

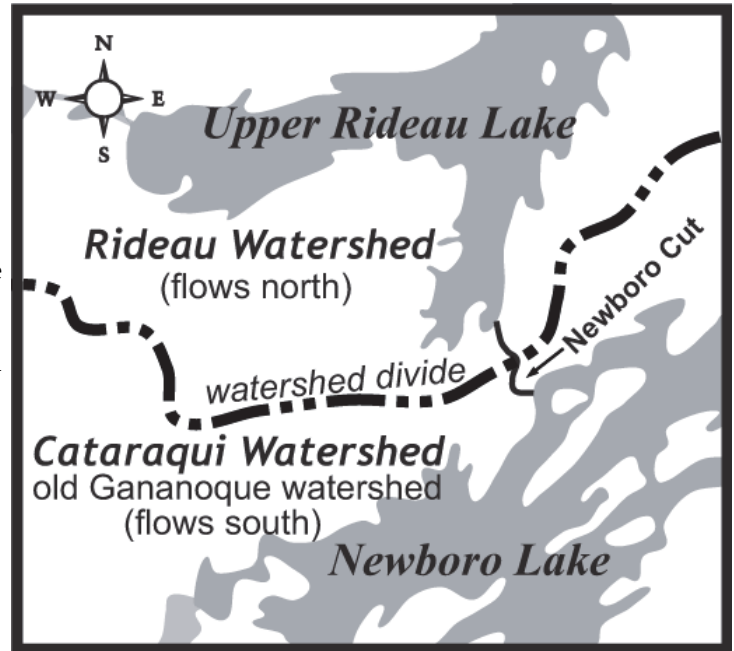
Waters Divided: Watersheds & Slackwater

There is a common misconception that Upper Rideau Lake, as the highest water level on the Rideau Canal, flows to both the Rideau River and to the Cataraqui River. But that is incorrect since it's not the highest point on the Rideau Canal, that honour goes to the height of land halfway down the canal cut from the Newboro Lock to Upper Rideau Lake. That is the watershed divide between the Cataraqui watershed which flows south to Lake Ontario and the Rideau watershed which flows north to the Ottawa River. Since there is no weir in the canal cut, the only contribution Upper Rideau Lake makes to the Cataraqui is what gets locked through the Newboro Lock, a very tiny amount in comparison to natural water flow north, through the weir at Narrows Lock.

In the pre-canal era, the route the Rideau Canal takes today spanned 3 watersheds, the Rideau River watershed (as it is today), the Gananoque River watershed and the Cataraqui River watershed. That changed due to the slackwater design of the Rideau Canal, with the building of dams to flood rapids and provide a navigable depth of water, one of the reasons for the UNESCO World Heritage designation of the Rideau Canal. But there already was slackwater navigation in part of the system prior to Lt. Colonel John By arriving on the scene. It was started, over 20 years earlier, by two millers, Carey and Lemuel Haskins.

The Haskins brothers were looking for a place to build a sawmill and they found it at White Fish Falls, the location of today's canal dam near Morton (see maps on next page). At that time the flow of water from the south-central Rideau Lakes (Newboro, Clear, Indian, Opinicon and Sand) flowed through the rapids at Jones Falls into the White Fish River. That river flowed through today's Morton Bay, down Morton Creek (which is a flooded remnant of the original river), into Lower Beverley Lake, and from there to the Gananoque River. Those lakes and the White Fish River were part of the Gananoque watershed.

In about 1803, the Haskins brothers erected a dam at White Fish Falls and built a sawmill. They hit a problem though; their dam at that location couldn't raise more than about 7 feet of water. In that era a miller's dam was generally 12 to 15 feet in height, the more height the better (more water power and a larger mill pond). But no matter how much water flowed to the dam, the height of water remained fixed at about 7 feet – they had a leak. That leak turned out to be the Cranberry Flood Plain, the area now



Dividing the Waters

The height of land between Upper Rideau Lake and Newboro Lake is the watershed divide. In the pre-canal era, the southern flow ended up at Gananoque. Today it ends up at Kingston. The reason for the change is the dam at Morton—originally a mill dam, now a canal dam.

occupied by part of Whitefish Lake, Little Cranberry Lake and Cranberry Lake, an area non-navigable (above water) in the summer. With water at about 7 feet in height at Haskins' dam at White Fish Falls, the White Fish River started to flow over the plain to the Cataraqui River. The Cataraqui was more of a creek at the time with its headwaters in Dog and Loughborough lakes.

Sometime prior to 1816 (likely closer to 1803 than 1816) the Haskins brothers figured out where their water was escaping and built a second dam at the Round Tail, a narrow rocky constriction in the Cataraqui River just upstream from today's Upper Brewer's lockstation, some 17 km away from their dam at White Fish Falls. We know that dam was in place by 1816 since Royal Engineer

FREE LOCKAGE IN 2017

Details inside

Friends of the Rideau is a volunteer, non-profit organization, working to enhance and conserve the heritage and charm of the Rideau Canal.

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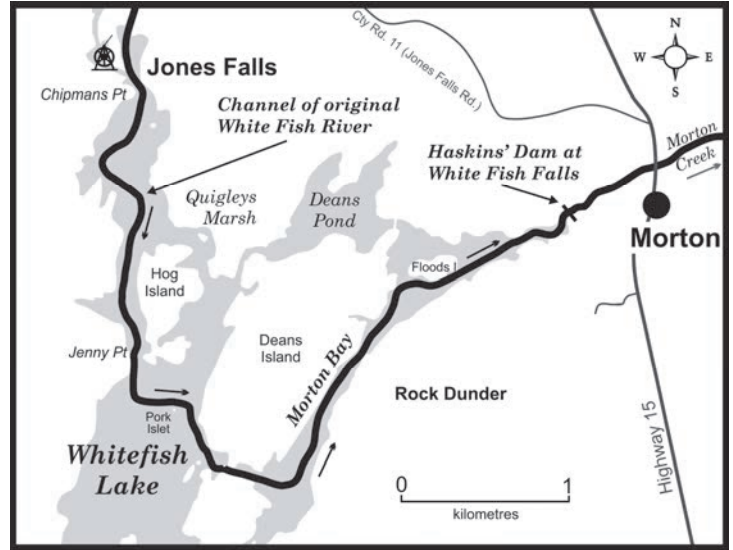
Joshua Jebb, during his 1816 survey of the Rideau Route, noted the Round Tail Dam and the fact that it was backing up about 6 feet of water over the Cranberry Flood Plain. That would have provided about 13 feet of head at Haskins' White Fish Falls dam.

We now jump forward to 1823/24 when surveyor Samuel Clowes was mapping out a conventional canal system, advocating for canal cuts around problem areas such as the rapids and falls at Smiths Falls and Merrickville. But in the area of the Cranberry Flood Plain he saw a working example of a slackwater system, the mill dams at Morton and The Round Tail providing navigation by flooding. This didn't go unnoticed by Clowes and even though he was proposing a conventional canal, with canal cuts and tow paths, in this area he saw the tremendous cost savings of simply maintaining those two dams. John By, when he arrived in 1826, had Clowes' report in hand and it perhaps sparked his idea to make the entire Rideau a slackwater system.

The limitation for creating a slackwater system was the dam building technology of the day. Rivers such as the Ottawa and the St. Lawrence were too big to dam, but the Rideau, Whitefish and Cataraqui rivers were small enough to be able to use this technique. So Colonel By initiated an ambitious engineering plan to flood the many rapids along the route by the building of dams. In the area of the Cranberry Flood Plain he had a higher dam built at White Fish Falls and a new dam built at Upper Brewers (which drowned the old Round Tail dam which was being used as a coffer dam for the work at Upper Brewers). The higher dam at White Fish Falls (today's Morton dam) drowned the White Fish River from Morton to Jones Falls and diverted most of the flow to the Cataraqui River. This doubled the size of the Cataraqui Watershed, the water from lakes and rivers that previously contributed to the Gananoque River, now going to the Cataraqui River, a situation that remains in place to this day.

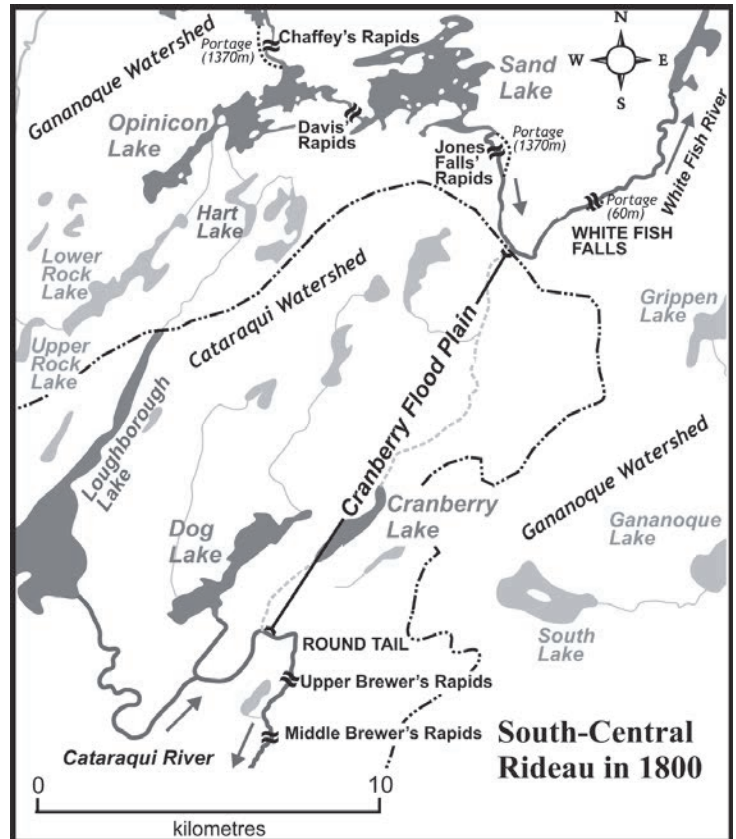
Colonel By's design changed the landscape forever, creating lakes where there previously had been forests and rivers. In 2007 this was recognized as one of the two criteria for why the Rideau Canal was awarded the designation of a UNESCO World Heritage Site. That part of the designation states, "The Rideau Canal remains the best preserved example of a slackwater canal in North America demonstrating the use of European slackwater technology in North America on a large scale. It is the only canal dating from the great North American canal-building era of the early 19th century that remains operational along its original line with most of its original structures intact." While the UNESCO credit goes to By's implementation of European slackwater technology, I'd give some credit to the Haskins brothers, who created the first slackwater navigation on the Rideau route.

- Ken Watson



The Drowned White Fish River

The black line is the channel of the former White Fish River, now drowned under Whitefish Lake. If you have a depth finder on your boat, you can still "see" that old channel.



South Central Rideau in 1800

The lakes and watershed divide prior to mill, and later, canal dams, changing the flow.

Maps by Ken W. Watson

FREE LOCKAGE IN 2017 !!

Lockage fees for the Rideau Canal will be waived in 2017 in celebration of Canada's 150th birthday. All other fees, such as mooring and camping, will still apply.

Start planning your Rideau outings now – make sure you go through a lock or three. If you're a resident of the Rideau, invite friends and family to enjoy the heritage experience of a Rideau lockage.

2016 AGM

Friends of the Rideau's AGM took place on May 7 in the theatre of the Rideau Canal Visitor Centre in Smiths Falls. Our Chair, Hunter McGill, welcomed everyone.

Hunter reviewed the past year for Friends, noting the various partners and funders who support our work. Parks Canada for allowing us the use of The Depot in Merrickville which we operate as a summer interpretation and visitor centre. The Village of Merrickville-Wolford for a generous grant in support of our operation of The Depot and for providing storage space for our files and supplies. The Ontario Ministry of Tourism, Culture and Sport for providing a Heritage Organization Development Grant in support of our outreach initiatives such as our newsletter and website. The federal Ministry of Employment and Skills Development for assistance through their Canada Summer Jobs program. Hunter also thanked Mark King of local MP Gord Brown's office for his assistance with the summer jobs program. And of course our members and donors, whose generous support helps to keep us going.

Hunter also noted our successful partnership with Ted Hitsman of the Canal Gallery in Merrickville in providing canoe and kayak rentals at the Depot, and our marketing partnership with the Bytown Museum in Ottawa.

The minutes of the 2015 AGM and the 2015 financial report were reviewed and approved.

Elections were held for directors, with Chris Biber, Marcus Letourneau, Hunter McGill, Gillian Organ, Victor Suthren and Ken Watson elected for a 2-year term. They join existing directors Cheryl Gulseth, Brian Osborne, Josephine MacFadden and Dave Brett who were elected for a 2 year term at the 2015 AGM.

Our featured speaker was John Festarini, the new Associate Director of Parks Canada's Ontario Waterways (Rideau Canal and Trent-Severn Waterway). John gave a very interesting talk touching on topics as diverse as a Parks Canada initiative to provide a free annual pass to those who purchased a new boat at the winter/spring boat shows and the latest information about the infrastructure program for the Rideau Canal. John also discussed the upcoming management plan consultations. It was a very interesting and enlightening presentation.

Message from the Chair

Dear Friends,

Well, I'm glad I wasn't responsible for water level management in the southern sector of the Rideau Canal last summer! What a challenge. Still, it was nice to have the warmth and sun. Normally one doesn't wish for a long, snowy winter, but if that's what's needed to replenish water reserves, so be it.

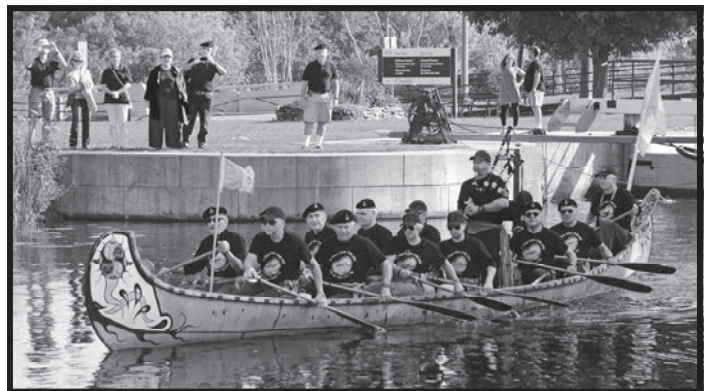
Given the weather, many more people visited the Rideau and we welcomed over 5,200 past the threshold at The Depot in Merrickville. Thank you to Emily McKenzie and Harry Hitsman who kept the visitor centre open seven days a week from June to Labour Day.

Following the announcement in 2015 of over \$40 million for long overdue infrastructure repair and renovation work, it was very encouraging to hear the commitment last May of a further \$57 million over the next three years for more Rideau Canal rehabilitation work.

This is a good start on the backlog of work to preserve the Rideau's heritage features and other less-visible but essential structures such as water control dams and berms. We have written to the Minister to express our appreciation and to encourage her to continue to give the Rideau Canal National Historic Site the attention it deserves and needs (see back page).

I want to close by thanking John Festarini, Associate Director, Ontario Waterways at Parks Canada, responsible for the Rideau Canal, for providing the keynote address at the Friends annual meeting in May. It has been a pleasure to work with John, since his appointment in January, on several project ideas and to share with him Friends' concerns regarding preservation of the heritage of the Rideau. There is no mistaking his commitment to the Rideau Canal and his openness and interest in meeting communities, groups and individuals along the waterway.

- Hunter McGill



Royal Military College Alumni paddlers are piped on their way from the Merrickville locks by piper General (ret'd) Tom Lawson. Part of their La Chasse-Gallerie 2016 fundraising paddle of the Rideau Canal. Photo by Ken W. Watson.

Why Canals?

The history of Canada is defined by its waterways. Long before Europeans arrived, indigenous peoples were making use of the waterways in our area since it was by far the easiest way to travel with bulky items. Dugout canoes, and then more technologically advanced birch bark canoes, allowed for the easy transportation of people and goods. When Europeans arrived, their needs were similar, boats provided the fastest and easiest way of moving people and goods. We see French colonization, for instance, concentrating on the St. Lawrence and Mississippi rivers, which were major marine highways in eastern North America.

It was European technology that made canals necessary. Larger boats with deeper drafts couldn't navigate shallow waters. The rapids present on all rivers formed barriers to these larger boats since they couldn't run the rapids and were far too large to be portaged. A navigation route was needed with a minimum depth of water, as required by the draft of the boat being used. To achieve that minimum depth and allow navigation for larger boats, a canal with locks was needed.

Today we think of roads for local transport and roads did exist at the time of the building of the Rideau Canal, but not as we know them today. Many were simply passages cut through the forest. A note on an 1828 map of the Rideau region states for one road that "waggon heavily loaded can pass here in the spring" – that note was made because it was an exception to the rule, most roads were mud bogs in the spring, essentially impassable. Summer often wasn't much better, the roads of the day were at their best when frozen in the winter and even then it was an expensive method of transport. So, if you had heavy goods to move, they were most easily and cheaply transported by water.

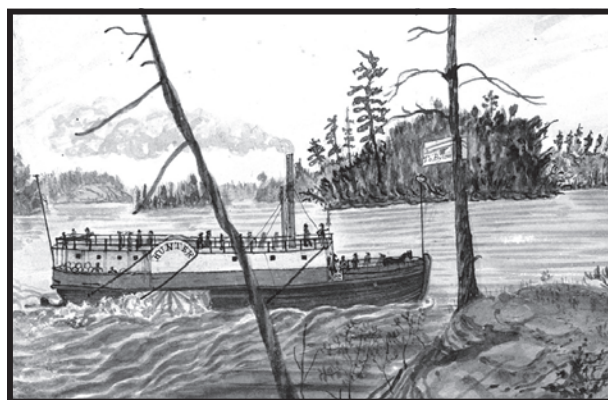
By the time of the building of the Rideau Canal, the ships coming into use on inland waters were steamboats, the technology for those rapidly advancing in the early 1800s. Colonel By foresaw where they were headed and initially lobbied for the Rideau Canal to be a minimum of 10 feet deep. The original purpose of the Rideau Canal was to provide for the easy and fast movement of military



Shallow draft canoes can navigate rapids. Shooting rapids in a bark canoe by John B. Wilkinson, n.d., Library and Archives Canada, C-150276

personnel and supplies from Montreal to Kingston, away from the St. Lawrence River. But the Ottawa River with its rapids (the Long Sault Rapids which stretched 21 km from Carillon to Grenville) and the Rideau, White Fish and Cataragui rivers with their many rapids (at least 30 distinct sets of rapids) formed impediments to the boats of the day. Canals were needed to provide navigation around, or, in the case of much of the Rideau Canal with its slackwater design, over rapids.

While the Rideau Canal did serve a military purpose in the form of deterrence, its main role was in early immigration into Upper Canada and in the movement of heavy goods from Upper Canada to Montreal. In 1841 for instance, there were 19 steamers, 3 self-propelled barges and 157 unpowered or tow barges using the Rideau Canal. The movement of heavy goods on large barges pulled by steamboats continued to the 20th century. The coming of the railways in the mid-late 1800s didn't initially hurt the Rideau Canal, they created a new commercial demand to move barge loads of coal to the rail yards in Smiths Falls and Ottawa. It was the coming of trucks on highways in the early 20th century that finally killed the direct commercial use of the canal, but by then the Rideau had transitioned into a recreational waterway and economic (tourism) driver for this region of eastern Ontario, a role that continues to this day.



Steamboats needed canals. Pictured here is the steamboat "Hunter", built in 1838, which carried passengers and freight plus towed barges on the Rideau Canal. Crop from "Opinicon Lake looking to N.W" by Thomas Burrowes, 1840, Archives of Ontario, I0002166

In our first newsletter for 2017, we will be looking at what the Rideau Canal means to Canada. Several of the heritage gurus with Friends of the Rideau have been asked to put on their thinking caps and contribute articles and ideas. A waterway connection between the Ottawa River and the St. Lawrence River/Lake Ontario had relevance for indigenous peoples. That waterway connection also had relevance for Europeans. It still has relevance today, not only for its economic benefits, but also for the roles it played in the past and to remind us today, in a very tangible manner, of our rich Canadian heritage. We'll explore more of that in the next newsletter.

- Ken Watson

Management Plan

A new management plan is needed for the Rideau Canal, the last one was done in 2005. The purpose of the plan is to ensure the commemorative integrity of the Rideau Canal National Historic Site, guide appropriate public use, ensure the application of cultural resource management principles and practices in decision-making and conserve the natural values of the Canal.

Open houses were held in Ottawa, Smiths Falls, Chaffeys and Kingston in late June and early July. Public feedback indicated that more time was needed to be able to develop a plan that addressed all the needs of the Rideau Canal. The timeline has now been extended to March 2018 which will allow for full consultations in 2017. We'll post information on our website as it becomes available.

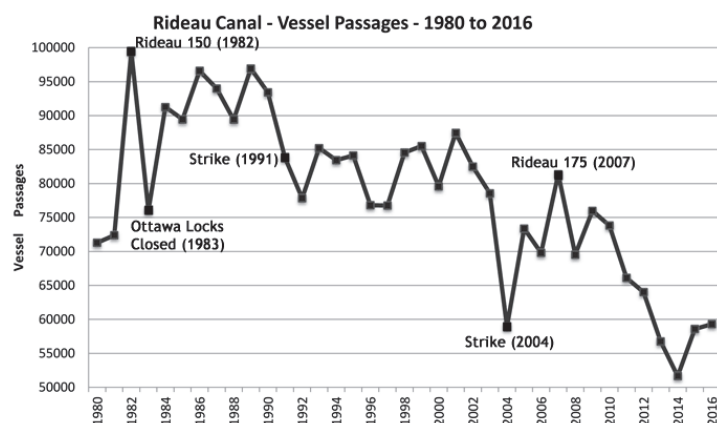
Infrastructure Program

In May of this year, the Government of Canada announced an additional \$57 million in infrastructure funding for the Rideau Canal, topping up the \$46 million announced by the previous government in June 2015. The work is expected to be completed by March 2020. For more information, see the Infrastructure page on our website: www.rideaufriends.com

2016 Boating Stats

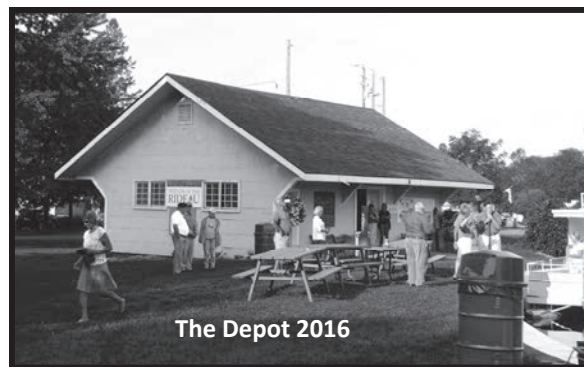
Canal traffic in 2016 was up 1.2% compared to 2015 with a total of 59,301 vessel passages recorded through the locks, compared to 58,592 vessel passages in 2015. These numbers represent the cumulative total of vessel passages through the locks. During 2016, 64.8% of the boats were from Ontario, 26.1% from Québec, 8.1% from the United States and 1.0% "Other". Boaters from Ontario and the U.S. decreased while boaters from Quebec increased compared to 2015. Moorings decreased slightly. For a listing of the stats for some of the individual lockstations see:

www.rideau-info.com/canal/statistics.html



Summer Activities 2016

As Friends' most visible presence, operating The Depot interpretation and visitor centre in Merrickville, is a very important part of our activities.



The Depot 2016

This year, with assistance from the Village of Merrickville-Wolford and a grant from the Canada Summer Jobs program we were able to open earlier in June and run seven days a week until Labour Day weekend. We welcomed 5,265 visitors, quite a jump from 2015. We also had the pleasure of greeting the Royal Military College voyageur canoe expedition in September and receiving a generous donation from the participants for our heritage work.

While we got rained out for the Classic Boat Show at Rideau Ferry on August 13, we did have our booth set up to greet visitors at Col. By Day at Ottawa Locks on August 1 and at Rideau Paddlefest in Smiths Falls on August 6. It is always rewarding to see so many people enjoying the Rideau Canal, especially children. We look forward to doing our road show again in 2017 and participating in Canada 150 events along the Rideau, which will celebrate its 185th year of continuous operation.



Friends' director Victor Suthren (left) shakes hands with RMC alumni Geoff Bennett at the donation presentation ceremony at The Depot in Merrickville on September 18. Merrickville Town Crier, Michael Whittaker, was on hand to announce the event.

Letter to the Honourable Catherine McKenna

November 11, 2016

Dear Minister McKenna,

We wrote last November to congratulate you on your appointment as Minister responsible for Parks Canada and to let you know of some concerns we had regarding the protection, preservation and presentation of the heritage of the Rideau Canal National Historic Site and UNESCO World Heritage Site. Thank you very much for your reply of July 6.

Now that you have been in office for a year we thought it would be appropriate to write again. Your announcement in May of \$57 million for important rehabilitation and reconstruction work on the Rideau Canal was most welcome and very necessary to protect essential infrastructure. A very good start. Upkeep of the physical fabric of the Canal is a critical part of the responsibility Parks Canada has been given as custodian and protector of this key element of our heritage.

We remain concerned, however, that presentation of the history of the Rideau Canal, and interpretation of that history for visitors, is still woefully underfunded and understaffed. In 2017 this will be highlighted even more than has been the case in the past when far larger numbers of visitors, Canadian and international, will come to the Canal by boat and on land as part of their enjoyment of Canada's 150th anniversary. Commemorations, such as those to take place in 2017, offer wonderful opportunities to present the Rideau Canal World Heritage Site as a vital component of Canada's history, but these chances will be missed if there are inadequate numbers of heritage interpretation staff to tell the story of the Canal, from Kingston to Ottawa. Visitors want to see and learn about a historic canal in operation. There is no substitute for live interpretation, delivered by a team dedicated to that task.

In your letter you mention the process, now beginning, to develop a new (long overdue) management plan for the Rideau Canal National Historic Site. We are looking forward to taking part in the consultations which we hope will begin soon. It is important that Parks Canada staff launch the process with an active program to engage and involve the public. This process is one of the very few occasions when all the communities of interest, or stakeholders, along the Rideau Canal are convened to discuss management, preservation, protection and presentation issues. While Parks Canada has the lead, there are many other agencies, levels of government, not-for-profit groups and organizations such as Friends of the Rideau which can contribute to the sustainable management of the Canal consistent with the principles of commemorative integrity, which Parks Canada is mandated to uphold. As operator of the Rideau Canal, Parks Canada must establish the framework within which the rest of us will do our part.

With warmest regards, onward and upward!

Hunter McGill
Chairman

Ed Note: you can see our previous letter and the Minister's reply on our website at www.rideaufriends.com



Juvenile Bald Eagles

A sign of the success of environmental work in the Rideau Corridor over that last few decades is the return of nesting Bald Eagles. In this mid-July 2016 photo, taken on a Rideau lake, we see a pair of juveniles, recently fledged from the nest (they are in a tree about 200 m from their nest). The inset photo was taken a couple of weeks earlier when they were starting to think about taking their first flight (it's a long drop).

Photos by: Ken W. Watson