

# Submission to the Trent-Severn Panel

## Introduction

I can tell you that I am very happy to be able to make a submission to this panel. I think it's a very good thing that it was constituted. I have tried a few times, over the years to get the ear of the system managers and it hasn't always been easy, and the results were never conclusive. I suspect this panel will lead to a much more consultative management style.

## My Involvement with Eel's Lake

When I was really young, before 1950, my Dad took us to stay on Eel's, and we spent two weeks over many summers at Russel Philp's cottage. He eventually deeded a portion of Big Runway Island to my Dad, and probably around 1955-56 he built the first version of the cottage—an 8 X 10 cabin with a wood stove and oil lamps. So the cottage, albeit in a slightly enlarged version, and the island have been in use for 50 years. My Dad wisely used to remind us that we weren't owners; we were custodians and other would follow.

## Background Data

So I have been an observer of Eel's for about fifty years and it has undergone a lot of change in terms of activity and cottagers and access roads. But of course there are a lot of constants. Eel's has always been a reservoir lake for the Trent-Severn System, so there have always been major variations in lake levels.

Nevertheless draw-down patterns have varied considerably. Years ago, the high water level was much lower than more recently, and in the late fall, low water levels left exposed huge amounts of shore, reefs, sandbars, and joined some islands. We used to walk in the late fall from Big Runway to the small island just to the north. Such low levels we haven't seen for fifteen or twenty years. Now the spring levels are very high, and the fall lows expose considerably less.

### Effects of Higher Average Levels

Despite the fact that the lake is situated in the Precambrian shield, a lot of the shore is not solid granite and there is a lot of sand and gravel and metamorphic rock, probably from glacial action. This means that the increase in water levels over the years has had serious consequences.

For as long as I can remember, Eel's Lake has been producing huge amounts of driftwood, and it is unabated for fifty years that I am familiar with. There are still huge stumps on the beach on the north end of the island, at least 25 ft from the present shoreline, that were once great trees. Eel's is a lake of bays, full of dead trees that have become driftwood.

But that is not the only problem. The consistent increase in the spring high water mark has meant that a number of small low-lying islands have been seriously flooded, so islands north of the marina, in the narrows between the lakes, north of Big Runway are being inundated and slowly losing their tree and vegetation cover.

And the shorelines that are not granite but deposits of sand and gravel are now continuously eroded. And it is not just the high water line but the size and power output of some boats now using the lake. The physics are such that a speedboat, in dissipating its energy, produces waves that hit the shore with a force that is easily 2 or 3 times that of wind generated waves, and the consequences are extraordinary. Large waves pound into the shore, erode the soil, produce undercuts of a meter or more, expose roots and weaken root systems. Many trees are seriously endangered.

### First Initiatives

Because of the effects of high water and wave action on Big Runway specifically, and the number of shoreline blowovers, I have made, over the last 8 years, a number of attempts to bring the information to the attention of the managers of the Trent system. In 1998 I took a series of 18 photographs of areas around Big Runway and of adjacent islands where the erosion of the shoreline is most dramatic and delivered them to Mr Kitchens at the Peterborough office. I would say in all that he gave me a fair hearing. He reminded me of the complexity of the problem, the number of stakeholders—cottagers, anglers, boaters, commercial interests—and how impossible it is to manage to everyone's liking.

He also agreed to come to the lake to see things first hand, and I took him and another gentleman for a tour of the lake and showed them the most glaring examples of erosion and the number of fallen trees. So they were well informed of the problems. But nothing got done.

At an individual level, in the last few years, I have actually had to manoeuvre large logs into place alongside the island where the erosion is dramatic and undercuts close to the cottage so they will absorb some of the intensity of the waves. Peter Philp at the south end of the island has built a levee with logs backfilled with rock. Of course this year with lower water levels, there is no topsoil erosion problem.

### Suggestions

There are probably two main considerations: the maximum levels and the storage range. I suspect that to lower the maximum spring level, and then to draw down through the same storage range will leave many cottagers' docks high and dry in the fall.

So my suggestion would be that is essential to reduce the maximum spring level by 25-30 centimeters—1 log—in order to stop shore erosion and blowovers. My second suggestion is to decrease significantly the allotted storage range. That would mean a lower Spring maximum, but taking the lake down to current fall levels. Despite how beautiful the lake looks on crisp, blue-skied days in the late fall, with huge shorelines, sandy beaches and exposed reefs, those former low levels and angled docks are not everyone's Eel's Lake cup of tea.

### Some Questions

1. What is the current storage range in meters?
2. When the system went metric, how was continuity preserved in terms of previous levels?
3. What are the plans for the next generation of dams? The current repairs on the dam face look as if they are going to be susceptible to a lot of freeze pressure.

4. How is the spring maximum established? Given how more trees are continuously endangered, the level is clearly increasing.