.

We have several different wetland types in New Brunswick: (i) the *St. John River Floodplain marshes* that are our most fertile; (ii) *inland freshwater marshes* that vary in their value to wildlife and vary in size; (iii) *inland bogs and ponds* that are very important, especially the bogs in terms of peat production - over half the wetland acreage in New Brunswick is bogs; and (iv) *salt marshes and other coastal wetlands*.

In terms of land cover in the province, the total wetland area is very small. But so are agricultural areas. They are tied at 4% of the total land area. The dominant land type in the province is forest. Of our wetland acres, about 49% are inland bogs, another 41% are inland marshes, such as beaver ponds and backwater floodplain areas such as the St. John River Floodplain; and the salt marsh areas, which we consider to be our most important wetland habitat types, comprise about 0.4% of the total land base of the province. Salt marshes are also located in the most heavily settled areas.

## **POLICY DEVELOPMENT**

We are trying to follow along with international initiatives. This is one way we are trying to sell it to our senior management in the three departments that I mentioned. In terms of dollars generated to the province by the North American Waterfowl Management Plan; interest such as the Ramsar Convention and the Wetlands for the Americas Program; we are focusing on potential high profile projects that we can get going under those various programs. We also include other federal initiatives that are ongoing and we are reviewing what other provinces have in their wetland policies.

We are impressing upon the other departments that wetland conservation is not a new idea. Other provinces are getting into it, and there is a real need and a real benefit, especially in terms of the values and functions that wetlands hold. There has been increasing public interest in education on wetlands. The Sackville Waterfowl Park and Daly Point Reserve are two wetland areas that have been developed. There are over 20 000 visitors a year between those two sites. The point is that a lot of small municipalities, Sackville and Bathurst as well as larger municipalities such as Moncton and Hampton, are becoming more interested in wetland conservation. These municipalities are actually getting ahead of where we are at in terms of provincial policy, with respect to their own recognition of a need for wetland protection guidelines.

In cooperation with Wildlife Habitat Canada, we now have two municipal projects going: one in the Hampton marshes, a very extensive marsh system along the St. John River, and another one in Moncton where we are helping the communities develop guidelines for wetland protection, to be incorporated into their municipal planning statements. These were solicited by the two municipalities. Smaller municipalities in New Brunswick are recognizing this and they are wanting to get ahead. There is a real inertia within the provincial government to jump on board, largely because of a lot of the concerns that have been mentioned around here, fiscal restraint and impinging on landowners' rights, and so on. There are some real fears in terms of what a wetland policy might do. It really is going to be a hard sell on our part in terms of the benefits that we will get out of a better protected wetland base.

The draft policy document that we have developed is at the Deputy Minister level with the three departments. It has been sitting there for a while. I am not sure when they are going to move on it. They have asked us for the draft policy document, after we made a presentation similar to this. But it has been up there without any word of what is going on and we have some concerns. The *ad hoc* committee has some concerns on how serious the government is going to be. So we do need to have a boost in the arm in terms of action on our draft policy document.

I will talk about the existing wetland legislation in the province. The Department of Environment right now has a *Clean Environment Act* which has environmental impact assessment (EIA) regulations. These call for any development that affects a wetland of two hectares in size or greater, to be registered under the *Clean Environment Act* to assess whether or not an EIA is required. They also have a Watercourse Alteration Regulation, which up until last year did not include wetlands. Wetlands were not considered watercourses, but they are now. So those two Acts are probably our strongest tools that exist right now in terms of wetland protection. The problem is that without a uniform policy, these Acts are applied and interpreted differently, not only between our departments, but quite differently when it gets down into the field staff level. Whether a road is appropriate through a salt marsh or whether it gets approval depends on interpretations in the different regions that we deal with in the province. So we really need a policy to firm up these existing Acts. Because there is no policy and we have these Acts which do put restrictions on wetland development, we find ourselves quite often in fairly embarrassing situations where somebody has turned something

down because they have judged a wetland as being important. Often it probably really isn't, or conversely somebody hasn't really cared about the wetland and allowed a road to go through it. So we are in a real mix. The sewage lagoon is a prime example of the sorts of problems we are facing because, even though these Acts exist, there isn't a uniform application or a uniform acceptance of even the wetland definition. Under our own department, we have the *Crown Lands and Forest Act* and an *Ecological Reserves Act*. So we have some power to protect wetlands on Crown land and regulate activities on those wetlands on Crown land.

What is probably going to be our strongest tool, like Ontario, is the *Community Planning Act* under the Department of Municipal Affairs, Culture and Housing. As I have mentioned, there is interest among a number of municipalities in New Brunswick to get involved with wetland protection. The interest is probably stronger in some of these municipal governments than the interest at the provincial level.

### ***THE DRAFT POLICY***

Our draft document is titled *The Wetlands Policy Framework for New Brunswick*. Our basic goal is to ensure the conservation of New Brunswick wetlands. Under our goal we have several objectives. First, we state that the principle of sustainable economic development will underlie our approach to the conservation of wetlands. The appropriate provincial governmental agencies will work together to implement strategies to meet the following three objectives:

- (1) To maintain the area and function for provincially significant wetlands. We've done evaluations now of our salt marshes, our St. John River Floodplain Habitats, and our Peat Resource Habitats and we have lists of provincially significant wetlands in each of those three habitat types that would be the "hands off" type of wetlands.
- (2) To maintain the function of regionally significant wetlands. These are the wetlands where we will allow development with mitigation, but we are a long way from defining what mitigation is in the province. We are just trying to get government to buy into these ideas.
- (3) To conserve all remaining wetlands. That would largely be through the Watercourse Alteration Permitting Process.

Our various strategies are pretty simple. To promote existing wetland management and protection mechanisms, that is, the ongoing programs, we need the government to buy into this across the departments. Those include things that we are doing under our stewardship programs, our community-based Wetlands Regulation Review, and other projects that we have going. Secondly, we need to have a complete review of policy and existing legislation and to ensure that we have across-the-board application of the basic wetland conservation principles that I outlined. Third, we must accelerate wetland inventory and evaluation initiatives because these actions are central to enacting and meeting the three objectives that I outlined.

We also have to really promote wetland education and awareness; this is where the public consultation process comes in. Fortunately, right now New Brunswick is also developing a new wildlife policy. The wildlife policy clearly defines what wetlands are and the need for habitat conservation. There is a public consultation process now on-going with the wildlife policy, so hopefully, the wetlands policy will become an underlying policy for the broader wildlife policy. We can tack wetlands onto the public review process already going on. We should encourage government to enhance cooperation at the federal and provincial and international level.

We are a long way from really having a policy. We have a framework and a discussion document that we have circulated within the three departments that I mentioned. We have to get it beyond that. We are right at the stage where we are going to see whether or not there is going to be acceptance by the three Deputy Ministers to allow us to go on to discussion with other departments. I think there may be some fear and apprehension, obviously from hearing experiences from Ontario and elsewhere among the Deputy Ministers. I think they see the need, at least for a consistent policy among the three departments. If they do not have one policy they will be embarrassed just about every two months when some major project that hits, perhaps whether it is a sewage lagoon or whatever. If we can move ahead, I think we have an opportunity to learn from the experiences of other jurisdictions that have wetland policies.

## ***CONCLUSIONS***

It is not going to be easy. I do not think it will ever be easy to put into effect something like this when you have an issue that will potentially impinge on private landowners' rights. I think you have to do the public education, in terms of the benefits you are going to receive by a sound wetland conservation policy. Throughout the policy development we have talked about the need for restoring and enhancing wetlands. So that meets some of the other concerns of interest groups. If there are any questions or advice on how to proceed from here, I would be happy to hear it. I have already picked up quite a few pointers by being here.

## ***QUESTIONS***

- Q. When you put up the slide on the area of wetland, it wasn't clear to me where your forested wetlands fell out there.
- A. They were included in the inland freshwater wetlands. Forested land was all upland forest. We have an extensive forest inventory. Another thing, even within our department on the forest inventory until this year, wetlands were classed as wastelands on the provincial inventory map. So we have managed to change that too.

- Q. My understanding is that in New Brunswick there is a 75 metre setback from streams, where no development or agricultural use is allowed.
- A. That is the Watercourse Alteration Permit and it is variable. It is 75 metres in some cases in designated watersheds but it is usually 30 metres. Designated watersheds are those watersheds that are designated for drinking water. The normal is 30 metres in lands used for forestry operations. This applies to all lands, private or Crown.
- Q. How is that being received by the agricultural community and those private landowners who may be affected?
- A. Not too well. The 30 metre regulation went through and it has been fairly well accepted but the 75 metre regulation, this new Watershed Designation Program, has been a real nightmare. It is administered by the New Brunswick Department of Environment. They were very restrictive when they created this program. There were clauses saying you could not gut a deer adjacent to a stream or within 75 metres of a stream. Nothing like that was supposed to happen within 75 metres of a stream when this was first developed. They have had to rethink what they did, a prime example of something that was done without any public or even interdepartmental consultation. We are seeing an easing up on that 75 metre rule. I think it will still hold for minor developments such as housing and subdivisions.

---

# ***THE WETLAND EVALUATION GUIDE: A NATIONAL TOOL FOR MITIGATION ASSESSMENT AND WETLAND DECISION-MAKING***

***Kenneth W. Cox***

***Secretariat***

***North American Wetlands Conservation Council (Canada)***

---

## ***INTRODUCTION***

Many of you are aware of the *Wetland Evaluation Guide* completed about four years ago. This Guide was developed in partnership with Wildlife Habitat Canada and the Canadian Wildlife Service of Environment Canada. It was initiated at Wildlife Habitat Canada as the Wetlands Are Not Wastelands Project.

The project had five phases: (i) a workshop to evaluate the methods that may be used to ensure wetlands were given increased recognition and understanding of their values; (ii) a literature review; (iii) four pilot studies across the country to consider the functions and values of wetlands; (iv) an interdisciplinary workshop; and (v) writing of the final report by a team of professionals.

The *Wetland Evaluation Guide* utilizes a hands-on approach to the analysis of a critical Canadian resource: wetlands. It provides conservation groups, developers, planners and politicians with a tool to undertake a clear, comprehensive review of the potential values of a land use project and the wetland involved. It provides a framework where a number of people can complete an analysis of the biophysical, architectural, religious, cultural, etc. aspects of a wetland or wetland complex as well as the positive and negative aspects of a proposed development for a wetland or wetland complex, and discuss it using a common base.

It is, as well, an educational tool. Significant interest has been shown by the Canadian Institute of Planners with whom the North American Wetlands Conservation Council (Canada) has already run a couple of seminars on the *Wetland Evaluation Guide* as a planning tool. Two more such seminars will be undertaken during 1994. It has also been adapted by the Foundation for International Training for use in Third World countries as a generic guide to look at the sustainability of a project in a natural ecosystem.

I think it is a very practical tool and could be of use in implementing various wetland policies across the country. To that end, the North American Wetlands Conservation Council (Canada) along with an engineering professor from Carleton University and a consultant developed a prototype CD-ROM version of the Guide. The prototype of this CD-ROM version is now available. I would be glad to show it to any of you following the formal part of our

meeting. I believe that it could be of significant use in educating both government and nongovernment personnel involved with implementation plans for federal, provincial or municipal wetland policies. As these wetland policies become developed and the implementation plans for them established, a tremendous educational process will have to be undertaken so that people understand wetlands and/or wetland complexes, as well as the methods to evaluate them. To this end, an inter-active computer module which can visually and auditively display wetland facts, functions and values would be a great complement to a hard copy background and evaluation guide.

To that end, the Secretariat of the North American Wetlands Conservation Council (Canada) will be looking for partners to help sponsor the completion of the prototype CD-ROM based on the *Wetland Evaluation Guide*.

## **REFERENCE**

Bond, W. K., K. W. Cox, T. Heberlein, E. W. Manning, D. R. Witty, and D. A. Young. 1992. *Wetland Evaluation Guide: Final Report of the Wetlands Are Not Wastelands Project*. Sustaining Wetlands Issues Paper Series, No. 1992-1. North American Wetlands Conservation Council (Canada). Ottawa, Ontario. 121 p.

## **QUESTIONS**

- Q. I would like to compliment you on that Guide. I've been working with guides like that in the United States. That one is the only wetland evaluation system that I am aware of that affirmatively requires the evaluator to bring into consideration the beneficial claims of the developer. I think that addresses a generic problem with wetland programs, that the development community tends to point fingers and say, this is all driven by you people who are only interested in the bunnies and bees, you never listen to us. By including that in that process, I think it gives you a psychological advantage that is extremely important in developing a dialogue between the regulated or impacted community and government.
- A. When we started it, we thought maybe one of the best ways to save wildlife habitat was to explain to municipalities how important wetlands were for groundwater retention, etc. That was one of the reasons why we took that approach. There are a number of people using it this summer in the United States with the United States Department of Agriculture. They were interested in comparing it against others available in the United States.

---

## **WETLAND, AGRICULTURAL AND INTERNATIONAL TRADE POLICY INTERACTIONS**

**Jim Patterson**  
**International and Government Relations**  
**Ducks Unlimited Canada**

---

### **INTRODUCTION**

Most of our discussion today has involved wetland policy developed by wetland conservation interests, trying to affect other sectors of society in enhancing the recognition of wetland values and efforts to conserve wetlands. Today, I am going to give a very general overview of a different perspective. Because of our geographic location, the focus will be on the prairies, looking at the development and implementation of other sectors' policies and how they affect wetland conservation, in concert with the wetland policies that are being discussed here.

One of the lessons we learned yesterday in this Workshop was that the development of any policy is a very long and complicated process. One may have a game plan looking two or three years down the line, but five, six or seven years down the line is when the policies finally start to come into being, and they may change significantly from the original intention. In all cases there is a debate over the regulatory versus the incentive approach to wetland policies. There is an absolute and clear need for the requirement to consult with landowners and other stakeholders in the whole process. Another current is the dichotomy or compatibility of protectionism versus incentives as a means of protecting wetlands. Finally, we see the need for consistent policy application by responsible agencies.

There is a very great danger for policies to react to various pressures at one extreme or another through the consultation process. I think it is important to have consistent, long-range policy application. This is most important in the farm community where the land is privately owned and managed. I think we all agree that about 85% of losses of wetlands occur due to agricultural developments. Another thing that came through in the discussions is the need for us to integrate our wetland policies with other policies and programs in different sectors.

We are the new kids on the block; we are talking only about one type of policy. Agriculture, on the other hand, has more than a duffel bag filled with agricultural policies and programs that have been in place for a long time and have a lot of momentum and a lot of vested interest support. Those of you who have worked for government agencies will recognize that one of the most difficult things in the policy and program arena is getting something started, developed and implemented. I think you might also agree that, once started,

the absolutely most difficult thing is to stop it or change it. Realistically, that is the ball game we are working in. This is particularly true in agriculture.

It goes without saying at this stage of the game in 1994 that sustainable development of our landscape resources is the key if we are going to conserve wetlands. That involves both the economic, the environmental, and the social dimension, and I stress this, in the privately owned farmland. The only things that are going to save wetlands in the long run on private lands are economically, environmentally and sociably acceptable win-win scenarios of how that landscape is to be used. Wetland policy can be a very fundamental part of it, but I don't think it will be the absolute determinant of it. We just have to put this in balance. This is easy to say; the challenge now is to do something to put it in practice.

## ***OPPORTUNITIES***

In very general terms, I am going to touch on some of the highlights of where we are in this business, where we are going, how the world is changing, and why we should have a cautious degree of optimism for sustainable agriculture and sustainable wetlands, particularly in the prairies. When we were planning the North American Waterfowl Management Plan and the Habitat Joint Ventures, the interaction between the agricultural community and the conservation community was not exactly made in heaven. Pat Rakowski yesterday made the point of being sick of confrontation and stressed the need for common sense dialogue over issues.

The drafters of the Plan had this wild dream that if we implemented a 15-year wetland conservation program in cooperation with the landowners, we would get to the point of being able to trust and communicate with each other and start looking for win-win scenarios. This is critical both for agricultural and landscape viability. I think everyone in this room would agree that we are very far beyond the objectives we had for that original 15-year concept. The world has changed dramatically, it is still changing very quickly, and I think we might ask some questions why. The Brundtland Commission report, *Our Common Future* and the notions of sustainable development came on the scene in 1987. This was after the North American Waterfowl Management Plan (NAWMP) was signed. So, the two tended to come together. The command and control mentality of the past was not going to cut it, out on the privately owned landscape, and, really, the only success would be based on the environmental, economic and social health of rural communities.

## ***RURAL RENEWAL INITIATIVE***

This gets us into the exercise that Bob Sopuck, Ken Cox and I have been involved in with the National Round Table on the Environment and the Economy called Rural Renewal. Its objective is to put the three cornerstones of sustainability together, particularly in the Prairies, although it is a national program, to try to foster policy and program changes that will

contribute to the objectives that we hold near and dear. A stark reality is that governments are going broke. As a society we can not afford to keep shelling out four billion dollars a year of federal farm support programs, with many more millions provincially. There is going to be change, there is going to be a reduction, and there is going to be streamlining in support programs. Trade liberalization is something we didn't even dream of back in 1986. With the Uruguay round of GATT and NAFTA now realities, the ground rules are very much changed, but I will get into that a bit more in a minute.

Finally, I wish any of us could take credit for these events, but history tends once in a while to put the right things in the right places at the right time. This is very much the case with the North American Waterfowl Management Plan. I am not trying to overblow the Plan as being the only determinant in this business, but many things have happened. What the Plan has done, particularly in the Prairies, and particularly well documented in this province, is to provide a menu of land use adjustments towards conservation, towards sustainability of farming, towards sustainability of the environment, and towards enhancing waterfowl. While totally voluntary, with no command controls, all of the programs such as Prairie CARE, the Permanent Cover Program, and related ones in the province are oversubscribed by farmers. Lo and behold, the evaluations done in Manitoba show that farmers who adopt conservation farming practices are better off financially. The diversity of their management holdings is higher. The stability of rural communities is higher. We are not preaching anymore, we are delivering reality out in the landscape.

## ***INTERNATIONAL TRADE***

A number of the things I am going to talk about in trade, now have an empirical basis in fact that can be demonstrated to farmers and many farmers have become evangelists themselves. While we are not revolutionizing the world, we are trying to run it in a far more efficient and effective way, to conform with international trade regulations to the benefit of everyone who lives in this landscape. Another important factor is that farmers, because of the changing world, recognize that if they don't become part of the solution, they are going to be identified as the problem and the solutions are going to be dictated to them. So there is a tremendous vested interest in the farm community, public and private, to get involved right at the beginning, to start rationalizing these various factors and taking into account the environment and sustainability as well as their ability to make a living.

Let's get back to the trade liberalization for a moment. In the last few years, OECD countries have spent in the order of US\$ 350 billion a year in agricultural support programs. The European Union and the United States have been the major forces through large export and domestic subsidies. That is not to say that these two powers are the only culprits. Everyone else who is in the game of exporting agricultural produce has felt they had to play the same game. The point is that the level of subsidies grossly distorts production of commodities. That means it is profitable in many many cases to drain wetlands and cultivate marginal lands whereas, if you were in a free market system, you would probably last a year

and you would be broke. The point here is that the farmers are making decisions to farm programs not the land and it is the land, water and wildlife that suffers.

The GATT negotiations have probably set a world record for length, going on for years and years. The greatest stumbling block was agriculture, how to somehow wean the World from this gross distortion of commodity production markets, prices and land use decision-making. The end result was that, the more money that was thrown at the problem, the greater the problem became. There has been a successful conclusion to the Uruguay Round of GATT and the World Trade Organization is to come into being in 1995. Although signed in Marekesh back in April, it has yet to be ratified by each country. Hopefully the agreement will be in place by July 1995, or even earlier if possible.

It is not perfection, but it does call for reductions of 36% in export subsidies from all participating members with about 20% reduction in export volumes. There are some wrinkles in the short-term, but in the long-term this will establish criteria and timetables for phasing down export subsidies - one of the major causes of unsustainable land use. Similarly, there is a 21% reduction called for in domestic subsidies. As it turns out, when we were first involved with these negotiations and I had the temerity to write a chapter in a book on *NAFTA and the Environment*, Canada was at a level of about four billion dollars a year in agricultural subsidies. This meant, according to these criteria, that one billion dollars a year would not be eligible. Now that could either go back to the treasury or a portion of it could be used for green, conservation friendly programs.

We are now into the colour phase of GATT. This is like kindergarten; we have to go into colours and shapes. In order to come to grips with defining subsidies and what they might do, there was a whole series of different colours. It started out green, amber and red, somehow it's now green, blue and amber. The green box subsidies are those that are judged to be not trade distorting or production stimulating. Many environmental or conservation incentive programs are permitted under international regimes. So right away there is a magnet to look at reprofiling, realigning some agricultural support programs to conservation incentives. The blue box ones are sort of fuzzy. The numerical criteria I mentioned don't call for their reduction but they are possibly subject to countervail. Canada has taken the position that they want to move quickly to rationalize all of the blue categories so that they will not be countervailed. Our history in the *Canada-United States Trade Agreement* (CUSTA) so far, even though we are lily white in everything we do with our hogs, wheat and trees, has been subject to repeated countervail challenge by the United States. I see in the paper this morning there is another extraordinary challenge being launched against softwood. The amber support programs are just absolute nasty no-no's. Portions of the *Western Grain Transportation Act* (WGTA) payment, particularly going out to the Port of Vancouver are clearly export subsidies. They are going to go one way or the other.

Getting onto NAFTA, this is the first trade agreement that contains relatively strong environmental provisions. The agreement makes a strong commitment to sustainable development. There is a side agreement on environmental cooperation. With all the animosity

and hardnose trade aspects of the international trading system, the fact that this is called an agreement for cooperation I think is extremely important. In fact, at the press conference last week where Sheila Copps announced the signing of the update to the North American Waterfowl Management Plan and the federal funding commitment for the next five years, she made a specific point of identifying this cooperative agreement and the fact that the Waterfowl Management Plan and continental wetland conservation was the first agreement that would happen under that NAFTA side agreement. It is very important for wetland conservation that the Minister is thinking along these lines.

Just a couple of other things on what is going on in Ottawa. The Minister of International Trade struck a number of Sectoral Advisory Groups on International Trade (SAGITs). I believe there are about 13 of them now for different sectors. I am a member of the one for agriculture. These groups were intimately involved in the negotiations of both NAFTA and GATT. I joined mid-way and I thought I'd gone to Mars with the language they were using, it was so trade technical. My feeling was that the real opportunity for people like ourselves would be when the agreements were concluded and we were looking at ways of implementation. That is very definitely becoming the case. The Minister has asked our SAGIT to form a Trade Environment Task Force. Trade and environment is seen to be the major trade issue of the rest of the 1990s. Canada very aggressively wants to perform a leadership role in this arena. Minister McLaren is looking for us to come up with tangible proposals.

Let me back up a bit. Ever since Mr. McLaren took over as Minister since the last election, he has been getting beat up on one side by Europe and the other side by Washington. He would like to have some things well thought out from the environment perspective that he can put on the table and fight for. Not only to enhance the environmental agenda, nationally and internationally, but to help Canada become more competitively advantaged. At a meeting about two weeks ago, a number of propositions were put to me by one of the Foreign Affairs officials. He said, as an example, what if Canada developed and well documented the contribution to global biodiversity of taking a percentage of our marginal lands out of production and committing them totally to biodiversity conservation? We could then take that to the World Trade Organization and say we've got Rio, we've got GATT, we've got NAFTA, are we serious about that? Canada would put forward a tangible initiative that we will get behind and we would hope that you would join us. I just about fell off my chair, if that is the type of thinking that's there. The fact is that means in Foreign Affairs in Ottawa, those types of thoughts not only would be received, they'd be receptive to them. They see the benefit for a whole host of agenda items that are on the table - environmental, social and economic.

More recently, Minister McLaren created three new senior level task forces. One on labour and trade, one on international business planning in trade, and another on trade and the environment. There are 25 of us from the industry, environmental and conservation communities on the trade and environment task force. The message that comes through loud and clear is that, it is time for Canada to take a leadership role internationally in these trading arrangements. So here is another opportunity to get our concerns on the table. I think the

things that we have collectively demonstrated over the last five years such as the farmer perception study in Manitoba, and others, puts us in a very good state because we can sit down and talk to the CEO of a major corporation and say this isn't fairyland, this is real. This puts more back into the community and that is where you make your living.

There are a number of reviews going on regarding producer panels across the country. These are getting back to the fact that the producers see the writing on the wall, that there is going to be change and they want to be part of it in a self-determination sense. There is the safety net review, the WGTA, and God knows how these will turn out, but the right things are being talked about. Mr. Goodale, the Agriculture Minister, has been talking for some time about the notion that is certainly not new to us, of decoupling agricultural support from the production of specific commodities and looking more at a whole farm income type of support. These factors individually if they were to go in this direction, similarly paying producers instead of railroads, all are thought to have a positive impact on habitat. Certainly we are seeing a movement away from policies that encourage cropping marginal land and impacting on wetlands.

In Ontario, farm coalitions have probably taken more initiative than anywhere in Canada with the development of their environmental farm plans. Like any new program, their well intended efforts provoked some unexpected reactions when the financial institution hawks wanted to use the farm plans to assess environmental liabilities. Ken Cox of the Wetlands Conservation Council has been extremely valuable in this with the Canadian Federation of Agriculture (CFA), in pulling together people for a dialogue to try to get out of one of these typical boxes that we seem to be forced into. Again, it is a case of trust with the Council, the CFA and growing with financial institutions. The environmental assessments of GRIP and NISA (two of Agriculture Canada's biggest safety net programs), which now is a requirement of any new federal legislation and programs, have indicated that to a degree those programs encouraged the drainage of wetlands. Some of you attended meetings on it. I think the heartening thing is that the meetings were called by Agriculture and AgriFood Canada and people like Clayton and others were invited to come in to look at it. They even used the terms "cross compliance" as a possible mechanism of coming to grips with it.

Most recently the Deputy Ministers of Agriculture and Agri-Food Canada, and Environment Canada created a National Agriculture Environment Committee. This is composed of 14 producer groups, leaders from across Canada, with the Prairie Farm Rehabilitation Administration (PFRA) and Environment Canada being ex-officio members. The two departments are going to second staff to a permanent secretariat that will be housed in the offices of the Canadian Federation of Agriculture. Lo and behold, we do have a very good relationship with the North American Wetlands Conservation Council (Canada), Ducks Unlimited and others not only with the producers on that panel but with the CFA and there will be a lot of contact with that secretariat. In the policy arena progress often is fairly ephemeral but it is moving ahead on an opportunistic basis.

## ***FINAL REMARKS***

Finally I would just like to comment on a new publication from the International Institute for Sustainable Development (IISD), *Trade and Sustainable Development: Principles* published in 1994. It is the type of thing that will really lift wetland conservation into these bigger policy arenas. "The most significant contribution to sustainable development and agriculture in this part of the World is the Prairie Habitat Joint Venture (of the NAWMP), through the incentive programs." We didn't say it, it's being said by very reputable international organizations. In conclusion, times are changing. The policy arena is very dynamic. Wetlands are getting a higher and higher profile. Producers are key players, an audience we have not worked closely with in the past. But I think that is where much of the success will come. The integration of wetland policies and these other sectoral policies, firmly founded in sustainable development will be the key to the future.

## ***QUESTIONS***

- Q. All things considered when you look at world trade, can you give us your opinion on whether liberalized trade, not at the margins but overall, will improve the environment or not?
- A. In my opinion it does, because of removing the great distortions to cropping practices, the use of marginal land, and that is in the developed world. I think it is even more critical in the developing world where our predatory dumping and subsidization of commodities, in essence, holds the developing world to absolute ransom where there are phenomenal debts that they owe the developed world. The commodities that they might produce to help pay off those debts and strengthen and diversify their economy are worthless so they start crawling up the sides of the mountains for subsistence. The environmental impact in that part of the World is far far more significant than we see.
- Q. I am just wondering where you see, just to take a particular example, the Crow Rate benefit work going. Are we almost at that stage where there might be some recommendations on cross compliance or sort of satisfied areas with that particular policy process?
- A. I wish I could give an informed answer to that but I really cannot. There are just so many feelings and options out on the table. I guess the only thing for sure is that the export subsidy component is a no-no. That could be covered off by paying that similar amount to domestic transport and even it out, so I guess it is politics now. Although I read in *The Globe and Mail* this morning that the whole amount of money is history according to an announcement by the Transportation Minister.

- Q. You made the comment that you felt that we could have a very powerful force for conservation if we could integrate wetland policies with some of the other initiatives that are going on within an overall framework for sustainable development. Could you tell me how you see that integration happening?
- A. I think in a number of ways. First of all the commodity producer groups are coming to us looking for ways of joining forces to address the question of the use of marginal lands and wetlands. That has a long way to go. I see a dramatic change in attitudes within Agriculture and Agri-Food Canada. Their Environment Bureau is doing a lot of work in publishing background papers on trade and environment. There is a growing and different mind-set of predicting how that will actually play itself out. I am not sure, but I think it is up to us to take the advantage of working as closely as possible with those people and not sit back and wait for phone calls but make them ourselves.

---

## ***IMPLEMENTING WETLAND POLICY: LESSONS FROM THE UNITED STATES***

***Kirk Andries***

***International Association of Fish and Wildlife Agencies***

---

### ***INTRODUCTION***

I work for the International Association of Fish and Wildlife Agencies (IAFWA) as Coordinator for the North American Waterfowl Management Plan (NAWMP). I am a transplanted Canadian from Alberta, working in the United States to assist in implementing the NAWMP. My experience with American wetland policy is limited but during my tenure I have learned a few things, observed even more, and have drawn some conclusions about the cultural, social, economic and political factors that make us different. I hope to be able to shed some light on the history of wetland law and make some observations about its evolution. It is important to learn from the past. There is no excuse for repeating the same mistakes.

To start this discussion, I think it is important to set the proper American context as it is obviously different than Canada. There is, however, much to learn from the American experience. Essentially the context consists of the status of the resource and the administrative systems for management. First the resource.

When European settlers first arrived, it was estimated that wetland acreage in the area, that would become the 48 states, was more than 220 million acres. According to the United States Fish and Wildlife Service (USFWS) the total wetland acreage was estimated to be 104 million acres by 1980. The most recently published national Fish and Wildlife Service survey of wetlands loss trends, covering the years between the mid 1970s through the mid 1980s shows that the rate of loss averaged 290 000 acres per year and this rate has continued. This is a decline from an earlier survey, which showed that losses averaged nearly 500 000 acres annually between 1954 and 1974. Overall, 85% of all United States wetlands have already been lost or damaged. Wetlands exist in every state but some, like Iowa, have lost over 90% of their original wetlands and others like Alaska have retained all of their wetlands. States like California virtually have no natural hydrological systems left, all are intensively managed. Within the contiguous lower 48, 22 states have lost more than 50% of their wetlands. Ten states have lost greater than 70%. Of the remaining wetlands 75% are found on private land.

In a 1994 report to Congress on the status and trends of wetlands entitled *The Impact of Federal Programs on Wetlands*, the USFWS reported that by 1990, 104.3 million acres of wetlands remained, a 1.6 million acre decline from the 105.9 million acres reported in the mid 1970s. Freshwater wetlands experienced 98% of the losses. Declines in coastal or estuarine

wetlands (5.5 million acres) occurred mostly in the Gulf Coast states and most were due to shifting of emergent wetlands to open saltwater. Indeed, palustrine vegetated wetlands experienced substantial losses at 3.3 million acres. The only increase (792 000 acres) occurred for freshwater ponds and most of this was on land not previously classified as wetlands (deep water, etc.). Over the same period conversions to agricultural land uses accounted for 54% which is an appreciable change from earlier years where it represented 87% of all losses. Conversions to urban land use accounted for 5%.

The legal basis and administrative structure responsible for wetlands in the United States is both interesting and complex. Several laws provide varying levels of protection under different circumstances: Section 404 in the *Clean Water Act*; the Swampbuster and other programs in the 1985 *Farm Bill* and 1990 *Farm Bill*; the *Fish and Wildlife Coordination Act*, the National Wildlife Refuge System, the *North American Wetland Conservation Act* and numerous other enactments that have contributed to wetland protection.

It was not that long ago that wetland regulatory authority rested with the states. Today, the federal government plays a very prominent role. The federal government role traces its roots back to 1899 (*River and Harbors Act*); when Congress gave the Corp of Engineers a statutory role to regulate dredging, filling and construction in navigable waters. Until 1960 the Corp limited its activities to these responsibilities and series of Supreme Court decisions at that time. However, they then construed the application of the *Act* to include industrial water - thus controlling pollution. Then in 1967, the *Fish and Wildlife Coordination Act* came into effect requiring the Corp to evaluate proposals based on environmental costs in addition to navigation impacts. In 1972, Congress in enacting amendments to the now *Clean Water Act*, gave overall administration to the Environmental Protection Agency (EPA) to restore and maintain the chemical, physical and biological integrity of the nation's waters. The Corp, fearing regulation by the EPA, successfully argued for an exemption.

Then in the 1977 amendments to the *Clean Water Act*, Congress reaffirmed jurisdiction of the *Act* over all United States waters including its regulatory application to wetlands which was new but based in early court decisions. This extension in federal responsibility was founded in the "commerce clause" of the United States Constitution which provides the federal government the authority to regulate activity related to interstate commerce. The courts ruled it reasonable to apply title 404 of the *Clean Water Act* to wetlands whether they were directly or indirectly linked to navigable waters. Therein lies the source of federal authority to regulate wetland activities in the United States.

Essentially then, federal regulatory authority is structured as follows:

- (a) EPA - administers the *Clean Water Act* and establishes procedures and guidelines for permit processing;
- (b) The Corp retains authority to issue permits for regulating the discharge of dredge or fill material through Section 404;

- (c) EPA - maintains authority to veto Corp decisions (done only 11 times);
- (d) The Fish and Wildlife Service and National Marine Fisheries Service are provided opportunities to comment on all applications.

Consequently, Congress has successfully established a regulatory tug of war which still exists today. Earlier, Ken Cox asked if we are becoming a litigious society and how to avoid that. The history I just gave is the very recipe for litigation. It embodies several characteristics:

- (1) Fights over jurisdiction - which never end;
- (2) Establishment of federal "rules" that cannot possibly meet the nuances of all situations;
- (3) Powerful interests that perpetuate and feed off the situation in their own self-interest; and,
- (4) Substantial sums of money that all groups fight for and which they believe would be better handled by them.

It takes decades to set up the characteristics within a system, to encourage this behaviour. You have an opportunity to try to avoid this. I recommend you not go down the same path.

In addition to these regulatory actions (which address only about 20% of the activities), several separate and non-regulatory initiatives are found in the 1985 *Farm Bill* and 1990 *Farm Bill*. This same Bill is up for reauthorization in 1995. The most notable wetland-related features of the Bill are Swampbuster, the Conservation Reserve Program and the Wetland Reserve Program.

Swampbuster is a program that encourages wetland retention by removing farm based incentive programs if the farmer plants an agricultural commodity (annually tilled crop) on wetlands that were converted after December 1985. It is the only program of its kind and can result in loss of commodity program benefits, crop insurance, disaster payments and other federal benefits. It has been successful in discouraging additional wetland loss.

The Conservation Reserve Program (CRP) of 1985 authorizes the federal government to enter into contracts with agricultural producers to remove highly erodible land from production for ten years in exchange for annual rental payments. Conservation plans are put in place for eligible lands and seeded to cover (grass or trees). Approximately 36 million acres of land is enrolled in CRP, most of it in the great plains. While directed at erodible land, substantial acreage is comprised of wetlands. Annual rental payments approximate 2 billion dollars. This vastly exceeds wetland acquisition efforts, through federal Ducks Stamp sales;

that total 3.5 million acres since 1934. In fact, CRP secured acreage is four times greater than all federal and state fish and wildlife efforts combined.

The Wetland Reserve Program (WRP) also authorized in the Farm Bill, provides opportunities to assist farmers who are interested in restoring wetlands. The program offers to pay for a 30 year or greater easement and up to 75% of the restoration costs. Two pilot programs have been conducted (20 states) and sign-ups considerably exceed the acreage target established by Congress. With full funding this program offers enormous potential.

The North American Wetlands Conservation Act (NAWCA) is a federal program to encourage voluntary partnerships to secure, restore, enhance and manage important wetland resources in Canada, Mexico and the United States. It was enacted in 1989 and over US\$100 million in federal dollars have been available on a minimum 1:1 matching basis. It is the only international program of its kind.

In addition, many states have enacted law that apply specifically to wetlands. Laws vary considerably by state and degree. While the *Clean Water Act*, Section 404, authorizes individual states to conduct their own permitting, only one, Michigan, has assumed responsibility for the cumbersome and costly process. In general, the Congress will not issue a permit unless appropriate permits have been approved by the state authorities as well (i.e. water quality, coastal zone management plans, etc.). State certification is authorized through Section 401 and becomes part of the 404 permit.

That provides you a very brief and sketchy overview of the significant laws and administrative bodies affecting wetlands in the United States.

### ***WHAT IS THE "NEW" POLICY?***

Every new government sets out to differentiate themselves from previous governments and to resolve issues that strengthen themselves politically. The Clinton Administration has established five basic principles for federal wetland policy. They are as follows:

- (1) No overall net loss with the long-term goal of increasing quality and quantity of wetlands.
- (2) Regulatory programs must be efficient, fair, flexible and predictable and avoid unnecessary impacts upon private property. Duplication must be avoided and the public must understand regulatory requirements and roles.
- (3) Non-regulatory programs (planning) must be encouraged to reduce reliance on regulation.

- (4) Federal government should expand partnerships and approach wetland protection in an ecosystem context.
- (5) Federal policies should be based on the best scientific information available.

### ***WHAT ARE THE CURRENT ISSUES?***

Federal programs have generated considerable controversy. Critics of regulatory programs characterize them as unfair, inflexible, inconsistent, confusing and complex. Supporters argue with equal effectiveness, emphasizing the environmental and economic benefits. The debate has become increasingly divisive. In short, wetland policy has become one of the most controversial environmental issues facing the federal government. In response to these, the Administration has broken these issues down into their components and developed strategies to resolve them. In the main, these strategies are administrative not legislative.

Issue No. 1: *The Section 404 program in failing to be landowner friendly. It is slow, unpredictable and unfair. A recent study says individual permits may take an average of 373 days to process.*

- Remedies
- (A) Establish deadlines for permit action and make a commitment of resources to deliver.
  - (B) Develop an administrative appeals process under 404 to avoid litigation.
  - (C) Certification and training in the use of the *Wetland Delineation Manual* (federal, states, etc.) must be done to improve efficiency and effectiveness.
  - (D) Promote voluntary, cooperative programs.

Issue No. 2: *Typically, decisions affecting wetlands are made on a project by project - permit by permit basis lacking any planned context to regulatory action.*

- Remedies
- (A) Provide incentives for state/locals to integrate watershed and wetland planning.
  - (B) Endorse state/tribal wetland conservation plans - EPA currently funding development of 22 state wetland conservation plans.
  - (C) Integrate advance planning into the Section 404 regulatory program and provide for categorization at local/regional levels.
  - (D) Permit the use of mitigation banks in the context of plans.

- (E) Provide improved and coordinated information and technical assistance.

Issue No. 3: *In the area of Agriculture, Swampbuster is administered by the Soil Conservation Service (SCS) and Section 404 by the Corp of Engineers/EPA often subjecting farmers to duplication and inconsistency.*

- Remedies
- (A) Remove uncertainty by removing 53 million acres of prior converted cropland from 404 regulation.
  - (B) Eliminate duplication and inconsistency by:
    - making SCS the lead agency
    - all agencies use the same procedures (1987 *Wetland Delineation Manual* to avoid inconsistencies)
  - (C) Classify certain wetlands as non-jurisdictional (i.e. irrigation ditches).
  - (D) Fund and expand the Wetland Reserve Program.

Issue No. 4: *The permit process is too inflexible in that all wetlands are treated the same. All go through the sequencing: avoid, minimize and mitigate. Administration has rejected categorization (maps for 48 states - 14 million maps, US\$ 500 million) (buying all "high value" wetlands - Congressional Budget Office estimates in lower 48 states - US\$ 10-45 billion).*

- Remedies
- (A) Provide flexibility in the way in which 404 is interpreted.
  - (B) Encourage advance planning.
  - (C) Establish regional general permits.

Issue No. 5: *The geographical scope or determination of wetlands that fall within 404 is a subject of debate. Three manuals have been made - 1987, 1989 and 1991 (1989 was criticized for expanding federal jurisdiction while the 1991 was criticized for greatly reducing it).*

- Remedy
- (A) Let's study it! The National Academy of Sciences is studying wetlands delineation. In the meantime, the 1987 manual will be used.

Issue No. 6: *Mitigation and Mitigation Banking: Mitigation is a basic premise of Section 404. Sequencing is (1) avoidance, (2) minimizing, and (3) compensating. Banking, of course, refers to the accumulation of credits which can then be withdrawn to offset debits.*

- Remedies
- (A) Develop mitigation planning guidelines for compensatory mitigation conditions.
  - (B) Seek endorsement of Congress for the appropriate use of banking.

- (C) Issue mitigation banking guidelines.

Issue No. 7: *Too much emphasis on regulation. Regulatory approaches at best, can only stem overall net loss. Emphasis on restoring wetlands is the key to achieving a positive increase.*

- Remedies
- (A) Fund WRP.
  - (B) Promote restoration through voluntary, cooperative programs and outreach.

Issue No. 8: *Complexity and confusion in the role of federal agencies. Multi-agency roles have contributed to confusion, delays and overlap.*

- Remedies
- (A) Streamline by reducing duplication, overlap and delay.
  - (B) The Soil Conservation Service becomes lead agency for wetlands delineations.

Issue No. 9: *Increasing the effectiveness and participation of state, tribal and local governments.*

- Remedies
- (A) Facilitate locals taking a stronger role.
  - (B) Provide incentives for locals to integrate watershed/wetlands planning.
  - (C) Endorse state/tribal wetland conservation plans.
  - (D) Encourage assumption of Section 404.
  - (E) Provide access to delineation training.

Issue No. 10: *The federal government's efforts to protect wetlands constitutes a "taking" of private property which is compensable under the 5th Amendment.*

- Remedies
- (A) Provide compensation when entitled.
  - (B) Allow courts to make determination on a case by case basis.
  - (C) Do not seek a legislative approach.
  - (D) Eligible if it diminishes by 50% or more of the fair market value of the property.

In summary, the Administration has established a comprehensive agenda to address wetland issues. Unfortunately, many solutions appear as band-aids. A system based in regulation will always be the subject of controversy.

## **CONCLUSIONS**

To close, I will offer some observations of the American system that I believe applies in the Canadian context. I believe Canada is on a track very similar to the United States but has not advanced as far. If you do not like what you see in the United States today, you have time to do something about it.

- (1) De-emphasize regulation - It is divisive, tends to provide temporary success and limited value over the long term. Regulation may well be the demise of wetland conservation in the United States. You cannot and should not legislate yourself to a resolution. There is a consistent theme - that is Regulation equals Resistance. It takes away individual choice and is divisive.
- (2) Pursue voluntary, incentive-based programs. In doing so, people are involved because they want to be, not because they have to. This mechanism builds cooperation and strengthens partnerships. The NAWMP is an excellent example. This program in the United States alone, has two times as many projects as funds available.
- (3) Keep as many decisions as possible at the local level. Ecological, social and legal circumstances are so varied it makes little sense to be overly prescriptive at the federal or even provincial/state levels.
- (4) Watch out for and avoid "creeping complexities." What I mean by this is the growth in bureaucracy which tends to feed on itself. Enormous amounts of resources (manpower and financial) feed these systems. Is the return on investment worth it?
- (5) Simplify administration as much as possible. The client (public) should not be burdened with the costs of poor and/or complex administration. Ultimately we will disenfranchise them.
- (6) Seek administrative not legislative solutions. This is probably directed more at the United States but nonetheless important. Congress has a love of "micro-managing" if you let them. Legislative issues often create black and white situations that lack necessary flexibility.
- (7) Strengthen planning. Develop necessary frameworks that can encourage voluntary actions as well as providing context for regulatory programs.

- (8) Take full advantage of opportunities. A good case in point is the Conservation Reserve Program (CRP). Originally designed to take highly erodible land out of production, it has been managed to provide enormous wetlands and wildlife benefits.
- (9) Do not underestimate the value of education, farm services and technical assistance. These activities lead to voluntary and/or incentive-based participation.
- (10) If you have got it, keep it. Seventy-five percent of the United States' remaining wetlands are on private land. What the United States government once had, they are now paying to get back. Canada should not make the same mistake.
- (11) Improve coordination and communication. This is the classic "big" government problem. The left hand must know what the right hand is doing. If it doesn't, service to the public suffers and so too does the resource.

## **QUESTIONS**

- Q. I am just curious about the debate on the 1995 Farm Bill this fall. We have heard a lot about the Conservation Reserve Program and its fate, and I am just curious about two things. One is what the future looks like for the Swampbuster provisions in the Bill and probably, more importantly, is there a similar debate going on in terms of the underlying crop insurance programs, creating incentives for land use? I think that Jim was describing this in response to GATT for Canada. Is that debate about rejigging agriculture programs going on in the course of the Farm Bill reauthorization or is the total focus of the wildlife lobby been on CRP to the exclusion of other issues?
- A. Yes, to the latter. The wildlife community has chosen to focus their energies on two program areas, so far: CRP and WRP. There are other conservation provisions within the Bill of course, but that is what they have elected to do. Most of what's being done right now is to try to define what the range of benefits are that are associated with wildlife. They need to get their own shop in order and then start to integrate with the agricultural community. I am a little distressed that there has been very little interaction between wildlife and the agriculture community so far. We've tended to do a lot of business with ourselves; and say the CRP is great. The ability to influence the process at the onset is extremely important in working out some sort of a cooperative arrangement with farmers for sure. On Swampbuster, I'm sorry but I'm not sure I do know it.
- Q. What is the objective under the Wetland Reserve Program? Have they got an end point? I notice in a recent paper by the Wildlife Society they are suggesting that the objective be to increase to 75% of historical wetland levels. Is that widely felt, is that the objective?

- A. The Wetland Reserve Program is limited by money and acreage. Congress has set a limit. This year it was 75 000 acres. They solicit bids from landowners within states, evaluate those bids in the context of the return on investment and then they respond. They try to determine, first, the eligibility of those bids and then they superimpose that over their acreage limits. In terms of your question, no it doesn't work that way. I think somewhere in the Bill the absolute limit on it, as set by Congress, was a million acres.
- Q. Just a couple of comments. You are right that the maximum length of time it takes some of these permits to get through are horrendous. The percentage of permits that take that amount of time is actually pretty small. The problem is they are highly visible, and being effectively used by the development community. The same is true for appeal procedures in state wetland programs. There are very few instances where initial decisions are appealed, but those that are, lead to a litigious situation; they get a lot of publicity. That is being used very effectively by the development community. The Soil Conservation Service (SCS), involvement in the 404 program is focused on making determinations of jurisdiction on agricultural lands. The agricultural community has felt for a long time and, I think rightly so, that they have not had a federal sponsor, or friend at the federal table, when the federal agencies sit down and talk about where to go with the wetland program. The wildlife interests and the marine fisheries interests have been there; so I think that is probably a welcome development.
- A. One of the problems is that the SCS has had very few staff capable of making these determinations. They are now facing a problem of gearing up. How do their staff go out on the ground and make a determination at a scale that they are not acquainted with? They are usually working with relatively small scales with pretty generalized maps. There is going to be a shake-out period to see how well that works out. If it works out well it should be a plus.

---

## ***OBSERVATIONS ON THE WORKSHOP***

***Rich Goulden***

***Manitoba Habitat Heritage Corporation***

---

Three people - Joseph Larson, Caroline Caza and I - offered to give you observations on the workshop as we saw fit. Our observations are presented below in individual sections.

We were asked by the organizers to bring forth our personal observations, highlights and meaningful points. First of all, from the observation standpoint I thought the workshop arrangements, the venue, the logistics were all excellent. The location at the Oak Hammock Conservation Centre set a tone for us. We can talk about wetlands and marshes and feel like we were really talking about something that was close to us. The social events added the opportunity for a group of this size to really get to know each other and that presented a better opportunity to engage in a spirited and meaningful dialogue.

I would make the observation that if we had included a few more people who are directly involved in the agricultural community who could be impacted and maybe even if we could have picked up one or two representatives of some of the agricultural producer organizations, it might have interestingly added a tone to the meeting. But that is not an indictment of any kind. It is always very difficult in a meeting of this kind to know where to stop in terms of who you should involve because you cannot involve the whole World. On the other hand, this particular group tends to be a group of people who is sort of talking to itself. And that is something we will have to watch out for as we move along.

I thought the way in which we were organized in terms of discussion groups allowed for air time; individual people could get their views off their chest and talk about it and that is good. My observations of the first day's agenda are that it was a little bit hijacked or perhaps the correct term was overwhelmed by current events in Ontario. That is not the fault of the Ontario representatives. It simply reflects the degree to which events in that province can dominate the agenda of other jurisdictions. I would compliment Kevin Loftus on his presentation. I think we would do well (if it is the intention of the workshop organizers) to put together a bit of a package of information afterwards. We would do well to both review and reflect carefully on the observations that Ontario put forward in terms of what worked and what didn't work in their process.

This is a national workshop on policy implementation. However, it is patently obvious that it is not possible to separate policy implementation from policy formulation. The process of policy formulation will dictate how, or even if, the policy can be implemented. So coming here to talk about policy implementation turned out, in my view, to be a little bit of a misnomer, because we could not really separate the two. That is not wrong, that is just a fact

that we had better keep in mind. Clearly we learned some things. And that is the process which will determine product.

Jim Patterson nicely summarized a few points. He talked about the tension between regulation versus incentives. The conclusion that I came to from the discussion over the last few days, to paraphrase John F. Kennedy, is "legislation if necessary, but not necessarily legislation." The need for consistent application seemed to permeate a lot of the discussions. There is a need for clear and concise communication and well-trained staff who understand both the policy and the processes which give rise to it. There is a natural tension between consultation versus imposition. I think we have to conclude that policies imposed will not be as effective as policies developed through consultation.

Now this seems trite and almost academic, but I think in all bureaucracies, particularly those that are large and with central planning agencies, there is the chance, the risk that policy will be formulated in central organizations and be imposed downward rather than work up from the grass roots. Policy that is developed in an integrated fashion within some kind of a framework is at logger heads with, or there is some tension between, that and stand-alone policy. The beauty of stand-alone policy is that it's nice for bureaucrats to develop because it is clean, it's clinical, it's simple, it's accurate, it's definable - but it doesn't work worth a darn. The integrated type of policy is difficult, it is messy, it is not specific, it is very risky - but it works. So draw the conclusion. Kirk Andries said, basically avoid at all costs the regulatory processes that the United States has got itself into. That process has led to polarization, litigation, divisiveness and win-lose consequences. He used the concept that regulation equals resistance - which is kind of a neat cliché. He suggested that we should pursue voluntary incentive processes, keep decisions at the local level, avoid creeping complexities, simplify administration, seek administrative not legislative solutions, and strengthen planning processes that promote volunteerism. In other words, take advantage of opportunities and if you have it, keep it. Yes, that works for a lot of things.

There was a reinforcement at this meeting of processes and attitudes that many of us have espoused for some time. I would say to you that, when you are working in this kind of area, you are sometimes on the edge - you are not really sure if you are doing the right thing. When you get a collection of people like this that comes from right across the country, you can see conclusions rising to the top and, if those conclusions are the same kind of things that you have been striving to do, then that gives you positive reinforcement to keep on going forward. On the down side of it, there is, I sense, a degree of frustration as to how exactly we influence the big policy picture. That is the area of global trade or agricultural trade policy in Canada, in the provinces and perhaps beyond. It is reassuring to have Jim Patterson at the helm in Ottawa looking in on these issues and trying to influence them and reporting back to us. Nobody quite frankly, can do it better. I commend Jim for the job he has been doing. I have heard him make a number of addresses of this kind and it is always very stimulating and very helpful for us. But I detect there is a desire among a lot of people that they would like to get in there and do something as well, try to influence the system, try to push it - and help get us there. Many of us are not sure just what buttons to push or in what wall to try to get an open

door. There is a bit of frustration there. Perhaps we need a bit more networking on that front. I am not sure how we do that but I think there are a lot of people in this room who would like to try to help.

In conclusion, I would say let us go from here, convicted by these proceedings. We must keep our vision focused on the big picture. In these times of competition, the "me generation" philosophy, and self-interest, we must seek opportunities to build on and exploit in the positive sense. Let us focus on the common interests among all who use and cherish wetland resources. We cannot afford, and must sternly resist, the urge to intellectually circle the wagons, by thinking that we can erect palisades around our remaining wetlands. Wetlands used are wetlands loved. It is a good example here. Let us not shrink back from engaging all and sundry about creative ways to save wetlands. Remember that the objective is functional wetland ecosystems, not processes to perpetuate regulatory, legal or administrative bureaucracies. So, on balance, this workshop has been a good thing to have done.



---

## ***OBSERVATIONS ON THE WORKSHOP***

***Joseph Larson***  
***The Environment Institute***  
***University of Massachusetts***

---

Kirk Andries earlier had a very good report; he has become a very good Washington bureaucrat. He has given you exactly the picture you would get from our own federal people concerning the wetland situation in the United States. I have to bring in some additions to his talk. My colleagues in Hong Kong refer to going on a trip in China as going to Mars. Well, you've invited me from Mars to God's country and I will share with you the perspective that I bring to this.

Each of you has been telling each other what is going on in your provinces. I would like to give you a scenario of what happens right on my home turf as far as wetland regulation goes. I live in a small town of 1 300 people in western Massachusetts. We have about 36 miles of roads that the Highway Department maintains. We are zoned entirely for agriculture and residences, we only have two stores that exist because they are grandfathered in. That is the scenario. Imagine that someone comes into town and wants to build a subdivision near a stream you can't jump across. The significance of that is that it's a pretty pragmatic test as to whether you are affected by the 404 federal program or not. If you can't jump across the stream, chances are that the discharge is great enough to get Uncle Sam taking a look at what you are doing. So when a developer comes in to build a subdivision, he knows he is going to have to run up against wetland regulation, and hires a consultant. The first step he has to address is a Municipal Conservation Commission that, within our State structure, has the power of the first level of permitting. This Commission is made up of three to seven people appointed by our Board of Selectmen, which is the group that runs the town. Commission members are volunteers and they are not paid. They may have a budget of \$200 or \$300 to advertise announcements and the like. Yet they have the responsibility of determining whether or not there will be an adverse impact from the subdivision on a specified protected interest in the State law - groundwater recharge, water supply, and that kind of thing. That Commission has to review the application and, furthermore, the town has empowered them to enforce its own local by-law which stands legislatively very separate from the state and federal jurisdiction.

This developer has to go through a review that involves the local by-law, which is much more restrictive than the state, and more restrictive than the federal. Very small vernal pools get looked at through our local by-law that don't get looked at through either the state or federal review. How does this local Commission, who are volunteers and are not required to have qualifications other than being appointed by the selectmen, do this? Well, they also hire a consultant. How do they pay for this? They pay for it by charging a fee to the applicant. This fee isn't set, it is negotiated. It is the equivalent of the cost of the local Commission

hiring another consultant at the expense of the applicant, to review the applicant's plan. So the applicant is paying twice; he pays first for his own designer, and then they have to pay a fee equal to somebody that we hire to come in to review this! That is the local level.

There is a state level as well and if the applicant is unhappy with what was decided at the local level the applicant then has the right to appeal. They can take them to court if the decision is clearly related only to the local statute. If they are unhappy with respect to the town's action under the authority of the State, then they can appeal to the State. The State comes in and wipes the slate completely clean. It may issue a superseding order which may or may not reaffirm what the locals did.

The federal agencies are involved as well. Luckily enough, at least in our state, there is concurrent filing. When you file for a permit, it gets filed with the United States Corps of Engineers at the same time. Somebody takes a look at it to see whether it does trigger federal involvement. This is the process that a developer has to go through - three potential layers of review. The federal agencies will not issue a permit if the state permit is denied (in most cases). But, if the state permit is permitted, then there may be some questions under the federal law that have to be answered.

That is the regulatory scene where I come from. When I tell my friends in Ohio or Texas that this is what we do, they go through the roof. They say, you are a bunch of Communists up there. I say, no, we are just a bunch of New England Yankees. I have served as the founding Chairman of the local Conservation Commission, so I have lobbied a lot for some of the state legislation.

Now let me make some observations about this conference from my point of view. For me, it has been quite a learning process to be exposed to how you are approaching the management of a resource that is no different on our side of the line than it is in yours. You are using incentives and we are tagged with using regulation. That is a tag that we will have to live with. You are talking about policies. One thing that I have learned is that there really isn't a counterpart in the American system to your "policies." You have got an interesting grey step here that is not quite legislation, but if you word it the right way, someone has to pay attention to it. We do not have anything quite like that in the United States. The closest I can think of is an Executive Order from the President. That has virtually the effect of law in the federal establishment. It may not be criminal or civil law, but if you don't follow an executive order from the White House and you come up for appropriations, you are not going to fare well.

We really do not have the array of options that you are thoroughly exploring here. They are worth trying to explore as much as you can. Regarding my description of the federal program, one thing I would add to what Kirk Andries has said, is that it is very unusual that Congress has got involved in this kind of regulation. In the United States, Congress has stayed far away from land use regulations and has left that exclusively up to the states. It probably can be argued that it is a state prerogative and not a congressional one. If Congress had

thought or had known what they were doing by enacting Section 404 and knew that it was really going to be a land use program, they probably never would have passed it. At the state we cannot use zoning to acquire some public good because of the constitutional takings clause. We have to show that we are exercising the police power of the State in the advancement or protection of health, welfare or safety. That is why we start focusing on the flood control function, the water quality function, the water supply function, etc. Those are clearly health, welfare, and safety issues. Indeed, for a long time in my state, wildlife was never a protected interest under the wetland clause. We couldn't sell that, at the outset, but any old crusty old Selectman knew something about water in the streets, or dry wells or polluted water. We knew we could sell regulations on the basis of those values.

The United States wetland program actually started at the grass roots level. It started in Massachusetts 14 years before the federal government got involved with the 404 program. It started in local communities with people who were concerned that the shellfish and finfish harvest was declining. They were convinced, by their interpretation of what marine biologists were saying, that the loss of coastal marshes was tied to those declines. They came to the State Legislature and said "we want some sort of law that is going to stop people from filling in these tidal marshes and building on them." Then a few years later the inland communities had experienced floods and they said, "we are pretty well convinced that paving over this landscape and putting in parking lots instead of truck gardens has caused a flood." So they came to the State Legislature also and said we want a counterpart law to regulate what is going on in wetlands in our towns. This was a request to be given the power to regulate your friends and neighbours so that they didn't build their garages on a red maple swamp, in a place that flooded every year, or pave it over with asphalt. Regulation started at the local level and has evolved into heavy involvement by municipalities in our northeastern states.

What I have been hearing about Ontario sounds familiar. It sounds like what we do in the northeastern United States. On the other hand, what I am hearing about central and western Canada is very much like what I perceive is going on in the central and western part of the United States. What we in the northeast do in wetland regulation may never be bought in the rest of the United States. I would suggest that is probably the case in Canada as well.

It is important to find the right tool for the right part of the country. It needs to involve people at the local level and avoid a weak top-down process. The federal agencies have a top-down program in the United States and, as we are now discovering, unless they regionalize and sensitize the system to differences in the resource and differences in the socio-economic-cultural community, it can be in jeopardy. We are starting to regionalize our approach to wetland assessment. The Wetland Evaluation (WET) procedure that Paul Adamus came up with was great to start but it has to be regionalized. I would suggest that a measure of your success will be how well whatever program you have is adapted and reacted to it at the local level. The most successful, natural resource programs have local involvement. Without this, it becomes a struggle and will probably fail. Somewhere in the system we have to measure our successes in terms of local support. It may be different measures and it may be different techniques in different parts of the Continent.

If you are going to involve local municipalities, I have observed that one of the patterns to success, at least in the northeastern United States, is partnerships with NGOs. In our state, this includes each one of the Municipal Conservation Commissions. Massachusetts is divided up into 351 cities and towns; so you are always within an incorporated municipality. Each of these towns has one of these Conservation Commissions. They got together and decided to form an NGO, a State Association of Conservation Commissions and pay dues into it. That group hires a professional who works with and lobbies the state agencies. They also have published a number of manuals that assist the communities in delineating wetlands, and give them basic instruction on hydrology, etc. They have had workshops and courses, and have helped in some cases to put out video tapes.

In New Hampshire, municipal involvement is quite different. The municipalities are encouraged to go out with a state-approved procedure and designate what they call "prime" wetlands. When that happens, it forces the State to add an additional level of review. In New Hampshire, the New Hampshire Audubon Society has stepped in, and helped to develop a delineation manual with private foundation money. It has gone out and provided training sessions in evenings with the different local Conservation Commissions. They have a very close partnership with the New Hampshire Wetlands Board.

One final lesson I would take from our experience is that sooner or later top-down programs have to build local support. Local involvement might, therefore, be best engaged at the outset.

---

## ***OBSERVATIONS ON THE WORKSHOP***

***Caroline Caza***  
***Wildlife Habitat Canada***

---

I wrote down notes about the things that impressed me during our discussions over the last couple of days. For this presentation, I was given two tasks by the workshop organizers. Initially, I found them somewhat contradictory; one was to give impartial observations on the workshop discussion and the other was to give personal observations. I may have mixed up the two in my notes for this talk, so I leave it up to you to sort them out.

I would like to thank the organizers for the opportunity to give you my perspective on our discussions and also to commend them for the venue and the organization, both of which have been excellent. Many of the comments that I have will echo things that Rich Goulden has already said. However, I feel it is important to mention that my perspective is quite different than his. My background is different and that influences my perspective. I do not have a long experience with either policy development or wildlife conservation. I have worked for the last several years with Wildlife Habitat Canada, a non-profit foundation, and in my position as Director of Programs, have been involved with an enormous variety of wetland programs and policy initiatives across the country. This is the experience that I bring to this particular forum.

While listening to the discussions of the last two days, several things have struck a chord with the experiences that I have had over that last number of years. Wetland conservation remains an area of enormous opportunity. It is interesting that, although this workshop is about wetland policies, we are still questioning the extent to which policy can and should be the major tool we use to pursue our wetland conservation objectives. I think that the discussion that we have had on this issue and the variety of tools and policy frameworks that are being developed or that exist are encouraging. The message that has come out is that we still need to remain flexible and we need to remain innovative, imaginative and forward thinking with our policies, with our policy formulation, and with policy implementation. We should resist being limited by current realities. In many cases, these realities seem overwhelming, something that came out time and again in discussions.

I also felt, on occasion, overwhelmed by the larger issues within which wetland policies operate. I heard, consistently, the message that we should not be looking only at a stand-alone wetland policy, but rather at the integration of wetland conservation into other types of policy initiatives. I didn't get a clear sense of how we do this, but it is apparent that many participants feel it is an important reality and, as such, must be an important part of our thinking in both the formulation and implementation stages.

My comments are divided into three areas: general comments about wetland policies; comments about the implementation of policy; and, an overview of where we are right now and where we are going with wetland policies.

In terms of general policies, I have already mentioned that it is surprising to me that people are still questioning the extent to which we can achieve with policies what we want for wetland conservation. It seems important, therefore, to be aware of what these policies can and cannot do for us. There was not much discussion about the types of policies or the relevance of the wetland policies for the agricultural, southern or northern landscapes. In discussions in our group, at least, we were thinking about the Boreal Region in particular.

The kinds of things that we need to affect wetland conservation in the Boreal landscape seem to be very different than the kinds of things we must achieve in more southerly areas. We want a strong focus on encouraging comprehensive and landscape-level planning in the North. Our policies should be focused at this level rather than dealing with site-by-site preservation of wetlands. The need for building in feedback and assessment components into policy was discussed several times. It was pointed out that current policies either do not have these components, or do not have them adequately developed or formalized. There are still many unknowns about how wetlands function, about how we value wetlands and about what we want to achieve ecologically with wetland conservation. Therefore, it is particularly important that we emphasize these components of policies in the development stage.

The effectiveness of a policy is only as good as its on-the-ground implementation. Rich Goulden mentioned peripherally that we didn't focus much on this level. Perhaps this is because many of the participants present deal with other levels of thinking about policies. It came out time and again that there are problems with the degree to which government staff understand the policies that they are expected to implement. There are problems with the degree to which landowners who are affected have bought into their intent, and the degree to which they have been consulted about what the policies mean to them. All of these things will determine how effective our policies will be. I wonder whether we pay enough attention to this in the formulation stages of a policy. It is all going to fall apart if you have these kinds of problems when you go to put it on-the-ground.

Another thing about wetland policies is that, because wetlands and their administration, management and planning involve so many different agencies and so many different interests, there will always be loopholes. We will never have a perfect policy. The existence of loopholes creates opportunities that are going to be exploited by those not served (or those who believe they are not served) by the policy. The existence of multi-jurisdictional issues and interagency issues really puts the onus on us to make sure that there is commitment and buy-in to the objectives and the overall intent of the policy.

In terms of implementation, there are a number of issues that were highlighted from my point of view. One of them that tended to divert a lot of the discussion was jurisdictional conflicts. This was brought up in both the plenary sessions and workshops. It seems to me

that they are a reality of life. The idea is to focus on how to make policies work despite them, rather than get so concerned about the fact that they exist. It is something that we will continue to work on and, in some ways, they may be viewed as an asset. They may mean that no one will ever have exclusive jurisdiction in this area and maybe we should work with this fact.

Another major challenge that really struck me was the problem of a policy with provincial or regional level objectives that has to be implemented through local processes. Such policies have to be effective and relevant locally but also must be seen to be consistent at a higher level. That is very important. When we talk about implementing a policy, we need to think about how we are going to do this, because inconsistent application of policies is an enormous challenge to their effective implementation.

The recurring problem of getting landowners involved in all stages of development is one that I have heard many times in many forums. I still do not understand why it is such a Herculean task. I would have loved to have heard more discussion about this problem. We have consultation processes, in fact an absolute consultation mania, which has even led to burn-out for some regular participants. Where do landowners fit into these processes? Why don't policies meet their needs?

We did not talk very much about the cost of implementation. On the personal level, I have a brother who is an environmental activist at the municipal level in Ottawa. He has participated in numerous local community meetings in the Ottawa area, one of which we have heard some reference to over the last two days. This was the one with the large group of irate landowners yelling and screaming about Ontario's wetland policy. I asked him what he thought, from his perspective, were the major problems with the implementation of the policy. It did not take him long to come up with four major problems. I promised him I would bring his voice from the trenches to you.

According to him, the intent of the policy is not comprehensive and wetland conservation is treated as an isolated activity. Everyone, particularly landowners, can see that this cannot work. People need to see how wetland conservation integrates with everything else they want or do not want at that level of planning and management. Secondly, the policy needs to be *seen* to be applied consistently, as much as it needs to be applied consistently. At this point in time, this is not the case. I do not know how you deal with this but it is definitely something that needs to be addressed. Thirdly, landowners clearly feel they have not been involved in decisions that affect them, and that they have been excluded from the consultation process. Fourthly, there is too little financial support for implementation. Every time there is a problem raised at the local level, the response given is that there is no money to deal with it. Adequate support has not been factored in for this component. My brother suggested that when you cost out the implementation of a policy, the first thing you should do is triple the amount. My brother's belief is that there is no commitment to implement the policy.

As an overall final comment, I suspect that the major battles and challenges for wetland conservation may still be ahead of us, in the implementation of wetland policies. Many organizations and individuals have put much effort into getting this issue to this stage. The measure of their success is the number of policies that have been developed and the number of initiatives underway. Rather than being frustrated or overwhelmed by the task ahead, certainly everyone who has been involved should be enormously proud of the successes to date. As Rich Goulden said, let's keep our focus on the vision that brought us here and let energy and commitment drive forward to meet the challenges that lie ahead.

---

## ***SUMMARY OF GROUP DISCUSSIONS AND WORKSHOP RECOMMENDATIONS***

***Catherine Rostron  
Alberta Water Resources Commission***

***and***

***Clayton Rubec  
Canadian Wildlife Service  
Environment Canada***

---

### ***WHY WAS THE MEETING HELD?***

Many Canadian jurisdictions are struggling with the issue of wetland conservation. Different approaches have been and are continuing to be taken across the country to accomplish wetland conservation goals. Because many methods and approaches are "state-of-the-art" there is no easy source of reference material about how to develop or implement wetland policy. The conference organizers felt that it was important for wetland resource managers across the country to have the opportunity to share their experiences and evaluations with each other. The discussion groups provided the best forum for the informal exchange of information.

This paper provides a brief outline of the process used in the discussion groups. The major discussion points are summarized, based largely on themes or topics identified by the observers, instead of strict summaries by question. Areas of consensus and disagreement are presented. Some recommendations are included, but many of the discussion groups did not present specific recommendations for actions, but rather information for consideration.

### ***WHAT WAS THE PROCESS USED IN THE DISCUSSION GROUPS?***

The workshop participants were divided into three groups of 12 to 14 participants, and each group had a discussion facilitator and a recorder. Membership in the groups was determined in advance, in an attempt to balance different interests and experiences among the groups. Participants stayed in the same groups for each of three discussion sessions to allow people to get to know each other, and develop an understanding for different positions.

An independent observer was also assigned to each group. The role of the observer was to participate in the discussions as desired, and to provide feedback on the discussions to the entire workshop on the final day. The expectation was that this type of perspective would be

more informative and interesting than detailed, formal "reporting back" often used when small discussion groups are created.

The topics for the discussion sessions were administrative and process issues, mitigation issues, and monitoring and compliance. The participants had been supplied before the conference with lists of potential discussion questions for each session, and had been asked to consider which questions they wanted to address (see Appendix 1). Each facilitator took an informal vote to determine the two or three most popular questions for discussion. Notes were recorded by the facilitators in each group. The discussion group notes were reviewed and summarized along with the observers' comments and final plenary session recommendations to provide an insight into the ideas discussed and recommendations presented by the participants at the workshop.

### ***WHAT WAS DISCUSSED IN THE DISCUSSION GROUPS?***

Workshop participants discussed administrative, mitigation, and monitoring issues from a broad range of experience in government and industry. Discussion ranged from theoretical perspectives to experiences in the field. Despite the vast differences in how wetland conservation objectives are approached, some common themes emerged, including the need to keep wetland policy and implementation flexible, and the need to make use of conservation opportunities when they arose. Comments from the participants in the discussion groups and the final plenary sessions, and from the observers, are summarized below in eleven major areas.

1. Workshop Process Issues
2. Partnerships and Consultation
3. Opportunities
4. Regulations versus Incentives
5. Policy as a Tool for Wetland Conservation
6. Implementation
7. The "Bigger Picture"
8. Frameworks
9. Evaluation, Monitoring and Compliance
10. Mitigation
11. Implementation of Mitigation Requirements

#### **1. Workshop Process Issues**

Several issues relating to the workshop format were raised by the observers and by participants in the final discussion group. One observer felt the discussion groups provided a good opportunity to air perspectives and ideas and to exchange information. It is interesting that the format did not necessarily create the atmosphere for discussion and solution seeking. Perhaps in the short time frame allotted to discussion groups it was not possible to get past the

information stage to the solution stage. It is also possible that the diverse conditions affecting wetland management across the country precluded the creation of universal solutions.

The need to address coastal wetland issues more specifically was also raised because the issues are different than central Canadian wetland issues, in particular with respect to the larger jurisdictional issues. It was suggested that either a separate meeting or focus group was required, or else an expanded participant base was needed.

There was general agreement that further meetings of this sort would be valuable, but it was recognized that the resources to conduct similar meetings are limited. It was suggested that participants explore existing opportunities to discuss wetland issues at forums such as the National Habitat Workshops or Canadian Water Resources Association general meetings. It may also be appropriate to conduct wetland policy workshops at the provincial level. Any further wetland policy meetings should involve agricultural producers and landowners because they have an important role in policy development and implementation.

## **2. Partnerships and Consultation**

Issues of public consultation and partnerships in policy development and implementation were raised in the general forum, as well as by the discussion groups. Comments about who to involve and why were addressed.

Efforts must be made to truly involve the public, not just consult them. Interests such as municipal governments, landowners, and agricultural producers should be represented. In addition to different jurisdictions, different users and different professions such as lawyers, bankers, economists should be included in the wetland policy discussion. It was agreed that the NAWCC (Canada) Secretariat goes a long way toward connecting those in Canada who are involved in wetland conservation. However, the Council itself has not yet articulated an interest in undertaking information clearing-house activities. This role could be performed by the Council Secretariat or other organizations, such as Wildlife Habitat Canada, if there were sufficient funding.

Meaningful consultation with stakeholders is critical, because it provides opportunities for education and learning by all involved parties. There is a need to strengthen partnerships with non-government organizations (NGOs) to accomplish conservation objectives. Politically active NGOs may overcome some jurisdictional problems by lobbying at the political level. Partnerships may be used to overcome the lack of clear jurisdiction that characterizes wetland management. Although difficult, wetland managers must ensure that personalities do not defeat multi-sectoral approaches.

Another impetus for partnerships and consultation mentioned during the workshop is the reality of divided jurisdiction in wetland management. Resource managers should turn this divided responsibility into an asset, encouraging different interests to work together in partnerships. One advantage of this will be that wetland management will never be the

exclusive responsibility of one organization that can control the direction management takes. Divided jurisdiction can be used positively to accomplish multiple objectives, as proven by the North American Waterfowl Management Plan (NAWMP). Participants emphasized that cooperation is essential as is the commitment of agencies to implementing plans agreed to in conjunction with other agencies.

Participants recognized that most provincial policies are going to depend on local processes for implementation; therefore it is critical to keep local levels involved in policy development and striving toward consistent policy application. Top-down policy creation should be avoided for this reason. Some indicated that the degree of local involvement in wetland conservation and policy implementation would be a good measure of the success of the policy. The Canadian participants were reminded that Section 404 provisions of the United States *Clean Water Act* (often seen as a top-down response to wetland issues) were initiated by local public concerns and represent a response to a grass-roots initiative.

### **3. Opportunities**

A common theme that ran throughout the workshop was the need to be opportunistic in advancing wetland conservation objectives. Those interested in wetland conservation must act when opportunities present themselves, such as when opportunities arise to develop partnerships with groups interested in wetlands, when public sentiment is in favour of protecting duck populations, or when agricultural policies are being revised. Managers have the chance to make use of broader opportunities to advance wetland conservation. In Canada, resource managers should consider areas such as: GATT policy talks (green subsidies); flood reduction; economic considerations such as pricing of fur to increase trapping use of wetlands; and agricultural diversification plans as opportunities for wetland conservation. Similarly, programs such as the Fraser River Action Plan in British Columbia present wetland conservation opportunities. In the United States, wetland conservation must be done in the interest of public health and safety, so conservation is tied to issues such as flood control, public health, or economic loss.

While we must be opportunistic in accomplishing wetland conservation objectives, we must recognize that the "cutting edge" nature of our work means there will be uncertainty about our methods and effectiveness. This uncertainty was certainly present in most discussions. It also means there is no fixed method to accomplish wetland conservation, and that managers must adapt their strategies to the political and economic realities. Given this, it is not surprising that simple answers to questions like how to implement a policy or structure mitigation requirements could not be achieved.

### **4. Regulations versus Incentives**

A continuing theme throughout the workshop was the ongoing tension between regulatory and incentives-based approaches for wetland conservation. There was distinct preference for the cooperative, non-regulatory approach and the use of partnerships. Non-

regulatory approaches that should be used include education, awareness, coercion, and persuasion. Voluntary cross-compliance may also be appropriate. Education of the public to enable them to influence politicians is important. Local involvement and awareness of issues and information are important tools for wetland conservation. Stewardship roles by companies involved in wetlands helps achieve policy objectives in a cost-efficient manner. It was argued that successful wetland conservation policies will provide incentives and subsidies that allow landowners or industry several options for policy implementation.

## **5. Policy as a Tool for Wetland Conservation**

The workshop was designed to focus on wetland policy implementation, but this did not preclude discussion in two of the groups, as well as in the plenary sessions, of the role of wetland policy in delivering wetland conservation objectives.

Wetland participants felt that a wetland conservation statement or policy, somewhere within the administrative framework, is critical to achieving wetland conservation objectives. It may be hard to generate interest in a policy unless it clearly deals with a hard issue to be resolved, but it should still be attempted. Such a policy helps generate commitment to wetland conservation objectives and provides a framework within which other wetland conservation tools can be used. While policy is a tool that is not familiar in the American setting, an American observer in the workshop felt it was a good option to explore and develop.

However, policy is recognized as only one tool to be used in accomplishing wetland conservation objectives. A variety of tools exist to deliver wetland conservation objectives, including policy, municipal planning, regional planning, environmental assessment legislation, habitat protection, community planning and bylaws, and education. The need to involve so many organizations will undoubtedly lead to the creation of some loopholes in policy or regulations; this highlights the importance of achieving commitment to the ideal to make it work.

## **6. Implementation**

In addition to the agreement about incentives-based approaches, there was broad agreement that wetland managers must use as many tools as possible to accomplish wetland conservation, including fiscal, regulatory, and persuasion tools. The tools must be adapted to the wetland type and ownership. Although it is believed that voluntary programs are the most successful, wetland managers must recognize that the use of legislation and regulation is still appropriate in some situations.

Regional application of wetland policies was considered critical. Wetland conservation policy must recognize regional differences in the resource, and in the socio-economic and cultural communities. Therefore it is important to tailor policies to the landscape and to incorporate the regional perspective.

Participants agreed that evaluation and feedback loops must be built into wetland policies and implementation plans to enable resource managers to learn from experience, and to allow revision of the policy or the implementation procedures if the objectives are not being met. Similarly, implementation plans should be designed to generate information that can be used to evaluate the implementation and use in future cases.

The implementation process will take significant financial and staff resources, as well as energy and political commitment. It will not flow easily from wetland policy, and managers must make sure that the momentum of policy development is not lost in the implementation stage.

Wetland policy must be applied in a consistent manner, and just as importantly, must be perceived as being applied in a consistent manner. To facilitate this, resource managers must make sure that those responsible for policy implementation understand the policy well and implement it effectively. This will require good training for all those involved, including municipal officials. Opportunities exist to develop extensive training programs, similar to what is available in the United States for regulatory issues. NGOs may play an important role in organizing and delivering such courses, as well as taking them.

Two areas where discussion did not result in consensus were the role of environmental assessment legislation in implementing wetland policies, and the importance of early wetland classification. Some believe environmental assessment legislation is the only enforceable legislation to implement wetland conservation objectives, while others are not sure it accomplishes conservation goals. It was agreed that the capabilities of environmental assessment to accomplish wetland conservation goals should be studied. With respect to wetland mapping and evaluation, there was no agreement whether the classification of all wetlands is essential to policy implementation. Some argue that evaluating each wetland as it comes under development pressure is more appropriate.

During the group discussions, several examples of implementation were provided. New Brunswick is investigating a tiered approach where some wetlands would be fully protected, others subject to mitigation and compensation, and others managed for multiple use. Saskatchewan wetland policy for the agricultural area ties the policy to the requirement to improve soil and water conservation at the landscape level.

## **7. The "Bigger Picture"**

A repeated theme of the discussion groups was the need to place wetland conservation into the "bigger picture," and to integrate wetland policies into both land use and water planning and management exercises. More concentrated efforts may be required on integrated policy development and comprehensive land use policies to achieve wetland conservation objectives. It will also be necessary to influence larger issues such as agriculture policy to meet wetland conservation goals. The job of wetland managers is twofold: to address the larger issues such as agriculture policy, and to keep the larger issues in mind while working

on wetland-specific activities. While considering the "bigger picture," more attention should be paid to forested wetlands, as the impacts of forest industry, hydro-electric development, transportation and communication corridors are often down-played or ignored. Education and financial programs should also consider the larger perspective, and deal with creating sustainable economic behaviour that will help achieve wetland conservation goals.

Despite the need to address broader issues, the workshop participants generally agreed that the urgency of wetland conservation is such that most felt they could not afford to wait for a comprehensive water or land use policy before something was done about wetlands. From a federal perspective, it was noted that there was a specific push for a distinct wetland policy because it was felt that wetlands would be ignored in the context of broader land and water planning.

By placing wetland conservation within the "bigger picture," managers retain flexibility in the means they use to accomplish wetland conservation. This allows managers to be opportunistic. While integrated land use planning may be an appropriate means to deliver wetland conservation, a separate wetland policy may be more able to grab public and political interest as it can seize on conditions like decreasing duck populations to generate support.

## **8. Frameworks**

Discussion about the appropriate framework for delivering wetland policies revealed little consensus. Some felt that a watershed approach is appropriate for wetland management while others supported the use of ecological land classifications or frameworks, such as ecodistricts, as the unit that management would use. It was argued that ecodistricts capture different habitat types but can ignore the industrial and economic realities of how a policy will be implemented. Discussion about wetland classification revealed it may facilitate some decision making, but it may remove flexibility in policy application.

Some comments revealed the value of using a combination of frameworks. For example, Ontario has used a multi-disciplinary classification and ranking of wetlands, followed by regulation of activities in certain areas. Such case by case implementation of policy may work well, especially within a hierarchical approach of regions, watersheds, and individual projects.

There was no mention of developing specific wetland legislation, but several references were made to jurisdictions that intend to make use of existing legislation to provide the mandate for wetland conservation. For example, New Brunswick is using existing environment and water resources legislation to support a tiered approach of protection, mitigation, and use. Quebec is using legislation to protect critical or essential habitat for wildlife, some of which habitat is wetland and Prince Edward Island addresses wetland protection through its provincial environmental protection legislation.

Despite the disagreement about the exact framework for policy implementation, it was agreed that some generalization may be necessary in policy, but it must not be allowed to paralyze implementation. Furthermore, any implementation process must respect the differences between public and private land.

## **9. Evaluation, Monitoring and Compliance**

Two areas requiring evaluation were discussed. The first was that managers must be able to evaluate wetland functions, such as habitat or hydrology, productivity, diversity, hydrogeological functions or wetland quality. This information could be used by managers to determine whether a policy or implementation strategy had been successful in conserving wetland functions.

The second focused on how to evaluate the effectiveness of policy and management techniques. Participants agreed that some overall monitoring of policy implementation is necessary to ensure goals and objectives are being met, and to allow implementation strategies to be altered if they are not being met. No evaluation of wetland status or policy effectiveness will be perfect, but it must be attempted. Many data currently collected are not wetland-specific, but they may provide insight into wetland status. For example, managers should make use of available information sources about issues such as agricultural land use as best proxies for direct information on wetland resources. Still, it may be difficult to isolate changes in wetlands that result from effective wetland policies, as opposed to larger activities such as changing agricultural practices or climate change.

It was suggested that targets and dates should be incorporated into wetland policy such as the NAWMP Habitat Joint Venture system has done, so it would be possible to know when goals have been achieved. However, some argued that a policy is meant to give general direction, not specific targets, and consensus was not reached.

The initial reasons for policy development will influence what indicators are appropriate to evaluate policy effectiveness. Examples included cost, acreage protected, rate of change of wetland area, landowner participation, changed perceptions, or measure of support at local communities. Some argued that the best indicators are socio-economic ones such as regional incomes, tourism activities, or fisheries health. Similarly, the saved costs of programs such as fish stocking or water treatment that are not needed as a result of maintaining wetland functions are a proxy for the value of the program. Because wetland area may be increasing for reasons unrelated to the policy (such as increased rainfall or beaver activity) one participant suggested that a successful wetland policy is one which has an influence on other government policies or programs.

Industry representatives pointed out that the government can regulate compliance, or it can regulate involvement in the solution; the latter is preferred by industry. Supporting regulation and legislation will still be required. The onus should be placed on industry and developers for implementation, monitoring and enforcement, with the government only

becoming involved when problems occur. Similar approaches are probably appropriate for private landowners.

## **10. Mitigation**

The importance of defining mitigation clearly in policy or regulations was highlighted by the range of definitions used by workshop participants who are much more familiar with the concept than most developers are. For discussion purposes, the groups agreed to use definitions provided by the workshop organizers from the current literature (see section below entitled "How Wetland Mitigation is Defined in Canada").

Most participants agreed that some scale of mitigation is necessary, especially as it is not always possible to avoid impacts from development. The acceptance of the mitigation ideal implies acceptance of the belief that wetlands can be recreated; this is more feasible for marshes than peatlands. There was consensus that mitigation for wetland area alone is not acceptable; mitigation must attempt to address wetland functions.

It was agreed that managing mitigation activities to achieve biodiversity goals is valuable, but not always feasible. Often a focus on a single species is necessary to get a habitat protection program going. If possible, programs should also plan for mitigation of change to other elements of biodiversity, and efforts should be made to show the multiple benefits of programs focused on one species. One participant noted that if mitigation programs accomplish their goals, even if they are focused on a species and not the concept of biodiversity in general, they will accomplish biodiversity goals and are definitely better than no mitigation.

Different discussion groups identified that the opportunity for mitigation is limited. Managers cannot always replace functions that are lost and this limitation should be accounted for in the mitigation requirements. Recognizing these limits to mitigation efforts, managers should seek to better understand wetland functions so mitigation measures can be designed more appropriately. Attempts should be made to encourage on-site mitigation as opposed to off-site mitigation or compensation.

Discussion about the best means to undertake mitigation did not reveal a consensus. Some felt that a case-by-case approach to mitigation, using a standard tool kit, was the best approach because it allows the greatest flexibility. Generally, it was felt that a wetland inventory would help managers make decisions about how many wetlands we can afford to lose. However, the case-by-case approach conflicts with the industry need for some level of consistency and certainty in assessing in the early design phases what might be acceptable for mitigation. Certainly, to maintain credibility, the government must have a clear decision process about issues such as what will be considered important functions and how mitigation needs will be assessed.

A good understanding and inventory of pre-disturbance conditions of wetlands and their functions, both in a general sense and for specific wetlands being impacted, is necessary to set mitigation requirements and to evaluate effectiveness. Mitigation requirements must define what functions are of concern, and what losses can be mitigated for. Political support for mitigation is critical to successful application of mitigation principles.

Industry wants a baseline of what areas will be acceptable for development, and which areas are off limits. Unfortunately, this requirement conflicts with a perception that this baseline may be changing as our knowledge and values, as well as the state of the resource, change.

There was agreement that managers do not have sufficient information to know all the answers about wetlands, but that mitigation must proceed within this limited information. Therefore, an assessment of risk should be built into mitigation plans. Where possible, government staff should work directly with proponents to frame mitigation requirements in a positive sense and to arrange "win-win" solutions. Managers should consider non-wetland means, such as engineering solutions, to replace lost functions.

Participants agreed it was critical to build monitoring and evaluation into the mitigation process to evaluate effectiveness and to provide information for future mitigation efforts. Existing mitigation efforts need to be better documented and evaluated to provide information for future efforts.

## **11. Implementation of Mitigation Requirements**

A variety of techniques to deliver wetland mitigation was suggested, ranging from cooperative to regulatory approaches, including:

- regulations, when effects are significant, obvious and measurable;
- legally binding conditions on approval;
- bonding with time limit;
- national or regional recognition rewards for reclamation;
- fines;
- stop work orders;
- use of existing legislation such as the *Fisheries Act*;
- stewardship agreements between resource industries and government;
- industry codes of conduct and associated peer pressure;
- performance standards for industry that present goals and allow the industry to assess the most appropriate means to accomplish them;
- bad press; and
- individual contacts and agreements with industry, as opposed to set requirements.

Regardless of whether legislation, policy, or persuasion is used to accomplish mitigation goals, participants agreed it is important to try to maintain a maximum number of viable

options; flexibility is again the key. Flexibility in choosing methods and tools will help developers accomplish mitigation goals. Participants urged that managers avoid an adversarial approach that may lead to litigation which wastes mitigation dollars. It was suggested that information and technology sharing will be important so small businesses can have access to techniques that larger companies can afford to research and develop on their own. It was suggested that the government role should include providing tools and some of the research efforts.

Many questions about implementing mitigation requirements were posed. Most did not have answers, but being aware of the potential problems may assist managers. Contentious issues were: How should we deal with temporary losses? Is compensation a viable mitigation technique? How do you legislate what is largely common sense? How do you arbitrarily decide what is a temporary, versus mid-term, versus long-term impact? And, how do we define how much change is acceptable?

## **CONCLUSIONS/RECOMMENDATIONS**

The workshop organizers had thought there would be discussion suggesting common potential solutions, a meeting of minds where answers could be found. Instead, we learned that we all have different problems requiring solutions, and different tools in our bags to create those solutions. Perhaps the underlying lesson is one of flexibility, creativity, and opportunism. If it works, use it.

Although the workshop was not structured to produce specific recommendations, consensus was reached on a number of issues throughout the discussion. These issues are framed below as 15 recommendations for wetland policy managers.

- 1. Coastal wetland issues need to be addressed specifically because the issues are different than central Canadian wetland issues, especially with respect to the larger jurisdictional issues. It was suggested that either a separate meeting or focus group was required, or an expanded participant base was needed.*
- 2. Further meetings of this sort would be valuable, but limited financial resources may preclude this. Wetland managers should explore existing opportunities to discuss wetland issues at forums such as the National Habitat Workshops or Canadian Water Resources Association general meetings.*
- 3. Efforts must be made to truly involve the public, not just consult them. Interests such as municipal governments, landowners, and agricultural producers should be represented. In addition to different jurisdictions, different users and different professions such as lawyers, bankers, economists should be included in the wetland policy discussion.*

4. *Most provincial policies will depend on local processes for implementation; therefore it is critical to keep local levels involved in policy development and striving toward consistent policy application. Top-down policy creation should be avoided for this reason.*
5. *Wetland managers must be opportunistic in advancing wetland conservation objectives. Those interested in wetland conservation must act when opportunities present themselves, such as when opportunities arise to develop partnerships with groups interested in wetlands, when public sentiment is in favour of protecting duck populations, or when agricultural policies are being revised.*
6. *The cooperative, non-regulatory approach to wetland management and the use of partnerships is strongly recommended over the regulatory approach.*
7. *A wetland conservation statement or policy, somewhere within the administrative framework, is critical to achieving wetland conservation objectives.*
8. *Wetland managers must use as many tools as possible to accomplish wetland conservation, including fiscal, regulatory, and persuasion tools. The tools must be adapted to the wetland type and ownership.*
9. *Regional application of wetland policies is critical. Wetland conservation policy must recognize regional differences in the resource, and in the socio-economic and cultural sectors.*
10. *Evaluation and feedback loops must be built into wetland policies and implementation plans to enable resource managers to learn from experience, and to allow revision of the policy or the implementation procedures if the objectives are not being met. Similarly, implementation plans should be designed to generate information that can be used to evaluate the implementation and for use in future cases.*
11. *Wetland conservation must be placed into the "bigger picture" and integrated into both land use and water planning and management exercises. Despite the need to address broader issues, the urgency of wetland conservation is such that we cannot afford to wait for a comprehensive water or land use policy before something is done about wetlands.*
12. *Overall monitoring of policy implementation is necessary to ensure that the goals and objectives are being met, and to allow revision of implementation strategies if they are not being met.*
13. *Managers must be able to evaluate wetland functions, such as habitat or hydrology, productivity, diversity, hydrogeological functions, and wetland quality so they can determine necessary mitigation, and assess policy and mitigation success.*

14. *Mitigation efforts must proceed even within the limited information base. An assessment of risk should be built into mitigation plans.*
15. *A maximum number of viable options must be tried in wetland impact mitigation plans, regardless of whether legislation, policy, or persuasion is used to accomplish mitigation goals. Flexibility is again the key.*

## **HOW WETLAND MITIGATION IS DEFINED IN CANADA**

### **The Federal Policy on Land Use - 1981**

The federal government will ensure that all significant land-related projects initiated by the federal government, for which federal funds are provided, or for which federal property is required, are subject to the Federal Environmental Assessment and Review Process or provincial equivalent so that potential environmental and land use ill effects can be identified and mitigated.

### **Fisheries and Oceans Canada Policy for the Management of Fish Habitat, Glossary - 1986**

Mitigation: Actions taken during the planning, design, construction and operation of works and undertakings to alleviate potential adverse effects on the productive capacity of fish habitats.

### **Implementation Strategy No. 2: The Federal Policy on Wetland Conservation - 1991**

[The federal government will] Develop guidelines to ensure mitigation of the impacts of federal government activities affecting wetland functions and, where appropriate, develop compensatory measures.

### **Manual of Implementation Guidelines for the Ontario Wetland Policy Statement, Appendix C - 1992**

Mitigation: The possible mitigation of damage caused by the construction, operation, or maintenance of a proposed use or development will be one factor in the consideration of an Environmental Impact Statement. The Policy does not provide for "compensatory replacement" (i.e. the replacement of wetland destroyed by the land use or development)...

### **A Guide to the Canadian Environmental Assessment Act - 1993**

Mitigation: Means the elimination, reduction, or control of the adverse environmental effects of the project, and includes restitution for any damage to the environment caused by such effects through replacement, restoration, compensation or any other means.

### **Interim Alberta Wetland Policy, Glossary - 1994**

Mitigation: The process of rectifying an impact by repairing, rehabilitating or restoring the affected environment; or the process of compensating for the impact by replacing or providing substitute resources or environments. It can also be defined as the restoration, creation, or enhancement of wetlands to compensate for wetland losses associated with human activities.

---

**APPENDIX 1**  
**AGENDA FOR MEETING AND WORKING GROUP QUESTIONS**  
**NATIONAL WORKSHOP ON WETLAND POLICY IMPLEMENTATION**

---

*June 12, 1994*  
*Delta Winnipeg Hotel*  
*Winnipeg, Manitoba*  
*and*  
*June 13-14, 1994*  
*Oak Hammock Marsh Conservation Centre*  
*Stonewall, Manitoba*

**AGENDA**

***Sunday June 12***

**19:00 Session 1: Opening Remarks. Chair: Ken Cox.**

- Welcome, Workshop Objectives and Logistics (Ken Cox, NAWCC Canada)
- The Evolution of Wetland Policy in Canada (Clayton Rubec, Canadian Wildlife Service, Environment Canada)
- Achieving Policy Commitments and Cooperation for Wetland Conservation (Robert Sopuck, Government of Manitoba)

***Monday June 13***

**09:00 Session 2: Challenges Facing Policy Implementation. Chair: Ken Cox.**

- Welcome to Oak Hammock Marsh Conservation Centre (Stewart Morrison, Ducks Unlimited Canada)
- Challenges Facing Wetland Policy Implementation in Alberta's Agricultural and Forested Landscapes (John Lilley, Alberta Water Resources Commission)
- Experience with the Implementation of the Federal Policy on Wetland Conservation (Pauline Lynch-Stewart, Lynch Stewart and Associates)

10:15 Working Group Discussion on Policy Administrative and Process Issues

12:00 Luncheon

14:00 **Session 3: Mitigation Issues. Chair: Ken Cox**

- Experience with the Implementation of Ontario's Wetlands Policy Statement (Kevin Loftus, Ontario Ministry of Natural Resources)
- Development of a Wetland Policy for New Brunswick (Pat Kehoe, New Brunswick Natural Resources and Energy)
- The Wetland Evaluation Guide: A National Tool for Mitigation Assessment and Wetland Decision-Making (Ken Cox, NAWCC Canada Secretariat)

15:45 Working Group Discussion on Wetland Policy Mitigation Issues

***Tuesday June 14***

09:00 **Session 4: Monitoring and Compliance Issues. Chair: Ken Cox**

- Wetland, Agricultural and International Trade Policy Interactions (Jim Patterson, Ducks Unlimited Canada)
- Implementing Wetland Policy: Lessons from the United States (Kirk Andries, International Association of Fish and Wildlife Agencies)

10:15 Group Discussion on the Future of Policy Implementation

11:15 Observations on the Workshop:

- Rich Goulden, Manitoba Habitat Heritage Corporation
- Joseph Larson, University of Massachusetts
- Caroline Caza, Wildlife Habitat Canada

11:45 Recommendations

12:45 Conclusions

## ***WORKING GROUP QUESTIONS***

The following questions were used to initiate discussion in each of the three working groups in the Workshop:

### ***Working Session 1: Administrative and Process Issues***

- (1) In achieving wetland policy objectives, what are the most effective frameworks for implementation: regional strategies or zoning of wetlands, a watershed approach, a socio/economic stratification, or case by case implementation?
- (2) What are effective strategies for policy implementation agencies to keep us out of court?
- (3) What are effective strategies to win over the private landowner - public awareness, consultation processes, education? Do's and don'ts?
- (4) How do we deal with wetland losses and impacts that lie outside the influence of our wetland policy or regulatory powers - e.g. jurisdictional, not dealt with in policy, etc.?
- (5) Are there any new tools for dealing with the conflict between the demands for economic development and the objectives of wetland conservation?
- (6) Is multi-agency jurisdiction over wetland resources an opportunity or our worst nightmare?

### ***Working Session 2: Mitigation Issues***

- (1) So what does mitigation mean to you? Are we all talking about the same thing?
- (2) What are viable mitigation options for program delivery? Can we define criteria for identifying the best option on a case by case basis?
- (3) Wetlands enhancement is undertaken for a variety of program objectives including waterfowl and biodiversity. Do these objectives require planning for mitigation of changes or impacts to other elements of biodiversity?
- (4) Do we know enough about wetland functions and "no net loss" to really deliver our commitment to mitigation efforts involving wetland protection/rehabilitation/creation in Canada?

- (5) How can we effectively mitigate off-site impacts on wetlands?
- (6) What are the most effective mechanisms to ensure operational delivery of wetland policy mitigation commitments on a site by site basis?

### ***Working Session 3: Monitoring and Compliance***

- (1) When and how do we know if our wetland policy objectives are successful in resulting in a tangible benefit on-the-marsh?
- (2) In Canadian experience what is leading to successful implementation of wetland policy objectives: a land use planning process, a regulatory approach or a cooperative, consultative and voluntary compliance approach?
- (3) What legislative examples in Canada are effective in enforcing wetland policy objectives?
- (4) What are the responsibilities and roles for the long-term integrity of altered/enhanced/ or created wetlands - e.g. considering the government, the proponent, and the developer?
- (5) Are wetland policies really going to do the job or is legislation the way to go?
- (6) What do we really need to monitor: (a) the wetland resources (what's left, is it healthy?); (b) the success of enhancement projects and program delivery; (c) compliance by landowners with policy and program change or implementation; (d) the wetland policy itself?
- (7) Are review mechanisms built into our policies essential?

---

**APPENDIX 2**  
**LIST OF PARTICIPANTS**

---

Mr. Kirk Andries, NAWMP Coordination Office, International Association of Fish and Wildlife Agencies, Suite 544, 444 North Capitol Street NW, Washington, D.C. 20001. Phone (202) 624-7890. Fax (202) 624-7891.

Mr. Glen Bergstrom, Alberta Environmental Protection, 9th Floor, 9920 - 108 Street, Edmonton, Alberta T5K 2M4.

Mr. Mike Cahill, Wildlife Division, Newfoundland and Labrador Department of Tourism and Culture, St. John's, Newfoundland A1B 4J6.

Mr. Andrew Cameron, Water Resources Branch, Nova Scotia Department of Environment, 136 Exhibition Street, Kentville, Nova Scotia B4N 4E5. Phone (902) 424-2554.

Mr. Bob Carles, Saskatchewan Wetlands Conservation Corporation, 2151 Scarth Street, Regina, Saskatchewan S4P 3Z3. Phone (306) 787-0918. Fax (306) 787-0780.

Mr. Joe Carreiro, Environmental Conservation Branch, Environment Canada, 49 Camelot Drive, Ottawa, Ontario K1A 0H3. Phone (613) 952-2417. Fax (613) 952-9027.

Dr. Caroline Caza, Wildlife Habitat Canada, Suite 200, 7 Hinton Avenue North, Ottawa, Ontario K1Y 4P1. Phone (613) 722-2090. Fax (613) 722-3318.

Mr. Ron Coley, Ducks Unlimited Canada, Box 1160, Stonewall, Manitoba R0C 2Z0. Phone (204) 467-3000. Fax (204) 467-9028.

Mr. Ken Cox, Secretariat, North American Wetlands Conservation Council (Canada), Suite 200, 1750 Courtwood Crescent, Ottawa, Ontario K2C 2B5. Phone (613) 228-2601. Fax (613) 228-0206.

Mr. Ed Dawe, Northland Associates Ltd., P.O. Box 1734, St. John's, Newfoundland A1C 5P5. Phone (709) 576-6820. Fax (709) 576-0208.

Mr. Graham Dorn, Agricultural Policy Branch, Saskatchewan Wetlands Conservation Corporation, 2151 Scarth Street, Regina, Saskatchewan S4P 3Z3. Phone (306) 787-0918. Fax (306) 787-0780.

Mr. Rich Goulden, Manitoba Habitat Heritage Corporation, 1555 St. James Street, Room 200, Winnipeg, Manitoba R3H 1B5. Phone (204) 784-4358. Fax (204) 784-4359.

Mr. Gerry Hood, Canadian Sphagnum Peat Moss Association, 4 Wycliff Place, St. Albert, Alberta T8N 3Y8. Phone (403) 460-8280. Fax (403) 459-0939.

Ms. Debbie Hylady, Canadian Wildlife Service, Environment Canada, Box 340, Delta, British Columbia V4K 3Y3. Phone (604) 946-8546. Fax (604) 946-7022.

Mr. Steven Kearney, Wildlife Branch, Manitoba Department of Natural Resources, Box 24, 1495 St. James Street, Winnipeg, Manitoba R3H 0W9. Phone (204) 945-7761. Fax (204) 945-3077.

Mr. Pat Kehoe, Fish and Wildlife Branch, New Brunswick Department of Natural Resources and Energy, P.O. Box 6000, Fredericton, New Brunswick E3B 5H1. Phone (506) 453-2440. Fax (506) 453-6699.

Mr. Haseen Khan, Water Resources Management Division, Newfoundland and Labrador Department of Environment and Lands, Box 8700, St. John's, Newfoundland A1B 4J6. Phone (709) 729-2535. Fax (709) 729-1930.

Ms. Heidi Klein, Natural Resources and Environment Branch, Indian and Northern Affairs Canada, 6th Floor, 10 Wellington Street, Hull, Quebec K1A 0H4. Phone (819) 994-6773. Fax (819) 953-2590.

Dr. Joseph Larson, The Environment Institute, Blaisdell House, University of Massachusetts at Amherst, Amherst, Massachusetts 01003-0820. Phone (413) 545-2842. Fax (413) 545-2304.

Mr. Gerry Lee, Water and Habitat Conservation Branch, Canadian Wildlife Service, Environment Canada, Hull, Quebec K1A 0H3. Phone (819) 953-1434. Fax (819) 994-4445.

Mr. John Lilley, Alberta Water Resources Commission, 910 Harley Court, 10045 - 111 Street, Edmonton, Alberta T5K 2M5. Phone (403) 422-4232. Fax (403) 422-9703.

Mr. Kevin Loftus, Aquatic Ecosystems Branch, Ontario Ministry of Natural Resources, P.O. Box 7000, Peterborough, Ontario K9J 8M5. Phone (705) 740-1375. Fax (705) 740-1536.

Ms. Pauline Lynch-Stewart, Lynch-Stewart and Associates, 39 Glengarry Road, Ottawa, Ontario K1S 0L4. Phone/Fax (613) 567-1116.

Mr. Patrick Mariott, Alberta Environmental Protection, 9th Floor, 9820 - 106 Street, Edmonton, Alberta T5K 2J6. Phone (403) 427-8985. Fax (403) 422-4190.

Ms. Carole Martin, Environment Bureau, Agriculture and Agri-Food Canada, Sir John Carling Building, Carling Avenue, Agriculture Canada, Ottawa, Ontario. Phone (613) 943-1611. Fax (613) 943-1612.

Mr. Randy Milton, Nova Scotia Department of Natural Resources, 136 Exhibition Street, Kentville, Nova Scotia B4N 4E5. Phone (902) 679-6091. Fax (902) 679-6176.

Mr. Stewart Morrison, Ducks Unlimited Canada, Box 1160, Stonewall, Manitoba R0C 2Z0. Phone (204) 467-3000. Fax (204) 467-9028.

Dr. Jim Patterson, International and Government Relations, Ducks Unlimited Canada, Suite 200, 1750 Courtwood Crescent, Ottawa, Ontario K2C 2B5. Phone (613) 228-2601. Fax (613) 228-0206.

Mr. Pat Rakowski, Environmental Conservation Branch, Environment Canada, Room 513, 269 Main Street, Winnipeg, Manitoba R3C 1B2. Phone (204) 983-5264. Fax (204) 983-4506.

Ms. Catherine Rostron, # 420, 425 -115 Street East, Saskatoon, Saskatchewan S7N 2E5. Phone (306) 249-3901.

Mr. Clayton Rubec, Water and Habitat Conservation Branch, Canadian Wildlife Service, Environment Canada, Hull, Quebec K1A 0H3. (819) 953-0485. Fax (819) 994-4445.

Mr. Raymond Sarrazin, Environmental Conservation Branch, Environment Canada, C.P. 10 100, Ste-Foy, Quebec G1V 4H5. Phone (418) 649-6300. Fax (418) 649-6475.

Dr. Jonathan Scarth, Delta Waterfowl Foundation, RR #1, Box 1, Portage la Prairie, Manitoba R1N 3A1.

Dr. Al Smith, Environmental Conservation Branch, Environment Canada, P.O. Box 1590, Sackville, New Brunswick E0A 3C0. Phone (506) 364-5038. Fax (506) 364-5062.

Dr. Robert Sopuck, Executive Council, Sustainable Development Coordination Unit, Government of Manitoba, Suite 305, 155 Carlton Street, Winnipeg, Manitoba R3C 2H8. Phone (204) 945-1010. Fax (204) 945-0090.

Mr. Sam Thornhill, Alberta Environmental Protection, 9th Floor, 9820 - 106 Street, Edmonton, Alberta T5K 2J6. Phone (403) 427-8985. Fax (403) 422-4190.

Mr. Ted Weins, Prairie Farm Rehabilitation Administration, Agriculture Canada, 1800 Hamilton Street, Regina, Saskatchewan S4P 4L2. (306) 780-7379. Fax (306) 780-8229.

Dr. Rick Wishart, Ontario Region, Ducks Unlimited Canada, 566 Welham Road, Barrie, Ontario L4M 6E7. Phone (705) 721-4444. Fax (705) 721-4999.



---

## **APPENDIX 3**

### **WETLAND POLICY DOCUMENTS AND SOURCE AGENCIES**

---

The following listing gives addresses of agencies that can provide copies of documents relating to wetland policy development or implementation across Canada. These agencies include government and non-government agencies and industry associations.

#### **Alberta**

Source:

Alberta Water Resources Commission  
910 - 10045 111th Street  
Edmonton, Alberta  
T5K 2M5

Tel. (403) 422-4232; fax (403) 422-9703

Policy Documents Available:

Alberta Water Resources Commission. 1990. *Wetland Management in the Settled Area of Alberta: Background for Policy Development*. Edmonton, Alberta. 56 p.

Alberta Water Resources Commission. 1991. *Wetland Management in the Settled Area of Alberta: Summary of Public Comments*. Edmonton, Alberta. 82 p.

Alberta Water Resources Commission. 1993. *Beyond Prairie Potholes: A Draft Policy for Managing Alberta's Peatlands and Non-settled Area Wetlands. For Discussion Purposes*. Edmonton, Alberta. 16 p.

Alberta Water Resources Commission. 1993. *Alberta's Peatlands and Non-settled Area Wetlands: A Background Report*. Edmonton, Alberta. 60 p.

Alberta Water Resources Commission. 1993. *Wetland Management in the Settled Area of Alberta: An Interim Policy*. Edmonton, Alberta. 14 p.

Alberta Water Resources Commission. 1994. *Wetland Policy for Alberta: Update*. Edmonton, Alberta. 4 p.

## Manitoba

### Source:

Sustainable Development Coordination Unit  
Government of Manitoba  
Suite 305, 155 Carlton Street  
Winnipeg, Manitoba  
R3C 2H8

Tel. (204) 945-1010; fax (204) 945-0090

### Policy Documents Available:

Government of Manitoba. 1994. *Applying Manitoba's Water Policies*. Sustainable Development Coordination Unit. Winnipeg, Manitoba. 85 p.

## New Brunswick

### Source:

Fish and Wildlife Branch  
New Brunswick Department of Natural Resources and Energy  
P.O. Box 6000  
Fredericton, New Brunswick  
E3B 5H1

Tel. (506) 453-2440; fax (506) 453-6699

### Policy Documents Available:

Department of Natural Resources and Energy. 1994. *Wetlands Policy Framework for New Brunswick*. Draft discussion paper. Fredericton, New Brunswick. Unpublished. March 1994. 12 p.

## Nova Scotia

### Source:

Water Resources Branch  
Nova Scotia Department of the Environment  
136 Exhibition Street  
Kentville, Nova Scotia  
B4N 4E5

Tel. (902) 424-2554

### Policy Documents Available:

Nova Scotia Department of the Environment. 1991. *Clean Water for Nova Scotia: New Directions For Water Resource Management*. Final Report of the Minister's Task Force on Clean Water. Halifax, Nova Scotia.

Nova Scotia Department of the Environment. 1994. *A Wetlands Policy for Nova Scotia*. Prepared for the Working Group of the Deputy Ministers Land Use Committee by the Wetlands Issue Group. First Draft June 30, 1994. Halifax, Nova Scotia. 9 p.

## Ontario

### Source:

Aquatic Ecosystems Branch  
Ontario Ministry of Natural Resources  
P.O. Box 7000  
Peterborough, Ontario  
K9J 8M5

Tel. (705) 740-1375; fax. (705) 740-1536

### Policy Documents Available:

Ontario Ministries of Municipal Affairs and Natural Resources. 1992. *Wetlands: A Statement of Ontario Government Policy issued under the authority of Section 3 of the Planning Act 1983*. Toronto, Ontario. 16 p.

Ontario Ministries of Natural Resources and Municipal Affairs. 1992. *Manual of Implementation Guidelines for the Wetlands Policy Statement*. Toronto, Ontario. 116 p.

## Saskatchewan

### Source:

Wetland Policy Working Group  
Saskatchewan Wetland Conservation Corporation  
Room 110, 2151 Scarth Street  
Regina, Saskatchewan S4P 3Z3

Tel. (306) 787-0726; fax (306) 787-0780

### Policy Documents Available:

Province of Saskatchewan. 1993. *One Resource Many Benefits: Managing Saskatchewan Wetlands*. Saskatchewan Wetland Policy Working Group, Saskatchewan Wetland Conservation Corporation. Regina, Saskatchewan. 32 p.

Province of Saskatchewan. 1994. *Proposed Wetland Management Policy for the Agricultural Zone of Saskatchewan*. Saskatchewan Wetland Policy Working Group, Saskatchewan Wetland Conservation Corporation. Regina, Saskatchewan. 21 p.

Saskatchewan Wetland Policy Working Group. 1994. *Saskatchewan Wetland Policy, Stakeholder Comments and Questionnaire Summary*. Saskatchewan Wetland Conservation Corporation. Regina, Saskatchewan. Unpublished. 21 p.

## Fisheries and Oceans Canada

### Source:

Habitat Policy and Program Division  
Fisheries and Oceans Canada  
200 Kent Street  
Ottawa, Ontario  
K1A 0E6

Tel. (613) 990-8850; fax (613) 993-7493

### Policy Documents Available:

Fisheries and Oceans Canada. 1986. *Policy for the Management of Fish Habitat*. Communications Directorate, Fisheries and Oceans Canada. Ottawa, Ontario. 30 p.

*Environment Canada*

Source:

Water and Habitat Conservation Branch  
Canadian Wildlife Service  
Environment Canada  
Ottawa, Canada  
K1A 0H3

Tel. (819) 953-0485; fax (819) 994-4445

Policy Documents Available:

Federal-Provincial Committee on Land Use (FPCLU). 1987. *A Framework for Wetland Policy in Canada*. FPCLU Secretariat. Environment Canada. Ottawa, Ontario.

Government of Canada. 1981. *Federal Policy on Land Use*. Environment Canada. Ottawa, Ontario. 5p.

Government of Canada. 1987. *Federal Water Policy*. Environment Canada. Ottawa, Ontario. 43 p.

Government of Canada. 1991. *The Federal Policy on Wetland Conservation*. Environment Canada. Ottawa, Ontario. 14 p.

Government of Canada. 1994. *Implementing Wetland Policy: A Guide for Federal Land Managers*. Draft report for consultation. Canadian Wildlife Service, Environment Canada. Ottawa, Ontario. 46 p.

Source:

Environmental Conservation Branch  
Ontario Region  
Environment Canada  
6th Floor, 25 St. Clair Avenue East  
Toronto, Ontario  
M4T 1M2

Tel. (416) 954-5620; fax (416) 973-5665

Policy Documents Available:

Canada - Ontario. 1993. *Canadian Great Lakes Wetland Conservation Action Plan*. Environment Canada and the Ontario Ministry of Natural Resources. Toronto, Ontario.

Environment Canada. 1993. *Strategic Plan for Wetlands of the Great Lakes Basin. Executive Summary*. Drafted by Agriculture Canada, Citizen's Environment Alliance, Fisheries and Oceans Canada, Federation of Ontario Naturalists, Great Lakes United, Nature Conservancy of Canada, and the Ontario Ministries of Agriculture and Food, Municipal Affairs, Natural Resources, and Environment and Energy. Toronto, Ontario. 10 p.

**Non-Government Organizations**

Source:

Secretariat  
North American Wetlands Conservation Council (Canada)  
Suite 200, 1750 Courtwood Crescent  
Ottawa, Ontario K2C 2B5

Tel: (613) 228-2601; fax (613) 228-0206

Policy Documents Available:

Brown, S. (Project Coordinator). 1990. *Preserving Great Lakes Wetlands: An Environmental Agenda*. The Final Report of the Great Lakes Wetlands Policy Consortium. Tip of the Mitt Watershed Council. Conway, Michigan. 78 p.

Cox, K. W. (Chairman). 1993. *Wetlands: A Celebration of Life*. Report of the Canadian Wetlands Conservation Task Force. Sustaining Wetlands Issues Paper, No. 1993-1. North American Wetlands Conservation Council (Canada). Ottawa, Ontario. 67 p.

Federation of Ontario Naturalists and Environment Canada. 1987. *Wetland Conservation Policy in Canada: Recommendations by Non-Government Organizations*. Results of the Advisory Workshop on Wetland Conservation Policy in Canada held in Toronto, Ontario in April, 1987. Ottawa, Ontario.

Lynch-Stewart, P. 1992. *No Net Loss: Implementing "No Net Loss" Goals to Conserve Wetlands In Canada*. Sustaining Wetlands Issues Paper, No. 1992-2. North American Wetlands Conservation Council (Canada). Ottawa, Ontario. 35 p.

Lynch-Stewart, P., C. D. A. Rubec, K. W. Cox, and J. H. Patterson. 1993. *A Coming of Age: Policy for Wetland Conservation in Canada*. Report No. 93-1. North American Wetlands Conservation Council (Canada). Ottawa, Ontario. 57 p.

Sustaining Wetlands Forum. 1990. *Sustaining Wetlands: International Challenge for the '90s*. Secretariat, North American Wetlands Conservation Council (Canada). Ottawa, Ontario. 20 p.

### Industry Groups

Source:

Canadian Pulp and Paper Association  
Suite 1900  
1155 Metcalfe Street  
Montreal, Quebec  
H3B 4T6

Tel. (514) 866-6621; fax (514) 866-3055

Policy Documents Available:

Canadian Pulp and Paper Association. 1992. *A Statement by the Pulp and Paper Industry on Wetlands*. One of a series of statements on forest land management in Canada made by the Canadian Pulp and Paper Association on behalf of the pulp and paper industry. Montreal, Quebec.

Source:

Canadian Sphagnum Peat Moss Association  
4 Wycliff Place  
St. Albert, Alberta  
T8N 3Y8

Tel. (403) 460-8280; fax (403) 459-0939

Policy Documents Available:

Canadian Sphagnum Peat Moss Association. 1990. *Preservation and Reclamation Policy*. St. Albert, Alberta. 8 p.