

# The Indigenous Canoe Route via Hart Lake

## A Geographic Evaluation

by Ken W. Watson

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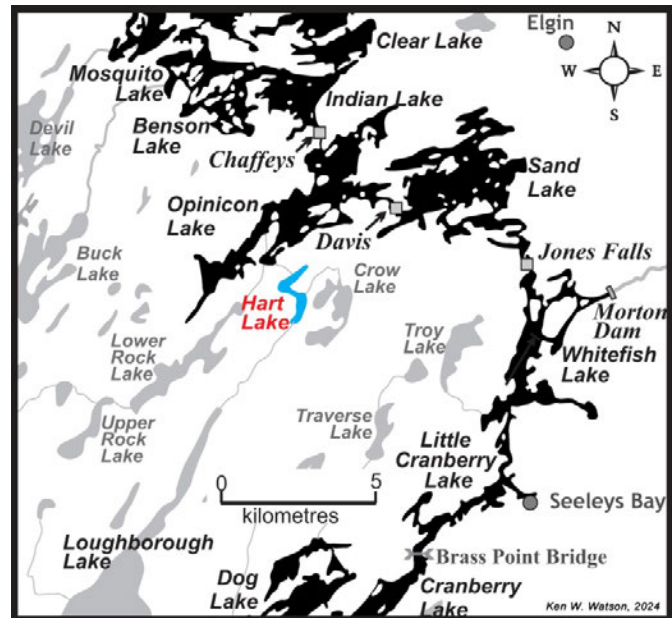
### Synopsis

Prior to the human alteration of the waterways between Kingston and the central Rideau Lakes, an indigenous travel route by canoe went through Hart Lake. This is supported by the geography of this section which determined which water routes could be taken in any given time period and where the portages were located. It is also supported by a direct written 1795 reference by a pre-canal surveyor.

The trace of the route today has been vastly altered by flooding due to dams. The current direct water connection of the Rideau Canal between the Upper Brewers and Jones Falls lockstations did not exist prior to dams raising the water in this area. To understand why Hart Lake was part of a travel route from Kingston to connect to the Rideau Route at Opinicon Lake, knowledge of the pre-dam geography is required. This was done by the author as part of his research for the book "Engineered Landscapes: The Rideau Canal's Transformation of a Wilderness Waterway" (2006). It was the background research for that book, and his subsequent book, "The Rideau Route, Exploring the Pre-Canal Waterway" (2007), that provided much of the information shown in this document.

Prior to dams, an area of today's Rideau Canal now occupied by Whitefish Lake, Little Cranberry Lake and Cranberry Lake was non-navigable (above water in summer and fall – mostly a damp forested area). The headwaters of the Cataraqui River at that time were the original, pre-dam, Dog and Loughborough lakes. To get from the mouth of the Cataraqui River to the Rideau lakes, a favourite indigenous fishing, hunting and gathering area, or to connect with the main indigenous water travel route that led from the St. Lawrence River at Gananoque to the Ottawa River at Rideau Falls, the water route from the Kingston area led up the meandering Cataraqui Creek (it wasn't really a river at that time) to Loughborough Lake and then down Loughborough Creek to Hart Lake and from there, via a portage and Hart Lake Creek to Opinicon Lake.

An early (1803-05) mill dam at White Fish Falls (today's Morton), started to flood the formerly non-navigable area in the central part of the study area, the Cranberry Floodplain, portions of today's Whitefish, Little Cranberry and Cranberry lakes. A second mill dam, erected at the Round Tail (upstream of today's Upper Brewer's Lock), prior to 1816, created a 6 foot depth of water over the floodplain, making it



Hart Lake is located just south of Opinicon Lake. Lakes shown in black on this map are part of the Rideau Canal World Heritage Site. Additional maps can be found at the end of this report. Map by author.

navigable by canoe. The 1831 canal dam at Upper Brewers put about 5.2 m/ 17 ft of water over the floodplain, the level we see today. This is today's route of the Rideau Canal.

Once the Rideau Canal was opened (1832) the Hart Lake route would have been essentially abandoned, except by those going into the area of Loughborough and Hart Lake for local use (i.e. fishing, hunting). Most indigenous travel was through the locks (they had free lockage) and the indigenous hunter-gatherer way of life in this region (seasonal camps) was fading due in part to the removal of supportive wildlife habitat by farming and intensive logging (for both lumber and firewood) and the increasing settler population in the region.

### **Pre-Dam Era (pre-1784)**

The geomorphology of this area starts with the last ice age when this region (entire pre-glacier topography) was depressed by 175 m / 575 ft due to the weight of ice from the continental glaciation of the most recent ice age known as the Wisconsinan ice age. At its peak about 18,000 years ago, the ice sheet was upwards of 2 km thick in this area. The glaciers started to retreat 14,000 years ago leading to several changes. One was the creation of glacial Lake Iroquois, a vast expansion of present day Lake Ontario due to the ice damming of the St. Lawrence about 12,500 years ago. Much of the southern part of the Rideau Corridor, including Hart Lake, was underwater at that time.

The lake drained through breaks in the ice dam and by about 12,000 years ago it had drained back to near the present day shoreline of Lake Ontario. At the same time the process of isostatic rebound was occurring (the rise of the landscape now that the weight of ice had been removed). This affected drainage patterns. This rebound was initially rapid (in geological terms) and by about 6,000 years or so ago, much of the landscape we see today (i.e. streams, vegetation) was developing. Of note, isostatic rebound is still occurring, but at a very slow rate in this area today (faster further north towards Hudson's Bay).

Humans followed the retreating glaciers, particularly the animals associated with that event such as caribou. The climate was sub-arctic at that time, but as the warming trend continued there were associative changes to wildlife due to changing climate and habitat (i.e. caribou to moose to white tailed deer in this area). The earliest archaeological evidence the author is aware of is from Lower Rideau Lake where a fluted point, characteristic of paleo-native people, dating to between 10,000 to 11,000 years ago, was found. An ancient rock painting in that area provides evidence of early indigenous use of dugout canoes on the Rideau. With the invention of the birch bark canoe about 3,000 years ago, water travel, including portaging, became much easier.

A map showing the geography and the main indigenous travel routes in 1783 has been included in this report. That year was chosen since in 1784, the Cataraqi Falls were dammed for the building of the King's mills (sawmill and gristmill) at today's Kingston Mills. This flooded a portion of the Cataraqi River, turning it from a river into a lake (part of today's Colonel By Lake) and changing the nature of water travel.

In this era, there was no direct water contribution, other than spring flooding, from the southern pre-canal Rideau Lakes (i.e. Sand, Opinicon, Indian, Benson, Clear, Newboro) to the Cataraqi River, then more of a meandering creek. Those lakes, and the



#### **Indigenous Dugout Canoe Carving**

This has been interpreted to show six people in a dugout canoe. It was carved onto a fragment of a slate tool. While it cannot be directly dated, it was reportedly found with other archaic period artifacts near Lower Rideau Lake, making it possibly up to 8,000 years old.

From "Palaeo-Indian and Archaic Occupations of the Rideau" by Gordon D. Watson, Ontario Archaeology Vol. 50, 1990.

lakes upland of those, including Hart Lake, were part of the western Gananoque watershed (see map “Indigenous Paddling Routes 1783” for detailed watershed outlines). The headwaters of the Cataraqui River was in the original Dog Lake (which today is the deep northern end of the lake which was much expanded due to the flooding from the canal dam at Upper Brewers) and Loughborough Lake. Today’s Milburn Creek (Battersea to Dog Lake) is the original upper part of the Cataraqui River (see the map section for a trace of the original river). Loughborough Lake is a bit of an oddity in that it drains in two directions, southeast to the Cataraqui River at today’s Battersea, and northeast to Hart Lake.

The author coined the term “Cataraqui Floodplain” (see map “Indigenous Paddling Routes 1783”) for the area between the original White Fish River and the Round Tail, the southern end of today’s Cranberry Lake. The White Fish River flowed from the Jones Falls Rapids, though today’s Morton Bay and on to Lower Beverley Lake and then down the Gananoque River. The Cataraqui Floodplain is about 12.75 km in length and is characterized by an almost flat surface (flat lake bottom) due to the sedimentary infill of a deeper topographic feature. This infill was likely caused by the repeated seasonal flooding, and associated sedimentary load, of this region from the White Fish River. This can most clearly be seen in Whitefish Lake which features towering cliffs adjacent to shallow water depths. The cliffs are an indication of a much deeper original topography. The bedrock bottom is far down but its profile has never been mapped (geophysics) to the author’s knowledge.

Bottom line is that the Cataraqui Floodplain was a barrier to water travel in the pre-dam era. Outside of the scientific evidence available today (bathymetry and such), we also have a written statement on a map done by surveyor Lewis Grant in 1795 which specifically notes “this marsh impassable in summer.” We also have indications from later surveys, including one by Joshua Jebb in 1816, where he characterizes the northern part of the floodplain as “land overflowed”. It was forested by damp ground loving trees such as black ash.

Indigenous water travel from the mouth of the Cataraqui (today’s Kingston) naturally led to its headwaters in Loughborough Lake and from there to Opinicon Lake. This is also shown on Lewis Grant’s 1795 map (see Maps and Photos section) where he notes “half a days journey from Kingston to the Gananoque in Canoes – a great number of rapids and Carrying Places on this Route.” Note, his reference to “Gananoque” is to Opinion Lake, then part of the Gananoque watershed. The “half a days journey” is suspect since the total distance, from the area of today’s Lasalle Causeway (official start of the canal – indigenous peoples may have used the close by Belle Island area), following the pre-canal waters, is about 55 km to arrive at Opinicon Lake. In addition to the paddling time required for that distance, there would have also been time delays for the several portages (carrying places). The trip would have likely taken two days. Voyageurs could have done it in less than a day, but most indigenous peoples, often family groups in canoes, did not travel at voyageur speed.

The geography of Grant’s map in this area is also highly problematic since he simply drew it from an indigenous description of the route, so we see general outline blobs representing lakes. All he shows in this



### **Dog Lake Entrance to Milburn Creek**

Formerly the upper part of the Cataraqui River, Milburn Creek can be a challenge to get to and is only partially navigable today. In the pre-canal era it had a greater flow. That water power was harnessed at the southern outlet of Loughborough Lake (today’s Battersea) in 1816 by Amos and Daniel Ansley. In 1832, Daniel tried to build the dam higher, and in late May the dam broke, the resulting floodwater coming close damaging the new dam and locks at Upper Brewers. See: [www.rideau-info.com/canal/tales/wall-water.html](http://www.rideau-info.com/canal/tales/wall-water.html)

area is a carrying place connection between Loughborough Lake (which he called Kingston Lake) and Opinicon Lake (unnamed on his map), we have to look at accurate geography to understand the original route via Hart Lake.

Two routes were considered during research in the early 2000s, one via Hart Lake and one via Lower Rock Lake since references had been seen indicating that Lower Rock Lake could have been used as part of the route. However, geography argues against this. Hart Lake today is the same level it was in that era, the bedrock elevation of its exit (by the portage, the head of Hart Lake Creek) defines the original level of the lake. Paddling today up Loughborough Creek to Loughborough Lake (a dam now exists at that original water outlet) is quite easy, as it would likely have been in the pre-dam era other than in times of low water. A route via Lower Rock Lake would have been much more difficult (involving a long portage). So a conclusion was reached, simply based on geography and personal paddling knowledge of the area, that the original indigenous route must have been through Hart Lake.

### 1803-1832

At some point between 1803 and 1805, two brothers, Lemuel and Carey Haskins built a dam and sawmill at White Fish Falls (Morton). Their dam was in essentially the same location as today's Rideau Canal dam at Morton. Normally in that era, a miller built a dam to raise water about 12 to 15 feet to provide more power to the waterwheel and to create a larger reservoir for milling (a mill pond). But the Haskins brothers would have found that the water level against their dam, no matter how high the dam, would have only risen about 7 feet. They had a leak somewhere. That leak was the Cataraqui Floodplain; water started to flow down from the dam raised level of Morton Bay to the Cataraqui River. An 1806 reference by surveyor Reuben Sherwood indicates that their dam flooded large flats of ash trees. That would be the upper part of the Cataraqui Floodplain.

At some point prior to 1816, likely much closer to 1803-05, the Haskins built a second dam at a narrow rocky constriction of the Cataraqui River, the Round Tail (still a present day geographic feature). In 1816, Lt. Joshua Jebb, a Royal Engineer, surveyed the length of the "Rideau Route". He noted the mill dam at the Round Tail and stated that it flooded the area above it by 6 feet. To quote Jebb "The Cranberry Marsh is rendered passable by a dam at the entrance or head of Kingston mill stream [Cataraqui River] which throws the water coming from Loughbro Lake onto it, and overflowing it to a depth of 6 feet." It was the Round Tail dam, in conjunction with the dam at Morton, that made the Cataraqui Floodplain navigable by canoe. Flooding extended almost to the foot of the Jones Falls Rapids and the canal builders referred to the flooded forested portions of the floodplain as "the Drowned Lands".

In that era, this would have become an indigenous travel route connecting the Cataraqui with the White Fish River flowing out of Jones Falls and on to the Rideau lakes. This would involve a single portage at Jones Falls (a long established portage). The Hart Lake route may have seen some continued use, since lakes such



**Canal Dam at Morton in 1839**

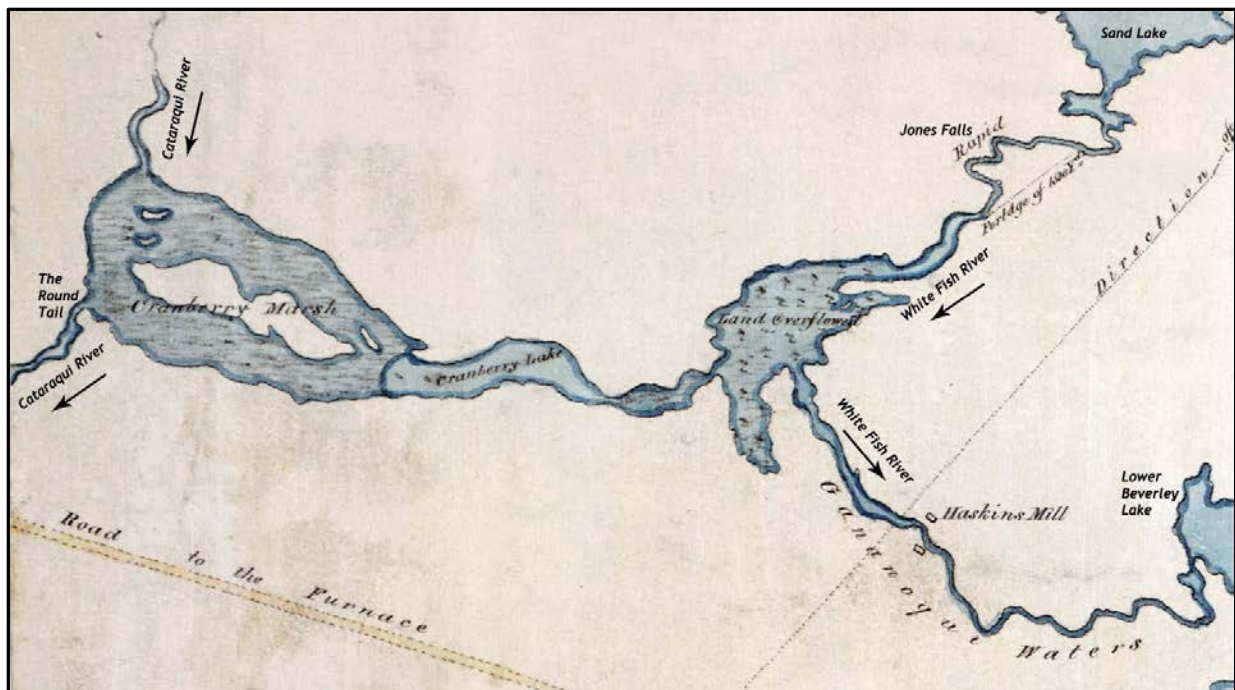
This view, looking west into the foot of Morton Bay, shows the original wooden canal dam at White Fish Falls, the former location of Haskins' mill dam. The canal dam (cement today) raises the water above it by about 7 m / 23 ft. The wooden guardhouse on top of the cliffs was built in 1838 in response to the Upper Canada Rebellion of 1837. "Dam and blockhouse at Whitefish Falls" by Thomas Burrows, 1839, Archives of Ontario, C 1-0-0-0-59

as Dog and Loughborough would have seen some indigenous use (fishing, hunting and gathering) and those at Loughborough wishing to go to the Rideau (Opinicon Lake) may have done so through the old travel route via Hart Lake.

The Rideau Canal was designed by Lt. Colonel John By as an extensive slackwater canal system, one of the reasons for its present UNESCO World Heritage Site designation. A slackwater canal, in a nutshell, is a canal created by dams, to flood navigation impediments such as rapids, rather than excavating canal cuts around those impediments as was the standard practise of the day. In the area between Upper Brewers (at the Round Tail) and the White Fish River, there already was slackwater navigation created by mill dams. In fact civilian surveyor Samuel Clowes, who surveyed the Rideau route in 1823 and 1824, proposing a standard canal with canal cuts and tow paths, recommended in this area that the dams be maintained since those dams would provide navigation at far lower cost than excavating canal channels.

In the end, Colonel By established two canal dams, one at Morton, at the former location of Haskins' dam and one at Upper Brewers, just a bit downstream of the mill dam at the Round Tail, which at the time was controlled by Lemuel Haskins and John Brewer. Brewer arrived in about 1819 and secured the mill seats (water rights) for both upper and lower Brewers rapids. The Round Tail dam was kept intact during the canal building period, used as a coffer dam to control the water going into the Upper Brewers lockstation construction site.

It should also be noted here that every section of today's Rideau Canal was flooded by the building of canal dams (see Engineered Landscapes for exact details). This included Opinicon Lake. Today's configuration of Deadlock Bay and Hart Lake Creek (the creek connecting Hart Lake with Opinicon Lake) was changed in late 1831 with the ~3.0 m / 10 ft of flooding of Opinicon Lake caused by the canal dam at Davis Lock. What we see today is not what existed in the pre-dam era.

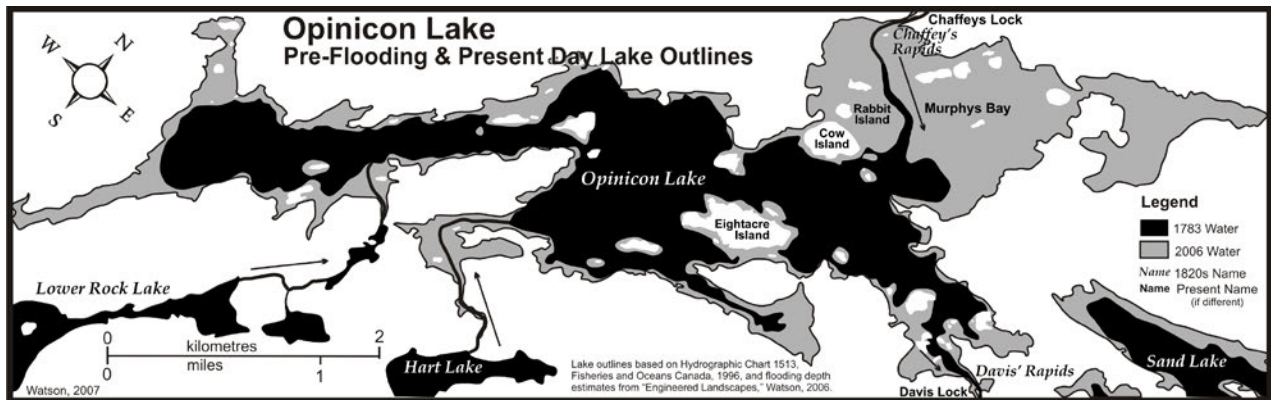


### The Cranberry Flood Plain in 1816

This annotated section from Lt. Joshua Jebb's 1816 survey map of the Rideau Route shows the result of 1.8 m / 6 ft of flooding created by the mill dams at the Round Tail (left) and the mill dam upstream of Haskins Mill at White Fish Falls (Morton). As with all early maps, the scaling and outlines of geographic features on this map are a bit problematic. Section from "Plan of the Water Communication from Kingston to the Grand River" by Lt. J. Jebb, July 8, 1816, Library and Archives Canada, NMC 21941 2/3. Annotation by Ken W. Watson.

There was a former mill dam at Davis (c.1820) which raised the water (uncalculated) of Opinicon Lake. That mill dam and a mill dam at Chaffey's built in the same period, changed the configuration of the original portage around Chaffey's Lock. Those two mill dams had the effect of considerably shortening the original very long (1.2 km), pre-mill dam portage around the rapids at Chaffey's.

At Hart Lake the effect of the mill dams and subsequent canal dams would have been much less pronounced, but the original length of the portage at Hart Lake would have been variable depending on the flow of Hart Lake Creek. The Hart Lake shoreline side is essentially what it would have originally looked like other than the cultural disturbance due to post 1830 dam construction in that area (see next section).



### Opinicon Lake – pre and post flooding

The black outline is a rough outline of the original pre-dam lake based on the hydrography shown on Chart 1513. Back in that era, Hart Lake Creek was a much longer creek flowing into a smaller Opinicon Lake. The lake was about 3 m / 10 ft lower than it is today. Schematic by author.

## 1832 to present

When the canal opened in 1832, the Upper Brewers' dam raised the water level at the dam by 5.2m / 17 ft. Today there is a 5.6 m / 18.5 ft rise (due to changes in the Morton and Upper Brewers dams over time), putting about 5.2m / 17 ft of flooding over the former Cataraqui Floodplain. This is evident in the bathymetry of the area.

As part of research for Engineered Landscapes, in 2004 the author conducted bathymetry work at the northern limit of the floodplain, the upper part of Whitefish Lake (see the map Bathymetric Depths of Upper Whitefish Lake). This was done both to define the exact channel of the now drowned upper portion of the White Fish River (Morton Creek is a flooded remnant of the lower portion) and to see if there was any evidence of channelization in the floodplain, in order to confirm historic evidence that it was non-navigable (and hence not a travelled canoe route, the reason they went via Hart Lake). A map of part of that survey has been included in this report.

In 2005, the author was involved in a research program conducted by Dr. Joe Boyce and MSc candidate Lisa Sonnenburg, using high powered bathymetrics, a side scan sonar and a magnetometer to map the bottom topography of several areas on the southern Rideau Canal. The author took part in some of the planning and the on-water data collection part of this study. Although Lisa later concentrated her MSc thesis on Colonel By Lake (see map on last page), the area from Jones Falls to the Morton Dam was surveyed and that work confirmed no channelization in the upper part of the floodplain. As a side note, Lisa's work was in part to try to identify now drowned indigenous sites. She later did a PhD on the same topic on Rice Lake on the Trent-Severn Waterway.

Hart Lake itself has a variable water level history starting with a mill dam built at the outlet (adjacent to the portage) by Robert Drummond, likely in the 1831-32 period. It eventually fell into disuse and then much later (1870s) a government dam was built here in order to use Hart Lake as a reservoir lake for the Rideau Canal. That dam didn't last very long since local farmers objected to their land being flooded and ended up destroying that dam, to quote a local farmer, Orman Baxter, "someone took some dynamite and blowed it up" See: <https://www.rideau-info.com/canal/tales/deadlock.html> for details.



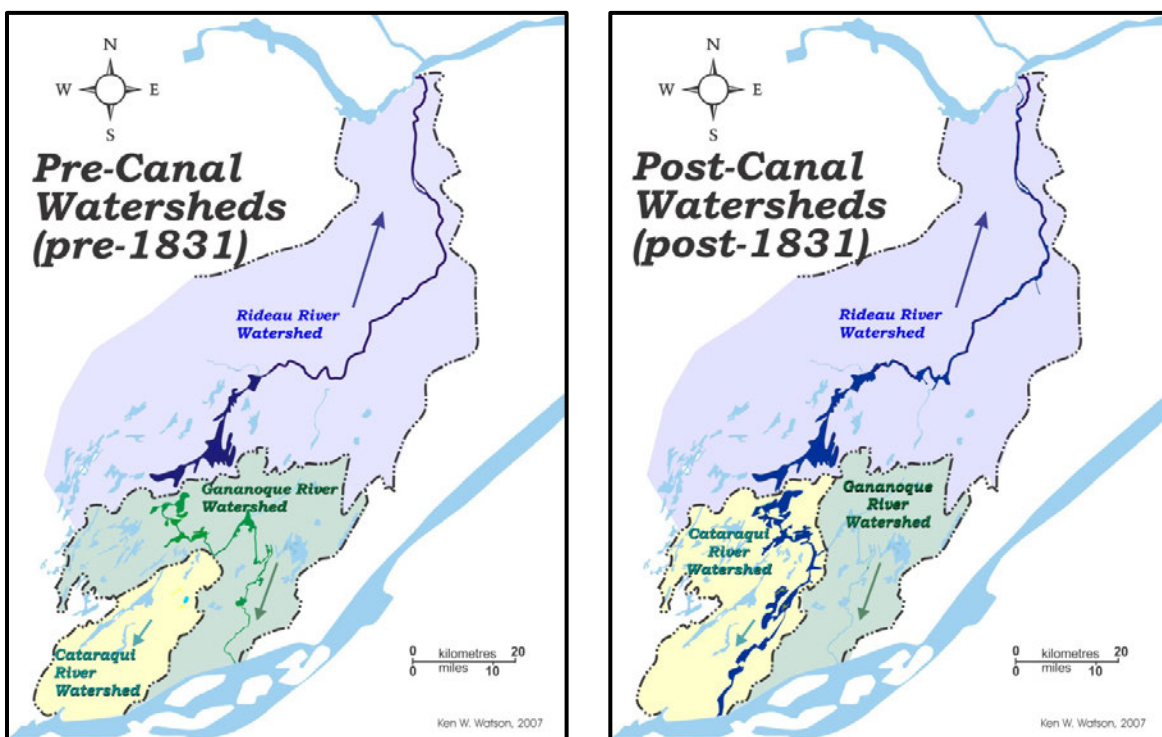
### 2005 bathymetric survey

A jury-rigged assembly held a large bathymetric transducer and a side scan sonar unit off the side of the author's boat. Photo by author, May 27, 2005.

## Changing Watersheds

The watersheds in this region tend to be quite confusing since they changed with the completion of the canal dam at Morton. The pre-canal Cataraqui and Gananoque watersheds are not the same as the post canal ones. Haskins' original mill dam likely only had a moderate effect, since he was letting most of the water from his mill dam back into the Gananoque system, but the Rideau Canal dam had a profound effect, diverting most of the water flow that used to go to the Gananoque River to the Cataraqui River. This happened in 1831 when most of the dams along the Rideau Canal, including the one at Morton, were completed. The first power craft trip (steamboat) along the entire Rideau happened in May, 1832 and the canal officially opened to commercial navigation in July 1832.

The canal dam at Morton had the effect of doubling the size of the Cataraqui watershed while halving the size the Gananoque watershed. Please note, actual flow rates have not been checked, doubling and halving are based on the geographic changes to both watersheds (see map comparison below).



## Seasonal Water Fluctuations

Please note that seasonal water fluctuations play a role in geographic interpretation of pre-canal landscapes and things associated with that such as the number and length of portages. We are used today to dam managed water levels which provide a generally consistent level. On the Rideau Canal, Parks Canada manages these following a set of "rule curves", elevating the Rideau to navigation level in late spring and then dropping it down to lower winter levels in the fall. This end of season drawdown was initially done just to provide reservoir capacity for the spring freshet (to prevent flooding and damage to the locks), but it also now has an environmental component (i.e. earlier drawdowns for things such as animal hibernation (i.e. turtles) and to accommodate fall fish spawning).

In a natural system such as the pre-dam Rideau, seasonal variations can be dramatic and period information relates to the time of year surveys were done. For instance, in 1827, two different surveys measured the width of the Upper Narrows (today's Narrows Lock) to be either 100 feet (low water) or 350 feet (high water). This also applies to shoreline outlines and such done by early surveyors (although that gets lost in the general inaccuracies of these maps). Surveyors in that period didn't note this fluctuation other than for Lake Ontario and the Ottawa River since at those locations it impacted the design of the lower lock (setting the sill depth and flood guard height of those locks).

The water route between Kingston and Opinicon Lake via Hart Lake would have been subject to seasonal water fluctuations impacting travel. At low water there is a lot more portaging required than during high water. While this doesn't apply to the Hart Lake shoreline side of the portage, which has a fairly abrupt bedrock entrance, it would to the lower part of that portage into Hart Lake Creek, which likely ran dry at times (late summer).

Hart Lake today is dam managed in terms of inflow since some of that flow is used for hydro-electric power generation at Jones Falls. The flow from Loughborough Lake, via Hart Lake (and then Opinicon to Sand to Jones Falls), contributes to that power generation. Hart Lake likely has a higher water inflow today than it did in the pre-hydro dam period (the hydro station at Jones Falls was built in 1947) or the pre-any-dam period.

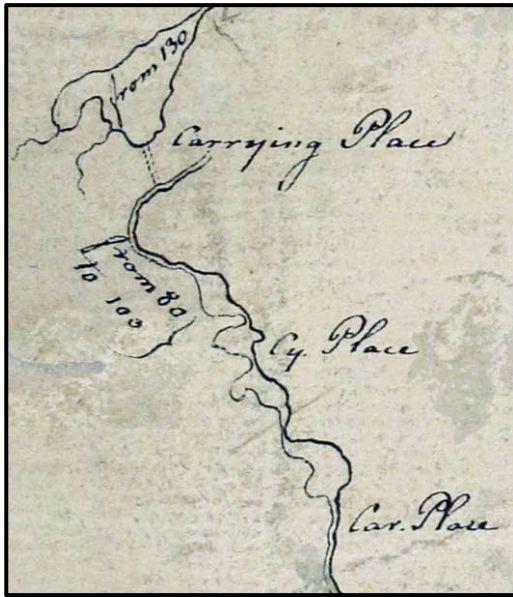
## **Portages**

The Hart Lake portage is a rarity in the Rideau region, a section of a portage that has been minimally disturbed and exists today much as it has since it was first used. There are very few other examples of this in the area since most are either culturally disturbed beyond the point of recognition or partially or completely flooded due to the building of the Rideau Canal.

Similar to the Rideau Canal telling a story of a time before good roads and railroads, when water travel was the best means to transport people and heavy goods, portages link us to a time before humans engineered waterways, though the building of canals, to make water transportation easier.

Exact pre-canal portages are difficult to determine, not just for the reasons given above, but because they also depended on who was travelling and what type of vessel they were using for that travel. Very few portages are noted by early surveyors in part because they would line or walk their birch bark canoes up or down shallow rapids. We have written descriptions of surveyors being up their armpits in water as they dragged their canoes up a set of rapids while surveying the Rideau. The earliest surveyor, Lt. Gershom French, only noted a few portages when he surveyed the Rideau Route in the fall of 1783 (see map on next page).

A family group travelling for fishing/hunting/gathering purposes was generally not in a rush and may have used portages in favour of running or lining up rapids. An indigenous raiding party on the other hand (the Rideau region saw conflict between various groups and was used as a travel route for that purpose), where speed was an issue, likely travelled the Rideau as early surveyors and voyageurs did. For example, we have several indications that the standard indigenous travel route between today's Newboro and Chaffeys was via Mosquito Creek (now Mosquito Lake). But there was a short (~40 m) portage between Indian and Clear lakes to cut off that extra travel distance. If paddlers wanted to shave off hours of travel time, they would have used that short portage. That portage is now long gone, a channel was excavated there as part of the building of the Rideau Canal.



### Portages between Rideau Lake and the White Fish River, 1783 and 1816

The map on the left was drawn by a draftsman in 1794 showing the route followed by Lt. Gershom French in his October 1783 survey. The map on the right is Lt. Joshua Jebb's map, originally drawn by Jebb as part of his 1816 report. French's map shows the long portage over the watershed divide at the Isthmus (Newboro), the next portage is the one at Chaffeys and the bottom portage is Jones Falls. Jebb adds detail and an additional portage, the 40 yard portage between Indian and Clear lakes. French's map indicates he went by way of Mosquito Creek, so he would not have encountered the Indian/Clear lakes portage. French only mentions the distance of one portage, calling the Jones Falls portage a mile and half long. Jebb's survey shows it as 1,500 yards (0.85 miles) long. The author has not tried to reconcile this difference, Jebb's survey is much more accurate, but there may also be a geographic reason for this large discrepancy due to the flooding of a portion of the White Fish River from the mill dam at the Round Tail. Jebb also shows the portage at Chaffeys to be 1,500 yards long, that route was abandoned c.1820 after mill dams at Davis and Chaffeys raised the waters of Opinicon and Indian lakes, allowing for a much shorter portage. If viewing this in a PDF, use the zoom function to see the detail on Jebb's map. Left = Section from "Communication with the St. Lawrence & Ottawa Rivers by the Rivers Petite Nation & Rideau", William Chewitt, 1794. Archives of Ontario, AO 1336. Right = Section from "Plan of the Water Communication from Kingston to the Grand River" by Lt. J. Jebb, July 8, 1816, Library and Archives Canada, NMC 21941 2/3

If we go back to the era before the invention of the birch bark canoe (~3,000 years ago), dug out canoes were much heavier and portages would have been avoided where possible. As a side note, settlers made dugout canoes since the technology of making birch bark canoes was an indigenous trade secret. The lightweight recreational canoes that we know today got their start in 1856 in Peterborough when John Stephenson, who got tired of lugging a 200+ pound dug-out canoe on camping trips, figured that there had to be a better way to build a canoe. He invented the planked dugout or board canoe, a lighter canoe made of sawn planks. Later in the 1870s, the even lighter canvas canoe was designed and today we have very light canoes built out of material such as Kevlar, making portaging much easier.

On the Kingston to Hart Lake route, most of the portages that would have existed on the Cataraqui River section are now either under water or culturally disturbed. So the portage at Hart Lake is a bit of a heritage gem and a direct link to the distant past.

## Who Used the Route?

It is outside the scope of this report and the author's main areas of expertise, so only a few brief notes will be added here. It is to be noted that the original "Rideau Route", which went from the Ottawa River at Rideau Falls to the St. Lawrence River at Gananoque Falls, was the main indigenous water travel route in this region. This route passed through Opinicon Lake and as noted in the write-up, the Cataraqui route may have been used at times to connect those coming from Lake Ontario to the Rideau Route. But its main use may have been to simply provide access into the general region for hunting, fishing and gathering.

The question of which indigenous groups used the Cataraqui/Hart Lake route depends on the time period being looked at since the human history of this area spans thousands of years and indigenous groups changed over time. Today, Hart Lake lies within the boundaries of an agreement in principle land claim with the Algonquins of Ontario. That will be the group that receives the benefits of a legal land claim once the settlement is finalized.

If we look back a few hundred years there are indications of overlapping use in the Hart Lake area by several indigenous groups including the Haudenosaunee (Iroquois Confederacy), the Anishinabewaki, the Algonquin, the Wendake-Nionwentsio (Huron) and the Mississauga. Those nations evolved over time and were preceded by other indigenous groups. For instance, we have archaeological evidence along the Rideau of usage by Point Peninsula peoples who flourished in North America from 600 BCE to 700 CE. There are still arguments taking place as to which of current indigenous groups these people were the ancestors of. This group had extensive trade routes and the Rideau route (primarily Gananoque to Ottawa) would have been a significant travel way for these peoples. The author is unaware of archaeological evidence showing they used the Cataraqui/Hart Lake route (not researched).

Usage of the actual route is more difficult to determine. Algonquins for instance, had permanent settlements on the Upper Ottawa River and came south from there to set up summer hunting, fishing and gathering camps in the Rideau region. So they may not have made much use of this travel route. Groups living on or near Lake Ontario who wished to come inland for the same purposes, may well have used this route.



**Indigenous Camp on the Ottawa River in 1833**

This painting shows a family grouping using a single canoe. Their camp was located near where the Canadian Museum of History sits today. The Ottawa locks and Barrack Hill (now Parliament Hill) are visible across the river (right side of painting). Entrance of the Rideau Canal, Ottawa River, Canada by Henry Pooley, 1833. National Gallery of Canada.

## Conclusion

Outside of any potential anecdotal or archaeological evidence supporting the Hart Lake indigenous route (not researched by the author), the pre-canal geography and historic documentation directly support Hart Lake as being part of an indigenous water travel route from the mouth of the Cataraqui River (at today's Kingston) to Opinicon Lake. Detailed indigenous usage of the route has never been documented, but this route may have been used for thousands of years, by various indigenous groups, up until the opening of the Rideau Canal in 1832 which then provided an easier water route alternative.

## References

Most of this is based on the author's own work. The two documents referenced in this report are:

"Engineered Landscapes: The Rideau Canal's Transformation of a Wilderness Waterway," by Ken W. Watson, 2006; ISBN 0-9780751-0-2. This 260 page document is presently only available as a free PDF from: [www.parkscanadahistory.com/publications/rideau/](http://www.parkscanadahistory.com/publications/rideau/)

"The Rideau Route: Exploring the Pre-Canal Waterway," by Ken W. Watson, 2007, ISBN 978-0-9780751-1-8. This 146 page book is presently only available as a free PDF from: [www.rideau-info.com/canal/history/rideau-route/](http://www.rideau-info.com/canal/history/rideau-route/)

Also referenced is the story of the Dead Lock: [www.rideau-info.com/canal/tales/deadlock.html](http://www.rideau-info.com/canal/tales/deadlock.html) written in 2015 and the Wall of Water: [www.rideau-info.com/canal/tales/wall-water.html](http://www.rideau-info.com/canal/tales/wall-water.html), written in 2009.

For a detailed synopsis of the quaternary geology in this area see: "Quaternary History of Eastern Ontario: Impacts on Physical Landscape and Biota" by Stephen C. Lougheed and Natalie Morrill (2012): [opinicon.wordpress.com/physical-environment/quaternary/](http://opinicon.wordpress.com/physical-environment/quaternary/)

## **PHOTOS and MAPS**



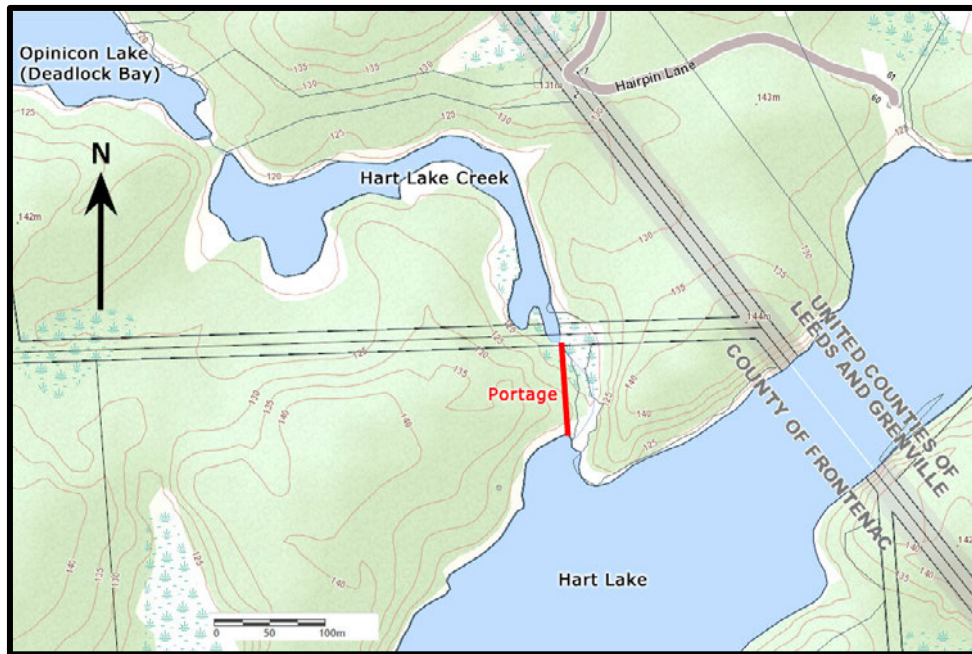
**Head of Hart Lake Portage (looking northwest towards Opinicon Lake)**

This photo taken by the author on August 6, 2015 shows the Hart Lake side of the portage leading to Opinicon Lake. This entrance would have been minimally impacted by fluctuating lake levels. It has a clean deep entrance and if the water level of Hart Lake dropped, the entrance and the portage distance remain very similar. If water levels rose it was also minimally impacted since the portage rises as it leaves Hart Lake before it descends down to Hart Lake Creek (see topographic map). It would likely have risen in the pre-dam era due to spring flooding, significant rain events and/or beavers damming the entrance to the Hart Lake Creek, something they continue to try to do to this day.

This is significantly different than the lower part of the portage which was greatly impacted by the building of the canal dam at Davis Lock and the subsequent 3 m / 10 ft rise of Opinicon Lake. In the pre-dam era, Hart Lake Creek extended as a creek some 1.35 km until it went into the original pre-dam raised Opinicon Lake (see the pre and post canal lake outline map of Opinicon Lake in the main write-up). In times of drought, when the creek may have partially or completely dried up, indigenous peoples would have portaged their canoes down the creek bed until they reached a spot where there was enough water to float them.



**Foot of the present day portage.** This photo, taken by the author on August 6, 2015, looking north (towards Opinicon Lake), shows the foot of the 80 m / 250 ft long portage where it goes into Hart Lake Creek. The water level seen in Hart Lake Creek in this photo is the summer level of Opinicon Lake which makes travel up the creek normally quite easy, except during the spring freshet or when beavers dam the creek, which they often do at the location of the “Dead Lock”.



This topographic map (Ontario Base Map topography), shows the topographic rise on either side of the portage around the head of Hart Lake Creek. The short portage today is due to the fact that the depth of Hart Lake Creek at the foot of today's portage is the canal dam flooded level of Opinicon Lake (+3 m / 10 ft). The original portage likely varied from about the 85 m length of today's portage up to 1.35 km (the length of the original creek), depending on the water flow in the creek at any given time.

**Name Convention Note:** I originally use the name Peterson Creek in favour of Hart Lake Creek since that was the official name shown the NTS map of this area (Westport Map Sheet, 31 C/9) at the time of my original research (early 2000s). But they dropped name that in 2010, leaving the creek unnamed.

A general geographic naming convention is to continue the name of a river or creek through any interrupting lakes. The name Peterson Creek was used (as of the mid-20<sup>th</sup> century, that name doesn't show on earlier maps) since it had its headwaters in Upper and Lower Peterson Lake which flows, via Peterson Creek, into Crow Lake and then via another Peterson Creek into Hart Lake and then via another Peterson Creek into Opinicon Lake. So it can be confusing, particularly when applied to smaller creeks.

I have also seen current on-line maps calling it Loughborough Lake Creek as a continuation of the creek that flows into Hart Lake from Loughborough Lake, which is called Loughborough Lake Creek. Of note, the earliest NTS maps (1927 to 1949 – the earliest ones I have) calls the creek flowing into Hart Lake from Loughborough Lake "Hart Creek". The Hart Lake outlet creek into Opinicon Lake is unnamed on those NTS maps.

The name Hart Lake Creek has been locally used for a long time. That name for instance shows up on a 1926 map of Opinicon Lake which is the earliest written reference seen by the author.

On the topic of official names, Opinicon Lake is the official name of that lake but you will see Lake Opinicon used quite often including on some maps as the name of the lake. That name was used for former small village, now mostly a ghost town located at the southwest end of the lake. So, for accuracy and clarity, it is Opinicon Lake for the lake and Lake Opinicon for the village (that village name shows up on most current maps).

## Loughborough Lake Creek



These photos, taken by the author in 2005, show a few aspects of Loughborough Lake Creek.

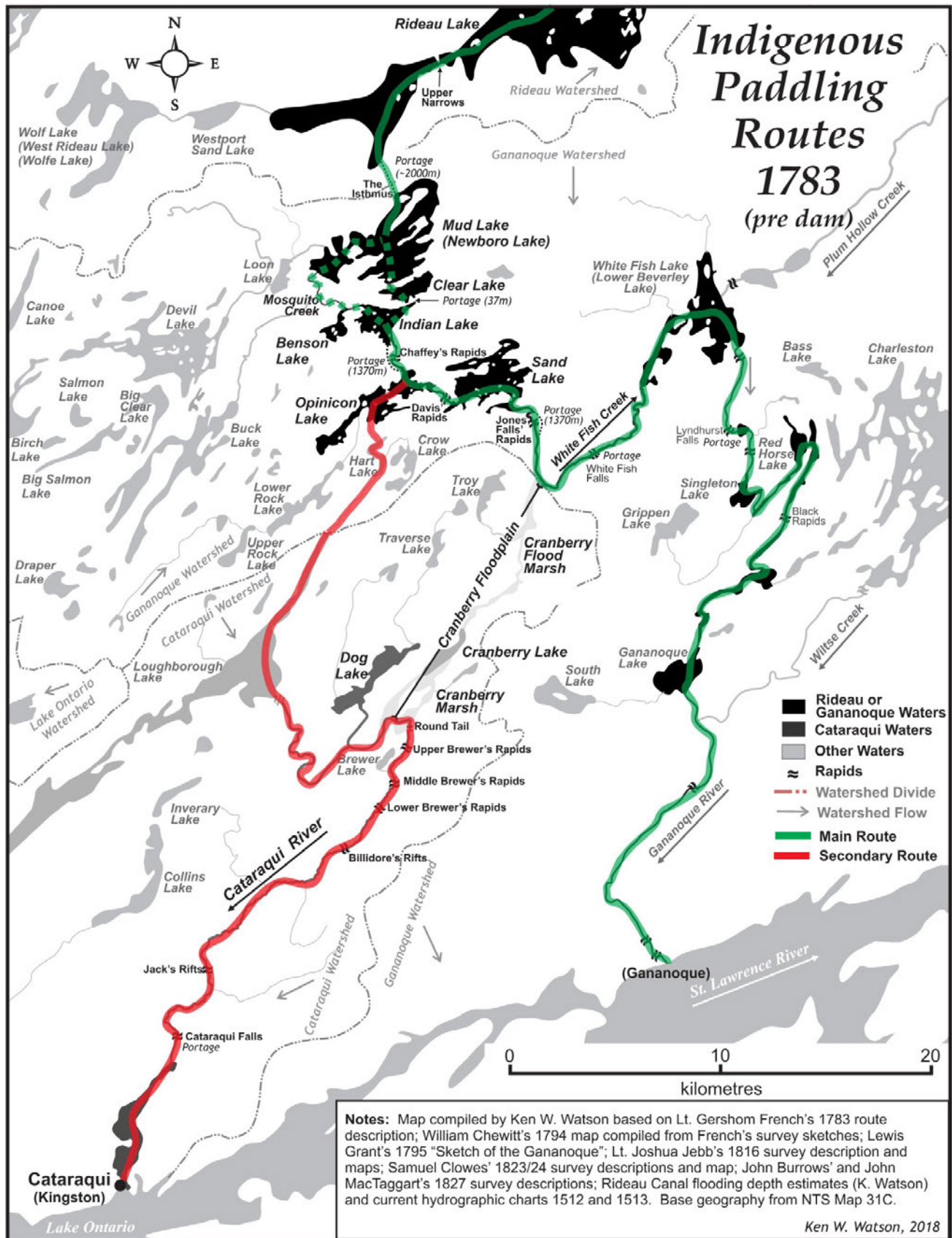
The photo on the left shows the dam at the northeastern outlet of Loughborough Lake, today's head of Loughborough Lake Creek.



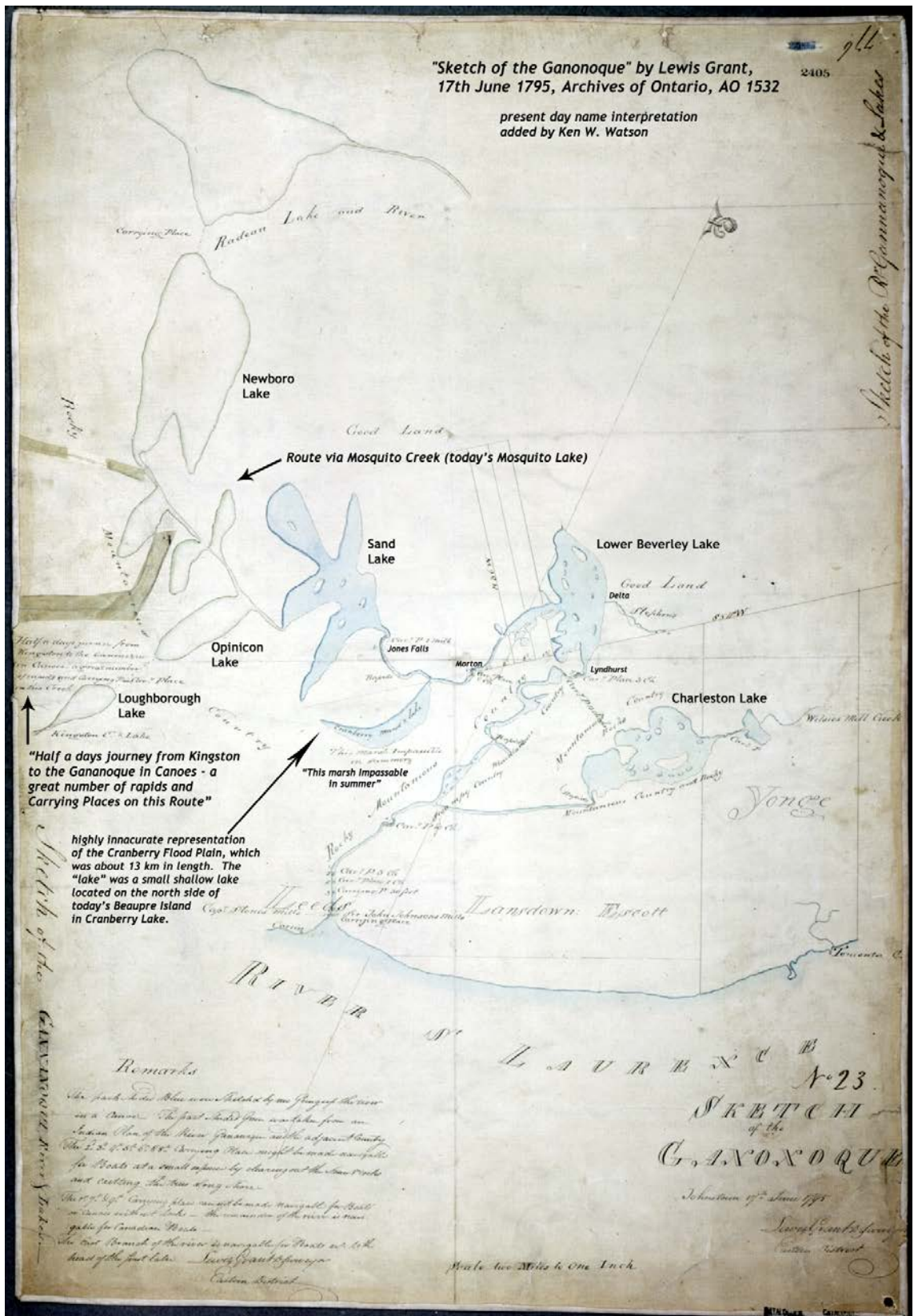
The photo above and to the left show a couple of navigation impediments in the creek. The top photo, looking north, shows a bedrock exposure across the creek. It is a bit culturally disturbed by a road crossing. These small rapids required a very short portage.



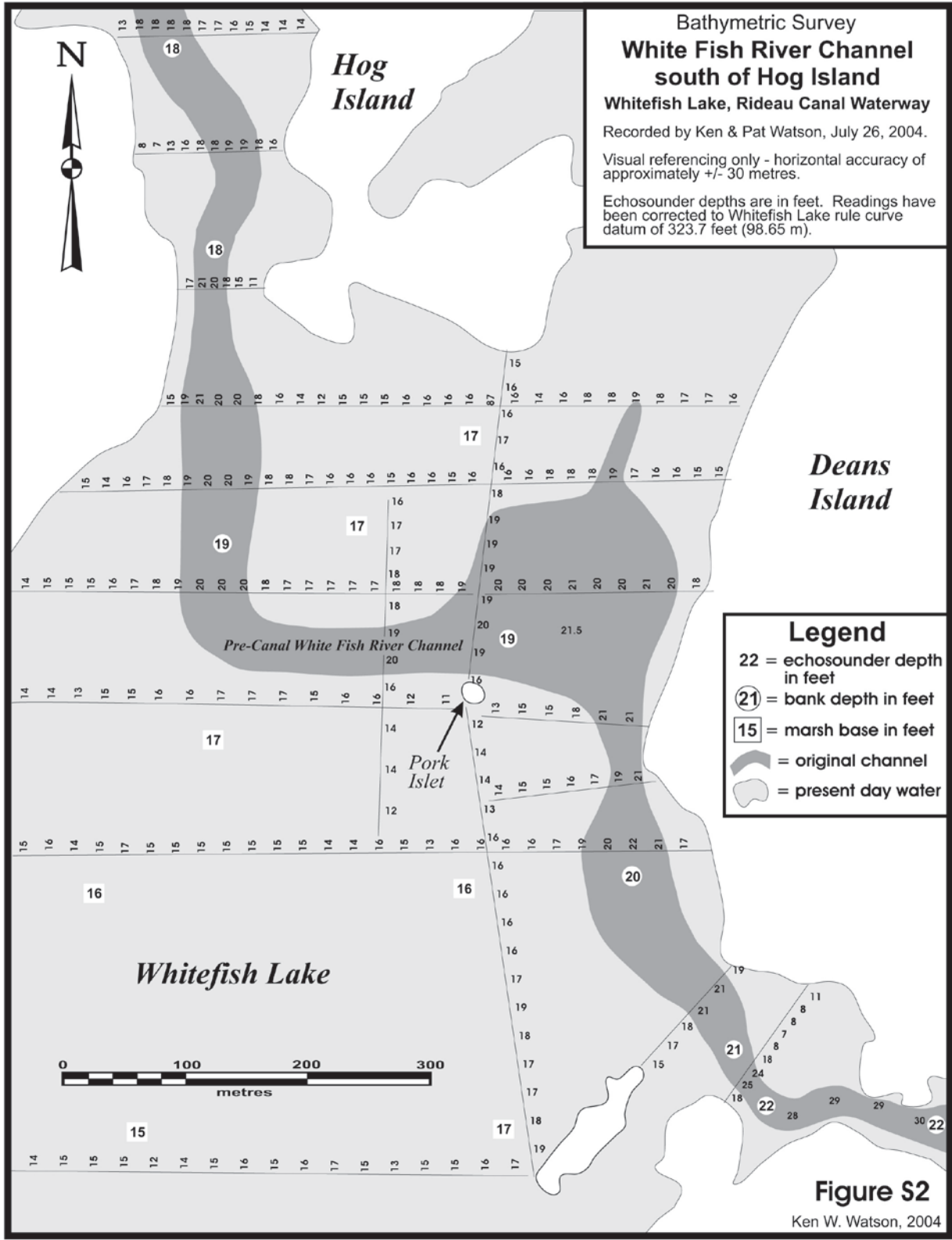
The photo to the left shows a beaver dam across the creek. It didn't pose a challenge for a kayak. Going over beaver dams would have been a common routine done by early paddlers.



**Indigenous Paddling Routes 1783:** The red line is the path of the indigenous canoe route from the mouth of the Cataraqi River (Kingston) to Opinicon Lake. Note this map also shows the pre-dam watersheds. Hart and Opinicon lakes were, in the pre-dam era, part of the Gananoque watershed. Map by Ken W. Watson.

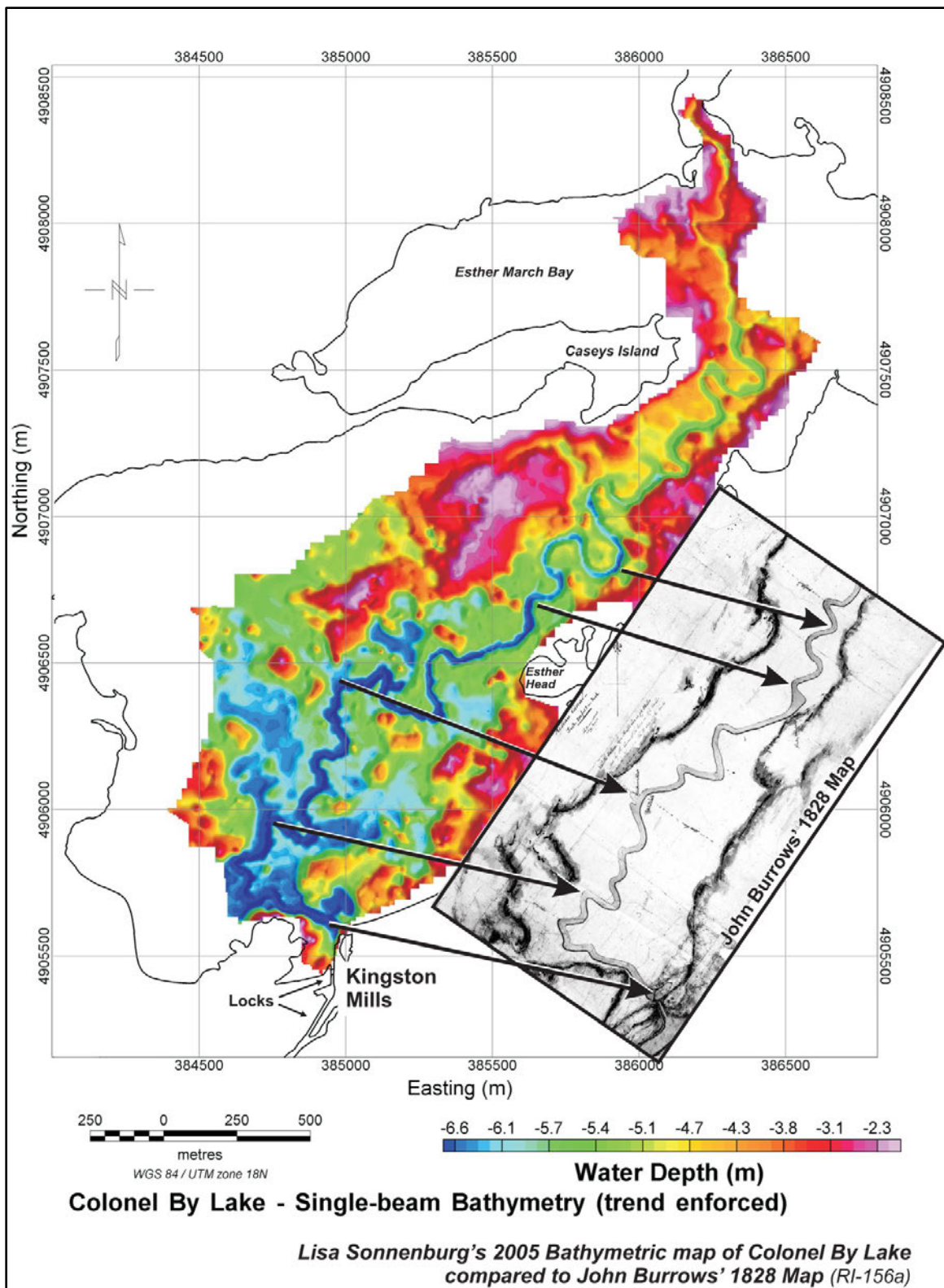


**Lewis Grant's 1795 Survey Map:** Blue outlines are areas that Grant says he travelled during his 1795 survey. The blank outlines of lakes were, quoting Grant "taken from an Indian Plan of the River Gananoque and adjacent country" Grant's blue outlines are simply representational, they are not accurate. Annotated version of "Sketch of the Gananoque", Lewis Grant, June 17, 1795, Archives of Ontario, AO 1532.



**Bathymetric Depths of Upper Whitefish Lake:** This was the first attempt by the author to map the original channel of the White Fish River, the northern part of which is now drowned under the waters of Whitefish Lake due to canal dams at Upper Brewers and at Morton. Of note, the hydrographic charts are not accurate enough (large distances between sounding depths) to do this type of detailed determination.





### The Catarqui "River" in the pre-dam period (pre-1784)

This bathymetric map shows the exact course of the original Catarqui River above Kingston Mills, the location of today's Colonel By Lake, whose shoreline is shown as the black outer line). Travel distance by canoe was greatly extended by having to follow all the meanders of the creek. Surveyor John Burrows in 1827 describes those meanders, indicating the river "with but few exceptions for the whole of that distance, [is shaped] in gentle curves, as Hogarth has it 'lines of beauty'". Today those lines of beauty are hidden beneath the canal dam raised waters of the Catarqui River and associated lakes.