

September 21, 2007

## Submission by the Crystal Lake Cottagers' Association (CLCA) to the Trent Severn Waterway Panel

### **Introduction**

The cottagers of Crystal Lake appreciate this opportunity to submit our ideas and suggestions for consideration by your TSW Panel.

Before we outline the various issues and recommendations that we would like to put forth to the Panel, we feel that it is important to outline some of the guiding principles of our association of cottagers on Crystal Lake.

First of all, with respect to the natural environment in and around Crystal Lake, we feel that we all must do our part to respect, preserve and protect our natural environment. We see ourselves as stewards of the environment, understanding that our actions or inactions in and around our Lake affect others. This is most evident in our case as Crystal Lake is a reservoir lake feeding the Trent Severn waterway.

As well, now that the early stages of global warming are upon us, we realize that what we have taken for granted in the past, can no longer automatically be relied upon. Reduced levels of snowfall and prolonged periods of drought may be more the trend than the exception as we look into the future.

Below we have outlined the specifics of our circumstance at Crystal Lake in order for the Panel to better understand how Crystal Lake fits into the larger Trent Severn Waterway.

### **Key Facts about Crystal Lake and Surrounding Environment**

Crystal Lake is a deep, clear, spring-fed lake located in the North Kawartha Lakes region. The lake is a reservoir lake for the Trent Severn Waterway. The control dam on Crystal Lake feeds overflow water through Nogies Creek, which in turn supplies water to Pigeon Lake on the Trent Severn Waterway.

The lake has a limestone base so its Ph level sustains a healthy population of fish species. Crystal Lake is recognized as a naturally reproducing Lake Trout Lake by both the Ministry of Natural Resources and the Ministry of the Environment for water quality and management purposes. The Lake has approximately 26 miles of shoreline composed of numerous bays and inlets. The vast majority of the cottages on the lake can be said to "fit in" with the surrounding natural habitat. Most of our cottagers understand the value of minimizing their "footprint" on the land when developing their properties.

## **Ecology of Crystal Lake**

As previously noted, Crystal Lake and surrounding lands support a myriad of wildlife species. Because the Lake is clear, cold and deep it supports a healthy Lake Trout population. Crystal Lake is one of a very few (<10) naturally reproducing Lake Trout lakes in the Kawarthas. The Lake also supports a diverse group of other fish species including: pickerel, small mouth bass and whitefish.

Crystal Lake also supports a healthy population of loon as well as assorted duck and bird species including: mallard duck, osprey, turkey vulture, marsh hawk, pileated and hairy woodpecker, black crow and raven to mention just a few.

Surrounding Crystal Lake are extensive areas of wetlands, which in some cases have been created by the action of beavers living in the lake. The wetlands and transitional lands near the lakeshore support populations of painted and snapping turtle, frog, toad, newt and salamander. The local populations of white tailed deer, red fox and black bear are vibrant.

Water flows over the control dam on Crystal Lake down Nogies Creek and into the north end of Pigeon Lake. Located at the confluence of Nogies Creek and Pigeon Lake is a protected muskellunge spawning sanctuary. This is one of the reasons why it is critically important that the flow of water in Nogies Creek is carefully managed throughout the year.

## **Development on Crystal Lake**

Crystal Lake is developed with approximately 600 cottages made up of about 90 % seasonal residents and about 10% full time residents. Recently the Ministries of Natural Resources and the Environment in conjunction with the County of Peterborough announced that due to the manmade pressure being put on Crystal Lake no further severances of land would be permitted. This was done to protect the water quality and the Lake Trout spawning grounds on the Lake.

As with all of the reservoir lakes in the TSW system, development on Crystal Lake has been supported and encouraged by all levels of government throughout the years. The result is a thriving lake community which draws significant tourist dollars to the area each year as well as forming the tax base for the Municipality (in excess of \$180 in property assessment).

## **Summary of Issues for Consideration by TSW Panel**

### **Water Level Issues on Crystal Lake**

Over the past twenty years or more, Parks Canada has done a very good job managing the lake levels on Crystal Lake. The general pattern has been that Parks Canada has allowed the Lake to capture the spring run-off and then, at prescribed intervals, (generally 6" to 1') has removed logs from the control dam at Nogies creek. Cottagers have enjoyed water based recreational activities as lake levels were predictable throughout the cottaging season. The last log in the control dam was traditionally removed just after the Thanksgiving long weekend.

This pattern has allowed residents to predict the timing of such activities as dock installation and removal, foot valve positioning, required dock extension, etc. The ecosystem, fish, flora and fauna on and surrounding Crystal Lake has also adapted to this water management pattern.

However, 2007 has been a different story. Due to the low levels of snowfall over the winter, the late spring runoff was less than normal. Rainfall in the early spring was not captured, as the logs were not placed in the dam until later in spring. As a result, the Lake did not "fill-up" to its traditional spring level.

Throughout the summer months logs were removed one at a time up until mid August. In late August of 2007, an unprecedented, 3 logs were removed from the control dam all at once. This dramatic and sudden drop in water levels caused many problems for cottagers. In some cases cottagers who had not come up during this time period found their boats fully or partially out of water. This resulted in some damage to boat hulls, and propellers. The extent of the damage to personal property is not known fully at this time.

There is also no doubt that this extreme draw down caused stress for other species in the watershed.

Some cottagers contacted Parks Canada to enquire as to what had precipitated this drastic drop only to receive disparaging remarks from some Parks Canada staff, including the threat of wholesale removal of the dam. Needless to say most cottagers are upset that they had not received any prior notification that this sudden drop in water levels was to occur. Had they received prior notification from Parks Canada they could have made the necessary adjustments to their property to prevent or at least minimize property damage.

In addition, we have recently been advised that vandals placed three logs back into the dam in early September. Parks Canada staff have told association members that as a result of this action Crystal Lake would now be taken down to winter levels. We question the rationale behind this decision. This decision will cause serious difficulties for cottager's who are planning dock and boat removal over the next month.

## **Crystal Lake Cottagers' Association Recommendations to TSW Panel**

### **Improving Monitoring and Communications with respect to Crystal Lake Water Levels**

With the advent of global warming the CLCA realizes that all stakeholders along the TSW need to adjust their views on the “new normal” when it comes to water levels throughout the traditional cottaging season. CLCA recommends that a communications protocol be developed so that all stakeholders along the TSW have access to the Parks Canada schedule on lake and river level water management.

Cottagers need to be able to determine, in advance, of Parks Canada's intentions with respect to removing logs at the Nogies Creek dam. We are recommending that this communication plan be developed for implementation starting in the spring of 2008.

An idea that we would like to bring forth to the Panel is that Parks Canada post a notification on its internet site so that all cottagers along the Trent Severn Waterway can access the Parks Canada website site and view the posted schedule on when water levels are to be adjusted in their respective lakes, rivers, and streams. In this way property owners can use this “self serve” system in order to make any necessary adjustments to the positioning of their docks, boats, waterlines and any other personal property affected.

Another idea that we would like Parks Canada to consider relates to its water level management strategies during the fall and winter. For example, in Crystal Lake, just after the Lake Trout spawning period in October, multiple logs could be reinserted in the dam at Nogies Creek. Generally speaking, in the late fall there is a good deal of rain and rainwater runoff into the lake. By having the logs in place (not to the full height of the dam) this precious water would be captured and stored. The “payback” for this strategy would come in the spring of the year where the snow levels were low (similar to conditions experienced in 2007).

It is our understanding that winter staffing issues may prevent a quick reaction time related to winter or early spring log manipulation. It is suggested that a volunteer lake steward could be enlisted to help alleviate this problem.

Our Association's position is that we would like to see the relative water level fluctuations from spring to fall remain the same as they traditionally have with a request to have water remain in the basin as long as possible during the summer months.

As noted above, climate change is upon us and it is very likely that historic patterns of rainfall will no longer serve to guide water management into the future. It may be necessary to capture the fall and winter rainfall in order to ensure adequate lake levels to support both the Trent canal system and the reservoir lakes.

## **Review and Input into the Parks Canada Water Management Plan.**

As noted above Crystal Lake is recognized as a Lake Trout Lake by both the Ministry of Natural Resources and the Ministry of the Environment for water quality and management purposes. It is extremely important that any water management decisions take into account the need to ensure adequate water levels to maintain Crystal Lake as a cold water fishery as well as to ensure adequate fall lake levels to support lake trout spawning.

As well, the water level and continuous water flow in Nogies Creek is crucial to the maintenance of a healthy ecosystem in Nogies Creek and to the continued health of the Muskellunge spawning beds located at the confluence of Nogies Creek and Pigeon Lake. We at the CLCA would like to review any water management plans affecting our watershed so that we could offer our input.

Early summer draw downs as experienced this year will result in warming of the lake as well as increased sun exposure causing adverse conditions for some species and increased weed growth.

## **Parks Canada review their current policies on the operations of the Lock System**

We at the CLCA support the idea that Parks Canada review its policies at the locks with respect to the volume of watercraft that move through the locks at any one time. As Parks Canada is well aware, every time a lock discharges, a large volume of water is lost to the receiving lake or river. It is our opinion that many times the locks are operated with one or two boats in the lock. We recommend that Park Canada instigate a policy that the boats be “bunched” into the locks. Boat operators will be subject to longer wait times at certain times of the year but a change to the policy will prevent the unnecessary loss of water down the system.

CLCA would also like to recommend a review of the six-foot depth guarantee on the Trent Severn Waterway. How many boats or recreational craft today actually require a six-foot draft?

As well, if there are plans to re-engineer any of the locks along the waterway could Parks Canada look at designs that include low volume water discharge?

Finally, the CLCA would like to suggest that the road tax portion of revenue from every litre of “marine pumped gas” be earmarked to repair or replace dams and locks along the TSW.

## **Parks Canada Jurisdiction over the Trent Severn Waterway needs to be reviewed**

It is the CLCA's position that the Trent Severn Waterway needs to be controlled and managed by the Province of Ontario. Currently Parks Canada has the mandate to control all aspects of the navigation along the Trent Severn Waterway. The problem with this model is that water levels and navigation are just two aspects of any comprehensive ecosystem plan. The Province of Ontario is best suited to develop and deliver an integrated plan that accounts for all aspects of the waterway ecosystem. Ontario's Provincial Ministry of Natural Resources would be the key stakeholder in this process that would develop and coordinate an integrated plan incorporating input from all the stakeholders.

## **Reservoir Lakes in General**

While we understand the important tourism values associated with the Trent Canal lock system, it must also be recognized that the installation of water control structures on the reservoir lakes has promoted the development of thriving lake-based communities. These communities are essential components of the Central Ontario tourism economy and tax base.

Precious eco-systems exist at and around each of these lakes. If these eco-systems are damaged by improper water management strategies, it could have far reaching effects for the environmental and financial sustainability of the entire Region.

A responsible water management plan for these lakes demonstrating respect and consideration for the importance of these lakes must be a key principal in any strategy developed for the Trent Canal System.

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