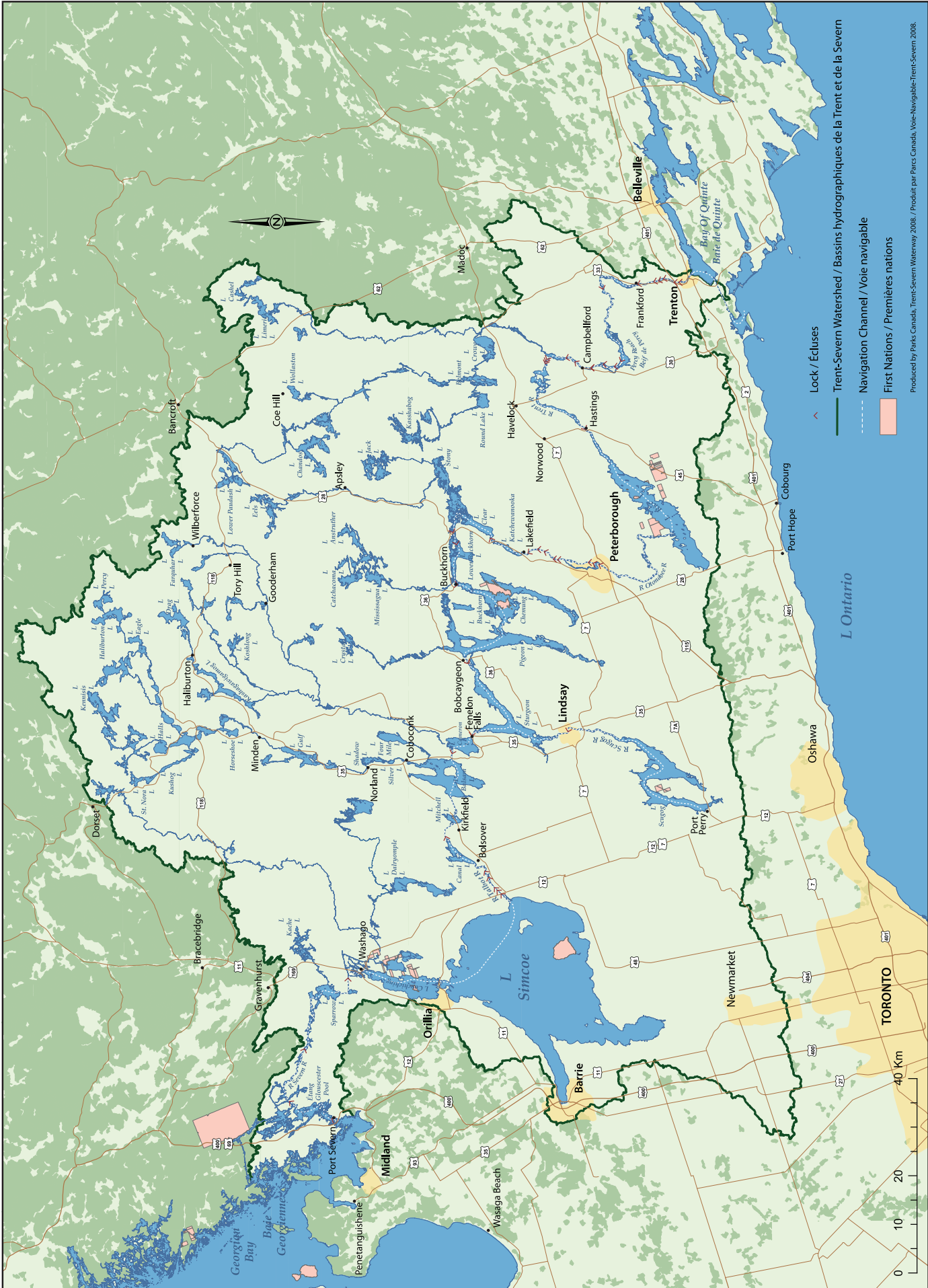


IT'S ALL ABOUT THE **WATER**

Report of The Panel on the Future of the Trent-Severn Waterway

A National Historic Site of Canada

MARCH 2008



- Lock / Écluses
- Trent-Severn Watershed / Bassins hydrographiques de la Trent et de la Severn
- Navigation Channel / Voie navigable
- First Nations / Premières nations

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Acknowledgements

Completion of this report would not have been possible without the contributions and assistance of many people.

Hundreds of people, organizations and branches and agencies of government made formal presentations at our public meetings and provided us with written briefs. These citizens shared with us their time, their knowledge, their experience, their ideas and particularly their passion. For this we are most grateful. We also salute the more than a thousand people that came out to our public meetings and participated in often lively and always productive discussions.

Similarly, the staff of the Parks Canada provided us with enormously valuable assistance and demonstrated without exception their commitment to the future of the waterway.

The panel was very well served by six staff members and ably guided by a former Parks Canada Superintendent, Mr. Ken East, as Project Manager and Senior Advisor. Their knowledge, energy and commitment made our work much easier – although they always left us with enough unanswered questions to make our work both challenging and interesting. Our sincere thanks to Ken, Richard Scott, Marnie Clement, Shirley Bond, and students Anu Radha Verma and Roddy Mackenzie.

Finally, we salute Bruce Stanton, Member of Parliament for Simcoe North, for his initiative and commitment to a positive future for the Trent-Severn Waterway. It was Bruce's Private Members Motion that received the unanimous approval of Parliament and launched this evaluation.

Aussi disponible en français.

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Panel on the Future of the Trent-Severn Waterway Commission sur l'avenir de la voie navigable Trent-Severn

Minister of the Environment
Ottawa, Ontario
K1A 0A6

March 2008

Dear Minister

On May 12, 2006, Parliament unanimously passed Private Members Motion 161 sponsored by the Member of Parliament for Simcoe North, Bruce Stanton. The Motion asked the government to “consider the advisability of evaluating the future of the Trent-Severn Waterway...”.

A year later almost to the day, we were appointed by the Government of Canada to carry out that evaluation. It is with pleasure that we tender our report.

The recommendations in our report are the product of conversations with many Canadians – more than a thousand of them. We held 30 public meetings in 16 communities throughout the waterway and its watersheds and witnessed the extraordinary interest, indeed the passion, our citizens have for this remarkable national historic site, and their concern for its future.

Our recommendations also reflect the thoughts of municipal governments, First Nations, Conservation Authorities, economic development facilitators, environmental and cultural organizations, boating alliances as well as associations representing industry – resort and marina operators, water power generators, private campground operators and others.

Several studies also contributed to our work. These included studies on how other waterways are managed and financed; examination of issues around the management of water; research on the economic contributions that the waterway makes to communities; and, finally, a broad examination of the condition of the \$1.4 billion in public infrastructure associated with the waterway.

What have we found?

We have concluded, Minister, that the future of the Trent-Severn Waterway “is all about the water.” The waterway is commonly thought of as a navigable channel from Lake Ontario to Georgian Bay. In fact, it is two large watersheds in Ontario that, over the course of nearly two centuries, have been materially altered through the construction of dams and other engineering works to support the settlement, economic endeavours and enjoyment of Canadians.

We have found that the economies of communities and the lives and lifestyles of millions of Canadians depend on effective management of that water and we are not certain that current management meets the standard that will most certainly be required in the future.

Citizens perceive that water quality in this vast system is deteriorating. They also believe that, due to increasing demand and climate change, there will be less water within the watersheds to equitably and effectively meet future needs and that an assertive conservation regime rooted in sound science and modern technology is required. We agree.

There is not great confidence, Minister, in the performance of governments with respect to management of the waterway system. Dozens of different government agencies – federal, provincial, municipal and First Nation – exercise some form of jurisdiction over waterway management with resulting duplication, overlap and gaps in accountability. These agencies appear not to communicate with each other and generally don’t provide effective mechanisms that permit the public to speak with them.

Many of our recommendations seek to address these challenges of governance in a practical way. There are some relatively simple actions that are required to clarify jurisdictional issues between the province and the federal government but, above all, governments at all levels must learn to work more effectively together and with citizens. We are proposing the designation of a Trent-Severn National Heritage Region and establishment of a Heritage Region Council as tools to encourage the setting of common goals and the advancement of common action.

The Source Water Protection Planning process in the Province of Ontario, if advanced with diligence and dispatch, offers a pathway toward an assured water quality future. We observe, however, that the Trent-Severn Waterway is and should remain a national treasure and suggest a higher degree of commitment in controlling use and occupancy of the federally owned beds of the lakes and rivers as an important tool in preserving water quality. We also urge federal support for hundreds of voluntary organizations that are the real stewards of these waters.

We also believe that it is no longer appropriate for one government to manage storage and flows of water and another to manage allocation. Nor do we think that Parks Canada is well equipped to be in the water management business. Accordingly, we propose that an independent agency with both federal and provincial participation assume responsibility for managing storage, flows and allocation of the water in the watersheds within the context of a modern, conservation-oriented model.

There is a growing recognition by Canadians that water is a finite resource. In fact, the presence of water is not enough; it must be water of quality. No fewer than six important reports on water management in Canada have been released during the past three years, including three during our mandate. They speak to the same issues we do – fragmented governance, outdated supply-oriented management models, declining supply and inadequate management.

It is our hope that this report will add to the developing conversation on the future of water in Canada – a conversation advanced by two Ontario Government Cabinet Ministers at the November 2007 Latonell Conservation Symposium, by the Ontario Environment Commissioner's 2007 Annual Report and by the recent renewal of the Canada-Ontario Great Lakes Agreement. And dare we hope that it will serve to encourage a sense of shared endeavour among all governments.

Although the Trent-Severn Waterway was accorded national historic importance in 1929, it is our view, Minister, that the Historic Sites and Monuments Board of Canada should revisit the designation. We believe that the Trent-Severn Waterway warrants recognition for more than its engineering achievements. These two watersheds should be recognized as a nationally significant cultural landscape – a landscape that has supported the lives, culture and aspirations of the people of the region for nearly 10,000 years.

We are particularly concerned that the historic resources under the stewardship of the federal government are not being adequately protected and urge that the government commit additional resources to this essential mandate of Parks Canada. This commitment should extend to an innovative science, education and interpretation program that reaches out to visitors, to residents along the shoreline, to the growing population of the Greater Toronto Area and particularly to our children through a creative schools program and partnerships with colleges and universities throughout the watersheds.

It is important, Minister, that all levels of government improve their ability to respond to the significant changes we have seen in how the waterway is used. Increasingly, citizens are choosing to live year round on the shores of its lakes and rivers often in condominium and fractional ownership developments. Traditional resorts are being replaced by more upscale facilities. Marinas are closing in some areas.

We are especially concerned about increasing demands on public open space coming in considerable measure from a diverse population in the Greater Toronto Area that is forecast to grow by 3.5 million by 2030. Increased demand and often-incompatible uses are already resulting in social conflict.

We urge governments to work together to develop a strategy to respond to these changes and have suggested the creation of a fund that will assist communities to undertake projects to enhance their sense of place along the water and assist them in responding to the new recreational and lifestyle realities.

We have found that there is interest in further developing hydro-electric generation potential along the waterway. We are very supportive of that development provided that it does not occur at the expense of important natural and cultural values. We have suggested a number of actions that could be undertaken by your government to realize that potential.

Above all, there is an urgent need to address serious deficiencies in the condition of waterway infrastructure much of which is more than a century old. Visitors depend on these facilities for their enjoyment of the waterway. More importantly, the nearly 160 dams are essential to community and individual water supplies, flood control, power generation and the protection of critical habitat including that of many species at risk.

Federal investment in the maintenance, repair and replacement of these built assets falls far short of any reasonable standard including guidelines provided by the Treasury Board.

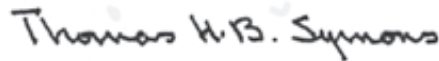
We acknowledge, Minister, that our recommendations come with a substantial cost. We believe that these costs are modest, however, when compared to the extraordinary economic, environmental, cultural and social benefits that accrue to Canadians from the waterway.

It has been a great privilege to carry out this evaluation on your behalf and we commend the foresight of the Government of Canada and that of all Members of Parliament for commissioning this work. We trust that our report will reflect well on the government's confidence in us.

Yours truly,



Douglas Downey
Chair



Thomas H. B. Symons



Sandra Barrett



Douglas Rollins



Greg Bishop



Dean Peters

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Chapter 1

Introduction

On 12 May 2006, the Member of Parliament for Simcoe North introduced Private Members Motion 161 in Parliament.

That, in the opinion of the House, the government should consider the advisability of evaluating the future of the historic Trent-Severn Waterway, one of Parks Canada's National Historic Sites, and its potential to become: (a) a premier recreational asset; (b) a world-class destination for recreational boaters; (c) a greater source of clean, renewable electrical power; (d) a facilitator of economic opportunity and renewal in the communities along its 386 km length; and (e) a model of environmental sustainability.

In the ensuing debates, all parties spoke in support of the motion recognizing, as Mr. Stanton had, that the Trent-Severn Waterway was one of Canada's jewels with the extraordinary potential to serve Canadians and the people of Ontario in many ways. The Motion passed unanimously on October 18, 2006.

Almost a year to the day after Mr. Stanton introduced his motion, the Honourable John Baird, Minister of the Environment and the minister responsible for Parks Canada, appointed us as an independent six-member panel to carry out the evaluation: Douglas Downey (chair), Sandra Barrett, Thomas Symons, Dean Peters, Greg Bishop and Doug Rollins.

Minister Baird reminded us that "the Trent-Severn Waterway has become much more than locks and canals to move boats." He spoke of nearly 50 communities along its shores and the hundreds of thousands of people who rely on it for drinking water, flood control, tourism and recreation. It was, he said, a showcase of human history and an important contributor to the protection of wildlife, wetlands and conservation areas.

Mr. Stanton's motion and the Minister's announcement were recognition of both opportunity and challenge. Since 1833, the dream and reality of a navigable waterway from Lake Ontario to Georgian Bay have been part of the fabric of Ontario. Constructed between 1833 and 1920, the waterway was designated to be of "national importance" in 1929 by the Historic Sites and Monuments Board of Canada. The waterway is an engineering marvel that has 44 locks including the world's tallest hydraulic lift lock, a marine railway and approximately 160 dams and water control structures. Forty-one reservoir lakes in the Haliburton Highlands provide supplementary water to ensure that navigation levels are maintained.

After nearly 180 years, the original waterway mandate of navigation is now challenged to meet the expanded needs, numbers and expectations of modern stakeholders. It is, geographically, Canada's largest national historic site with more physical assets than any other. It serves a regional population numbering many millions and supports the economies of more than 100 communities throughout its watersheds.

As a National Historic Site, the waterway must be managed for the protection and presentation of nationally significant cultural resources. Beyond that, however, government agencies and environmental organizations expect that the system will be managed to provide for the protection of natural values including species at risk and the integrity of the shoreline.

Cottagers, shoreline owners and visitors expect that it will be managed such that it contributes to the quality of their lifestyles and recreational interests. Municipalities and individuals throughout the watershed expect the

system to be managed to ensure water supplies of adequate quality and quantity. Governments, business organizations and individual business owners expect the system to contribute to economic well-being. There are many other interests.

The physical infrastructure that makes up the system is deteriorating due to age. The waterway has more than 1,500 assets with a replacement value in excess of \$1.4 billion. It is estimated that essential maintenance and recapitalization over the next 15-20 years will require hundreds of millions of dollars.

The jurisdictional, governance and regulatory framework of the waterway does not appear to be well suited to its emerging roles or indeed to its current needs. The range of responsibilities far exceeds the mandate of Parks Canada, the Agency that manages the waterway. The Historic Canals Regulations are outdated and largely unenforceable as Parks Canada's primary management tool. There is also uncertainty about the legal and jurisdictional responsibilities of Parks Canada compared to those of the province and adjoining municipalities, particularly in land management activities.

We were asked to recommend a new vision for the waterway that would ensure its long-term effectiveness and sustainability and optimize the full range of contributions that it makes to Canada and Ontario. (Please see Appendix G for the Panel Terms of Reference.)

Specifically, we were asked to look at:

- How to protect and present the waterway's cultural heritage;
- Ways of assuring the future of the waterway's natural environment;
- How the waterway can contribute to the present and future outdoor recreational needs of Canadians and particularly the growing and diverse population of the Greater Golden Horseshoe;
- A water management regime that is seen to meet the demands and expectations of a diverse array of stakeholders and needs;
- A framework for jurisdictional and inter-agency coordination and governance along the waterway corridor;
- How the waterway can contribute to economically sustainable communities, including the role of renewable energy; and,
- A sustainable funding framework.

Over eight months, we listened to people in public forums to hear their perspectives and understand their vision for the future of the waterway. We held 30 public sessions in 16 different communities throughout the watershed. Nearly 225 formal submissions were received and more than 1,100 individuals attended these sessions and 85 per cent of them participated in open discussions. We received nearly 225 formal submissions at the meetings, by mail and through our website.

The submissions came from municipal governments, conservation authorities, chambers of commerce, economic development agencies, property owner associations, non-government organizations, businesses, historical and cultural organizations and individuals.

As part of the process, we also talked with First Nations and met with industry associations related to camping, power generation, resorts and marinas. Meetings were also held with Parks Canada staff including senior officials, a representative sample of waterway staff and staff at the Rideau Canal.

The panel also drew information from seven original discussion papers and three studies that were conducted to augment this process. In addition, panel staff reviewed and drew liberally from the research and initiatives of others. A study on other waterway models was supplemented by direct discussions with canal experts from Germany, the United States and the United Kingdom. The Panel Project Manager also visited a number of sites in western England and Wales to observe reconstruction of canals and waterfronts being undertaken there in the context of larger community regeneration programs.

Once the Panel developed some general directions about where the recommendations were headed, it went back and spoke again to some key stakeholder groups to get feedback and test its ideas. These stakeholders included conservation authorities, municipalities that had already provided input, First Nations and Parks Canada.

Chapter 2

What We Learned

When the Minister of the Environment appointed us in May of 2007, our first challenge was to learn more about the waterway and how it operates. Most of us had some understanding of the waterway and the services it provides, but we rapidly realized that the waterway is an extraordinarily complex operation.

One of our priorities was to get a sense of the Trent-Severn from the water. We spent several days on the water looking at different sections. We visited the section between Campbellford and Hastings in the company of the crew and passengers of the Kawartha Voyageur – a ship that provides some 40 or so passengers with six-day cruises on both the Trent-Severn and the Rideau.

We visited the Gamebridge and Kirkfield section on a Parks Canada workboat. This part of the waterway has been designated of national historic significance because, unlike many other parts of the waterway, its historic infrastructure is largely intact. We were able to spend a day with Parks Canada staff looking at the scenically stunning section of the waterway from Port Severn to Swift Rapids.

John Mackey, a Port Perry marina operator, was kind enough to provide us an opportunity to see part of Lake Scugog on one of his boats. This enabled us to see first-hand issues with aquatic vegetation and shoreline development. During the public consultation process we visited many other parts of the waterway and its watersheds. Each area was very different from the others, with its own unique history, scenery and environment.

The Public Consultation

We also talked to more than a thousand people in public forums to hear their perspectives and understand their vision for the future of the waterway.

Throughout the process, everything we heard and received was posted on our internet site as quickly as possible, so that even if people couldn't attend a session, they could find out what had been presented, and send in their own comments.

At the beginning we wondered if anyone would care enough about this process to get involved. We needn't have worried. From the very first meeting in Bobcaygeon to the last meeting in Lakefield, we saw first-hand the tremendous passion that people have for their own part of the waterway. In fact, the Lakefield session had to be extended, both in hours and number of days, to accommodate the large number of presenters.

People were eager to share their feelings about the waterway. We heard stories that had been passed down through family history. Childhood memories were related. Many expressed the hope that their grandchildren would be able to enjoy the waterway in the same way they had experienced.

The comments we received covered a wide spectrum and did not always reflect a consensus. Divergent views were often expressed on the same topics. But while the words and specific concerns were often different, all presenters did agree on one thing: The waterway is important, and it profoundly affects the lives of those who live, work and play nearby.

And over time a larger theme began to emerge: ***It's all about the water.*** Repeatedly, we heard concerns about deterioration of water quality, preservation of natural beauty, its importance as a home for fish and wildlife, its importance for recreation, competing demands for its use, how to stop it being wasted, and how to use it responsibly as a source of green power.

An Overview of Public Comments

At the public forums, we heard comments on all aspects of the Trent-Severn Waterway and its operations. While the comments were diverse and wide-ranging, they fell into three general categories: the state of the waterway; funding for the waterway; and governance of the waterway.

State of the Waterway

We learned that the public believes that the Trent-Severn Waterway is really two large watersheds, that over nearly two centuries, have been substantially modified by engineering works and now include a heritage and a recreational waterway.

Here are some of the most frequently expressed comments we received on the state of the waterway.

- Water quality is deteriorating and the future environmental sustainability of the lakes and rivers that make up the system is at risk;
- Falling water levels, increasing weed growth, threats to fish from invasive species and disappearance of wetlands are all being noted by waterway users;
- Water management is problematic, including inequities in allocation and threats to future availability, particularly in the light of climate change;
- The condition of locks and dams is deteriorating, waterway staffing has been reduced and there is general underfunding of the waterway;
- Development along the waterway is not well controlled and there is a need for more rigorous planning controls and enforcement;
- Public safety, public health, environmental health and the economic health of communities must be protected; and,
- The values that have been drawing people to the waterway for many years must be preserved.

Funding of the Waterway

Although there were many and sometimes conflicting suggestions about how the Trent-Severn Waterway should be financed, one message repeatedly came through loud and clear – taxpayers already pay enough and someone else should provide the funds.

Here are some of the comments we received about funding of the waterway.

- The waterway is a federal responsibility, so the funding should be federal;
- The gas tax from the fuel sold at marinas along the waterway should be dedicated to supporting the system;
- An annual boat registration fee, similar to that applied in many American states, could contribute to maintenance of the waterway;
- Revenue from existing and new waterpower facilities could generate funds for the waterway;
- Lock fees should be eliminated to increase tourism in waterway communities;

- Lock users believe that all users of the system, and not just those who use the locks and pay lock and mooring fees, should contribute to the financial sustainability of the waterway;
- Shoreline owners believe that they are already contributing to the waterway through high municipal taxes on shoreline properties and that governments are not protecting their interests in and enjoyment of the water; and,
- Waterway communities are concerned that the costs of operating the waterway not be downloaded.

Governance of the Waterway

At the sessions we heard repeatedly about the high level of frustration with the performance of governments in managing the Trent-Severn system. The 2007 summer carp die-off in the Kawartha Lakes focused both the public's and the media's attention on the lack of coordination among different levels of government and the various ministries and agencies within governments. Presenters expressed concern about unnecessary duplication and confusion among government agencies, and an absence of accountability.

Here are some of the comments we heard about governance of the waterway.

- Government agencies don't communicate or work together well, or in some cases, at all;
- Government agencies are not communicating with the public;
- Property owners are frustrated by a lack of communication about the reasons for and timing of changes in water levels – most understand that their property is on a reservoir system, but would find it easier to adjust to changes if they were given advance warning;
- A “one-window” approach for the waterway would make it easier for the public to get in touch with the right people;
- A new governing body for the waterway, one that is free from government red tape and can “just get things done”, should be formed; and,
- Many responsibilities should be shifted to the province, or at the very least waterway and provincial staff need to work more closely with each other.

By the time we heard the final presentation and received the last submission, it was abundantly clear that no matter what the issues, activities or experiences associated with the waterway, the system is vitally important. It is important to the people who live in the region, to the communities along its shores, to the wildlife and fish that rely on its wetlands and natural areas to survive, as a source of clean water for a large portion of southern Ontario, and as a site of significant historical importance for all Canadians.

Research Review Results

Our review of three commissioned studies as well as other existing research on the Trent-Severn Waterway added to our understanding of the issues at hand.

The *Study of the Sustainable Economic Contributions to Communities along the Waterway*¹ examined the nature and magnitude of the contributions the waterway makes to the economic vitality of the communities along its route and throughout its watersheds.

¹ TCI Management Consultants & EDP Consulting. 2007. *Trent Severn Waterway National Historic Site of Canada: Study of its Sustainable Economic Contributions to Communities Along the Waterway*.

This study produced some findings that changed our perceptions of the waterway economy. It identified management of the water levels and flows as the single biggest contributor to economic value associated with the waterway corridor and the reservoir lakes. This is measured by how much revenue is generated by property taxes and spending by seasonal and permanent residents.

This study also identified recreational fishing as another surprisingly large economic contributor. During the public consultation, the Ontario Federation of Anglers and Hunters and representatives of fishing organizations confirmed the importance of the Trent-Severn Waterway as the most important recreational fishing resource in the province.

The *Review of Other Models of Waterway, Waterway Corridor Management and Financing*² study looked at operation of the Okeechobee Waterway in Florida, the Tennessee-Tombigbee Waterway, the New York State Canal System, Waterways Ireland, British Waterways and the Gota Canal in Sweden.

This study found that, in general, waterway mandates are broad, vary widely, and extend beyond the water. Most are dedicated organizations with a relatively high degree of autonomy, funded mainly through government. None are expected to generate a profit, but rather to provide economic, social and environmental benefits to a wide array of publics and governments. Intergovernmental cooperation and partnerships are common, and most agencies practice open, inclusive governance that includes stakeholder engagement.

A *Study of the Past, Present and Future of Water Management on the Trent-Severn Waterway*³ suggested that management of water levels and flows should be governed by an independent agency that includes representatives of Canada, Ontario, First Nations and conservation authorities. This agency should include a formal stakeholder advisory committee, have access to government technical expertise, and be adequately funded by the federal and provincial governments.

The study recommended that the waterway needs clear goals and objectives set out in an integrated management plan developed through an open consultation process and that partnerships could help build data and models. Above all, the study emphasized the importance of comprehensive stakeholder and public communications.

² The Canals Group. 2007. *Review of Other Models of Waterway, Waterway Corridor Management and Financing*.

³ Ecoplans Limited. 2007. *A Study of the Past, Present and Future of Water Management on the Trent-Severn Waterway National Historic Site of Canada*, for Parks Canada.

Chapter 3

A Vision for the Waterway

What is the Trent-Severn Waterway, Really?

Waterway, watershed, corridor, canal. Understanding the essence of what we were studying was one of the most important challenges we faced in considering our report. We came to this project with different perceptions. Our conversations with Canadians radically expanded our horizons.

Some Panel members thought the waterway was about boats and locks – a navigable passage from Lake Ontario to Georgian Bay. We all recognized that it had historic significance extending back over thousands of years beginning with Canada’s Aboriginal Peoples. We knew it was a place for recreation and tourism. We sensed its importance to communities and we knew that its existence had been expressed in rich cultural traditions. Some of us recognized the value of its dams for hydropower.

Through our public consultations, we came to realize that the waterway is something different to each person, largely defined by their relationship to it. We learned that it is an essential source of drinking water, and an ecological network of natural systems including many species at risk. It is a physical expression of our past and an inspiration for our art, music and literature. It is, above all, a part of the daily lives of millions of Canadians.

Clearly the waterway can be defined in many different ways. It became essential to us to develop our own understanding of the waterway, in order to provide a context for our recommendations.

We see the waterway as two large watersheds in Ontario that, over the course of nearly two centuries, have been materially altered through the construction of dams and other engineering works to support the economic endeavours and enjoyment of Canadians.

As such, the waterway is really a vast water management system with a navigation channel running through it. To consider the lakes and rivers of the navigation channel as separate from the rest of the system is neither ecologically tenable nor advisable in planning for the future of the waterway. History reinforces that the waterway and its watersheds have been inextricably linked since humans first began to use and manipulate their waters.

This relationship continues today. Residents throughout the Trent-Severn watersheds – whether in Buckhorn, Minden, Port Severn or elsewhere – face common issues and opportunities that bind them together.

Tomorrow will be no different. We believe that the future of the Trent-Severn Waterway is all about the water and the management of these two large watersheds for the benefit of future generations of Canadians. The remainder of our report reflects that perspective.

Why is the Waterway Important to Canada and Ontario?

Early in our public meetings, we heard a few individuals with homes, businesses or cottages along the waterway comment that they don’t think the waterway is important to them. In most cases, these were individuals who perceived the waterway as a system of locks. Because they didn’t use the locks themselves or cater to those who do, they felt the waterway provided them with no benefits.

The reality is that you can't just "shut the waterway down." Water will continue to flow, as it has for millennia. It will continue to flow through a huge water management system that, in fuelling settlement and the growth of industry, communities, recreation, and tourism, has redefined the geography and economy of its watersheds.

Continued management of this system is vital to the life of central Ontario. It is essential to a natural environment that has adjusted to this artificial reality. It is essential to public safety, and to the evolving economies and lives of hundreds of thousands of watershed residents and millions more that visit every year.

This waterway system is the pillar of its watersheds' economies. Waterfront residential property alone is worth a whopping \$23.6 billion. Seasonal and permanent waterfront residents generate more than \$1 billion in economic activity and \$240 million in municipal property taxes each year. The waterway alone supports a \$300 million recreational fishery, Ontario's largest. And water-based tourism generates tens of millions more dollars.

Boats and locks are perhaps the most visible parts of this great system, but they are only the "tip of the iceberg".

The lakes and rivers controlled by this system will be increasingly important to future Ontarians. They will provide a source of water. They will be cherished for their recreational amenity by residents of the burgeoning Greater Golden Horseshoe, one of North America's fastest growing regions, and for the economic opportunity they present for watershed communities. They will be valued as Ontario's largest recreational fishery and for their green energy. They will continue to influence the cultural expression of central Ontario. And ecologically unique and diverse habitats located within the waterway region such as "The Land Between"⁴ will constitute irreplaceable and unique treasures of provincial importance.

We believe the waterway and its watersheds will also be of increasing importance to Canadians. The waterway is Parks Canada's largest National Historic Site and one of its most popular. It is within a two-hours' drive of our nation's largest city and millions of new Canadians. Its legacy of thousands of years of continuous human occupation along its waters is of national and international importance. It has produced artists, writers, and musicians of national and international repute. Its development influenced the political fortunes of Canada's early prime ministers and helped open a young country to settlement. It remains a highly visible expression of federal presence in Ontario.

Many of the waterway's technologies are unique in international terms. Building on one of the earliest large-scale watershed manipulations, the system today is the largest federally owned and operated water management system in Canada. Continued federal management can contribute to efforts to improve the Great Lakes Basin ecosystem and embody the federal commitment to the health of a nationally precious resource – water.

A Vision for the Future

Our vision for the future of the waterway is a reflection of what we were told by hundreds of people – First Nations, watershed residents, governments, and industry.

⁴ "The Land Between" – contact zone between the Canadian Shield and Lake Ontario Lowland that features a high degree of ecological diversity.

First and foremost, we see a future that “is all about the water” and is focused on the watersheds of the Trent-Severn.

We see the water as a living and evolving expression of who we have been, who we are, and who we will be in the future.

We see a future that commits to preserving the quality of the water.

We see a future that is rooted in the equitable sharing of the water throughout the watersheds within the context of a strong conservation ethic, one subscribed to by all users.

We see a future where governments and citizens work effectively and together to assure the watershed’s sustainability.

We see a future that provides for the enjoyment of the water by all our citizens and builds our communities around the water.

What Needs to be Done

In the remainder of this report, we make 26 recommendations that we believe need to be implemented to achieve this vision. These recommendations can be grouped under six broad areas of action.

We need to **improve the performance of governments** by:

- Simplifying and clarifying roles so everyone knows who is and should be responsible;
- Providing tools that encourage governments to work together and with the citizens they serve; and,
- Improving federal legislation and policies.

We need to **assure the future of our water** by:

- Improving the role and performance of the federal government;
- Paying particular attention to development near the water;
- Enhancing our understanding of the state of the watershed environment; and,
- Reinventing how we value and manage water throughout the watersheds.

We need to **plan for future places to live and enjoy along the waterway** by:

- Enhancing regional identity;
- Preparing for the demands of a growing population seeking the amenity of water;
- Encouraging communities to make their waterfronts great public assets;
- Developing green energy potential without degrading natural and cultural values; and,
- Leading and coordinating the activities of communities.

We need to **protect, present and enjoy our cultural heritage** by:

- Broadening our understanding of our water-related heritage;
- Telling Canadians the stories of this heritage and protecting the assets that help tell them;
- Protecting related cultural and scenic resources; and,
- Responding to the needs of those that use the lock stations for enjoyment.

We need to **improve the condition of waterway infrastructure** by:

- Providing appropriate funding;
- Enhancing engineering and maintenance capacity;
- Implementing a balanced asset management program that focuses on continued operation and protection of historic assets; and,
- Renovating facilities to respond to current and future needs.

We need to **provide sustainable funding** by:

- Increasing federal appropriations in support of the waterway; and,
- Increasing revenue from users and beneficiaries.

Chapter 4

Improving the Performance of Governments

Early in our mandate, we started to receive letters about carp. Carp in large numbers were dying in the Kawartha Lakes and citizens were asking us what could be done about all the dead fish that were floating in the water and washing up on the shores. Dealing with hundreds and then thousands of dead fish was clearly a challenge that citizens and governments weren't prepared for.

We tracked the issue for a number of weeks hearing about it in our public meetings and reading about it in the newspapers. We watched as government agency after government agency at all levels patiently explained that they weren't responsible for cleaning up dead fish. Some even resorted to "taking shots" at other government agencies that they felt weren't stepping up to the mark to address the issue.

The dead carp issue graphically illustrated to us the challenge of governance on the waterway. There are a large number of government agencies at all levels with some interest or responsibility for management of the waterway. Nobody, including the government employees themselves, is entirely clear who is responsible for what.

The carp die-off also illustrated the importance of improving our knowledge of the natural world as an important contributor to decision-making.

Throughout our consultations, citizens, lake and industry associations and even government agencies expressed concern about fuzzy responsibilities and a lack of associated accountabilities. They provided examples of duplication and overlap in government services and regulatory responsibilities. They noted gaps where no government seemed to be in charge at all. They were frustrated by not knowing who to talk to about particular issues and commented on a "passing the buck" culture.

Government agencies, we heard, did not communicate well with the public or with each other. They certainly did not appear to provide adequate means or forums to permit citizens to communicate with them.

We encountered a similar lack of responsiveness. We had great difficulty determining which government agencies we ought to speak to about the many issues brought before us. We wrote letters and organized meetings with a number of government agencies to engage them in discussions about the future of the waterway with only modest success. Ultimately, we were able to speak meaningfully with municipalities, conservation authorities, First Nations and one or two federal departments. We had little success in engaging the Province.

A 1971 study authored by Professor George Rich of the University of Waterloo investigated jurisdictional and administrative characteristics of national waterways, including the Trent-Severn Waterway.⁵ Professor Rich found that there were 11 federal government agencies and departments and 11 provincial government agencies and departments "whose concerns include waterways." These agencies and governments administered a total of 69 pieces of legislation relevant to waterways.

⁵ Rich, George S. 1971. *National Waterways: A Study of the Jurisdiction and Administrative Characteristics of Waterways and Proposals for their Future Administration*. Unpublished paper, p. 20.

We have little doubt that government and legislative complexity has increased since that time and the resources available to government agencies to deliver on their responsibilities have declined. Almost all government agencies have, in recent years, seen staffing and resource levels reduced both in relation to the cost of living and in real terms through deficit reduction programs. This splintering of jurisdictional and administrative responsibilities makes effective management difficult, to say the least.

Some parties we talked to advocated a single “one-window” organization that would have overall responsibility for the waterway and would provide a “one-stop shopping” approach to communication and service. They even advocated creating special legislation that would embrace and consolidate multiple pieces of federal and provincial legislation under a single Trent-Severn legislative banner.

While we understand the appeal of this approach, we concluded that performance, accountability and cost effectiveness would be more practically served by continuing to work for the most part within the existing government framework.

That being said, the existing framework needs to operate more effectively than it now does. Public submissions and research provided us with a set of principles for governance that underpin our recommendations. The principles are:

- Government agencies should do what they are mandated to do and what they are good at and must be supported by comprehensive legislation, policies and realistic capacity;
- Governance should be as simple, understandable and transparent as possible;
- Governance should emphasize strong two-way communication and those who are affected by the decisions should be involved in making them; and,
- Government agencies with a role in the management of land and water should demonstrate the qualities of collaboration and teamwork.

We believe that improving governance of the waterway will require greatly improved coordination and communication within and between government agencies and with citizens. In our first two recommendations, we offer a geographic framework and a mechanism to accomplish that. The federal and provincial governments also need to work together to resolve long outstanding ownership and jurisdictional issues. Finally, we believe there is a pressing need to put the federal house in order – particularly with respect to changing legislation and policy to reflect contemporary needs.

Considering a Heritage Region Approach

In our Vision for the Trent Severn Waterway, we describe a new, exciting, and embracing vision built on the broader watersheds and the interrelationships that have influenced how they have developed. We believe that by establishing a heritage identity, permanent and seasonal residents as well as visitors will see themselves as part of a grander vision, and the distinctive qualities that make the Trent-Severn watersheds valued can be sustained as the region continues to evolve.

The “heritage region” concept is an expression of common identity and a framework for communities and institutions to work together. Within its system of parks and historic places, the U.S. National Park Service has formalized a protected areas category, the “Natural Heritage Area.”

They are designated to preserve important aspects of America's past and share it with visitors. Based on partnerships, Heritage Areas provide opportunities for a broad range of constituents to work together to achieve a shared vision for the future of an area... They aim... to preserve their special natural and historic places as part of their communities' social and economic future.⁶

Unlike a traditional national park, lands within the boundaries of a National Heritage Area are not owned or managed by a government agency. Instead, a commission works in partnership with a variety of federal, state and local agencies, and with many non-profit and private organizations, to protect the sites and resources of each area.

As part of this concept, the U.S. National Parks Service uses a "heritage corridor". The Erie Canal is a National Heritage Corridor as is the John M. Chaffee Blackstone River Valley. The latter is a 75 kilometre, 162,000-hectare corridor established by an Act of Congress to protect natural and cultural resources and provide recreational opportunities.⁷ Promoting sustainable community economies and public education are also important goals.

The Trent-Severn region has a surprisingly common identity. It is an identity expressed through its natural features defined in many respects by water. It is an identity that is expressed by many, if not most, of the more than 500 historic places throughout the region designated by all orders of government.

It is an identity reflected in the economic traditions of the communities throughout the region most of which owe their origins to their place on the water and the resource development, transportation and power benefits that came from the water. Their economies continue to be linked today through the importance of what we call the lifestyle economy – people and businesses that come to those communities because of the attractive proximity of water.

Cultural institutions throughout the region tell stories and present the art and music and literature that make the region unique. Business organizations see the region, and particularly the navigation corridor, as a common brand as they promote tourism and encourage businesses to locate.

Citizens, communities and interest groups from the region have come together frequently to discuss topics of common interest – tourism and branding, water management, species at risk and others. These meetings are an expression of common identity and that forms the basis for a common and collaborative future.

The "heritage region" concept is an expression of common identity and a framework for communities and institutions to work together. Accordingly, we recommend designation of the two large Trent-Severn watersheds as a "National Heritage Region" within which communities and others would plan and work together.

As far as we are aware, no such designation currently exists in Canada. There are many examples, however of the idea of regional coordination being applied to the promotion of tourism destination areas and routes. Our recommendation is to expand on that concept to incorporate a broader range of shared goals.

Our own experience with similar initiatives and advice we received from others indicates that the heritage region concept should not be imposed by senior orders of government. Ideas such as this work better from the "ground up" rather than "top down". We suggest that leadership in advancing the heritage region come from communities themselves with technical and other support from federal and provincial governments.

⁶ National Park Service, "What is a National Heritage Area?". Retrieved from the World Wide Web: <http://www.nps.gov/history/heritageareas/FAQ/INDEX.HTM>.

⁷ Brown, Jessica, Nora Mitchell and Jacqueline Tuxill. 2003. "Partnerships and lived-in landscapes: an evolving system of US systems of parks and protected areas," *Parks*, Vol. 13 (2).

Later in this report, we will speak to how the national historical significance of the waterway might be reflected in this heritage region.

RECOMMENDATION 1

Provide a geographical framework that encourages communication and coordination by considering, through a community initiated and led process, the establishment of a Trent-Severn National Heritage Region.

A Trent-Severn Heritage Region Council

The heritage region is a geographical area that embraces citizens, organizations and governments that share a common identity and hopefully a set of shared goals. This section suggests a mechanism for the formulation and advancement of those goals in a coordinated fashion.

This is not a new idea. As far back as 1971, Professor Rich argued that a mechanism was needed to coordinate the activities of the various agencies and orders of government involved in waterway management. He promoted the concept of waterways as “national” entities as opposed to federal or provincial ones. He encouraged simplicity, involvement of both the province and the federal government, citizen engagement and shared funding arrangements – separately and through existing programs.

In February of 1975, the federal Minister of Indian and Northern Affairs and the provincial Minister of Natural Resources signed an historic agreement to coordinate the activities of Canada and Ontario related to the Trent-Severn and Rideau corridors. That agreement resulted from years of collaborative work under the Canada-Ontario Rideau-Trent-Severn Study (CORTS) by the two governments. It recognized the heritage, recreational and environmental importance of the two corridors to both Canada and Ontario and acknowledged that a sustainable future depended on cooperative action.

This cooperative framework existed until 1982 and resulted in the publication of joint policies to guide both governments in their management of various aspects of the waterway including tourism, land use, water management, recreation, pollution control and heritage conservation.⁸ The policy document, in describing the task ahead, gave priority to coordinating policy implementation and commented on the importance of engaging municipalities.

For reasons only partially understood, this cooperative framework largely disappeared in ensuing years.

We believe that the need for coordination and communication between governments is greater now than ever before. The challenges identified through the CORTS process have grown in magnitude due to population growth, extensive development, climate change, invasive species, and competing demands for scarce resources such as water and public access to the shore. Governments have become more complex while the resources available to achieve government programs have diluted. The expectations of citizens for transparency, real time communication, accountability and engagement have risen exponentially.

⁸ Canada-Ontario Rideau-Trent-Severn: CORTS. 1982. *Canada-Ontario Policies for Rideau-Trent-Severn Corridor*.

We believe that the cooperative framework and tools put in place during the CORTS process served Canadians and Ontarians well. With adaptation to modern circumstances and goals reflecting a culture of sustainability, a more robust and effective framework can serve well in the future.

We have examined a number of models that serve that role elsewhere. Specifically, we are attracted to the Fraser Basin Council and its vision of a Fraser River Basin “where social well-being is supported by a vibrant economy sustained by a healthy environment.”⁹ We also support the concept embodied in the Hudson River Greenway in New York State that was created “to facilitate the development of a voluntary regional strategy for preserving scenic, natural, cultural and recreational resources while encouraging economic development and maintaining the tradition of home rule for land use decision-making.”¹⁰ The Ontario Waterfront Regeneration Trust model has also worked well in bringing communities along the Lake Ontario shore together.

The idea of a coordinated approach already has some support. The Kawartha Lakes Community Future Development Corporation (CFDC) suggested a need to “link the communities along the Trent, creating a more cohesive and evident Trent Severn community of information, education, attraction and awareness of one of our greatest resources”.¹¹ The Eastern Ontario CFDC Network suggested a long-term corridor perspective linking economic activity to social and environmental health. And the Kawartha Lakes Chamber of Commerce urged the federal government to create a corridor economic development plan that would receive input from local agencies and governments but be administered federally.

We recommend that a formal Trent-Severn Heritage Region Council be established to promote, advocate and educate in support of heritage region sustainability with a focus on lakes, rivers and important landscapes. The council would draw its members from the federal government, provincial government, municipalities, First Nations and citizens at large and be the “guardian” of a heritage region Sustainability Charter. In the charter, members would commit to the essential concepts of sustainable development – advancement of economic and social goals within the context of a strong conservation ethic.

The Heritage Region Council would serve to promote understanding of the work of governments and foster communications and coordination between them. It would play an advocacy role; bring together communities of interest; serve as a repository for relevant research; and set goals and monitor progress against those goals. It would be established and funded by the federal and provincial governments with municipal and other contributions. A detailed description of our concept of the Council can be found in Appendix B.

RECOMMENDATION 2

Broadly coordinate the activities of government agencies and citizen organizations to achieve a set of common sustainability goals within the Heritage Region by collectively establishing a permanent Trent-Severn Heritage Region Council.

⁹ Fraser Basin Council, *Fraser Basin Council Website*. Retrieved from the World Wide Web: <http://www.fraserbasin.bc.ca>.

¹⁰ Hudson River Valley Greenway, *Hudson River Valley Greenway Website*. Retrieved from the World Wide Web: <http://www.hudsongreenway.state.ny.us>.

¹¹ Kawartha Lakes Community Future Development Corporation. 29 September 2007. *Submission to the Panel on the Future of the Trent-Severn Waterway*.

During our consultations, we were repeatedly told of significant ecological concerns on the waterway and were presented with several suggestions about how to address them. These suggestions could be subjects of interest for the council, and through this report are being passed along to the appropriate authorities to consider. They are:

- Coordinate education programs on environmentally sustainable shoreline practices and target them to shoreline residents, businesses and agriculture;
- Prohibit the use of pesticides and fertilizers near the shore along the waterway;
- Implement a continuing septic system inspection program and move toward 0% untreated discharge from municipal sewage treatment plants; and,
- Develop an integrated approach to the long-term management of aquatic vegetation.

Clarifying Jurisdiction

In our discussion paper, “Jurisdiction for the Waterway – Authorities and Responsibilities”, we describe the questions and uncertainties with respect to ownership and jurisdiction along the waterway. Jurisdiction, we observed, “is the essential path to defining both authorities and fiduciary responsibilities for the waterway.”¹² Confusion about jurisdiction has almost certainly had a negative impact on the public interest.

Management of the waterway is made complex because it is not always clear who owns what and who has the authority to act.

Allow us to briefly describe our perception of the present ownership regime. We believe that the evidence supports federal government ownership of the beds of the lakes and rivers along the path of the marked navigation channels, with the exception of areas owned by First Nations and limited areas in private ownership. The Province, with the apparent tacit agreement of the federal government, is asserting ownership over the beds of Lake Simcoe and Lake Couchiching but we can find no legal authorities that support this. It seems that this provincial exercising of authority has been an administrative convenience in response to uncertainty.

We also believe, after reading a 1905 Provincial Order-in-Council, that there is legal uncertainty over ownership of the beds of the lakes and rivers that comprise the reservoir lakes system. The Province currently asserts ownership through the exercise of provincial authorities.

That there is uncertainty in these matters will come as no surprise to the Province. Efforts have been underway since 1938 to resolve these issues. In 1988, officials from Canada and Ontario discussed a course of action to achieve resolution. However, little action followed.

If we were designing the ownership and jurisdiction regime for the waterway from scratch, we would ideally vest most of the bed of the waterway with the Province. We don’t believe that Parks Canada needs to own the beds of the lakes and rivers to carry out its responsibilities for managing a national historic site including a navigable waterway. We also think that the Province and municipalities are better placed to manage these lands¹³ in the

¹² Panel Secretariat. 2007. “Jurisdiction for the Waterway – Authorities and Responsibilities,” *Discussion Paper* 6, p. 1.

¹³ “Land” in this context includes the beds of water bodies.

public interest. Because they have similar responsibilities elsewhere in the province, they have the legislation, policy and expertise to manage land and resources. Confirming this would reduce confusion, duplication and overlap and, most probably, be more consistent with constitutional practice elsewhere in Canada.

We know, however, that vesting ownership of the beds of the lakes and rivers with the Province would have its own complications. Before accepting ownership, the Province would seek certainty as to current ownership including detailed data on privately held water lots. They would also want to understand any liabilities they might assume with ownership including provisions for dealing with known and unknown contaminated sites such as those near the mouth of the Trent River.

Provincial officials have also informally indicated that they would want formalization of the tenure and occupancy of commercial uses of the bed before accepting any transfer. First Nations have concerns about any transfer of the beds adjacent to their Reserves signalling that this would add to the complexity of their inter-governmental relations. Finally, some aspects of federal ownership may be entrenched through the 1867 Constitution Act. Amending this Act, should that be the case, would be no mean feat.

Although we believe that a transfer of ownership would serve Canadians best, we recognize that it would be difficult to achieve. Accordingly, we suggest that Canada and the Province apply their energies in the short term to resolving and **appropriately formalizing** the existing anomalies – the exercising of provincial jurisdiction over lakes Simcoe and Couchiching and the reservoir lakes. We expect that this would be of particular interest to the Province given its expressed desire to enact legislation to provide for the protection of Lake Simcoe.

RECOMMENDATION 3

Reduce jurisdictional uncertainty by resolving outstanding jurisdictional issues relating to lakes Simcoe and Couchiching and the reservoir lakes through discussions between the Province and the Federal Government.

Rights in Waters

In the previous section, we discussed clarification of ownership and jurisdiction along the waterway. There is one more jurisdictional issue that begs for resolution. Who has the authority to allocate a finite amount of water flowing through the Trent-Severn watersheds to serve an increasing number of demands?

Currently, the federal government through Parks Canada manages the storage and flow of water throughout the system while the Ontario Ministry of Environment issues “Permits to Take Water” under the provincial *Water Resources Act* to municipalities, quarries, and other users. Parks Canada is held publicly accountable for water quantities and flows while the Province has no evident accountability for many of the impacts of its water-taking permits. One estimate suggested that more than 6,000 permits had been issued although we have not been able to confirm that number.

We believe that all government agencies involved in the management of water should have the goal of fostering an integrated approach. It makes little sense for one agency to be responsible for storage and flows throughout the watersheds and another, reporting to a different order of government, to exert controls over withdrawal and use.

In the chapter on Assuring the Future of Our Water, we suggest a broad mechanism to improve water management. The success of that mechanism will depend on clarification of which government has the authority to make

decisions regarding storage, flows and allocation. We believe that the 1905 Provincial Order-in-Council effectively assigned that authority to the federal government and that the federal government should actively assert that authority.

RECOMMENDATION 4

Work toward the goal of integrated water management by asserting Federal Government rights and responsibilities to control storage, flows and allocation of water from the two watersheds.

The Need for Legislative Change and Policy Improvement

Parks Canada assumed responsibility for Canada's historic canals in 1972. However, we believe that the Agency has never really embraced the historic canals within its heritage family. Parks Canada has seemed a somewhat benign foster parent for the historic canals. They were brought into the house but never given the family name.

Currently, canals are managed under the *Department of Transport Act*. This Act gives the canals an administrative home and enables Ministerial authority but does not accord them any mandate or purpose. Regulations for the canals under the *Department of Transport Act* are ancient and inadequate to support the effective management of the canals in the 21st century. We were perplexed to find that there are actually two sets of regulations pursuant to the Act – the *Canals Regulations* and the *Historic Canals Regulations*, with tremendous duplication between them. A major review of the regulations was underway within the last few years but has not advanced.

To be seen as a credible guide and parent to the historic canals, Parks Canada must take full ownership of the historic canal regulations in a legislative and policy sense. We understand that improved legislation for national historic sites is being considered. Parliament must seize this opportunity to make a clear statement on the heritage mandate of canals rather than relegating them to an “other protected areas” category as occurs with their reference in the *Parks Canada Agency Act*. We urge the federal government to review and modernize the historic canals regulations as a high priority of its legislative agenda.

RECOMMENDATION 5

Enable Parks Canada to take “ownership” of the historic canals and improve management effectiveness by:

- (a) Transferring historic canal legislation to Parks Canada;**
- (b) Incorporating a strong heritage mandate in new legislative instruments; and,**
- (c) Modernizing and strengthening the current regulations governing the management of Canada's historic canals.**

Parks Canada manages its historic canals pursuant to two major policy documents. The “Parks Canada Guiding Principles and Operational Policies” provide a general policy framework for all of Parks Canada operations and includes specific policy statements for national parks, national historic sites, historic canals and other resources. The second important policy source is the “Cultural Resource Management Policy.”

As with the legislation, we are of the view that the policies relating to historic canals require improvement. They are brief, narrowly framed and lack a sense of vision or breadth of perspective. They seem to speak, for example, to navigation as the generic role of canals and seem to convey the message that their primary role is to serve boaters. We respectfully disagree.

Objectives for historic canals must be expanded to include all visitors including boaters, land-based visitors, residents in communities along the waterway and the growing and diverse cities that are served by many of these canals such as Ottawa, Toronto, and Montreal. In fact, serving a changing mix of land-based visitors is a primary function of most of Canada's historic canals. Each year more people visit and enjoy the Trent-Severn Waterway from the land than from the water. This is the reality of waterways the world over.

Conservatively, 1.5 million land-based visitors visit and enjoy the lock stations along the waterway and millions more visit other parks and open spaces along its length to swim, fish, picnic, walk, enjoy nature and just breathe the air. More than 230,000 land-based visitors stop at the Big Chute Marine Railway each year. Historic canals policies should clearly state that Parks Canada is committed to engaging with and serving all of its visitors including land-based visitors.

Policies respecting cultural resources also need to be broader and reflect the importance of the cultural landscapes, the full range of human endeavour and invention associated with the water, the arts and the continuing evolution of the historic canals.

Natural and ecological functions of historic canals are also of immense importance to Canadians. We believe that the objectives for "Protecting Natural Resources" in the Historic Canals section of the Guiding Principles and Operating Policies fail to adequately acknowledge this important role. We draw your attention Section 1.1.6 of the Cultural Resource Management Policy.

A cultural resource that derives its historic value from the interaction of nature and human activities will be valued for both its cultural and natural qualities.

This statement speaks eloquently to our view of what the mandate of Parks Canada should be in operating historic canals. This mandate needs to be prominently positioned as a guiding principle.

We advocate a broader policy vision for historic canals than has been practiced in the past. Successful transition toward this vision will require the understanding and commitment of all Parks Canada staff. We urge Parks Canada to undertake the necessary actions to ensure that staff at all levels of the organization are aware of this vision and act as advocates for it in their day-to-day work.

RECOMMENDATION 6

Improve Parks Canada's policies that guide the management of historic canals by:

- (a) Revising "Parks Canada Guiding Principles and Operational Policies" to incorporate a broader and more assertive vision that embraces all visitors and speaks more specifically to the important role of the "historic canals" with respect to natural and ecological values; and,**
- (b) Ensuring that all staff are aware of and act as advocates of that broader policy vision.**

Chapter 5

Assuring the Future of Our Water

We recently read that “freshwater is predicted to become this century’s oil.”¹⁴ Declining water quantity and quality is rapidly emerging worldwide as a critical public policy issue. Drought in portions of Australia, Africa, and the United States has reached alarming proportions. The United Nations says that 700 million people worldwide face chronic water shortages, and predicts this number may exceed 3 billion by 2025.¹⁵ UN Secretary-General Ban Ki-moon recently described unsafe drinking water as a “silent crisis”.¹⁶ The UN declaration of 2005-2015 as the “Water Decade”¹⁷ is compelling evidence of the magnitude and importance of these issues.

These are not the issues of “somewhere else.” Parts of western Canada face severe water shortages. There is anxiety about record low water levels in the Great Lakes. The Walkerton tragedy underlined the importance of clean water to communities.

In 2007, a drought year in central Ontario, we saw first hand the impacts and potential social conflict that can arise from not enough water in the Trent-Severn watersheds. This past summer low water advisories were issued within various parts of the watersheds. Toward the end of our mandate, a large number of wells in the Wilberforce area ran dry. Independent consultant analysis confirmed that this was the result of low ground water levels associated with drought condition but nonetheless a resource essential for life was no longer there.

There is also both anecdotal and statistical evidence that water quality in the lakes and rivers that make up the watersheds is also at risk. Blue-green algae blooms have been reported in recent years on Rice and Cameron lakes. We know that these blooms have been largely localized. Should they expand in area, they can render lakes largely unusable. Collapses in the real estate market have occurred in conjunction with this natural phenomenon when toxic varieties are involved.

The presence of invasive species is leading to water clarification, increasing aquatic vegetation growth and adversely affecting some fish species and recreational enjoyment.

There is also a linkage between water quantity and water quality. The quality of many lakes is dependent on annual flushing during the spring freshet. Having less water flowing through the system will accelerate deterioration of water quality.

These are only today’s challenges. We see the possibility of a future in which climate change could reduce water supply, open up pathways for new invasive species, raise water temperatures, and impair water quality. Add to this development pressure fuelled by growth in the Greater Toronto Area, expansion of hydro facilities and increased industrial use. The scenario is unsettling.

¹⁴ Song, V. “Water, water (not) everywhere. Water, not oil is projected to be the next scarce commodity,” *The Ottawa Sun*, 2 November 2007. Retrieved from the World Wide Web: <http://www.ottawasun.com/News/Features/2007/11/02/4624560-sun.html>.

¹⁵ “Ban Ki-moon urges greater efforts to tackle ‘silent crisis’ of safe water for all,” *United Nations (UN) News Service*, 24 October 2007. Retrieved from the World Wide Web: <http://www.un.org/apps/news/story.asp?NewsID=24397&Cr=water&Cr1>.

¹⁶ *Ibid.*

¹⁷ See <http://www.un.org/waterforlifedecade>.

Many citizens with whom we spoke are both knowledgeable and concerned about water issues. They reminded us that the quality of the water is dependent on what happens on the land – poor land management means poor water. They spoke to us about wetland and habitat destruction, leaking septic systems, herbicide and pesticide use, invasive species and the cumulative effects of development. We heard how conflicting demands for scarce water are pitting Haliburton-area communities against those along the main navigation lakes and rivers. People who live downriver from Peterborough told us about the lasting effects of storm and sanitary sewer overflows that occurred during the Peterborough flood of 2004.

During our three trips on the water this we saw for ourselves the effects of poor water stewardship. We saw hardened shorelines, livestock in the water, weed growth, and erosion. We came to share the apprehension of citizens about fluctuating water levels and their negative impacts on birds and fish.

Our mandate is to offer recommendations with respect to the future of the Trent-Severn Waterway. **Without adequate supplies of clean water, there is little or no future for the waterway.** Hundreds of thousands of citizens will struggle to find enough water to drink. A recreational fishery worth \$300 million annually will be at risk. Property values that currently support \$240 million in property tax revenues will decline. A multi-million dollar boating industry will be affected. Species will be lost.

We believe that governments at all levels must commit to policies and programs that emphasize both water quality and water quantity. We offer some recommendations in that regard.

Promoting Water Quality

Our mandate was not to study water quality. But the more we learned, the more we realized we could not ignore it. We reviewed a number of reports on the issue. The data we saw did not suggest an existing, system-wide crisis in water quality but it did confirm the existence of localized problems and the potential for serious and more widespread problems in the future.

A 2005 Parks Canada report on the environmental health of the waterway cited several water quality-related concerns.¹⁸ Continuing wetland loss along the waterway is “of concern” and conditions are “potentially impaired”.¹⁹ The expansion of exotic invasive species along the waterway is also “of concern”.²⁰ Declining water clarity in Upper Buckhorn, Pigeon, and Chemong lakes indicates water quality concerns. A 2006 report indicates that chloride concentrations in the Trent River have doubled over the past 25 years.²¹

It is apparent that governments are working hard to improve water quality. We were impressed with presentations from the Lake Simcoe Region Conservation Authority on its “Watershed for Life” program and a similar presentation from the Trent Conservation Coalition on its source water protection planning program.

¹⁸ Mystic Consulting Services and Ecoplans. 2005. *State of Environmental Health, Vol. 1 of Indicators of Environmental Health and Long-Term Monitoring Strategy, Trent-Severn Waterway National Historic Site*, prepared for Parks Canada.

¹⁹ *Ibid.*, p. 94.

²⁰ *Ibid.*, p. 108.

²¹ Kaltenecker, Georgina and Aaron Todd, Ontario, Ministry of Environment. 2006. *Chloride concentrations in Ontario's rivers and streams*, Ontario Good Roads Association, 2006 Snow and Ice Colloquium, 18-19 October 2006, Mississauga, ON. Retrieved from the World Wide Web: <http://www.ogra.org/lib/db2fil.asp?fileid=15574>.

The former initiative seems well advanced and reflects a science-based and goal driven approach to improving water quality in Lake Simcoe. It recognizes pollution sources and the impacts of watershed development on water quality. Although the Trent Coalition initiative is not as advanced, we could see evidence of a thoughtful program that seeks to address water quality issues within the context of an overall understanding of the watershed water budget – an essential connection in our estimation.

Citizens are contributing too. Almost every lake has a property owners' association. They and the Federation of Ontario Cottagers' Associations promote shoreline stewardship. We were inspired by lake monitoring and planning by the Kawartha Lake Stewards, Lake Scugog Stewards, and citizens on Stoney and Buckhorn lakes. The Ontario Federation of Anglers and Hunters is a key actor in combating invasive species along the waterway. We believe this citizen concern and action reflects a deep personal and emotional attachment to the water and the life-renewing lifestyle it offers.

It is our view that governments, including the federal government, can do more to contribute to the success of the efforts described above.

The Trent-Severn Waterway as a Federal Waterway

We think it is imperative that the federal government, not just Parks Canada, become a prominent supporter of efforts to assure future water quality on the waterway. We have noted earlier that jurisdictions along the waterway are complex. The fact remains, however, that the waterway is a federal entity and has been so in almost all respects since Confederation. The waterway is also the most expansive federal presence in Ontario.

The federal government is responsible for providing quality visitor experiences associated with this heritage treasure. Dozens of presenters at our public meetings spoke emotionally about how poor water quality and excessive aquatic vegetation was affecting their enjoyment of the water.

We believe the waterway offers many opportunities for the federal government to display its commitment to sustainable water management within the province and to showcase a truly national policy agenda. Sustainable water is an important national policy goal as demonstrated by the recent federal contributions amounting to \$30 million toward the health of Lake Simcoe and by the renewal of the Canada-Ontario Great Lakes Agreement.²²

Although the contribution toward Lake Simcoe water quality is no doubt welcome, we are concerned that Lake Simcoe is not seen as part of a much larger federal presence with a significant array of water-related challenges. We believe that the federal government should expand its water quality initiative to embrace and be framed within the context of this *national* historic site. We would also like to suggest that the initiative should support the outstanding work of communities and citizens in addressing their water quality issues. We offer that suggestion because we believe that a key to a sustainable water future lies in individual citizen stewardship.

²² Environment Canada and Ontario Ministry of Environment. 2007. *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem*, revised.

RECOMMENDATION 7

Recognize and reflect federal stewardship obligations by expanding the Lake Simcoe water quality initiative to encompass the entire waterway and by directing investments toward supporting “on the ground” initiatives by communities and citizen organizations.

Protecting Federal Interests

In addition to operating the dams and locks, the federal government is also a major landowner along the Trent-Severn Waterway. The lakes and rivers that make up the system cover several thousand square kilometres – an area larger than many national parks. The federal government, in our view, owns the beds of those lakes and rivers. There are more than 120,000 properties located along the nearly 5,000 kilometres of shoreline when all the islands are included. Activities on those properties have the potential to impact on the federally owned bed.

Ownership by the federal government conveys jurisdiction, and jurisdiction, as we stated earlier, “is the essential path to defining both authorities and fiduciary responsibilities for the management of the waterway in the public interest.”²³

In its simplest terms, this requires the ability to exercise control over use and occupancy of the land. We believe that the federal government is not currently meeting a reasonable standard with respect to that responsibility and that this has adverse impact on water quality and future sustainability.

The *Navigable Waters Protection Act*, *Canal Regulations*, *Historic Canals Regulations*, the *Fisheries Act*, the *Canadian Environmental Assessment Act* and, more recently, the *Species at Risk Act*, provide the authorities that permit the federal government to exercise its responsibilities. Of these, the *Historic Canals Regulations* and the *Fisheries Act* permit the government to exercise controls over usage that might adversely affect the integrity of natural and cultural resources.

The *Historic Canal Regulations* can only, in our view, be regarded as a relatively primitive tool to assist the government in its work compared to legislation elsewhere. They are rarely enforced. They are not well known in the legal and judicial communities. Our broad sense is that they are out of date and lack the enforcement teeth to ensure compliance. The maximum penalty for non-compliance, for example, is \$400 while offences under other Parks Canada legislation such as the *National Parks Act* have fines exceeding \$100,000. It is sometimes cheaper to pay the fine than to pay the cost of obtaining permission, if permission would be granted at all.

Many citizens with whom we spoke complained of building activities such as the construction of docks, boathouses and similar structures that are occurring without any form of approval. They told us about excessively long permitting processes that encourage some to ignore the regulatory requirements. Parks Canada staff related the story of an individual who bulldozed a lengthy section of the canal bank near Lake Simcoe – a portion of the waterway that has the highest level of historic designation – with negligible punitive consequences. This individual was ultimately convicted under provincial trespass legislation in some measure due to inadequacies with the historic canal regulations.

²³ Panel Secretariat. 2007. “Jurisdiction for the Waterway – Authorities and Responsibilities,” op. cit., p. 1.

Municipalities also advised us that the federal government needs to enhance its capacity to work with them in reviewing applications for development along the shoreline. They observed that early intervention in the development process would serve to better protect essential shoreline values to the benefit of both federal and municipal governments.

On the positive side, we note the recently developed Parks Canada policy statement governing circumstances under which “dredge and fill” permits can be issued. Although they have not yet reached the highest standard of shoreline protection, this policy statement represents welcome progress.

Recently, Parks Canada has considered bringing commercial users of the bed under some form of tenure. We think this is a good step toward the exercising of jurisdiction. A similar requirement has been in place for Provincial waters for a number of years.

The proposal has met resistance, in part because it extends licensing beyond provincial requirements. Resistance also comes from a very broad range of perceived inequities in the proposed water lot licensing program. Why require it of commercial operations and not private cottage owners? What about private owners who rent their own cottages and thus receive a commercial benefit? Commercial property owners also cited the premium they already pay in property taxes by virtue of being on the water.

Notwithstanding these concerns, controlling the occupancy and use of the bed is essential to responsible water stewardship. We believe that all those who derive a private benefit from the use of a public resource, a benefit that other citizens do not receive, should pay in some measure for that benefit. Citizens should receive equitable treatment in respect of that benefit and this requires a consistent standard between the waterway and elsewhere in the province. The federal and provincial governments jointly need to develop a model based on these principles.

In summary, the goal of environmental sustainability of the waterway demands that the federal government significantly enhance its capacity to exercise appropriate management and control over the land under its ownership and stewardship. To do this, it needs to improve its supporting legislation; increase investment in monitoring and enforcement; work more actively with municipalities; control occupancy and use; and enter into partnerships with others.

Recommendations overleaf

RECOMMENDATION 8

Significantly enhance capacity to protect and manage federal waterway lands in the public interest by:

- (a) Reviewing and amending the *Historic Canal Regulations* to provide a modern and effective tool to control occupancy and use by all users of the bed of the waterway;**
- (b) Entering into agreements with municipalities and conservation authorities where appropriate to allow them to administer the permitting provisions of the regulations on a cost recovery basis or, alternatively, enhancing the permit administration capacity of Parks Canada on a cost recovery basis;**
- (c) Considering a harmonized Canada/Ontario approach to the licensing of all private occupiers of Crown-owned water beds;**
- (d) Increasing investment in monitoring and enforcement of the *Historic Canal Regulations* and other relevant legislation to a level similar to that of a national park of similar size and complexity;**
- (e) Implementing an environmental monitoring program for lands under federal stewardship that is similar in concept and scope to that implemented for national parks; and,**
- (f) Enhancing federal planning and development review capacity to permit work with municipalities and others earlier in their planning processes.**

Housing and Communicating Environmental Monitoring Data

To better understand the water quality concerns brought to us by citizens, we looked for information on the subject. We found evidence of considerable data collection and analysis by a myriad of government and citizens' organizations. The results, however, were often difficult to obtain. It is not surprising perhaps that, in the absence of readily accessible information, citizens have been left with a degree of disquiet about water quality.

We think it is essential that methodologies and information from these different sources be centralized and made more accessible for decision-makers and citizens. We would like to see a central repository established to house and report on environmental studies and monitoring in the watersheds. The proposed Trent-Severn Heritage Region Council could play a role in this. It could also take on the important responsibility of ensuring that these studies and monitoring efforts are broadly communicated to citizens and decision-makers.

Municipalities also reminded us that a central repository could also play an important role in ensuring that water quality data are collected in a highly standardized fashion to assure accuracy and facilitate comparison among studies.

RECOMMENDATION 9

Make environmental information accessible and understandable for citizens by establishing a central repository under the aegis of the Trent-Severn Heritage Region Council to collect the results and methodologies of environmental monitoring along the waterway and ensuring they are communicated to citizens and decision-makers.

Consistent Approaches to the Management of Shoreline Development

The Trent-Severn Waterway including its watersheds is a mosaic of differing jurisdictions, philosophies, strategies and rules governing development along the shoreline.

Parks Canada has recently developed new policies governing work that occurs on the bed of the waterway. The City of Kawartha Lakes and other municipalities have undertaken similar initiatives with respect to their shorelines. The province's Greenbelt and Oak Ridges Moraine plans provide waterfront policies for portions of the waterway along Simcoe, Scugog, and Rice lakes. The District of Muskoka has adopted rigorous policies that tie development intensity to the sensitivity of individual lakes. The north bank of Severn River falls under these policies.

But while some jurisdictions have new policies in place, others don't. And even the updated policies reflect considerable variation in approach. Sometimes federal policies actually conflict with local policies.

These policies govern what tens of thousands of owners can do on their part of the shoreline. Can they build a boathouse in the water? Should they have a buffer between the shoreline and the landscaped portions of their properties to absorb nutrients that run off the lawns and gardens? Can they dredge channels and remove rocks and stumps thereby affecting fish habitat? Should they be allowed to build shore walls that block the movement of many species between the land and water? What development densities are appropriate in a shoreline environment?

Meanwhile, development is intensifying within this highly variable planning framework. A 2007 Parks Canada study indicates more than 46,000 new residential units are planned within five kilometres of the waterway between Trenton and Port Severn (half of these are associated with growth just south of Lake Simcoe).²⁴ New types of development in the form of condominiums, fractional ownership, and large resorts are challenging current planning policies. Not all municipalities have the capacity to fully respond. And we don't know the cumulative effects of future development already on the books much less that which will inevitably follow in the decades to come.

We believe that enlightened management of development and use of the land and water along the shoreline is one of the most important contributions that governments can make to assure the future of the waterway. Management of setbacks, buffers, waste water systems, and storm water should be part of strong, consistent shoreline policies. These tools should be supported by modeling, indicators, and monitoring.

We believe that environmentally sustainable management of development along the waterway requires a consistent philosophy and a policy base that recognizes the immense ecological importance of shorelines. At the earliest opportunity, a planners' forum should be convened to begin the process of moving toward a more consistent approach.

RECOMMENDATION 10

Improve ecological protection of shorelines by convening a planners' forum involving Parks Canada, Fisheries and Oceans Canada, the provincial government, conservation authorities and municipalities to explore opportunities to move toward a consistent, rigorous approach to managing waterfront development throughout the watersheds.

²⁴ Catalyst Environmental Group. 2007. Appendix I: Development within 5 km buffer of Trent-Severn Waterway, in *Threat Assessment for Species at Risk*, prepared for Trent-Severn Waterway, Parks Canada.

Water Management

Most people think of the waterway in terms of boats and locks. Yet it is clear to us that the most important aspect of the waterway is the management of water storage and flows. Water management has shaped the development, character and economy of southern Ontario's largest watershed, and continues to do so via a network of more than 160 federal dams and other control structures. This network controls water levels and flows in hundreds of lakes, rivers and streams – including most of the Haliburton lakes – extending over an area of 18,000 square kilometres.

Originally, this massive water control system was designed for the movement of logs. By the beginning of the 20th century, it evolved into a network of reservoirs from which water was released to maintain navigational levels on the waterway. Since that time, the system has become much more. It provides a reliable source of drinking water for communities and individual homes throughout central Ontario. It enables water-based recreation and maintains water levels that controls flooding. It generates economic opportunities, including supporting 18 hydro-electric plants.

The more things change...

In the 1840s to 1870s, disputes over water privileges along what today is known as the Trent-Severn Waterway became common. Millers, loggers and steamboat operators pressured governments to regulate water to suit their own specific needs. Through these years, there were constant complaints to government about the control of water levels. Waterway superintendents of the day frequently found themselves in the centre of conflicts over water rights without any government policy to provide guidance. Some of these problems arose because water levels at many dams were regulated by local mill owners who drew off as much water as they pleased.

Some cottagers and business owners claimed that they “get no benefit from the existence of the waterway.” They may have forgotten that, without the dams and water management system that the waterway embodies, many of the lakes and rivers would be substantially smaller and would not support through navigation and many other uses. In some locations, the high water mark in May or June might be hundreds of metres offshore in August.

As we noted earlier, Parks Canada manages the storage and flow of water throughout the system, while the province issues permits to take water for municipalities, quarries, and other uses.

Our consultations and studies have emphasized that this system is not working well. The physical infrastructure of the waterway is old and leaking. It relies for the most part on slow and labour-intensive log changes to manage levels and flows. It is guided by a management model developed for navigation that leaves an overworked staff struggling to deal with modern and often competing demands.

Reservoir lake residents want less fluctuation and more equity with main system shoreline residents. Citizens and natural resource managers want fish and wildlife habitat needs to be formally considered. Power generators want less “wastage” of water that could otherwise generate electricity. Above all, those interested in water management want to see major improvements in communication and want to be engaged to an appropriate degree in decision-making.

Almost everyone we spoke to understands that the system was never designed to do what it needs to do now. They also understand that the funding and staff resources to operate and maintain the system have been entirely inadequate.

How Water is Managed in the Trent and Severn Watersheds

The Trent and Severn watersheds contain a system of approximately 160 dams that is used to manage water levels in the Trent Severn Waterway. This system is an aging artifact dating mostly from the 19th century.

Simply put, in the Trent watershed, water is stored during the later winter and spring in the Haliburton and north Kawartha lakes, often referred to as the “reservoir lakes”. This water is gradually released during the summer as evaporation lowers the lake and river levels along the waterway navigation channel. In practice, it is a very complex process.

Parks Canada’s waterway Water Control Engineer has access to information on water levels and flows – mostly from manual readings at lock and dam locations. In recent years, a program has been initiated to convert a limited number of manual gauges to automated stations accessed by computer that can be analyzed on a daily and sometimes hourly basis. Decisions to store or release water take into consideration a range of priorities such as public safety, navigation requirements, flood mitigation, community water supplies, water quality, protecting natural resources, green power generation, and water for recreational activities.

Adjustment of levels and flows throughout the Haliburton area is generally accomplished through the annual removal or addition of one foot stop logs, although six inch steel beams are used when finer adjustments are required. Along the main system, many dams have hydraulic log lifters and there is a number of mechanized dams. Decisions usually apply to a number of dams in a series to prevent flooding of the sections between dams.

Although each year is a little different, there is a typical, annual cycle of operations for the Trent watershed based on over 100 years of recorded water levels, flows and weather data. The cycle varies somewhat depending on what part of the system is involved. In the reservoir lakes, for example, water is drawn down in the autumn so that the lakes can accommodate spring run-off without flooding. Through the late winter and spring, levels of these lakes are raised to their maximum levels.

During the summer, the lakes are gradually drawn down to provide water to maintain navigation levels in the main waterway. This is accomplished on an “equal draw down” basis. Depending on the height of the dam at its outlet, this draw down may lower levels vertically anywhere from a couple of feet to as much as twelve feet. In a normal year, 50 per cent of storage capacity in reservoir lakes is needed to maintain the Kawartha Lakes at regular operating levels.

The Kawartha Lakes are drawn down from January to March 15 to bring the lakes to their low levels prior to the spring run-off. In the summer the focus shifts to maintaining water levels in the navigation channels using as little water as possible from the reservoir lakes.

As well, sufficient flow needs to be maintained to ensure water quality.

Water management in the Severn watershed is different because of the size of Lake Simcoe. Water in this area is managed using an approach that has been in effect since 1918. Basically flows are increased if the lake is above normal levels, or decreased if levels are lower than normal. Lake Simcoe is also managed to reduce spring flooding along the Severn River.

Competition for water has caused conflict and debate throughout the watersheds. Now, however, the real possibility of a future with less water and increasing demand is changing that debate. It is no longer “the needs of the waterway versus those of Haliburtons.” It is no longer “us” and “them”. It is and should be, “how water management can best serve the sustainability of the entire watershed.”

In the face of these challenges, we believe that the responsibility for water management is not an appropriate job for Parks Canada. Parks Canada does not have the mandate, legislative and policy instruments or the resources and expertise to do that job well. Moreover, with its responsibility for navigation, Parks Canada should be viewed as a single water user among many.

Although there is currently a legal requirement to maintain a six foot draft, managing water in such a way that navigation trumps, or is perceived to trump, all other demands makes little sense in the 21st century.

It is clear that water management is a complex and important issue. It is vital to the environment and economy and to the quality of life of hundreds of thousands of people whose lives are shaped by the water. A number of improvements in water management performance are required to reduce potential threats to the environment, public safety, private property, and economic opportunity, and to reduce the level of public frustration. These include:

- Automated monitoring of levels and flows;
- Development of a new allocation and management model;
- Enhanced stakeholder engagement and communication including distribution of real time information to citizens;
- Establishment of a central automated watershed control centre;
- Modernized dams to permit finer and remote control; and,
- A water conservation strategy, including a water pricing regime.

We have looked at models from other watersheds and recommend that an independent water management agency similar to that of the Lake of the Woods Control Board be considered. Both it and the Ottawa River Regulation Planning Board were established by federal-provincial agreements involving two provinces, so the Trent-Severn offers a less complicated entity to establish.

Through this agency, the federal government would continue to own and fund the water control infrastructure; revenues would cover operations. It is absolutely essential in our view that those who manage water coming into the system should be responsible for what is taken out of it. As such, this agency would assume responsibility for issuing water-taking permits consistent with the above-noted assertion of “rights in waters.” Finally, it is our view that Parks Canada should be at “arm’s length” from the agency and we therefore recommend that the agency report through a ministry not responsible for the Parks Canada Agency – perhaps the federal Minister of Natural Resources.

In Appendix C we describe the principles that should guide the agency’s operations, and provide suggestions for governance, required expertise, staffing levels, and funding.

RECOMMENDATION 11

Improve management of water by creating and appropriately funding an independent water management agency, reporting to the federal Minister of Natural Resources, to assume responsibility for managing water storage, flows, allocation and use in the Trent and Severn watersheds.

We strongly believe that a culture of conservation and an integrated approach to water management embracing ground and surface water are the fundamental principles by which water must be managed by this authority and indeed by all in the watersheds. Citizens, businesses, and industries must also be engaged in decision-making, timely communications, knowledge creation, and education about water and its management.

The mandate of the water management agency must include the fostering of a Heritage Region-wide conservation ethic. We are attracted by the “soft path approach.”

We also believe that the pricing of water can be a powerful conservation tool. For decades experts have been saying that water in Canada is woefully under-priced. Canadians are profligate water users, only second to the United States on a per capita basis. And we know that water abundance is a myth – 60 per cent of Canadian water flows north to the Arctic and is far away from the population centres of southern Canada.

Some provinces are starting to heed the experts. Prices are beginning to reflect the value of water, the range of users falling under pricing regimes is expanding, and the minimum extraction volumes at which pricing begins are dropping. Ontario will introduce water royalties in 2009. And Quebec is considering charging royalties for the commercial and industrial use of groundwater.

Many residents don't know how much water they use because it is not metered. We think that surface and ground water users should know how much they use and that water should be priced to encourage conservation. The concept of “accountability” reinforces the need for such responsibilities by consumers exercising their rights of consumption.

The Soft Path Approach

For many, water has been regarded as an inexhaustible resource. In recent years, there has been increasing recognition that it is really a finite resource and conservation measures that manage demand have been introduced. The “soft path” of water management goes one step further by adapting human use of the water to respect the long-term ecological sustainability of the watershed. It considers water a service rather than a commodity. It asks “Why use it at all, why in this way and why of this quality?” It encourages efficiency, equity and sustainability in water allocation, distribution and use. And it involves local communities in making decisions about water. In doing so, the “soft path” fosters long term ecological, economic and social sustainability.

See Brooks, David B., 2007, “Reversing the Flow,” *Alternatives Journal* 33:4, p. 9.

Accordingly we recommend that the water management agency work, in consultation with the Province, toward establishing a harmonized, water pricing regime and that revenues be used to support its operations and foster a conservation-based water ethic throughout the watershed.

RECOMMENDATION 12

Better assure adequate water supplies throughout the Trent-Severn Heritage Region in the future by:

- (a) Promoting an integrated approach to water management;**
- (b) Fostering a strong water conservation ethic as part of the formal mandate of the water management authority; and,**
- (c) Implementing a Canada/Ontario harmonized water pricing regime that helps to offset water management costs and encourages water conservation.**

Chapter 6

Planning for Future Places to Live and Enjoy

On a hot, August afternoon during our watershed travels we were privileged to speak with a delegation from the community of Harwood. Harwood is a small town on the south shore of Rice Lake – a mixture of families that have been there for generations and residents and cottagers who have come more recently.

For a time, many decades ago, a railway ran from Cobourg to Harwood and thence by a short-lived trestle across the lake. The waterfront at Harwood is an expression of the traditional identity of the place and essential to the vision they have for the future. In their efforts at “place building”, they would like to transform their waterfront and suggested that the panel might urge senior orders of government to support their efforts.

We heard similar stories from many other communities throughout the watersheds and particularly along the waterway. We noticed a commonality in their messages. Communities are trying to figure out how they can be revitalized; how their presence on water can best serve their citizens; how to position themselves in an increasingly competitive market; how to embrace tourism; how to make the most of economic opportunities; and how to handle increasing demand for recreational space from a growing population elsewhere.

In this chapter, we invite governments and communities to work together to respond creatively to the growing demand for access to the water – demand that originates from the growth of “lifestyle” communities along the shore and demand that comes from the growing population of the Greater Toronto Area. The lakes and rivers throughout the watershed are and will be a “destination” for many years to come supporting both the economic and social well-being of communities.

Throughout our process we came to broadly understand that the social and economic environment of the waterway region is changing. Retiring baby boomers from the Greater Toronto Area increasingly call it home. A recent informal survey by the Federation of Ontario Cottagers suggests that upwards of 60 per cent of cottages are now being used year-round.²⁵ Houses are gradually replacing cottages as a waterfront icon. Fractional ownership, condominiums, and major lifestyle developments are emerging. Technology allows more workers to “telecommute” from the waterway region to Toronto or elsewhere.

Planners from municipalities and conservation authorities provided us with information on the rapid shifts from seasonal to year-round residential development and the accompanying array of new service and amenity requirements. Our own research confirmed this phenomenon and documented the billion-dollar-a-year economic importance of residential occupancy of the shoreline.

Tourism operators spoke to us of changes in the configuration of recreational accommodation. Traditional family and fishing lodges, marinas and resorts are disappearing and are being replaced by high-end resorts, condominiums and fractional ownership developments that generate more economic return. The facilities that are disappearing are those that serve ordinary Canadian families. Replacement developments are being designed to serve a more upscale market.

²⁵ Winter 2007/08 Readers' Panel, *Cottage Life* magazine.

We also heard from seasonal residents who have cottages that can only be accessed by boat. The closure of marinas is of great concern to them.

We attempted to better understand the nature of changes in recreational boating. There is an increasing number of boats on the waterway. The Ontario Marine Operators Association estimates 40,000 although, in the absence of an effective boat registration system, accurate numbers are impossible to determine. Meanwhile, fewer boats are using the locks – lock usage has declined by almost a half since 1988. The reasons for this are not clearly understood.

It is important to add a note about the social and economic importance of the recreational fishery. The Federation of Anglers and Hunters of Ontario provided us with an excellent sense of the economic importance of this fishery supported by an outstanding presentation in Lindsay by a representative of the Bassmasters organization.

Finally, we sense that there is a severe recreational supply and demand crisis emerging in the waterway corridor that, if not addressed, will be the source of increasing social conflict. By 2031, the population of the Greater Golden Horseshoe is projected to grow by a further 3.7 million people. This new population will be very culturally diverse.²⁶ Where will these families go to enjoy the water on a hot summer day – enjoyment that is a quintessential part of the Canadian dream? Most of the land along the shore is privately owned. We were told that public recreational open space that does exist along the waterway has reached its optimum carrying capacity. Yet demand continues to grow.

There is also evidence of growing social conflict along the waterway associated with changing patterns of use and availability of access. For several years lock staff have reported conflicts between boaters and shore-based visitors. Residents and cottagers along the Severn River and elsewhere are concerned about illegal camping adjacent to their properties and have fears about their own safety. Many told us about issues with garbage and human waste associated with increasing use. Recently, the Ontario Human Rights Commission issued a Preliminary Report on its investigation into incidents of harassment involving Asian fishers and local residents. Among other conclusions, the Commission observed that:

...it seems clear from the submissions to this inquiry that the competition over water resources has taken on a very disturbing racial overtone in some communities, and the Commission urges conservation and waterway authorities to take action to address these issues.²⁷

It is imperative that governments at all levels better understand the changes that are occurring in both residential and recreational demand along the shores of the waterway. That understanding and the strategic support of senior levels of government can, in our view, enable communities to better respond to those changes while protecting the cultural and natural values that make the region so attractive.

Preparing a New Strategic Plan

In our chapter on “Improving the Performance of Governments” we refer to the Canada-Ontario Rideau-Trent-Severn Study (CORTS) that began in 1967. This was a joint Canada-Ontario project launched to study the recreational potential of the lands and waters along the navigation corridors between Ottawa and Georgian

²⁶ Ontario, Ministry of Public Infrastructure Renewal. 2006. *Places to Grow: Growth Plan for the Greater Golden Horseshoe*, p. 12. Retrieved from the World Wide Web: <http://www.pir.gov.on.ca/Engling/growth/gghdocs/FPLAN-ENG-WEB-ALL.pdf>.

²⁷ Ontario Human Rights Commission, 2007, *Preliminary Findings – Inquiry Into Assaults on Asian Canadian Anglers*. Retrieved from the World Wide Web: <http://www.ohrc.on.ca>. December.

Bay. Staff from 15 provincial and federal departments produced the 1971 report entitled *Yesterday, Today and Tomorrow*.²⁸ In our view this wide-ranging report remains a model of forward-thinking, visionary, strategic planning.

The CORTS report stated that the “recreational environment of the Rideau-Trent-Severn Corridor is approaching a state of crisis”.²⁹ Today, 37 years after that report was written, the corridor faces the same – and in many ways much more severe – challenges and issues. More shoreline has been lost to development; publicly accessible shoreline is disappearing; environmental health is deteriorating; and communities are struggling in isolation to respond to the challenges. And these issues are being experienced throughout the entire watershed.

It is our recommendation that the governments of Canada and Ontario join together with the Heritage Region Council to review and modernize the 1971 plan to address the challenges we see emerging today.

A modern plan would:

- Seek to better understand and respond to the changes in recreational use and the requirements of a regional population that is very different from that of several decades ago;
- Provide for the needs of the growing number of people that live in the region reflecting the emerging planning principle that amenities that are attractive to people who live in a community will serve as attractions to those who might visit;
- Address the importance and sustainability of the recreational fishery;
- Identify how tens of thousands of new day users from the Greater Toronto Area will be accommodated;
- Identify the scenic, natural and cultural landscapes that are elementary to the future sustainability, use and enjoyment of the waterway region and provide for their protection;
- Integrate and support the development of activities such as biking, hiking, swimming, picnicking and visiting cultural institutions as part of the recreational supply; and,
- Provide a framework for action and investment within which communities plan and senior levels of government can support their efforts.

RECOMMENDATION 13

Provide for long-term public access and the protection of important natural, cultural, economic and social values associated with the Heritage Region’s lakes and rivers by updating and modernizing the 1971 “Yesterday, Today and Tomorrow” plan through the collaboration of federal and provincial governments, municipalities, First Nations and the Heritage Region Council.

²⁸ Canada-Ontario Rideau Trent Severn: CORTS. Study Committee. 1971. *The Rideau-Trent Severn: Yesterday Today Tomorrow: A Report on Optimum Recreational Development*.

²⁹ *Ibid.*, p. 9.

Supporting Improvement of Community Infrastructure

We believe that residents – both seasonal and permanent – are key to the waterway's economic future. Our economic study reveals much about their impact.³⁰ The results of that study challenged traditional perceptions, including our own.

Contrary to common understanding, boating and traditional tourism are not the most important economic drivers on the waterway. Waterfront homeowners and cottagers have the biggest economic influence, and by a large margin. The almost 50,000 residences along the waterway and 16,500 more on the Haliburton reservoir lakes generate from \$650 million to \$900 million each year in economic activity and contribute close to \$300 million in municipal property taxes. Tens of millions of dollars are paid in provincial and federal sales and other taxes.

The waterway economy is now largely based on its lifestyle amenity value to those choosing to live on it. These residents are rooted in their communities and form strong social and economic ties within them. They offer a more sustained economic base on which waterway communities can grow.

We only need to look to other waterways to see how communities are investing in this new future. In the UK and along the Erie Canal in New York, public, private and non-profit sectors are working together to bring people to the water – to live, work, shop, eat, celebrate, be entertained. Their efforts to create great public waterfront spaces have attracted new residents, businesses, visitors, and have stimulated private investment.

They have integrated public spaces and public art with commercial activities, residential development, commercial accommodation and cultural institutions. The mills and factories that were part of the character of their waterfronts are no longer being torn down but rather converted to contemporary use giving new life to their historic character. They are, in fact, regenerating communities.

Coordinated, strategic approaches are creating sustainable economic and quality of life benefits for these communities. Because of that, these communities are also becoming great tourist venues. Our meeting with the New York State Canal Corporation left us with an indelible impression of the catalyst that strategic community-based investments can be.

We found that waterway communities within our region are already enhancing their waterfronts in different ways. Some, like Cambellford, Hastings, and Bobcaygeon are building additional docking and marina facilities. Haliburton, Harwood and Lindsay are upgrading the ambient quality of their waterfronts to serve both boaters and land-based visitors. Minden is developing the shoreline of the Gull River as an attractive park. Still others, like Trenton, see a future in the development of large-scale attractions designed to attract tourists from passing traffic on Highway 401.

To this point, waterfront enhancement projects within our region have largely been local visions, not part of a broader strategy. Although we are committed to the idea of local vision, we also see great merit in encouraging a broader vision in which individual community efforts can contribute to a larger whole.

³⁰ TCI Management Consultants & EDP Consulting. 2007. *Study of its Sustainable Economic Contributions to Communities Along the Waterway*.

Communities along the waterway indicated that they are interested in investing in projects and programs that advance the goals of the waterway, but they require assistance. We suggest the establishment of a “Trent-Severn Heritage Region Strategic Investment Fund” created with annual waterway-dedicated allocations from federal and provincial funds such as FedNor’s Community Futures program, the Canada-Ontario Municipal Rural Investment Fund, and the province’s rural economic development programs. The establishment of such a fund would promote investments within the context of broad waterway goals and offer a secure, sustainable funding source to support planning efforts by waterway communities.

Finally, communities need to be able to access technical support in planning and design. Support of this kind has paid great dividends elsewhere. It should be part of the overall strategy.

RECOMMENDATION 14

Encourage communities to invest in projects that make the most of the advantages they enjoy from their location on the water by:

- (a) Establishing a federal/provincial Trent-Severn Heritage Region Strategic Investment Fund; and,**
- (b) Funding the Heritage Region Council to enable communities to access planning and design expertise for projects that contribute to broad waterway goals.**

Chapter 7

Encouraging the Development of Renewable Energy

At the present time, there are 18 hydro-electric generating plants on the main Trent-Severn system with an additional three plants on reservoir rivers. Additional new plants are under active consideration and at least two operators have indicated that they plan to expand the generating capacity of existing plants, subject to approvals.

The generating capacity of current operations is approaching 100 Mw and provides approximately \$2 million in revenue to Parks Canada. This revenue helps cover some of the operating costs of the vast water management system that furnishes hydro-electric generation operators with a relatively reliable year-round source of water. The Ontario Water Power Association has suggested to us that the production potential of existing plants can be improved by 20 per cent with changes in water management practices and a further 50 Mw of generating capacity could be added through new plants and upgrades to existing facilities.

Mr. Stanton's Parliamentary Motion asked that the potential of the Trent-Severn Waterway as a source of clean, renewable energy be evaluated. Many of the submissions we received commented on the potential for additional hydro-electric generating capacity to serve as a source both of "green" energy and of additional revenue to help fund maintenance and new initiatives along the system.

We believe that the development of renewable energy resources is a sound public policy goal. We support a vigorous effort to pursue green energy generating potential along the waterway.

Unqualified support for additional hydro generation on the waterway was by no means universal. A number of presenters expressed concern about the environmental and heritage impacts of hydro development. We agree that caution is necessary to ensure that development doesn't occur at the expense of natural and cultural values. The Canadian Environmental Assessment Act provides the process and regulatory instrument to ensure protection of these values if applied knowledgeably and rigorously.

Others expressed concern that water used for hydro generation might come at the expense of other users. Citizens in Minden, for example, noted the negative impacts of variable flow from an upstream power plant on the Gull River.

Although the practice is prohibited in most hydro licenses, we are aware that the current approach to marketing power encourages companies to accumulate water through the day so that electricity can be generated in the later afternoon or evening when prices are higher. We believe that hydro development on the waterway should be operated on a "run of river/no ponding" basis to ensure that use of the water for hydro generation does not come at the expense of other uses or of natural and cultural values. Severe financial penalties should be embedded in licenses to ensure compliance.

RECOMMENDATION 15

Support Canada's goal of increasing the supply of renewable energy by facilitating the development of additional hydro-generation capacity along the waterway with due regard for its important natural and cultural values.

We do not believe that Parks Canada should be in the power generation business. Its primary role to protect important heritage and ecological resources is in direct conflict with a role as promoter of hydro generation opportunities. We are convinced that Parks Canada's reliance on hydro generation fees as a source of much-needed revenue furthers that conflict. Furthermore, we believe that Parks Canada does not have the expertise or policy capacity to properly administer hydro-electric generation development and operation.

We have considered the governance options for hydro generation on the waterway and believe that there should be a separate hydro division created within the proposed water management agency. This division, as with the water management agency, should report to the federal Minister of Natural Resources, the key federal ministry responsible for renewable energy technologies. We suggest this reporting relationship to reduce the potential for regulatory conflict with the Federal Minister of Environment who is responsible for both the Parks Canada Agency and the *Canadian Environmental Assessment Act*.

RECOMMENDATION 16

Administer the allocation and management of hydro developments on the Trent-Severn Waterway by establishing a hydro-electric generation division of the independent water management agency reporting to the Federal Minister of Natural Resources.

Existing legislative enablers for federal engagement in waterpower are woefully inadequate. The *Dominion Water Power Act* and particularly its regulations urgently require modernization if they are to serve as a useful tool for managing the development of hydro generation capacity on federal waters. A modern Act and associated regulations should streamline application and licensing processes; reconcile requirements with those of other legislation such as the *Canadian Environmental Assessment Act*; and provide for harmonization with provincial legislation and processes.

Fees returnable to the Crown for the use of water, a public resource, should be a reasonable measure of the value of that resource to both citizens and developers. Currently, six of eighteen producers along the waterway, publicly-owned corporations among them, benefit from huge public expenditures to maintain a water management system, yet pay little or nothing for the use of the water.

We understand that this is, at least in part, the result of ancient lease and license arrangements. However, it is also a reflection of the absence of a clear and assertive federal policy toward water use fees, a situation dating from an era when the government was seeking to encourage the development of generating facilities in isolated areas. Not paying their fair share may be legal for these producers. It is clearly not in the public interest, however, and should be rectified.

RECOMMENDATION 17

Encourage development of new hydro generation facilities along the waterway by modernizing the *Dominion Water Power Act* and Regulations to provide for:

- (a) Enhanced efficiency in the new site allocation and development process;**
- (b) Consistency with other related legislation such as the *Canadian Environmental Assessment Act*; and,**
- (c) A license fee regime that recognizes public ownership of the water and the public investment in managing water supplies used for hydro generation.**

Hydro Revenues

As noted above, Parks Canada currently receives about \$2 million in revenue from hydro licensing annually. There is some potential for these revenues to increase as new and upgraded plants come on stream. We also see additional potential revenue through a review of the tenure and licensing arrangements for those hydro operations that currently do not pay any water rental fees to support operation of the system.

We have proposed that Parks Canada get out of the hydro business, and that revenue from hydro help support the operations of the water management agency. As such, this revenue would be lost to Parks Canada. However, it is important to stress that the revenue would not be lost to the federal government, and in fact that this arrangement should help Parks Canada's balance sheet.

While Parks Canada will continue to own the dams under our proposed scenario, the costs of their maintenance, repair, and recapitalisation should be funded through the water management agency. We would expect that details associated with this approach, including division of funds, would be worked out as an implementation detail should our recommendations in this regard be accepted.

RECOMMENDATION 18

Ensure hydro producers contribute appropriately toward maintenance and operation of the water management system by reviewing the tenure and licensing instruments of all existing hydro generation facilities within the watershed.

Chapter 8

Protecting, Presenting, and Enjoying Our Cultural Heritage

During our consultations, Chief Laurie Carr of the Hiawatha First Nation showed us some old photographs mounted on the wall along a corridor in her office. The photographs were of her people harvesting wild rice from Rice Lake. We were reminded with great sensitivity that the wild rice harvest was a traditional activity that started to disappear when dams were constructed in the 19th century, raising water levels in Rice Lake.

The long ago tradition of harvesting wild rice is part of the cultural heritage embodied in the waterway. This cultural heritage includes the buildings, the individual places and the specific events that tell the story of our past. But it also includes the wide range of human creativity and invention that has been influenced and inspired by the presence of water. It is the stories of people, the original people and the people who came more recently – how they came to be here, how they lived, how they sustained themselves and adapted to the land and how the land and water supported them. It is the stories of political evolution, of nation building and of the art, the music and the literature that emerged as an expression of people’s lives and their relationship to the land and the water.

Our identity within these two large watersheds of Ontario has been and continues to be influenced by the presence of and use of water. This is a story of national significance – a story that needs to be protected and shared with those who live in and visit this region, including our children.

It seems to us that there are real opportunities to improve performance in protecting the cultural heritage of the waterway and providing Canadians with a chance to learn from and enjoy it. In this chapter, we offer recommendations on how the waterway’s heritage can be protected; how Canadians can come to know and better understand that heritage; and finally, how Canadians’ enjoyment of that heritage can be enhanced.

A Broader Perspective on Historic Significance

Our cultural resources discussion paper describes how the waterway came to be designated as nationally significant. In 1924, the Chairman of the Historic Sites and Monuments Board of Canada observed that construction of the canals of Canada were “important events in the industrial history of Canada.”³¹ In 1929, the Trent and several other canals were designated as “nationally important.” By 1938, the first official plaque appeared at Bobcaygeon marking construction of the lock as the beginning of the improvement of the natural waterway connecting Lake Ontario with Georgian Bay.

In 1967, the Historic Sites and Monuments Board of Canada designated the Rideau Canal as nationally significant. The Trent-Severn and other Canadian historic canals were deemed only to be of “national interest” likely because their historic infrastructure was not as intact as that of the Rideau. This relegation to something of a second-class historic status was reinforced by the Board in 1973 when it observed that “the canals of Canada have already been sufficiently commemorated and that no further commemorations be considered.”³²

³¹ Taylor, J., cited in Carter-Edwards, Dennis. 2007. *Commemorating the Canal: the Trent Severn Waterway and the HSMBC*. Unpublished Parks Canada paper, p. 2.

³² HSMBC minutes. 1973. Cited in *Ibid.*, p. 9.

In 1979, the Peterborough Lift Lock was subsequently given “national architectural significance.” Later, the Canal Lake Arch Bridge and the Simcoe to Balsam Lake section of the waterway were formally designated. Somewhat later, that significance was revisited and it was determined that being “part of Canada’s national canal system” was what made the waterway nationally important.

It seems to us that the perspective of both the Historic Sites and Monuments Board and Parks Canada has reflected too narrow a view of what makes the waterway significant.

We submit that its national significance lies in the long tradition of use and adaptation of the water and the associated landscapes of these two watersheds and the continuing evidence of that use and adaptation. First Nations people lived and traveled along the lakes and rivers many thousands of years ago. Ancient fish weirs under the waters of Atherley Narrows and Lovesick Lake, the petroglyphs at Stoney Lake, the artefacts at Healey Falls and Burleigh and the Serpent Mounds burial site on the shores of Rice Lake are some of the earliest chapters in the long and rich history of the waterway.

Samuel de Champlain voyaged along much of the waterway in the early 17th century. The Jesuits and fur traders followed remaking the culture of the place.

The log chute of Hawk Lake, recently reconstructed by volunteers, recaptures the era of a lumbering industry that extended into the Haliburton and North Kawartha wilderness. Lumbering and milling reshaped the landscape with construction of dams to support the mills and the movement of logs toward Lake Ontario and Georgian Bay and thence to faraway markets. Half-pay soldiers from the Napoleonic Wars continued the transformation as they “felled and brushed and cleared and fought a war with stump and stone.”³³

The waterway story is also one of constitutional change and the evolution from Huronia to Upper Canada to Canada and Ontario. It is a realization of the skill and vision of Nicol Hugh Baird, principal surveyor, and R. B. Rogers, Liftlock engineer, as well as the many others who believed in the dream of a waterway, kept the idea alive, planned the route, and designed and built engineering monuments such as the two liftlocks and the marine railway at Big Chute.

The waterway has also been a source of inspiration to our artists and storytellers. Mazo de la Roche, Stephen Leacock, Catherine Parr Trail, Tanglefoot, the Leahy family, Ronnie Hawkins, Franklin Carmichael, Ethel Curry, Katherine Wallis, Elizabeth Wyn Wood and Arthur Shilling are just some of the creative individuals who have drawn their “muse” from the waterway and land along the waterway for their writing, music and art.

The national significance of the dams and locks throughout the watersheds also lies in the positive and not so positive impact their construction had on the people of the region and how they lived. A vast engineering work, whose origins in many communities preceded the opening of the waterway and extended far beyond it, provided power and supported their growth. It also changed the lives and traditions of First Nations and flooded portions of their lands. The waterway continues to be a living and evolving entity and its designation needs to embrace that evolution.

We submit that wise precedent for what we are suggesting has already been set in the designation of **Sahoyúé-Şehdacho National Historic Site of Canada** on the south shore of Great Bear Lake in the N.W.T. as a cultural landscape. The watersheds of the Trent and Severn are no less important a reflection of the lives of our people over many centuries. Together, they indeed form a ***national heritage region***.

³³ Tanglefoot. 1994. “Immigrant Tears,” *Saturday Night in Hardwood Lake*, Tanglefoot Media. For lyrics see <http://www.tanglefootmusic.com/lyrics/snhl.htm#immigrants>.

RECOMMENDATION 19

Properly recognize the waterway's historic importance by designating the entire Trent and Severn watersheds as a cultural landscape of national historic significance.

Protecting Historic Resources

During our public consultations, we were impressed by the passion and commitment shown by Canadians toward the waterway stories. Many view the waterway as a valuable national heritage institution. The Orillia Museum of Art and History described it as a “rich depository of Canadian heritage.”³⁴ We agree.

Parks Canada is the federal agency mandated to protect the legacy of the people, places and events that are of national significance and to provide opportunities for Canadians to enjoy them. The highly committed staff of Parks Canada are admired by many for their knowledge and helpfulness. Parks Canada is one of the most highly respected government institutions in Canada.

We believe that Parks Canada is the right agency to protect the waterway and tell its story. However, we feel that its performance in many areas needs to improve. We have some suggestions.

The last cultural resource inventory of the waterway was completed in 1994-95 – more than a decade ago. That inventory identifies hundreds of historic resources – some owned by Parks Canada and many not. The list includes an Orange Lodge built on the banks of the Otonabee River in 1852, a power plant at the Quaker Oats Company in Peterborough, a bridge tender's house on the Trent University campus, an abandoned swing bridge, dams built in Haliburton in the early part of the last century, a theatre in Lindsay, the remnants of an historic inn at Gamebridge and our favourite, a “berth for spare gates stored under water.”

Few, if any, of Parks Canada's national historic sites rival the Trent-Severn Waterway for the number, diversity and geographic distribution of the historic resources that make up its story. Recent surveys also identify underwater archaeological resources including First Nations' sites and more modern entities such as the Ragged Rapids power plant.

We feel that Parks Canada is not adequately equipped to understand, protect and share information about the historic resources associated with the waterway. The historic resources inventory is outdated and incomplete. Asset condition reports have been completed for some resources but largely from an engineering perspective without considering historic values.

A 2004/05 Commemorative Integrity Evaluation reviewed some Level 1 and Level 2³⁵ assets and found many of them to be in “fair” condition. It was observed that as many as 10 per cent of the assets are subject to wear and tear due to operational use within a marine environment. The evaluation also noted that “some...are in poor condition and need major repair to retain their historic value and operational use.”³⁶ The evaluation did not assess all Parks Canada owned assets nor did it evaluate privately owned assets related to primary waterway themes.

³⁴ Orillia Museum of Art and History. 8 August 2007. *Submission to the Panel on the Future of the Trent-Severn Waterway*.

³⁵ Parks Canada's Cultural Resource Management Policy assigns “levels” of historic importance to individual assets with Level 1 assets being accorded the highest historic importance rating.

³⁶ Parks Canada, Trent-Severn Waterway National Historic Site of Canada. 2005. *Commemorative Integrity Evaluation: 2004/5 Executive Summary*, p. 3.

It is widely accepted that protection of natural resources requires regular monitoring to ensure awareness of their condition, use and threats. Parks Canada has established monitoring programs to protect ecological integrity within national parks. We urge that a similar monitoring program be established to provide for the protection of cultural resources in Canada's national historic sites.

We believe that the presence of a senior cultural resource specialist at the waterway management table would provide the professional expertise and ongoing advocacy that cultural resource protection requires. Such a position would also serve as a focus for the development of partnerships with other cultural institutions and private owners to encourage the protection of historic resources not owned by Parks Canada.

This position must be supported by adequate technical expertise. Currently, such expertise is drawn from a Professional and Technical Service Centre located in Cornwall and Ottawa. The services provided by the centre are of high quality, particularly in the areas of conservation, historical research and underwater archaeology. The trend to co-locate service centre staff with parks and sites is a positive one that should be encouraged. Proximity to the actual historic resource builds knowledge and relationships that cannot be duplicated from a distance. Notwithstanding existence of the service centre, a "knowledgeable client" capacity at the local level is essential to maximizing its effectiveness.

In our meetings with First Nations, our attention was drawn to the very real threats to underwater archaeological sites, particularly those relating to First Nations heritage. There are probably thousands of such sites along the waterway, many of which were flooded by construction of dams over the last two centuries. First Nations people showed us examples of the artefacts that have been found through a largely informal diving program. These included 1,500-year old Algonquin pottery, a 9,000 year-old projectile point and remnants of fish weirs that are more than four millennia old.

It was suggested to us that development along the shore and in the water should not be permitted without a requirement for an underwater archaeological survey. It was also suggested that a more detailed inventory of underwater archaeological sites be prepared in partnership with local dive clubs and others.

We agree in principle with those recommendations although we understand that they come with significant logistical and cost implications. To fully assess the implications of these recommendations we suggest that Parks Canada and the Ontario Ministry of Culture, together with First Nations, develop a better understanding of the challenge and consider a strategy to ensure that key First Nations archaeological resources are protected.

Parks Canada is also custodian of an impressive and diverse collection of documentary material associated with the construction, maintenance and operation of the waterway. The collection includes plans and drawings for individual engineering works, lock stations and proposed routes including N.H. Baird's original coloured drawings of the first detailed canal survey in the 1830s. The numerous contracts for building and repairing works along the waterway are carefully detailed in the voluminous ledgers that form part of the archival collection.

Over the years, waterway workers and staff took hundreds of photographs of construction activity along the waterway. This collection of photographs constitutes a unique visual record of the evolution of the extensive features along the entire corridor. Other records such as decades of data on water levels throughout the watershed, realty transactions, routine correspondence and personal diaries provide valuable insight into particular aspects of the waterway. Collectively, this material constitutes a nationally significant cultural resource.

These documents were only recently moved to a separate storage area. The storage area does not meet accepted archival standards for protecting such unique documents. But at least it is an important start.

The collection is now being digitized to make the information more accessible for regular use, and able to be searched without the risk of damaging the original documents.

We believe that Parks Canada needs to take the next steps to properly protect the collection and to provide access for research. Parks Canada could construct and staff a new facility to house the collection. However, we suggest that a partnership with another archival organization such as the Peterborough Museum and Archives, the Trent University Archives or the Trent Valley Archives would be a better approach.

RECOMMENDATION 20

Significantly enhance Parks Canada's capacity to manage its historic resources throughout the waterway region by:

- (a) Implementing an ongoing cultural resource inventory and monitoring program;**
- (b) Enhancing cultural resource management capacity through additional managerial and technical staff;**
- (c) Considering a strategy to protect First Nations archaeological resources in concert with the Ontario Ministry of Culture and First Nations; and,**
- (d) Entering into a partnership with another organization to protect and provide access to the original archival material documenting the surveying and construction of the waterway.**

Enhancing Interpretation and Education

The Trent-Severn Waterway is geographically Canada's largest national historic site with an annual visitation that is higher than all but a few of the national parks and historic sites administered by Parks Canada. More than 50 million people live within a day's drive and more than 10 million people can visit one of its 44 lock stations with a drive of less than two hours.

During the summer of 2007, a total of 137,000 boats, each carrying several passengers, passed through locks. Parks Canada's statistics record 1.4 million land-based visitors to lock stations although we believe the actual number is much higher.

Statistics Canada recently reported that almost half the people in the Greater Toronto Area were born somewhere other than Canada. Forecasts suggest that the GTA population could increase by 3.5 million people in the next 25 years mostly through immigration. These new Canadians represent an extraordinary audience for the important stories the waterway can tell them about Canada.

There are more than a thousand schools in the region full of students who could also learn from the stories of the waterway.

Despite the existence of the largest and most diverse audience in the Parks Canada system, the education and interpretation program at the Trent-Severn Waterway was virtually eliminated during the 1990s. There are currently no curriculum-based education programs that tell students about the waterway. There are no personal interpretation programs delivered to waterway visitors. Most of the interpretative signage found at individual locks and at the Peterborough Lift Lock Visitor Centre is more than two decades old. We do acknowledge that new funding has been identified to upgrade the aging interpretive signage along the waterway. This is helpful but would be more so if the capacity existed to do the required planning and assessment of effectiveness on an ongoing basis.

We strongly feel that the lack of a comprehensive interpretation program represents a lost opportunity on the part of Parks Canada to deliver on its mandate and we urge the Agency take immediate and substantial steps to take advantage of a huge audience that would benefit from the stories. We have several suggestions in that regard.

First, an extraordinary number of cultural institutions – museums, galleries and historic places – are presently engaged in telling the stories of this heritage region. This is a ready-made network of protectors and storytellers with whom Parks Canada should work.

Second, we were repeatedly struck during our consultations by comments about the knowledge and helpfulness of staff at the locks and bridges. We also heard from front line staff themselves of their passion for telling the waterway stories. Yet their job descriptions contain little or no reference to communications and interpretation. These men and women should be regarded as the waterway’s storytellers. They should be recruited and paid for an interest and skill in communicating with the public and their job descriptions should reflect that responsibility. They should be provided with the training, information and support to enable them to do that job and they should be evaluated on their performance in that respect.

Finally, the national heritage region constitutes a major educational resource to students and researchers in the natural, cultural and social sciences. Outreach programs targeted at schools and ethno-cultural communities could carry both the waterway story and the stories of Canada to important audiences that Parks Canada is currently not reaching. Cooperative research and science opportunities could be developed through a network of university and college cooperative research and teaching units similar to that found in association with American national parks and historic sites. This concept has been considered for Canadian national parks and we suggest that the notion be broadened to embrace historic sites.

RECOMMENDATION 21

Significantly improve Parks Canada’s capacity to tell the waterway story to visitors, students and residents of the larger waterway region by:

- (a) Investing significant new resources in interpretation and communications staff;**
- (b) Developing and implementing an interpretive plan that reflects the stronger and broader vision that we have described;**
- (c) Revising the recruitment and training model for lock and bridge staff to enhance their ability to become Parks Canada’s front line storytellers;**
- (d) Implementing a curriculum-based schools extension program; and,**
- (e) Establishing a network of cooperative research and teaching units with educational institutions through the heritage region.**

Designating and Protecting Cultural, Natural and Scenic Landscapes

The concept of a heritage region includes valued landscapes that are essential to the Region’s heritage identity. Cultural landscapes convey significant historic themes and contribute to its historic character. The Peterborough Lift Lock, for example, would have much less impact were it surrounded by high-rise buildings. The City of Peterborough is conscious of the importance of this icon but that consciousness has not been translated into a formal protocol between the city and Parks Canada.

Scenic landscapes contribute immeasurably to the experience of waterway visitors by providing visual evidence of past natural conditions and of the evolution of land use, particularly agricultural. There are, for example, almost no

remaining views of the Canadian Shield landscape of the Severn section of the waterway that don't have cottages and resorts and other buildings along the shoreline. This is a great loss to the experience.

Natural landscapes along the waterway encompass some of the most productive habitats in Canada including significant fish sanctuaries and hundreds of wetlands. These natural areas are valued for their ecological importance, but also for their economic, research, aesthetic, religious and cultural contributions.

We are concerned about the loss of these cultural, scenic and natural landscapes. These landscapes are just as important to the history of the waterway as the original locks, bridges, dams and buildings. As they disappear, we're losing important visual representations of our past. We're also losing opportunities to build awareness and to provide sites for research and education.

In the 1971 *Yesterday, Today and Tomorrow* plan and in the 2000 Parks Canada Management Plan for the waterway, landscapes of importance have been identified. Virtually no concrete action, however, has ever been taken to ensure their protection. Parks Canada and municipalities along the waterway must work together to ensure that some of these land-scapes are preserved for the education and enjoyment of future generations.

RECOMMENDATION 22

Protect important cultural, scenic and natural landscapes throughout the waterway region by:

- (a) Updating the list of designated landscapes;**
- (b) Developing formal protocols with municipalities to provide for their protection; and,**
- (c) Encouraging municipalities to designate important landscapes within their jurisdictions.**

Improving the Visitor Experience

Canadians spend a lot of time dreaming about the water. The image of spending time on or beside the water distracts almost all of us when we find ourselves in our workplaces on those hot and humid summer days that characterize Ontario. We think how nice it would be to have a cottage or to visit a resort on a lake somewhere. We think about sitting in a boat fishing with our children and grandchildren or taking the family to the beach. We think about watching the boats go by, some from far away places, and wish we had a boat.

Recreational use of the waterway is a tangible expression of that dream. We have traditionally thought of boating and, in particular, use of the locks as the main recreational use of the waterway. However, we now understand its importance to a wide range of users and how it is an essential contributor to the social health of our communities.

The number and diversity of waterway users is extraordinary. Boaters travel the entire length of the system, pass through a single lock to visit friends on the next lake or go to town to shop or visit restaurants. The waterway is a destination for long distance boaters – the Great Loopers who travel the Canadian and the U. S. waterways. It provides boating opportunities to fishers, cottagers and residents who visit and live along its length and on the Haliburton lakes. Nobody knows how many people use the waterway in these ways, but the number likely reaches into the six-figure range. The National Geographic recently included the Trent-Severn among its “Journeys of a Lifetime: 500 of the World’s Greatest Trips.”³⁷

³⁷ Retrieved from the World Wide Web: <http://travel.canoe.ca/Travel/News/2007/12/05/4708987-cp.html>.

Non-boaters use the waterway to an even greater extent. More than 1.5 million people a year visit lock stations to fish, picnic and watch the boats. Provincial parks, conservation areas and municipal and county parks serve countless others – both waterway residents and visitors from the Greater Toronto Area. More than 16,000 campsites, mostly privately-owned, offer low cost access to the waterway.

During our consultations, we heard many suggestions on how service could be enhanced, particularly for boaters. Suggestions included showers and shore power, longer hours of service, more mooring around communities, reduced aquatic vegetation in the navigation channels, reduction or elimination of lockage fees to encourage increased use, improved labour relations, better customer service and enhanced promotional efforts.

We don't have sufficient information to evaluate most of these suggestions. However, we also don't believe that Parks Canada understands its products and customers well enough to adequately consider them either. As far as we were able to determine, Parks Canada has very little information on who its customers are now and who they might be in the future.

We suggest that a professional effort be made to understand, in detail, who waterway customers are, where they come from or might come from and what elements of the service and price might influence their decisions. Parks Canada needs, for example, to find out why most of the 40,000 resident boaters along the system are not using the locks. They also need to better understand the nature of what is probably their most rapidly growing market segment – family visits from GTA ethno-cultural communities.

Understanding the current market is a beginning. On an ongoing basis, Parks Canada needs to be more sophisticated in measuring actual use of and customer satisfaction with its services and facilities on the waterway. This requires a real-time, electronic user-monitoring system that allows managers to have a much better idea of when, where and by whom their services are being used. It also requires ongoing measurement of customer satisfaction and not just the periodic surveys that occur now.

This should not be Parks Canada's challenge alone as there are many potential partners with an interest in successfully accommodating visitor use of the waterway. The marine industry and businesses adjacent to the waterway derive huge benefit from both land and water-based use. Municipalities and the province are also important beneficiaries through tourism and associated tax revenues. We believe that these organizations should work together to better understand and respond to market demand and should contribute both financially and otherwise to these efforts.

RECOMMENDATION 23

Improve Parks Canada's ability to understand and respond to changing market demand and customer satisfaction through professional market analysis, customer tracking and satisfaction measurement in partnership with the Province and business organizations.

Aids to Navigation

We would like to comment on the controversial issue of removal of navigation aids. During 2006, Parks Canada removed approximately 400 of over 2,000 buoys and other aids to navigation along the waterway. The removal was part of a broader effort to balance the waterway budget and occurred after a review of the existing navigation aids in concert with the Canadian Coast Guard. The removal has evoked substantial public criticism. Many members of the public and some business operators along the waterway told us that this decision was ill-advised and put lives

and property at risk. Criticism has not been universal, however. More than one member of the Canadian Power and Sail Squadron advised us that the removal of aids was reasonable.

We have talked to Parks Canada, members of the public and representatives of the Coast Guard. We accept that the decisions made in the recent review of the aids to navigation were based on sound standards and criteria used elsewhere. But we wonder if the standards applied were designed to accommodate the kind of boaters that typically use the waterway. Coast Guard representatives also suggested informally that more public involvement would have improved the process.

We urge Parks Canada, the Coast Guard and users to think about whether or not the unique nature of the waterway and the inexperience and/or unfamiliarity of many of its users warrant a different standard. We think it probably does.

RECOMMENDATION 24

Ensure boater safety and enjoyment of the waterway by revisiting, in consultation with the Coast Guard and a panel of users, the standards used in the recent review of aids to navigation and consider replacement of some of the removed buoys where inexperienced boaters and those new to the waterway might be at risk.

Chapter 9

Improving the Condition of Waterway Infrastructure

The Trent-Severn Waterway is a remarkable feat of engineering. The locks and dams provide for the movement of boats and the control of water through 18,000 square kilometres of watershed. Nearly 1,500 engineering structures and pieces of major equipment are required to keep it operating. Gabions and shore walls keep constructed channels open. Nearly 100 buildings provide service to the public and house the administrative staff who oversee the waterway operation. Dozens of specialized pieces of equipment from mobile cranes to huge planers for making log gates are required to keep the system in reasonable repair. More than 1,500 aids to navigation mark channels and hazards.

During our travels along the waterway, we marvelled at the extent and diversity of the infrastructure – even more so when we recognized that most of the major engineering works were constructed between 1845 and 1920. It is a testament to Parks Canada staff that they have been able to keep the system operating with minimal disruption in service despite the age of the infrastructure.

We also saw that this infrastructure is generally not in good condition. We saw leaking dams, deteriorating concrete, walls slipping into the channel and many other examples of public assets in disrepair.

Many of the citizens and organizations with whom we spoke during our consultations acknowledged that the waterway infrastructure was not in good condition. They commented on the loss of water through locks and dams. They expressed fears of catastrophic collapse of dams and resulting property damage and personal injury. They reported on damage to their boats from deteriorating concrete. They felt that operational breakdowns would become more frequent in the future and would affect both their use of the waterway and the ability of the waterway to attract and retain new users.

Parks Canada has provided us with information that was helpful in allowing us to understand the challenge of deteriorating infrastructure. This included their long-term capital plan as well as a 2006-7 assessment of major maintenance and recapitalization requirements and funding shortfalls. At the express request of the Panel, Public Works and Government Services Canada assessed the condition of major civil engineering works along the waterway.

Aging and broken infrastructure is now affecting the quality of experience of waterway users and making it more difficult for Parks Canada staff to keep the system operating. It is reasonable to expect that breakdowns will occur with increasing frequency in the future with associated disruptions in service. It is also evident that achievement of an effective water conservation regime in the watersheds will be virtually impossible without repair or replacement of the many leaking dams.

Recent engineering assessments of major civil works along the system do not suggest a significant risk of catastrophic failure of any of the dams with associated major damage to property and potential personal injury. We would note however that huge investment in the dams is required to bring them into compliance with the intent of the Canadian Dam Safety Guidelines. Parks Canada has provided some funding for this work, however there is much left to do.

We would like to make a number of specific observations with respect to infrastructure.

- There is an annual shortfall of tens of million of dollars in investment to maintain and replace the waterway's built assets.
- Staff cuts in the maintenance organization of the waterway have exacerbated the deterioration of assets and led to a loss of unique staff knowledge and expertise from which it will be difficult to recover.
- Priorities for investment in asset management seem to be based solely on asset condition when other considerations such as historic value and environmental factors need to be accorded greater value. We believe, for example, that investment in water conservation measures should be a high priority in the allocation of capital funding.
- The waterway long-term capital plan makes little or no provision for modernization of non-historic assets to improve their efficiency and permit them to serve new markets more effectively.
- The Parks Canada budget cycle for capital expenditures and the allocation of supplementary funding does not permit adequate time for planning and the development of sound project management expertise.

Establishing Appropriate Funding Levels

Using “rule of thumb” guidelines provided by the federal Treasury Board, there is a theoretical, annual shortfall of approximately \$46 million dollars in investment to maintain and replace built assets on the waterway.

The Treasury Board's “Guide to the Management of Real Property” states:

*The informal rule of thumb is that a minimum of two per cent of what it would cost to rebuild an asset is what should be invested annually for its maintenance and repair ... an additional two per cent should be invested in capital projects to renew the life of the asset.*³⁸

Using Parks Canada's estimate of \$1.4 billion as the replacement value of assets on the waterway, the Treasury Board formula suggests that \$56 million should be spent annually on maintenance and replacement of assets.

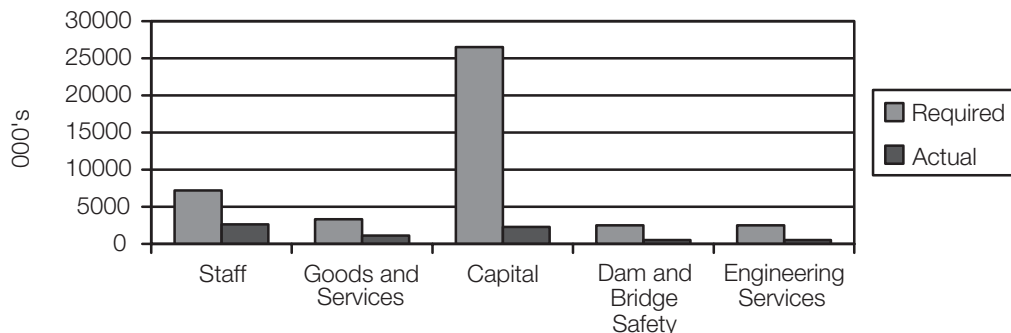
Currently, we estimate that the Parks Canada budget for engineering and maintenance on the waterway is \$5.7 million in operations and capital plus \$0.5 million in support from Public Works and Government Services Canada. To these figures we would add the notional amount of \$0.5 million in wages for lock operations staff who perform maintenance tasks making a total of \$6.7 million. In addition, Parks Canada has recently provided supplementary funding averaging \$3.5 million annually for emergency projects such as dam and lock repairs. This is not part of the fixed annual “A-Base” budget for the waterway, however, and is not guaranteed into the future.

By these estimates, the total current, annual expenditure for maintenance and asset replacement on the waterway is \$10.2 million, of which less than \$7 million is part of the fixed budget. This represents an annual investment of 0.73 per cent of the asset replacement value or, in starker terms, an apparent \$46 million annual shortfall when compared to the Treasury Board's guidelines.

³⁸ Canada, Treasury Board of Canada Secretariat, Section 3.2.2. “Integration with Strategic Planning,” *Guide to the Management of Real Property*, last modified 26 June 2007. Retrieved from the World Wide Web: http://www.tbs-sct.gc.ca/rpm-gbi/gmrp-ggbi/gmrp-ggbi_e.asp.

Parks Canada's own figures suggest the need for an additional annual budget allocation for the waterway of \$35.5 million based on assessment of long-term capital and staffing requirements. Figure 1 shows the distribution of these estimates.

Figure 1 – Annual Maintenance and Capital Shortfalls³⁹



How much money should the federal government actually be spending to maintain and replace the waterway's built assets? The Treasury Board guidelines suggest the investment ought to be \$56 million annually. Although the four per cent guideline is an admirable target, we know of no public or private sector organization that invests that percentage in its infrastructure on an ongoing basis.

The nature of the waterway's assets should also be considered in the analysis. The 2006-7 Condition Assessment Report provided by Public Works and Government Services Canada confirms that most of the assets are large concrete structures. These structures, once replaced or repaired to modern standards, have a life expectancy that far exceeds most modern buildings and require considerably less annual maintenance attention.

We believe that the annual target for investment in repairs, maintenance and replacement of waterway infrastructure should be in the order of two per cent of the asset replacement value. This translates into a budget augmentation of \$21 million per year.

This additional funding should be phased in over a five-year period to allow the organization to recruit the engineering, technical and other expertise required to use the funding effectively. The monies should be dedicated funding in the form of an A-Base budget increase. The current Parks Canada practice of allocating supplementary capital funds on a competitive basis within a two or three-year time horizon prevents reasonable planning and project management from occurring.

RECOMMENDATION 25

Ensure that waterway infrastructure is maintained, repaired and replaced according to appropriate standards by increasing the annual infrastructure maintenance, repair and replacement budget by \$21 million per year on a phased-in basis starting immediately.

³⁹ Source: Parks Canada.

Rebuilding a Unique Engineering and Maintenance Organization

There is nothing “off the shelf” about most of the infrastructure on the waterway. Designed, in some cases, more than 150 years ago, the construction techniques and parts are unique. Maintaining these historic assets requires unique expertise. Unfortunately, this expertise is now largely absent from the Parks Canada organization due to downsizing and attrition. The individuals who knew how to repair things are mostly gone and the resources have not been available to ensure that younger men and women are trained to take their place.

Similarly, there is insufficient engineering and technical capacity within Parks Canada to manage a major repair and restoration program. Some political representatives with whom we spoke suggested that the federal government could demonstrate positive commitment to the waterway by launching major repair or replacement projects shortly after this report is submitted. Even if major funding were made available in the short term, it could not be effectively used given the current lack of in-place project management expertise. That is why we favour phased budget increases with initial concentration on building staff capacity.

We would also suggest that consideration be given to reconstitution of the “capital” crews that were historically responsible for most of the major concrete and lock gate construction projects. We suggest this for two reasons. First, describing much of this kind of work for purposes of calling tenders is almost impossible given that the engineers often can’t tell what a contractor will discover when restoration work on an historic structure begins. Contractors are aware of this and usually respond by building a very high risk factor into their estimates or by billing large amounts for “extras.” Second, the capital crews have, in the past, been an outstanding training ground for future maintenance personnel. Re-established crews would become part of a much needed succession program.

RECOMMENDATION 26

Ensure that the effectiveness of investment in maintenance, repair and replacement of waterway built assets is maximized through development of a cadre of well-trained and experienced personnel with a strong succession and training program.

Priorities for Infrastructure Investment

Even with major budget increases, there will never be enough money to do everything that really ought to be done. Clearly, a system that prioritizes investment is required. We offer a prioritizing scheme that takes a balanced approach. It allows for consideration of not only urgent repairs to permit continued operation but also protection of important heritage assets; improves efficiency for conservation purposes; and improves service to future users and the regional population. We recognize that several of these priorities may need to be addressed concurrently. Our list of priorities is as follows.

1. Urgent repairs and replacement of assets essential to continued operation.
2. Repair and restore Level 1 and a selection of representative Level 2 assets with a very strong emphasis on historic authenticity.
3. Repair and modernize the network of dams to improve their ability to contribute to a strong conservation regime and also to allow them to be more efficiently operated to equitably serve a broader range of water needs.
4. Renovate lock stations including associated public use areas to permit them to better serve the land-based visitor.
5. Upgrade interpretive signage and displays at lock stations.

Chapter 10

Funding – Who Pays and How Much?

In previous chapters of this report, we have sought to identify and quantify, where possible, the value of the waterway to Canadians. We have noted that the waterway generates economic activity in the billions of dollars annually. We have discussed the importance of the water management regime to the survival of communities and the future of adequate supplies of water. We have touched on many other facets of the waterway that bring important value to Canadians.

We have also observed that there is much to be done to assure the future of the waterway and presented a range of recommendations that we think will contribute to its sustainability.

We would like now to turn our attention to the matter of money, for that is really the most fundamental challenge facing the waterway. It is evident to us that, in recent decades, the management of the waterway system has lost its way. This may have been caused in part by uncertainty of jurisdiction, mandate and role. However, it is also the result of inadequate funding of the waterway's operations and maintenance – for the last two generations, at least, if not throughout its entire history.

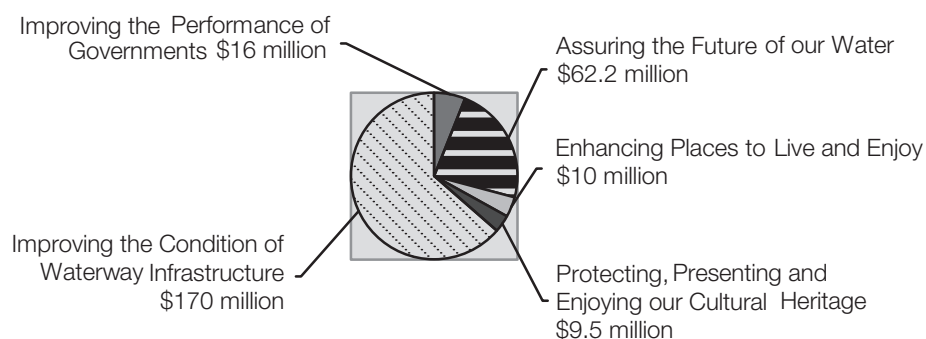
How Much Will it Cost?

Assuring the future of the waterway is going to cost money. In Figure 2, we provide our best estimates of the cost of our recommendations. The total price tag for what we suggest will likely approach \$270 million in 2008 dollars over the next 10 years. This is in addition to existing operating and capital budgets.

We have prepared estimates of the cost of each of the recommendations however it is important to understand that these estimates are largely “order of magnitude” in nature. It is anticipated that government, as they consider the recommendations, will cost them out in more detail.

Figure 2 shows where we expect the funding will be required. Notes on each of the categories follow the figure.

Figure 2 - Distribution of 10 Year Costs by Category



Improving the Performance of Governments – A description of the Trent-Severn Heritage Council may be found in Appendix B. We estimate that the Council would require annual contributions of \$1.6 million to support its operations – the majority of which would pay for professional staff to advance the goals of the Council. The role of the Council would be to encourage the setting and monitoring of common goals as well as improved communication and coordination among the many government agencies involved in the Heritage Region. We believe that most of the cost of the Council should be shared equally between the federal and provincial governments. It is suggested, however, that the more than fifty municipalities and First Nations that will benefit from the existence of the Council might also wish to contribute. We have assumed that a contribution of \$200,000 annually or 12 per cent of Council costs would be a reasonable expectation.

Assuring the Future of our Water – These funds – approximately \$1.5 million per year – would be used to support improved development permit administration, regulatory enforcement and coordination among planning agencies. In addition, we are suggesting investment of \$1 million annually in environmental monitoring of federal lands and waters in the waterway region. Finally, we have recommended that a fund in the order of \$250,000 per year be created to support community and citizen water quality stewardship.

We estimate that the Water Management Agency and the recommended Hydro Division will cost approximately \$2.1 million per year to operate. This will be more than offset by current hydro revenues that might be expected to significantly increase with new developments and improved efficiency. We are also suggesting a specific dam modernization program costing a total of \$24 million over a five-year period starting in 2010.

Enhancing Places to Live and Enjoy – Based on a review of the scope of the Canada-Ontario Rideau-Trent-Severn Study, we expect that preparation of a strategic plan will cost approximately \$600,000 over two years. We have also made provision in our estimates for a further \$10,000 per year to ensure that the plan is kept as current as possible. Preparation of the plan should be a partnership endeavour with each of the federal, provincial and municipal (aggregated) partners contributing equally to its completion.

We are suggesting that the federal government establish a \$10 million Trent-Severn Heritage Region Strategic Investment Fund to cost share community investment in improving the quality of their waterfronts. The fund would be accessible on an equal cost share basis over a six-year period. A provincial contribution to the fund would be helpful but has not been factored into our estimates.

Protecting, Presenting and Enjoying Our Cultural Heritage – We are recommending that the federal government augment Parks Canada's budget by \$315,000 annually to enhance its cultural resource management capacity for the important historic resources owned by Parks Canada throughout the Heritage Region. A further \$600,000 per year should be allocated to improved interpretation and education to better tell the stories of the waterway to a growing and diverse population.

Improving the Condition of Waterway Infrastructure – By far the biggest item in our cost estimates would be for maintenance, repair and replacement of the physical infrastructure. We are proposing an investment of \$170 million over a ten-year period for this purpose starting with an immediate budget increase of \$7.5 million that would rise to \$21 million by 2013.

Where Should the Money Come From?

The Trent-Severn Waterway is a federal asset and a national treasure and we believe that it must be funded, in large measure, by its owner – the federal government. Our examination of waterways elsewhere

in the world confirms that similar public assets are primarily funded through tax-based appropriations coming from their respective federal governments. The one exception is the New York State Canal Corporation that is supported by the state government.

We found no examples where a significant portion of the operating and maintenance costs come from generated revenues although, in many cases, certain aspects of operations are supported by fees for use of the canals and lands owned by canal corporations.

It is worth noting, as we have shown in Chapter 8, that all levels of government receive substantial benefit and revenue from the waterway in the form of boater fuel taxes, fishing permits, and municipal waterfront property taxes. It is also reasonable to assume that revenue is generated to each level of government through the economic activities made possible by the dams and locks throughout the watersheds. Many municipalities also benefit from reliable sources of municipal water that are assured as a result of the federally operated water management regime.

We believe that other levels of government have both a vested interest and a moral obligation to contribute to the sustainable future of the waterway. We suggest that financial contributions to new initiatives proposed in this report might reasonably be expected to come from the Province and from municipalities. Of the \$270 million total cost of our recommendations over ten years, we suggest that the federal government contribute approximately \$260 million with the Province contributing \$7.3 million and municipalities offering a further \$2.3 million. We believe, however, that the most important contribution other orders of government can make will not be financial, but rather in the form of their commitment to sustainable goals and their participation in a variety of partnerships that will be essential to assuring the waterway's future.

It is also our view that individuals who receive a specific private benefit from the waterway should pay their share. Some of our presenters suggested that Canada should emulate the recent New York State example by eliminating lockage fees. But access to the locks is an extraordinary benefit received by boaters – a benefit not available to most Canadians. We believe, in principle, that lock users should pay a reasonable fee for that benefit.

Several people told us that federal and provincial marina fuel taxes collected along the waterway should be dedicated to support its maintenance. One presenter suggested that member marinas of the Ontario Marine Operators Association along the system generate \$24 million annually in G.S.T. payments. We believe that dedicating a portion of the fuel tax derived from marine gas sales to maintaining the waterways – in a manner similar to the dedication of gas taxes to maintenance of public roadways and transit systems – is an idea worth considering.

Province-wide boat licensing was also suggested as a source of revenue. Boat registration is common in the United States, and funds there have been allocated to the improvement of recreational water bodies. In Michigan, for example, boat licensing revenues help support a state-owned network of marinas on the Great Lakes.

We suggest that the federal and provincial governments give some thought to a boat licensing regime. Snowmobile licensing has been introduced in Ontario in the last few years with the revenues dedicated to the maintenance of the trail network and safety education. A similar approach for boats could provide a source of funds for initiatives to improve the health of our navigable lakes and rivers. All citizens, including boaters, would benefit.

Appendix A

Summary of Recommendations

RECOMMENDATION 1

Provide a geographical framework that encourages communication and coordination by considering, through a community initiated and led process, the establishment of a Trent-Severn National Heritage Region.

RECOMMENDATION 2

Broadly coordinate the activities of government agencies and citizen organizations to achieve a set of common sustainability goals within the Heritage Region by collectively establishing a permanent Trent-Severn Heritage Region Council.

RECOMMENDATION 3

Reduce jurisdictional uncertainty by resolving outstanding jurisdictional issues relating to lakes Simcoe and Couchiching and the reservoir lakes through discussions between the Province and the Federal Government.

RECOMMENDATION 4

Work toward the goal of integrated water management by asserting Federal Government rights and responsibilities to control storage, flows and allocation of water from the two watersheds.

RECOMMENDATION 5

Enable Parks Canada to take “ownership” of the historic canals and improve management effectiveness by:

- (a) Transferring historic canal legislation to Parks Canada;
- (b) Incorporating a strong heritage mandate in new legislative instruments; and,
- (c) Modernizing and strengthening the current regulations governing the management of Canada’s historic canals.

RECOMMENDATION 6

Improve Parks Canada’s policies that guide the management of historic canals by:

- (a) Revising “Parks Canada Guiding Principles and Operational Policies” to incorporate a broader and more assertive vision that embraces all visitors and speaks more specifically to the important role of the “historic canals” with respect to natural and ecological values; and,
- (b) Ensuring that all staff are aware of and act as advocates of that broader policy vision.

RECOMMENDATION 7

Recognize and reflect federal stewardship obligations by expanding the Lake Simcoe water quality initiative to encompass the entire waterway and by directing investments toward supporting “on the ground” initiatives by communities and citizen organizations.

RECOMMENDATION 8

Significantly enhance capacity to protect and manage federal waterway lands in the public interest by:

- (a) Reviewing and amending the *Historic Canal Regulations* to provide a modern and effective tool to control occupancy and use by all users of the bed of the waterway;
- (b) Entering into agreements with municipalities and conservation authorities where appropriate to allow them to administer the permitting provisions of the regulations on a cost recovery basis or, alternatively, enhancing the permit administration capacity of Parks Canada on a cost recovery basis;
- (c) Considering a harmonized Canada/Ontario approach to the licensing of all private occupiers of Crown-owned water beds.
- (d) Increasing investment in monitoring and enforcement of the *Historic Canal Regulations* and other relevant legislation to a level similar to that of a national park of similar size and complexity;
- (e) Implementing an environmental monitoring program for lands under federal stewardship that is similar in concept and scope to that implemented for national parks; and,
- (f) Enhancing federal planning and development review capacity to permit work with municipalities and others earlier in their planning processes.

RECOMMENDATION 9

Make environmental information accessible and understandable for citizens by establishing a central repository under the aegis of the Trent-Severn Heritage Region Council to collect the results and methodologies of environmental monitoring along the waterway and ensuring they are communicated to citizens and decision-makers.

RECOMMENDATION 10

Improve ecological protection of shorelines by convening a planners' forum involving Parks Canada, the provincial government, conservation authorities and municipalities to explore opportunities to move toward a consistent, rigorous approach to managing waterfront development throughout the watersheds.

RECOMMENDATION 11

Improve management of water by creating and appropriately funding an independent water management agency, reporting to the federal Minister of Natural Resources, to assume responsibility for managing water storage, flows, allocation and use in the Trent and Severn watersheds.

RECOMMENDATION 12

Better assure adequate water supplies throughout the Trent-Severn Heritage Region in the future by:

- (a) Promoting an integrated approach to water management;
- (b) Fostering a strong water conservation ethic as part of the formal mandate of the water management authority; and,
- (c) Implementing a Canada/Ontario harmonized water pricing regime that helps to offset water management costs and encourages water conservation.

RECOMMENDATION 13

Provide for long-term public access and the protection of important natural, cultural, economic and social values associated with the Heritage Region's lakes and rivers by updating and modernizing the 1971 "Yesterday, Today and Tomorrow" plan through the collaboration of federal and provincial governments, municipalities, First Nations and the Heritage Region Council.

RECOMMENDATION 14

Encourage communities to invest in projects that make the most of the advantages they enjoy from their location on the water by:

- (a) Establishing a federal/provincial Trent-Severn Heritage Region Strategic Investment Fund; and,
- (b) Funding the Heritage Region Council to enable communities to access planning and design expertise for projects that contribute to broad waterway goals.

RECOMMENDATION 15

Support Canada's goal of increasing the supply of renewable energy by facilitating the development of additional hydro-generation capacity along the waterway with due regard for its important natural and cultural values.

RECOMMENDATION 16

Administer the allocation and management of hydro developments on the Trent-Severn Waterway by establishing a hydro-electric generation division of the independent water management agency reporting to the Federal Minister of Natural Resources.

RECOMMENDATION 17

Encourage development of new hydro generation facilities along the waterway by modernizing the *Dominion Water Power Act* and Regulations to provide for:

- (a) Enhanced efficiency in the new site allocation and development process;
- (b) Consistency with other related legislation such as the *Canadian Environmental Assessment Act*; and,
- (c) A license fee regime that recognizes public ownership of the water and the public investment in managing water supplies used for hydro generation.

RECOMMENDATION 18

Ensure hydro producers contribute appropriately toward maintenance and operation of the water management system by reviewing the tenure and licensing instruments of all existing hydro generation facilities within the watershed.

RECOMMENDATION 19

Properly recognize the waterway's historic importance by designating the entire Trent and Severn watersheds as a cultural landscape of national historic significance.

RECOMMENDATION 20

Significantly enhance Parks Canada's capacity to manage its historic resources throughout the waterway region by:

- (a) Implementing an ongoing cultural resource inventory and monitoring program;
- (b) Enhancing cultural resource management capacity through additional managerial and technical staff;
- (c) Considering a strategy to protect First Nations archaeological resources in concert with the Ontario Ministry of Culture and First Nations; and,
- (d) Entering into a partnership with another organization to protect and provide access to the original archival material documenting the surveying and construction of the waterway.

RECOMMENDATION 21

Significantly improve Parks Canada's capacity to tell the waterway story to visitors, students and residents of the larger waterway region by:

- (a) Investing significant new resources in interpretation and communications staff;
- (b) Developing and implementing an interpretive plan that reflects the stronger and broader vision that we have described;
- (c) Revising the recruitment and training model for lock and bridge staff to enhance their ability to become Parks Canada's front line storytellers;
- (d) Implementing a curriculum-based schools extension program; and,
- (e) Establishing a network of cooperative research and teaching units with educational institutions through the heritage region.

RECOMMENDATION 22

Protect important cultural, scenic and natural landscapes throughout the waterway region by:

- (a) Updating the list of designated landscapes;
- (b) Developing formal protocols with municipalities to provide for their protection; and,
- (c) Encouraging municipalities to designate areas within their jurisdictions.

RECOMMENDATION 23

Improve Parks Canada's ability to understand and respond to changing market demand and customer satisfaction through professional market analysis, customer tracking and satisfaction measurement in partnership with the Province and business organizations.

RECOMMENDATION 24

Ensure boater safety and enjoyment of the waterway by revisiting, in consultation with the Coast Guard and a panel of users, the standards used in the recent review of aids to navigation and consider replacement of some of the removed buoys where inexperienced boaters and those new to the waterway might be at risk.

RECOMMENDATION 25

Ensure that waterway infrastructure is maintained, repaired and replaced according to appropriate standards by increasing the annual infrastructure maintenance, repair and replacement budget by \$21 million per year on a phased-in basis starting immediately.

RECOMMENDATION 26

Ensure that the effectiveness of investment in maintenance, repair and replacement of waterway built assets is maximized through development of a cadre of well-trained and experienced personnel with a strong succession and training program.

Appendix B

Trent-Severn Heritage Region Council

A Model for Discussion

In Chapter 4, we recommend a Heritage Region Council to improve coordination and communication between governments and citizens. This appendix provides details on what that council would do and how it would work. We have been inspired in making this recommendation by the efforts of the Fraser Basin Council, the Hudson River Greenway, and the National Heritage corridors in the United States to advance sustainability built around the water.

What is the Heritage Region Council?

The Heritage Region Council is a coordinating body whose mission is to promote sustainability in the Trent-Severn watersheds. It would be made up primarily of governments in the watersheds along with key non-profit and private sector interests. It would be established and co-funded by the federal and provincial governments, augmented by municipal and other contributions.

The council would have no regulatory authority, but would advocate coordination and cooperation among those that do, in the areas of governance, information, research, and specific programs. It would work by informing, educating, facilitating, and engaging governments and citizens.

Topics of Interest to the Heritage Region Council

A variety of characteristics of the watersheds that affect water in one way or another would be of interest to the council. They include, but are not limited to:

- Lake health and planning (e.g., water quality, shoreline development and management, aquatic habitat)
- Water conservation
- Cultural resources and scenic quality
- Recreational access to and use of the water
- Natural areas (e.g., wetlands, habitat and corridors, regional ecological links)
- Coordination of water-based economic opportunities
- Natural resource management (e.g., farming, forestry, resource extraction)

How the Council Would be Governed

We propose that council members be drawn from federal and provincial governments, conservation authorities, local governments, First Nations and citizens-at-large. The latter category would represent the public good, and could be drawn from key communities of interest such as waterfront residents, boaters/marina operators, fishers, recreationists, environmentalists, cultural heritage proponents and economic development agency representatives. This would likely be a large council. However, other waterway regions we investigated have councils of similar or larger size and they seem to function well.

Heritage Region Council Activities

The council would focus on the following:

- Understanding and communicating government agency roles and responsibilities
- Promoting arrangements to simplify governance (e.g., permitting)
- Setting sustainability goals and priorities
- Developing and housing a “Heritage Region Sustainability Charter”
- Monitoring and reporting on progress toward charter goals
- Facilitating communication between governments and with citizens
- Housing performance data and encouraging standardized data collection by others
- Providing advice and technical assistance to local organizations

The council would engage in these activities in various ways. It would bring communities of interest together by way of meetings, workshops and forums; publish periodic “State of the Heritage Region” reports and occasional research papers; and recognize and encourage community efforts through, for example, an annual awards program.

Council Secretariat

A 10 – 12 member secretariat would support the council’s activities in administration, stakeholder engagement, communications, land use planning, community economic development, recreation planning, natural resources management, design/landscape architecture, geographic information systems and data management.

Regional Coordination

The activities of others in the watershed may generate the need for agreements with the council. Examples might include:

- Sharing of data from conservation authorities and Ontario government agencies
- Coordinating regional ecological efforts that touch on the Heritage Region, such as biosphere reserves (Thousand Islands Frontenac Arch and Georgian Bay Littoral), and land trust activity (e.g., The Land Between, Oak Ridges Moraine, and Rice Lake Plains)
- Coordinating with the proposed water management agency (technical liaison and support)

Accountability

The Heritage Region Council would be accountable to its member organizations. In turn, the council would encourage accountability among Heritage Region governments and citizens in two ways. It would advocate and be the guardian of a “Heritage Region Sustainability Charter” which it would encourage all governments in the Heritage Region and other partners to sign.⁴⁰ It would report on progress made in Heritage Region sustainability by way of annual reports. And it would host symposia and publish information on the overall state of the Heritage Region.

⁴⁰ The Fraser Basin Council’s charter of sustainability provides an example of a community-based, region-wide approach. See http://www.fraserbasin.bc.ca/about_us/documents/FBCcharter.pdf.

Funding

Funding should be shared equally between the federal and provincial governments. Local governments would be encouraged to contribute. Additional program-specific funding may be sought for special initiatives.

Summary

The Heritage Region Council would have a broad mandate with a small staff and budget; it would have coordinating, technical and advisory capacity but no land ownership or regulatory responsibilities; and finally it would rely on common goals, partnerships, and leveraged funding via existing organizations to advance its work.

Appendix C

Independent Water Management Agency

A Model for Discussion

What is the Water Management Agency?

In Chapter 5, we recommend an independent agency to manage water flows, levels, and allocation in the Trent-Severn watersheds. It would assume many of the responsibilities currently fragmented among different agencies. It would also complement the work of conservation authorities in watershed and water quality management.

A federal/provincial agreement would create the agency. The agreement would clearly describe its mandate, jurisdiction, guiding principles and structure.⁴¹ The agency would be accountable to the federal Minister of Natural Resources.

The agency would have exclusive authority over water use, allocation, and flow management in the two watersheds. It would contract with Parks Canada to maintain and recapitalize Parks Canada's water management infrastructure. A division would manage existing and new hydro agreements where the federal government owns the right of use.

Infrastructure maintenance and improvements funding would remain with the federal government. Revenue from water use would support day-to-day operations. As important beneficiaries, the province and others including the hydro industry should make in-kind contributions.

Guiding Principles of the Agency

The following principles should be enshrined in the agency's mandate in the enabling federal/provincial agreement:

- Accountable, open governance, supported by a clear and widely-shared watershed vision;
- A "precautionary approach" built on water conservation and integrated water management that form the fundamental principles by which water is managed;
- Continual improvement in predictability and responsiveness, in system modelling, monitoring, system adjustments, and communications;
- Open, continuing, and timely engagement of and provision of information to citizens and business; and,
- Adequate resources to manage and maintain the system as a matter of public safety, economic security, and environmental health.

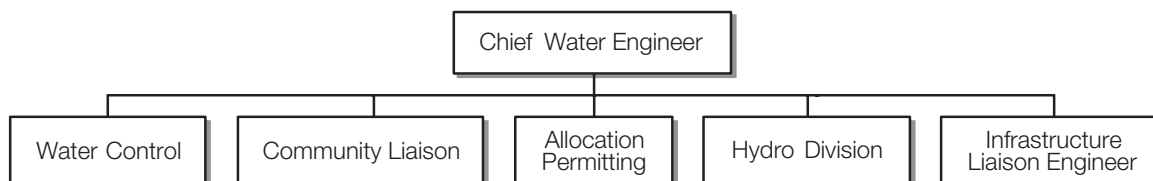
Governance

A five to seven member board of water management representatives from Canada and Ontario would govern the agency. This board would establish and maintain operating policies and water use priorities. Board meetings would be held on a regular basis and be open to the public. A stakeholder advisory committee would provide formal input to the board. It would represent First Nations, select municipalities, and conservation authorities, as well as citizens with an interest in water management relating to the environment, shoreline residence, tourism, waterpower, recreational fishing, boating and resource extraction.

⁴¹ The Canada-Ontario-Quebec agreement establishing the Ottawa River Regulation Planning Board provides a useful model as a starting point. See <http://www.ottawariver.ca/emain.htm>.

Agency Organization

We have based our assumptions for the Agency organization on a review of comparable water management agencies, recommendations from the Ontario Waterpower Association and consultations with Parks Canada staff. To these, we have added provision for the permitting role now carried out by the Ontario Ministry of Environment.



We have attempted some general costing of this organization, however it is notional. We assume that some of the positions currently exist and will be transferred to the Agency after discussion with their home organization. The total number of staff would likely be 10 – 15.

Role of the Hydro Division

The hydro division would assume roles now conducted by Parks Canada. It would:

- Establish a licensing regime for new hydro development that reflects a rate for water usage and embodies a “run-of-river” philosophy
- Pursue the development of new opportunities
- Ensure compliance with federal environmental assessment legislation and policies, with a particular emphasis on cultural and natural heritage
- Monitor and ensure compliance with license requirements
- Renegotiate existing licenses to bring all plants under one pricing regime

Intergovernmental Coordination

An important ingredient of success will be coordination and partnerships with others, defined mainly through formal agreements. Examples include:

- Data collection and information sharing and access to expertise
- Protocols to protect fish habitat with regulators and major water users
- Second party dam operation agreements (e.g., Parks Canada)
- Flood control and source water protection protocols (conservation authorities)
- Water use fee regimes and transfer of water allocation permitting from Ontario to Canada

Funding

Infrastructure funding needs are covered in Chapter 10. The federal government should fund repair, maintenance, and technology upgrades. We also believe that day-to-day operations should be funded from hydro and water use revenues through a water pricing model that promotes conservation and captures all water users – surface and groundwater.

Appendix D

Panel Biographies

DOUGLAS DOWNEY (CHAIR)

Douglas Downey is a partner in a six lawyer, central Ontario law firm. As a Certified Specialist in Real Estate Law by the Law Society of Upper Canada, he has completed transactions of great complexity. He lectures for Laurentian University at Georgian College; has taught the Real Estate Bar Admission Course for the Law Society of Upper Canada; and occasionally lectures for the Schulich School of Medicine at the University of Western Ontario on law-related topics. Mr. Downey has served six years as Councillor with the City of Orillia and three years on the Board of Directors of Ontario Small Urban Municipalities. He continues to stay active in the community as Past-President of the Kiwanis Club of Orillia and Vice-President of the Orillia and District Chamber of Commerce. He was named Orillia Business Leader of the Year in 2006 and was awarded the Sam Delmar Award by the Simcoe County Law Association in 2007. Mr. Downey obtained his Honours Bachelor of Arts degree from Wilfrid Laurier University; Master of Arts, specializing in Judicial Administration, from Brock University; and a Law Degree from Dalhousie University at Halifax. He is currently completing a Master of Laws in Municipal and Development Law through Osgoode Hall Law School.

SANDRA BARRETT

Sandra Barrett has been involved in public life at many levels, and was elected Councillor of Ward Six for the newly amalgamated City of Kawartha Lakes in 2000. She is past-president of the Fenelon Falls District Chamber of Commerce and has chaired the Village Improvement Committee for the past six years. Chair of the Trent Severn Advisory Committee since 2004, Sandra Barrett was also chair of the Executive of the Board of Governors of Sir Sanford Fleming College, a member of the Board of Health and of the District Health Council. She has been involved in a number of strategic planning initiatives and is an advocate for the preservation and protection of cultural heritage resources.

GREGORY BISHOP

Gregory Bishop is a land use consultant with extensive experience in all aspects of planning including severances, plans of subdivision, variances, rezoning, and official plan amendments. He was a member of the Ontario Municipal Board from 2000–2004, and served as Vice-Chair in 2003 and 2004. Mr. Bishop taught surveying, Autocad and the use of global positioning systems at Sir Sandford Fleming College in Lindsay, and has been a registered Professional Engineer since 1982 and an Ontario Land Surveyor since 1986. A member of the Haliburton County Environmental and Planning Committee, he has a Bachelor of Science Degree, in the Survey Engineer Program, from the University of New Brunswick.

DEAN PETERS

Dean Peters developed extensive project management, team building and analytical skills during a career with Ontario Hydro/Ontario Power Generation and several machinery manufacturers. Since retirement, he has focused on community service and has been involved in establishing a residential hospice, as well as a multi-use recreation facility, in the Municipality of Trent Hills. Now Deputy Mayor of the Municipality of Trent Hills, he is a member of the Board of Directors of the Lower Trent Conservation Authority and several other committees. A graduate of the University of Saskatchewan in Mechanical Engineering, Mr. Peters is a member of the Professional Engineers of Ontario.

DOUG ROLLINS

Doug Rollins was a community member of the Ontario Parole and Earned Release Board until his four-year term was completed on April 2007 and, until Jack Parrott's death in 2005, managed (along with Jack Parrott) a considerable portfolio of property for the John M. Parrott Foundation. A member of Provincial Parliament representing the riding of Quinte from 1995 to 1999, Mr. Rollins served as the vice-chair of the Standing Committee on Administration of Justice and was the chair of the Standing Committee on Finance. He was educated at the Ontario Agricultural College and the University of Guelph and worked as a farmer after graduation, purchasing a local gas station in 1974. Mr. Rollins is chair of the Quinte Exhibition and Raceway, the Belleville Waterfront Festival and Victoria Park.

PROFESSOR THOMAS H. B. SYMONS

Professor Symons has had a distinguished career as a writer, teacher and administrator in the fields of Canadian Studies, contemporary intellectual and cultural issues and international academic and cultural relations. He is a Companion of the Order of Canada and a member of the Order of Ontario. The Founding President of Trent University, he was educated at the University of Toronto and at Oxford and Harvard universities. A Fellow of the Royal Society of Canada and of the Royal Geographic Society of Britain, he has been awarded honorary degrees by 14 Canadian universities and colleges. Professor Symons has served as Chairman of the Commission on Canadian Studies, Chairman of the Commission on French Language Education in Ontario, Chairman of the Human Rights Commission, Chairman of the Advisory Committee on the National Atlas of Canada and Chair of the National Library. Chair of the Historic Sites and Monuments Board of Canada for 10 years, he is now chair of the Peterborough-Lakefield Police Commission and a Director of the Ontario Heritage Trust and of the Fathers of Confederation Buildings Trust. He has served as Chair of the Universities of the Commonwealth and also as Chair of the International Board of United World Colleges.

Appendix E

Presenter List

Alan Appleby
Alderville First Nation
Architectural Conservancy of Ontario – Edward Smith
Batawa Development Corporation – Heather Candler
Betsy McGregor
Bill Dunlop
Bob Pennock
Brett Moore
Bruce Lister
Bryton Hill
Buckhorn District Tourist Association – Louis Melizan
Buckhorn Yacht Harbour Ltd. and Kawartha Prop
Repair – John Fuderer
Cameron Lake South Shore Cottagers Association
– Dr. Stuart Kinsinger
Canadian Boaters Alliance – Ernie Williams
Carol Kelly
Caroline Tennant
Centre Point Landing Ltd, Tom Bath
Charles Pitcher
City of Kawartha Lakes – Mayor Ric McGee
and Jane Lunn
City of Peterborough – Mayor Paul Ayotte
and Malcolm Hunt
Clear/Stoney/White Lake Plan – Robert Little
Coalition for Equitable Water Flows –
Bonnie Fleischaker
Community of Loon Lake Haliburton County –
Stephen Foster
Cottage Road Owners Association – Janet Duval
County of Haliburton – Warden Murray Fearrey
County of Peterborough – Bryan Weir
Curve Lake First Nation
Donald Mackay, Ph.D.
Don Money
Doug Smith
Douglas Crowe
Dr. Ian Rowe
Dr. Richard Wellesley Staples
Dr. Stuart Kinsinger
Ed Hammer
Eels Lake Cottage Association – Sandy Kilgour
Eels Lake Cottages and Marina – Carolyn Amyotte
and Jeff Ball
Eileen Mennell
Environment Haliburton! – Mieke Foster
Federation of Ontario Cottagers Association –
Terry Rees
Fenelon Falls and District Chamber of Commerce,
Bill Goulding, President
Frank Kehoe
Frank Kinzinger
Friends of the Trail – Donna Endicott
Gail Jackson
George Barrett
Georgian Bay Township – Mayor Jim Walden
Greater Peterborough Economic Development
Corporation – Andy Mitchell
Haliburton County Development Corporation –
Andy Campbell
Haliburton Highlands Chamber of Commerce –
Eric Christianson
Happy Days Houseboats – Jill Quast
Harwood Station Heritage Museum –
Kevin Ambeault
Harwood Waterfront Committee – Pauline Browse
Heather Brooks Hill and Jeremy Carver
Hiawatha First Nation
Homestead Campground – John Doomerick
Jim Waddell and Dave Pearce

Joanne Bohneck
John Kelly
Kawartha Heritage Conservancy – Ian Attridge
Kawartha Lake Stewards – Kathleen MacKenzie
Kawartha Lakes Chamber of Commerce –
Scott Davidson
Kawartha Nishnawbe
Kawartha Protect Our Water – Murray Hynes
Keith Hodgson
Ken Brown
Kennisis Lake Cottage Owners' Association –
Dr. Chris Riddle
Lake Simcoe Region Conservation Authority –
Gayle Wood
Lakefield Heritage Research – Gord Young
Lindsay Bassmasters – Jason Barnucz
Lock 42 and Area Rate Payers Association,
Doug Sinclair
Lovesick Lake Association – Ann Ambler
Lower Trent Region Conservation Authority –
Jim Kelleher
Marlene White
Max LeMarchant
Mnjikaning First Nation
Mnjikaning Fish Fence Circle – Janet Turner
Mountain Lake Property Owners – Don Benson
Municipality of Trent Hills – Mayor Hector MacMillan,
Michael Rutter and Brenda Otto
Nick Alosinac
Northern Pigeon Lake Ratepayers Association –
Ian Furlong
North Seymour Ratepayers Association –
Don Knowles
Ontario Federation of Anglers and Hunters –
Jeremy Holden and Francine MacDonald
Ontario Marine Operators Association
Ontario Private Campground Association
Ontario Waterpower Association
Orillia District Chamber of Commerce, Operators of
the Port of Orillia – Susan Lang, Harbour Master

Orillia Museum of Art and History – Sim Salata
Otonabee Region Conservation Authority –
Dick Hunter
Percy Lake Ratepayers' Association – Gary Roberts
and Gary Portway
Peter Brogden
Peter MacNaughton
Peterborough Historic Society – Michael Townsend
Quinte West Eco-Centre – Gerrit DeBruyn
Rainbow Cottages – Tony Kenny
Ramara Township – Mayor Bill Duffy
RCAF Trenton Squadron: Canadian Power &
Sail Squadrons, John Fear
Resorts Ontario
Rice Lake Tourist Association – Greg Gurd
Richard and Cindy von Hagen
Roger Jones, Ph.D.
Ross Hawe
Scugog Lake Stewards – Dr. Sandy Beaton
Severn River Association of Property Owners –
Kay Soares
Shadow Lake Association – Ian Forrester
Sheldon Alspector
Soyer's Lake Ratepayers' Association –
Dave Pengelly and Dennis Good
Stephen Gibson
Sustainable Ecological Alternative Living –
Maicey Benjamin
Ted Spence
Township of Galway, Cavendish and Harvey,
Councillor Peter Franzen
Township of Georgian Bay – Mayor Jim Walden
Township of Minden Hills – Bill Obee
Township of Scugog – Bev Hendry
Township of Ramara – Mayor Bill Duffy
Township of Smith, Harvey, Cavendish –
Councillor Peter Franzen
Township of Smith-Ennismore-Lakefield –
Reeve Ron Millen
Trent Conservation Coalition, Jim Kelleher

Trent Hills and District Chamber of Commerce –
Nancy Allanson

Trent Hills/Hastings Marina – Roger Warren

Trent Talbot River Property Owners' Association –
Jane Gill

Union of Canadian Transportation Employees –
Local 00056, Darlene Brown

W.J. Dunlop

Warren Clark, Commander Georgian-Trent District,
Canadian Power and Sail Squadron

Whispering Pines Cottages on Rice Lake,
Roger Fayle

Yvonne Turgeon

Appendix F

Written Submissions

Adrian Kardash
Andrew and Bonnie Beaudoin
Andy Gray
Ann Jaeger
Anne Morawetz
Anne Washington
Anstruther Lake Cottagers' Association – Jim Whelan
Barbara DeLorey
Batawa
Betty and Tony's B&B On-the-Water – Tony Bridgens
Bill and Glenda Wakely
Bill Westcott
Black Duck Bay Road Owners Association, Janet Duval
Bob Jamieson
Brian Henry
Bruce Lister and Goodith Heeney
Burritys Rapids Community Association
Cameron Lake South Shore Cottagers Association
Carol Kelly
Catchacoma Cottagers' Association, Cavendish Community Ratepayers' Association, Beaver-Cavendish-Bottle-McGuinness Cottage Owners' Organization
Catherine Puddister
Charles Mills, Brian Harding, Peter Reesor, Les Skultety, Marie Skultety
City of Barrie – Ralph E. Scheunemann
City of Kawartha Lakes – Jane Lunn
Coalition for Equitable Water Flow
Community Futures Development Corporation
Community of Loon Lake Haliburton County – Stephen Foster
Concession 17 Pigeon Lake Cottagers – Sheila Gordon-Dillane
Corporation of the Township of Hamilton – Betty McIntosh
Couchiching Conservancy – Ron Reid
Crystal Lake Cottagers' Association – Bill Bradley
Dave Fellowes
David Barber
David Bonham
David Parsons
Department of Fisheries and Oceans
District of Muskoka – Gord Adams
Don Long, Marie and Paul Rennick
Don Richardson
Donald Mackay, Ph.D.
Dr. Dan Robertson and Anitta Robertson
Dr. Eric Schiller
Dr Richard Wellesley Staples
Eastern Ontario CFDC Network Ltd – Dan Borowec
Eileen Mennell
Emrys Edwards
Federation of Ontario Cottagers' Associations – Terry Rees
Fisheries Management Zone #17 Advisory Council – David Swales M.D.
Frank Farago
Fred and Ethel Clark
Friends of Harwood Waterfront – Pauline Browes
Friends of the Trail, Donna Endicott
G. Douglas Keary
George Godwin
Georgian Bay Township Historical Society – Ron and Cindee Breckbill
Georgian-Trent District Canadian Power Squadron

Gernot and Beverly Gleibs
Gordon A. Cochrane
Gordon Fraser
Greater Peterborough Area Economic Development Corporation – Andy Mitchell
Greater Peterborough Chamber of Commerce – Stuart Harrison
Gwen and Klaus Edelman
Haliburton County Development Corporation – Andy Campbell
Haliburton Highlands Chamber of Commerce – Eric Christensen
Haliburton Lake Cottage Association – Dianne Kelly
Harold and Margaret McManus
Heather and James Smart
Ian Rowe, Ph.D.
Isobel Hie
Jack and Frieda Robinson
Jack's Lake Association – Hugh Spence
Jenny Crawford
Jim and Mary Lou Fox
Jim Dagleish
John and Brenda Smith
John and Freda Robinson
John and Judy Skinner
John McFeeters
Josie Pascoe
Kathleen Shepherd
Kawartha Lakes Chamber of Commerce
Kawartha Lakes Community Futures Development Corporation – Andrew Wallen
Kawartha Protect Our Water – Murray Hynes
Kawartha Region Arts and Heritage Society
Kenton Stewart
Kennisis Lake Cottage Owners' Association – Dr. Chris Riddle
Kevin Walters
Konrad Brenner
Koshlong Lake Association

Lake Edge Cottages – Peter and Pam Fischer
Lake Ontario Waterfront Trail & The Waterfront Regeneration Trust – Pauline Browes
Lakeview Estates Cottage Owners Association – Chris Gaetan
Linda Robataille and Craig Smith
Lindsay and District Chamber of Commerce – Evelyn Chambers
Little Glamour Lake Cottagers' Association – Roger Young
Lock 26 Cottage Association – Rick Boyle
Lower Trent Region Conservation Authority – Jim Kelleher
Lynn and Gord Dolphin
Marc Marsh and Vicky Weir-Marsh
Marina Management Board of the Municipality of Trent Hills, Hastings Village Marina – Roger Warren
Marina McLennan
Mary Whitsitt
Matt McDonald
Michael LeBlanc
Michael Woolfenden
Minden Riverwalk Committee – Roy Haig
Miskwabi Area Cottagers' Association – Larry Holden
Mnjikaning Fish Fence Circle – Mary Lou Kirby
Mountain Lake Property Owners' Association – Don Benson
Nenad Jeremic
Ontario Private Campground Association – Beth Potter
Ontario Waterpower Association
Orillia District Chamber of Commerce, Operators of the Port of Orillia – Susan Lang, Harbour Master
Orillia Museum of Art and History – Sim Salata
Otonabee Region Conservation Authority – Richard Hunter
Paris Marine – Bill Paris
Parks Canada
Paul Frechette

Paul Russell
Percy Lake Ratepayers' Association – Gary Roberts
and Gary Portway
Peter C. MacNaughton
Peter Dance
Peter Newman
Peter Savage
Greater Peterborough Chamber of Commerce
Peterborough Field Naturalists – John Bottomley
Peterborough Historical Society –
Michael Townsend
R.A. Burns
Reach Harbour – Brian and Jane McKimmie
Richard and Glenda Knoblach
Roger Jones, Ph.D.
Ron and Karen Thompson
Ron and Linda Benson
Ron Taylor
Scugog Lake Stewards
Severn Shores Bed & Breakfast – Pat and
Bob Durrant
Shadow Lakes Association – Ian Forster

Sims Latham Associates – Paul Rexe
South Mariposa Lakefront Ratepayers – Nancy Lee
Susan J. Dolbey
Tim Tanner and Donna Eden
Township of Minden Hills – Bill Obee,
Councillor Ward 1
Township of Muskoka Lakes – Mayor Susan Pryke
Township of Ramara – Mayor Bill Duffy,
Richard P. Bates
Township of Smith-Ennismore-Lakefield –
Angela Chittick
Trent Hills & District Chamber of Commerce,
Nancy Allanson
Trent Talbot River Property Owners Association –
Jane Gill
Trent Valley Archives – Elwood H. Jones
Vicki McCulloch, Joan McCulloch, Janis Darrah
W.J. Dunlop
W.N. Duncan
Wally McCourt
Wendy Asselstine
William and Alberta Berry

Appendix G

Panel Terms of Reference

Introduction/Background

Since 1833, the dream and reality of a navigable Waterway from Lake Ontario to Georgian Bay has been part of the fabric of central Ontario. The Trent-Severn Waterway was designated a national historic site as early as 1929, and today is appreciated by more than 130,000 boaters each year and more than a million land visitors that visit its 44 lock stations. Hundreds of thousands of people live along the Waterway's shorelines in cities, towns and villages as well as cottage and rural residential developments. Eighteen generating stations produce green energy and more than 35 species at risk live along its length.

The Trent-Severn Waterway National Historic Site of Canada is managed by Parks Canada. The existing Trent-Severn Waterway Management Plan was completed in 2000. Parks Canada must now review the current management plan.

The challenges in implementing the current management plan have led to the realization that the Trent-Severn Waterway is at a crossroads. Infrastructure deterioration, changing visitor patterns, the Waterway's presence within a rapidly-growing Greater Golden Horseshoe, competing demands for water, and the quality of the Waterway's natural environment all offer challenges beyond the capacity of a single agency to manage.

These challenges have been recognized as impeding the potential associated with the Waterway. In the spring 2006, MP Bruce Stanton introduced the following motion (M-161) in the House of Commons:

That, in the opinion of the House, the government should consider the advisability of evaluating the future of the historic Trent-Severn Waterway, one of Parks Canada's National Historic Sites, and its potential to become: (a) a premier recreational asset; (b) a world-class destination for recreational boaters; (c) a greater source of clean, renewable electrical power; (d) a facilitator of economic opportunity and renewal in the communities along its 386 km length; and (e) a model of environmental sustainability.

The House passed this motion unanimously on October 18, 2006.

The challenges and opportunities associated with maintaining and enhancing the Waterway as a sustainable contributor to Canada and Central Ontario has led the federal Minister of the Environment to endorse the creation of an independent panel to report on significant questions and opportunities associated with the Waterway's future.

The Challenge

The Trent-Severn Waterway is a nationally significant historic, cultural, ecological and recreational corridor with the potential to serve Canadians more broadly and more effectively than is the present case. The economic and social environment within which the Waterway operates has changed dramatically however the mandate and associated tools for its management have not.

Providing for navigation was the Waterway's original mandate. As a National Historic Site, the protection and presentation of nationally-significant cultural resources is also an essential obligation. Beyond those goals, the modern Waterway must, in a sustainable manner, contribute to the recreational and lifestyle economy, access to water-based enjoyment, green power generation, protection of natural resources and critical community water sources, support of economically sustainable communities, and telling a compelling story of the evolution of Central Ontario and canal technology.

Determining how best that can be achieved and by whom is the challenge facing the Panel.

Purpose of the Mandate Review

The purpose of the Mandate Review is to assess and make recommendations to the federal Minister of the Environment concerning the future contributions and management of the Trent-Severn Waterway. Broadly, the review will recommend a new Vision for the Waterway that will ensure its long term effectiveness and sustainability and optimize the full range of contributions that it makes to Canada and Central Ontario: More specifically the Review will suggest

- How to protect and present the Waterway's cultural heritage;
- Ways of assuring the future of the Waterway natural environment;
- How the Waterway can contribute to the present and future outdoor recreational needs of Canadians and particularly the growing and diverse population of the Greater Golden Horseshoe;
- A water management regime that is seen to meet the demands and expectations of a diverse array of stakeholders and needs;
- A framework for jurisdictional and inter-agency coordination and governance along the Waterway corridor;
- Ways in which the Waterway can contribute to economically sustainable communities, including the role of renewable energy; and,
- A sustainable funding framework.

Process

A six member, expert panel will be appointed to undertake the review. The Panel will be independent and report directly to the Minister. Parks Canada input into the Panel process will be primarily through submissions in the consultation process. The federal Minister of the Environment will select the Chair and the other panel members, having regard for Parks Canada's mandate as well as mandates of other jurisdictions along the Waterway. The panel members will ideally be respected leaders within their communities of interest, be familiar with the Waterway, have a broad outlook, and understand the complexities of governance in a public context.

The Panel will conduct an extensive consultation program to seek public and key stakeholder views on the future mandate and expectations for management of the Waterway. The Panel will consider the results of the consultations and the results of supporting studies to generate analysis and recommendations to be considered by the Minister.

A small, full-time Secretariat will be established to support the Panel's work and to provide project and contract management.

Reporting and Timing

The Panel will report to the Minister in December 2007. The Minister will respond to the Panel recommendations following submission of the Panel report. The accepted results will be incorporated into a revised Management Plan to be prepared by Parks Canada and submitted to the Minister for approval within a year of the Minister's response.

Appendix H

Selected Source Materials

Panel-commissioned Documents

Discussion Papers

- *Discussion Paper 1: Natural Environment*. May 2007.
- *Discussion Paper 2: Cultural Resources*. May 2007.
- *Discussion Paper 3: Recreation*. May 2007.
- *Discussion Paper 4: The Waterway's Contributions to Sustainable Community Economic Development*. May 2007.
- *Discussion Paper 5: Improving Governance*. June 2007.
- *Discussion Paper 6: Jurisdiction for the Waterway – Authorities and Responsibilities*. July 2007.
- *Discussion Paper 7: Water Management*. July 2007.

Student Papers

- *Marinas along the Trent-Severn Waterway*. July 2007.
- *Recreational Accommodations along the Trent-Severn Waterway*. July 2007.
- *Source Water Protection in Ontario – Clean Water Act, 2006: The Trent Conservation Coalition and South Georgian Bay-Lake Simcoe Source Water Protection Regions*. July 2007.
- *Population and Demographics*. August 2007.
- *Observations from an Informal Survey on Recreational Trends: Focus on Ethno-Cultural Recreational Uses of the Waterway*. November 2007.
- *Waterfront Development: A Case Study Approach to Waterfront Planning Policies and Tools in Muskoka*. December 2007.

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 - *Obligations and Expectations*. May 2007.
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