

*A Study of the Past, Present  
and Future of Water  
Management on the Trent-  
Severn Waterway National  
Historic Site of Canada*

*Obligations and  
Expectations*

*Prepared for:  
Parks Canada Agency*

*By:*



May 31, 2007

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## 1.0 Introduction

The Trent-Severn Waterway National Historic Site of Canada (TSW or “the Waterway”) is a 386 km navigable waterway that runs through inland waters of central Ontario from Trenton on Lake Ontario to Port Severn on Georgian Bay. The main channel of the Waterway follows the course of the Trent, Otonabee, and Severn Rivers, their associated lakes and artificial canal cuts. There are numerous secondary channels that permit navigation into Stoney, Scugog and other lakes. Trans-navigation is facilitated by an array of single lock chamber, flight and lift locks as well as a large-scale marine railway.

While only a small fraction of the Waterway is a made system, navigational draughts and water flows are maintained by human intervention by drawing water from two watersheds, the areas of which cover more than 18,000 square kilometres (km<sup>2</sup>) including approximately 4,500 km<sup>2</sup> in the reservoir lakes area north of the main system. The two watersheds (Figure 1-1), the Trent and Severn, are located primarily north of the main route of the navigation channel and drain into the main river systems.



**Figure 1-1 Watershed of the Trent-Severn Waterway**  
(Source: Parks Canada)

The very large area that is influenced by the management of the TSW includes a large and complex variety of stakeholders. Excluding the reservoir lakes, these stakeholders include: More than 120,000 shoreline properties;

- Approximately 35,000 shoreline properties in the reservoir lakes;

- More than 400 commercial operations;
- 6 First Nations;
- 6 Conservation Authorities;
- 5 cities;
- 4 towns;
- 5 Counties;
- 2 regional municipalities;
- 3 municipalities;
- 1 district municipality;
- 26 townships;
- 18 power generation facilities;
- Numerous associations, Environmental Non-Government Organizations;
- 10 Provincial ridings; and
- 11 Federal ridings

The reservoir system includes 44 lakes, each with its own population of seasonal and/or full-time residents. The Haliburton sector which includes the Gull River, Burnt River, Mississaugua River, Nogies, Eels, and Jack Creek watersheds have an estimated 35,000 shoreline residents.

## 2.0 Purpose

As background to the Panel on the Future of the Trent-Severn Waterway and to Trent-Severn Waterway Management Plan Review, this chapter catalogues the requirements, obligations, and expectations of Parks Canada as they related to maintaining water levels in the watershed.

## 3.0 Approach and Methodology

Over time, the requirements, obligations, and expectations have changed. The requirements and obligations are driven by legislation, formal legally binding agreements, or corporate policy. Some of these are direct such as requirements to maintain safe flows and water levels for navigation. Others are indirect such as the requirements to maintain appropriate water levels for ecological reasons such as the protection of fish habitat (*Fisheries Act*). To compile an analysis of requirements and obligations, the following were examined:

- legislative instruments;
- policy obligations;
- lease agreements;
- bi-lateral or multi-lateral agreements; and
- unofficial agreements.

The expectations are more difficult to define since these vary from area to area and are value driven. Some municipalities that draw their water from the system and have sewage treatment systems expect certain flows and water levels to ensure adequate quantity and quality of water supplies and assimilation of sewage effluents. Residents (permanent and seasonal) on the system and reservoir lakes have expectations regarding water levels for aesthetic, water supply,

navigation, and ecological reasons. The expectations discussed are derived from feedback received during the public consultation phase of the work.

## 4.0 Analysis

The chapter on Legislative Review provides a detailed discussion on the jurisdiction, authorities, and obligations held by Parks Canada and the Trent-Severn Waterway. The following highlights some of the key requirements and obligations as they relate to water management.

### 4.1 Obligations under Legislation

#### 4.1.1 Navigation

The *British North America Act, 1867* gave the federal government clear jurisdiction over canals and lake improvements and works.

A public right of navigation exists in Canada. This right is not written anywhere; it is a Common Law right. If the waters are navigable, then the public has the right to navigate. This right can only be restricted by an act of Parliament. The *Navigable Waters Protection Act* (NWPA) is the Act that protects the right of navigation. It ensures a balance between the public right of navigation and the need to build works, such as bridges, dams or docks for example, in navigable waters. The Act provides for the prohibition to build works in navigable waters, unless the work, its site, and plans have been approved by the Minister of Transport on such terms and conditions as he deems fit. The Act also provides for the removal of wrecks or other obstacles to navigation and for the prohibition to throw or deposit any material in navigable waters. Finally, each navigation chart published by the Canadian Hydrographic Service of Environment Canada sets out for specific sections of the Waterway, a published chart datum being a specified water elevation above Sea Level, geodetic that is guaranteed for the navigation season.

Under the Historic Canals Regulations, the Superintendent has obligations. For example, he must take into account the effects of an activity for which he may issue a permit on:

- (a) cultural resources, natural resources, structures, equipment and objects in the historic canal;
- (b) the safe navigation of vessels and the safe operation of locks, dams and bridges in the historic canal;
- (c) the safety of persons in the historic canal;
- (d) wildlife and the eggs and habitat of wildlife in the historic canal; and
- (e) the historic character of the historic canal.

#### 4.1.2 Infrastructure Maintenance

Under the 1905 and 1906 Federal and Provincial orders-in-council that transferred the rights to the dams on the reservoir lakes to the federal government, Parks Canada has a legal obligation to maintain those structures.

### **4.1.3 Protection of Cultural Resources**

Under the *Parks Canada Agency Act*, Parks Canada has the requirement to implement the “policies of the Government of Canada that relate to national parks, national historic sites and other protected heritage areas and heritage protection programs” (Gov’t of Canada 1998).

### **4.1.4 Protection of the Natural Environment**

There are a number of direct and indirect legal requirements imposed by various pieces of federal and provincial legislation. These pieces of legislation are catalogued in more detail in the chapter on Legislative Review; however, some of the key obligations are as follows.

#### **4.1.4.1 Species at Risk Act**

The *Species at Risk Act* (SARA) imposes obligations on federal land management agencies. The Waterway needs to meet its legal requirements as a “competent agency” under SARA. In very general terms, no activity may be undertaken that is contrary to SARA. This means any activity that may affect an individual of a species listed in Schedule 1 of the Act as extirpated, endangered, or threatened, its residences, or the critical habitat of the species and is prohibited under SARA. The authorization requirements of SARA apply to activities conducted by third parties as well as those undertaken by Parks Canada employees. This means that any research, commercial, or park management activities that may affect a species listed in Schedule 1 of the Act can only take place if the SARA authorization requirements are met. If an activity can be reasonably expected to affect the species, then the pre-conditions and other authorization requirements of SARA must be met before the authorization can be issued.

Water management is an activity that has the potential to have a major influence on species at risk, their residences, or their critical habitats along the system. The Waterway has an obligation under SARA to evaluate the impact on species listed under the Act whenever it grants a formal permit, or undertakes work that has the potential to affect species or habitats. Similarly, an authorization under SARA is required before any authorization such as a lease, licence, or permit may be issued if the activity being authorized may affect an individual of a species listed in Schedule 1 of the Act as extirpated, endangered, or threatened, its residences, or the critical habitat of the species and that would be prohibited under SARA (Parks Canada 2004).

#### **4.1.4.2 Fisheries Act**

The federal *Fisheries Act* has a major influence on the management of the Waterway. Specifically, the Act provides for the protection of fish habitat and the prevention of pollution. For example, section 35 (1) states that no person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat. Any construction or alteration of water management or flow altering structures on the waterway and all flow regimes must meet the habitat requirements of fish unless otherwise authorized under the Act.

Crossings of a waterbody that provides fish habitat at any time of the year shall be designed, constructed, operated and maintained such that no new barriers to fish passage, including

physical, chemical or flow impediments (including maintaining minimum flows and depths), are created so that fish can pass and the ability for fish to pass is not reduced over time, unless authorized by Fisheries and Oceans Canada (*Fisheries Act* s.20 (1), s.22 (1), s.22 (2), s.35).

No harmful alteration, disruption or destruction of fish habitat is permitted unless authorized by Fisheries and Oceans Canada (*Fisheries Act* s.35 (2) – A). Destruction of any part of the critical habitat of any listed endangered or threatened aquatic species, or an extirpated species where a recovery strategy recommends reintroduction of that species to the wild, is not permitted (*Species At Risk Act* s.58 (1)(b)).

No substance of any type that is deleterious shall be deposited in water frequented by fish, or be released or placed such that the deleterious substance could enter the water (*Fisheries Act* s.36(3)).

Note: At this writing, the *Fisheries Act* is under review. Consequently, the above section numbers are likely to change.

#### **4.1.4.3 Canadian Environmental Assessment Act**

The purpose of the *Canadian Environmental Assessment Act* (CEAA) is to ensure that projects are considered in a careful and precautionary manner before federal authorities take action in connection with them, in order to ensure that such projects do not cause significant adverse environmental effects. A wide variety of construction, maintenance, permitting, and other activities on the Waterway are subject to CEAA. In addition, Parks Canada's policy is that even if an action is not subject to CEAA, environmental implications of such actions will be taken into consideration as if CEAA did apply.

#### **4.1.4.4 Permitting Activities**

The Waterway has the authority to regulate a number of third party activities that affect Waterway lands such as in-water works. This authority brings with it the obligation to inform the public of the regulatory requirements and to respond in a timely fashion to applications for permits.

## **4.2 Policy Obligations**

The *Parks Canada Guiding Principles and Operational Policies* (Parks Canada 1994) is a comprehensive policy document that guides the management of all Parks Canada Agency activities including the Waterway. There are several parts that bear on the Waterway.

- Part I provides a policy overview and a set of guiding principles.
- Part II sets out activity policies, two of which are directly applicable.
  - The first is the National Historic Sites Policy that guides the management and protection of sites of national historic significance.

- The second is the Historic Canals Policy which guides the management and operation of all of Canada's historic canals.
- Part III provides the Agency's Cultural Resource Management Policy. This guides the management of cultural resources whether these are of national (Level I) or local (Level II) significance.

#### **4.2.1 Navigation**

The following is a summary of the specific section of the Historic Canals Policy dealing with navigation.

- Navigation forms an important part of the heritage character and heritage experience that these canals provide. However, structures, operating devices and procedures will not be modified to increase the capacity of historic canals (Section 1.0).
- The following considerations will guide the provision of navigation: availability of adequate water levels, maintenance of public safety, preservation of heritage character, physical condition of the works, time of year, demand, and available human and financial resources (Section 1.1.2.).
- Where navigation is maintained, Parks Canada objectives will be to maintain adequate canal water depths, structures, and navigation aids in order to provide for navigation (Section 1.1.3.).
- Water levels and flows required for navigation on the canals will be monitored and managed to minimize flooding and adverse resource impacts (Section 1.1.4.).
- Canals that become non-navigable are no longer subject to the provisions of this policy, but will continue to be managed in accordance with other Parks Canada policies (Section 1.1.5.).

### **4.3 Lease Agreements**

#### **4.3.1 Water Power Leases**

Parks Canada has negotiated 14 formal hydro-electric power generating leases (Table 4-1) for stations along the waterway (Figure 4-1). Under these leases Parks Canada has granted permission to occupy the bed of the Waterway and in some cases adjacent Waterway lands and to use water surplus to navigational or other requirements of the Waterway for the purposes of generating electrical energy. In return for such permission and depending on the particular agreement, lessees agree to:

- pay a water rental fee for the use of the water to generate power;
- pay a land rental fee to occupy federal crown lands adjacent to the facility;
- a rental review period of 10 years;

- supply electric power at no cost to Parks Canada to operate electric heaters installed in the dam sluices to manage ice build-up;
- pay all related federal, provincial, and municipal taxes; and
- maintain water levels above and below the facility within specified ranges; and
- a number of specific clauses related to insurance, compensation of Parks Canada employees, public safety and security, waste management, specific operating procedures, etc.

Generally, Parks Canada has few obligations under these agreements. For example, they do not have any obligation to supply minimum water flows or to adjust flows to optimize power production.



**Figure 4-1 Locations of hydro-electric generating stations on the TSW**  
 (Source: Parks Canada)

**Table 4-1 Hydro-electric leases on the TSW**

Lessee	Locations
Ontario Power Generation Inc.	Dam 2 at Lock 2, Sidney
Trent-Severn Power Corporation (Innergex)	Dam 4, Batawa
Ontario Power Generation Inc.	Dam 5 at Lock 5, Trent
The Canada Boxboard Co. Ltd.	Dam 6 at Lock 6, Frankford
Ontario Power Generation Inc.	Dam 8 at Lock 9, Meyersburg
Ontario Power Generation Inc.	Dam 9, at Lock 10, Hague's Reach
Ontario Power Generation Inc.	Dam 11 at Lock 13, Campbellford
Ontario Power Generation Inc.	Lock 12, Ranney Falls
Algonquin Power (Campbellford) Ltd.	Located at Lock 14, Crowe Bay
Ontario Power Generation Inc.	Dam 14 at Locks 16/17, Healey Falls

Lessee	Locations
Marsh Hydropower (Trent Valley)	Drag Lake South Dam
OPG – Small Hydro Inc.	Lakefield Dam at Lock 26 Village of Lakefield
Consolidated Hydro Limited (Shaman Power Corp.)	Dam at Lock 34, Fenelon Falls
Orillia Power Generation Corporation	Dam at Lock 43, Swift Rapids

### 4.3.2 Waterlot Licences

Commercial operators receiving a direct or indirect monetary gain for any structure such as a dock, boat house, or launch ramp that occupies the bed of the Waterway and therefore, federal land, technically is trespassing unless it is covered by a waterlot licence. A waterlot licence grants to the licensee a legal right to occupy the land. The requirement for occupiers to take out a waterlot licence has not been applied by the Waterway, although, some commercial operators such as marinas or resorts have opted to take out a licence for certainty and liability/insurance reasons. There were 34 waterlot leases issued in 2003-04 (Table 4-2).

### 4.3.3 Other Leases

Other leases have been granted for Utility and Sanitary Pipelines (2) and Institutional (1) in 2003-04.

### 4.3.4 Licences

There are a large number of licences of occupation administered by the Waterway. Table 4-2 is an inventory of such legal instruments in effect in 2003-04.

**Table 4-2 Catalogue of licences issued in 2003-2004**

(Source: Parks Canada)

Licence	Number
Utility and Sanitary Pipelines	88
Private Intakes and Outfalls	43*
Commercial Waterlots (marina)	34
Private Waterlots	7*
Commercial (restaurant, snack bar)	1
Buildings	2
Cottage Lots	199
Access Lots	121
Bell Canada Permits	441
Gas Pipelines	15
Hydro and Utility Cables	490
Cable TV	28
Hydro Generation	14*
Causeways	4
Municipal Parks	4

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Licence	Number
Boathouses	5*
Right-of-way	15
Advertising (signs)	1
Other	26

\* Directly related to water levels and flows.

#### 4.4 Bi-lateral and Multi-lateral Agreements

In 2003-04, 75 formal agreements exist that cover bridge crossings and 65 other Federal and Provincial Agreements involving Waterway lands.

In addition, the following formal bi-lateral agreements exist specific to water management.

1. The Swift Rapids Generating Station Water Management Operations Plan is tied to the Orillia Power Corporation Swift Rapids generating lease. Under this agreement, normal operating ranges are set for river flows. Maximum and minimum headwater elevations are set for different flow characteristics of the Severn River. It also sets out operating rules for emergency conditions and high and low flow operations. Specific fish spawning flow operations are also included in the Plan. It should be noted that the Plan does not place any specific obligations on the TSW.
2. A Memorandum of Understanding (MOU) was concluded in January 2002 with the Ministry of Natural Resources respecting the management of flows and levels on the Talbot River below the dam at Gamebridge to promote spring Walleye spawning. Under this MOU, the Waterway is obliged to maintain on a “best efforts” basis the established water level target range of 0.40 metres to 0.58 metres, or 1.5 to 1.9 feet, below the Talbot River dam from the beginning of Walleye spawning to the conclusion of egg incubation period. This MOU expires in December 2007. The MOU is currently under review.
3. A letter of agreement exists with Ontario Hydro under which Ontario Hydro recognizes that the TSW incurs hydroelectric costs in controlling and providing the water used by Ontario Hydro for power generation and agrees to refund to the TSW \$1,400.00 per dam annually for electricity costs for 14 dams on the Waterway.
4. In a letter dated July 18, 2006, the 1946 agreement with Orillia Power Generation Corporation regarding the provision of flows for the Minden power plant was cancelled. In the July 2006 letter, the TSW undertook to set winter stop log levels on:
  - Twelve Mile Lake – three (3) logs in spillway number 1 and three (3) logs in spillway number 2; and

- Horseshoe Lake – four (4) logs in spillway number 1 and four (4) logs in spillway number 3. Spillways numbers 2 and 4 are not operating and stop logs are permanently installed.

Parks Canada agrees that it will undertake to release water into the Gull River if and when storage water is available, during a winter drought year when there is a threat of damage caused by freezing conditions.

#### 4.5 Unofficial Agreements

There are a number of unofficial agreements related to fisheries protection that affect water flows and levels. These are listed in Table 4-2.

**Table 4-3 Listing of unofficial agreements related to fisheries**

(Source: Parks Canada)

Location	Parties	Formal / Informal	Year	Key Commitments
Healey Falls, below of control weir	MNR OPG DFO	Informal	1999	OPG will run 3 logs of water down the ice run of the powerhouse to ensure a minimum flow is maintained. The water should be maintained until the Walleye fry have had the time to hatch.
Pretty Channel, below dam	MNR OPG DFO	Informal	1998	Run 30 cms during the spawn and 20 cms during incubation of the spring Walleye run. This is only done when the water is available i.e., Lake Simcoe will not be drained to maintain these minimum flows. The 30 cms flow is begun when the temperature of the Severn River reaches 6 degrees Celsius or on April 15th, which ever comes first.
Mitchell and Canal Lakes		Informal	?	The fall drawdown that occurs on Mitchell and Canal Lakes is done in such a manner that allows the fish time to move into the deeper portions of the lake. This is done by removing stoplogs from the control structures gradually (1 stoplog per week).
Eagle Lake, below dam	MNR	Informal	?	The TSW will attempt to run as much water as possible for the spring Walleye spawn.
Big Bob / Kushog Lakes	MNR	Informal	?	On September 1st the TSW will begin the early drawdown of Big Bob and Kushog for Sept. 30th minimum to ensure that the lake does not drop any further past the end of September to ensure the Lake Trout spawn does not get exposed.
Bayview Dam, below dam	SSEA	Informal	?	The TSW will attempt to run as much water as possible for the spring Walleye spawn.
Lower Lock 19, below dam	OFAH MNR	Informal	?	For an extended period of time the spawning below the dam at Lock 19 has been a troublesome area, prone to having the Walleye spawn exposed. After the bed below the dam was flattened, the spawn could be covered with a minimum flow discharging down the Otonabee River.
Crooked Bay Dam, below dam		Informal	?	The TSW will attempt to run as much water as possible for the spring Walleye spawn.

In addition, an understanding was struck with the Ontario Wild Water Association (OWWA) in 1979 by the Superintendent of the day. The OWWA is an incorporated body in charge of official white water events in Ontario. It operates a white water competition course on the Gull River between Horseshoe Lake and Minden Lake. Parks Canada acknowledged that did not object to the facility and was sympathetic to the project. It undertook to “endeavour to assist water release where possible, practical” and within the specific conditions. For example, it agreed to facilitate releases where such releases were not detrimental to other recreational, potable water and other water supply, water quality, hydro-electric operations and environmental interests (Parks Canada 1979). Sufficient notice of required releases was also a condition. Further, the OWWA were required to pay the cost of any employee overtime. Parks Canada did not commit to any structural changes to the dam or river.

## 4.6 Expectations

### 4.6.1 TSW Management Plan

The TSW’s current Management Plan (Parks Canada 2000a) has a Vision statement that espouses support for multiple interests. The actions identified in the Management Plan are consistent with many of the objectives and expectations identified by stakeholders during the consultation process. For example, as they relate to water management, the Plan identifies actions related to:

- Reviewing the impact of Waterway activities on fish and wildlife habitat;
- Implementing a wetland management program;
- Minimizing nuisance exotic species;
- Protection and enhancement of ecosystem health;
- Minimizing negative cumulative environmental damage;
- Update and expanding historical water management information for clear, effective analysis and forecasting;
- Providing regular public information bulletins;
- Modifying control dams to ensure operator safety and to contribute to balanced water management;
- Cooperating with stakeholders to periodically review implications of seasonal water levels and flows;
- Ensuring that any proposal to change current water management practices includes consultation with the public and appropriate stakeholders, and demonstrates positive watershed-wide benefits before being considered and accepted for review;
- Ensuring that any review of the implications of water management changes, over the longer term, take into account the entire watershed environment;
- Cooperating with other agencies and stakeholders in the development of a flood forecasting system;
- Providing a consistent approach to flood advisories and updates;
- Cooperating with other agencies in the review and study of the implications of climatic change on the existing water supply;

- Improving speed and accuracy of data collection, remote sensing, forecasting of weather events, and other areas of data management, through the use of new technologies;
- Cooperating with other agencies and stakeholders in developing partnerships for collecting and sharing data; and
- Increasing people's understanding of water management through the use of user-friendly training aids, exhibits and other media.

It appears that the architects of this Plan had a good understanding of the needs of the organization and the expectations of the partners and stakeholders. There appears, however, to be a lack of commitment by all parties to the successful implementation of the plan and to the provision of the necessary resources.

Discussions with staff of TSW suggest that many of the actions identified in the Management Plan cannot be implemented due to resource constraints and the fact that success in achieving many of the actions is entirely dependent upon cooperative efforts of a large number of other federal and provincial organizations. For example, in the Management Plan there are 22 policy areas listed and a total of 157 major actions to be taken to address these policies. To achieve the overall goals, partnerships, alliances or cooperation is required of at least 4 federal departments, 6 First Nations, 7 provincial departments or agencies, 6 conservation authorities, as many as 46 municipal jurisdictions, and countless individuals, interest groups, businesses, Chambers of Commerce, etc. There is only one action of the 157 that is the sole domain of Parks Canada. The rest can only be achieved in a cooperative atmosphere. The frameworks for this cooperation are not in place nor subscribed to by the many organizations and agencies that must be at the table and discharging their responsibilities. Informal cooperative efforts can go only so far. Successful water management organizations have managed to harness the cooperation and action of their partners.

The actions in the current Management Plan address many of the concerns raised by stakeholders. An overly simplistic conclusion might be – there is a plan; implement it. The reality is that the geopolitical complexities together with the insufficient staff and funding levels make it impossible to achieve. The result is that management issues are dealt with, not as part of an integrated landscape and watershed plan but rather as isolated crisis issues. The overwhelming challenges manifest themselves in a defensive and closed organizational posture that is projected outwardly and represents a major barrier to moving forward.

When opportunities do present themselves, the Waterway is unable to capitalize on them. For example, the water power industry points out that the current political climate and public empathy for the development of green energy is ripe for innovative hydro development on the Waterway, but the TSW, and indeed Parks Canada, does not seem to be positioned to take advantage of this opportunity. This is an opportunity that not only meets the political agenda of both the provincial and federal governments and is well supported by the public, but also would generate needed revenues to support operations.

#### **4.6.2 Navigation Levels**

The most clear public expectation relates to the advertised minimum depths guaranteed on the Canadian Hydrographic Charts for the Waterway. These depths are expected to be maintained throughout the navigation season, which generally runs from the beginning of the Victoria Day weekend to Thanksgiving Day. Boaters trust that published depths will be maintained.

#### **4.6.3 Public Safety**

There are a number of other expectations held by the public related to public safety. The public expects that Parks Canada will maintain its infrastructure in a safe operating condition and that it will take steps to protect the public from hazards associated with its water control structures. This may take the form of warning signs and devices, barrier booms and cables above open dams, closure of navigation during periods of very high flows, and standard operating procedures for employees. They also expect that the structural integrity of dams will be maintained so that the risk of catastrophic failures is minimized.

#### **4.6.4 Flood Forecasting and Mitigation**

This responsibility is shared among Conservation Authorities, Municipalities (Danziger, pers. comm.) and the TSW. Agencies and municipalities with these shared responsibilities clearly expect cooperation from the TSW in sharing of flow and level data and forecasting flood or drought conditions. Affected property owners expect that government agencies will mitigate flooding.

#### **4.6.5 Municipal Utilities**

Municipalities draw domestic and industrial water from the Waterway and they discharge treated effluent into the Waterway's lakes and rivers. They expect that water levels will be maintained to such a level as to cover water intake pipes. Similarly, they rely on the Waterway to supply sufficient flow to enable them to meet the effluent assimilation standards set by the Province.

#### **4.6.6 Domestic Water Supplies**

Commercial and residential developments are relying more and more on the lakes and rivers as a source of water and there is an expectation that levels will be maintained that will assure a water supply through low water periods. This expectation is not one that the TSW has promoted. In fact, as more seasonal residences are converted to year round, the expectation is growing.

#### **4.6.7 Hydro-electric Power Generation**

Under the power generation licences, there is no obligation on the part of Parks Canada to supply minimum water flows and, in fact, leases clearly say that the Superintendent shall be the sole judge of the quantity of surplus water available from time to time for the use of the Licensee. In the licences, surplus water means the variable quantity of water flowing through the TSW, over and above that required for navigational requirements and any enlargement of or improvement of

navigation facilities, other operational requirements, and any other purposes of the TSW. In other words, water that is surplus to the TSW needs.

#### **4.6.8 Fisheries Agreements**

While the agreements listed in section 4.5 are informal, they clearly create expectations that the TSW will operate in accordance with the understandings reached.

#### **4.6.9 Unofficial Understandings**

There are likely other unofficial understandings that have been created over the years that have not been uncovered through this review and may be the source of misunderstandings or unrealized expectations. One such case is an unofficial arrangement for Deer Bay reach. This is a tacit agreement with the Ministry of Natural Resources that the TSW will not lower the reach further than about 15-30 cm until after the fishing season ends around November 15<sup>th</sup>. There is a further understanding with the residents of Lower Buckhorn Lake that TSW will not intentionally lower the reach in winter further than about 241.80m due to water line problems and apparent lack of success in drilling wells in the area (B. Kitchen, pers. comm.).

#### **4.6.10 Historical Practices**

Certainly, the long history of past practice has created a very large public expectation that the system will continue to be operated as in the past and in a predictable way. Marinas have build launching and docking facilities and timed their start-up and shut-down operations to coincide with spring filling and draw down practices. Commercial boat operators have built boats to operate within advertised navigation depths and expect these depths to be maintained. Residents along the Waterway and in many of the reservoir lakes have adapted their infrastructure and practices to reflect a consistent history of manipulation of flows and levels. They have come to rely on consistency and predictability to avoid damage to boats and infrastructure, particularly during periods of absence. Finally, visiting boaters form a large part of the Waterway's business and have come to rely on the guaranteed safe water depths over the years.

## **5.0 Conclusion**

There are a number of formal and informal obligations that generate a variety of expectations. Failure to meet these expectations has varying degrees of consequences. Some, such as navigation depths and dam integrity have public safety and liability implications. Others, such as compliance with federal statutes (SARA, CEAA, FFA, Historic Canals Regulations), are legal obligations with statutory implications for non-compliance. Other stakeholder expectations are rooted in historical water management practices. Clearly the TSW managers are unable to fulfill all expectations and must manage for the greater public good; however, when historical practices change unexpectedly, the result is often stakeholder frustration and anger.

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