

## “It Seems Rather a Puzzler”

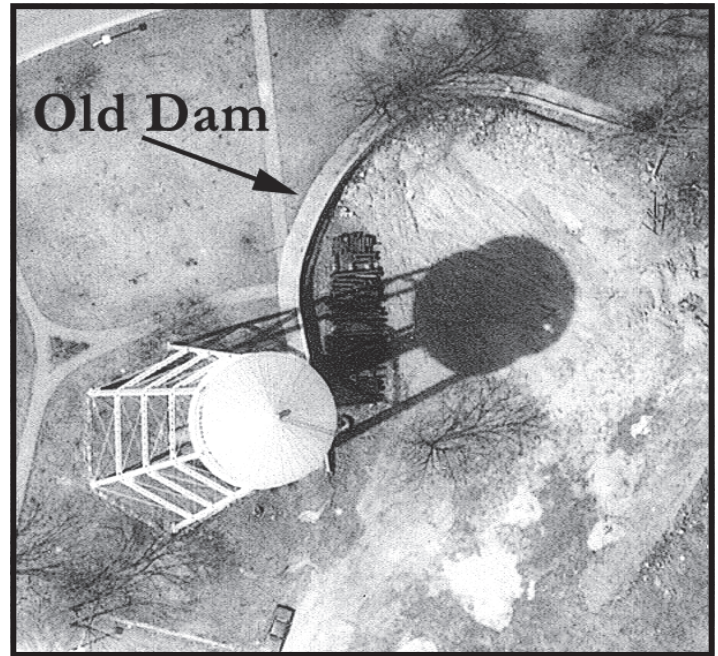
In November 1828, Nichol Hugh Baird was trying to figure out how to provide navigation through the rapids and hard fractured rock at Smiths Falls. Baird, an engineer and the newly appointed Clerk of the Works for the Rideau Canal was part of a team with Royal Engineers Lt. Henry Pooley and Lt. Edward Frome, trying to come up with a solution. He made the understatement in his diary that “it seems rather a puzzler.”

Every lockstation proved to be a challenge and Smiths Falls was no exception. In Lt. Gershom French’s 1783 survey of the Rideau Route he described the rapids at Smiths Falls: “we met with Eight Falls in the distance of a mile, from 4 to 10 feet each, and the River Divided by several Rocks and Islands forming very convenient places for Mills.” Later measurements showed that the Rideau River dropped 10.4 m (34 ft) over a distance of 1.1 kilometres (0.7 miles).

The first idea for making this section navigable was to flood the rapids by building an overflow dam in the middle of the Rideau River. An old flood channel known as the Hornet’s Snie (see schematic map on page 2), was to be the location for three locks that would provide the required lift. But nature had other ideas. The Rideau River in spring flood produced too great a volume of water for an overflow dam. It was this situation at most lock locations, including Smiths Falls, that made Colonel By revise his plans to incorporate separate weirs (water control dams). In addition, the hard bedrock at Smiths Falls was highly fractured. It leaked ... a lot! The more water pressure put on those rocks, the more they leaked.

The leaky nature of the bedrock caused the main problem. It was realized as they started the work that the original plan would cause extensive flooding and require a great deal of embankment work. They needed a new plan. So a detailed investigation by Baird, Pooley and Frome was done in 1828. It was adaptive engineering, modifying the plans to suit local conditions, something done at most lockstation locations.

They decided that the dam in the Rideau River would stay where it was originally intended but that everything else would change. The Hornet’s Snie would now be used for a weir and the locks moved to a new location to the south of the snie. In addition, 8 feet (2.4 m) of the required lift would be detached from the combined locks and



**Stone Arch Dam at Smiths Falls**

This 1977 air photo shows the top of the dam that used to block the Rideau River. The dam and river channel in this location are now buried under fill. The top few feet of the dam can still be seen today, it forms the edge of the parking lot under the water tower. Library and Archives Canada, National Air Photo Library, A24621-82.

moved upstream. A second weir would be placed in the Rideau River across from this lock. This configuration would mean less embanking and less flooding.

There were construction problems from the beginning. Colonel By noted that many of the contractors had no experience in stone construction and that several first efforts had to be pulled down and the contractors instructed by the Royal Engineers in proper construction techniques. The contractors at Smiths Falls, Rykert, Simpson and Co., were no exception, the main dam in the Rideau River that they were building was to give them problems. In fact the exact same problem that took down the stone dam at Hogs Back on April 3, 1829 almost took down the Smiths Falls dam less than three weeks later.

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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It was late afternoon on April 20, 1829 when the dam was observed to be leaking. The leak was near the bottom of the dam, just above the first course of stones. The dam they were building had three components; cut stone, clay puddle and earthen “rubbish” material. The stonework itself is not watertight, it’s only there to hold the watertight portion of the dam, puddled clay, in position. That puddled clay was generally made about 5 feet (1.5 m) thick and rubbish material (earth, stones, etc.) would be placed in front of that, forming the sloping apron of the dam. It was a clay sandwich, earthen apron on one side, stone backing on the other and puddled clay in the middle.

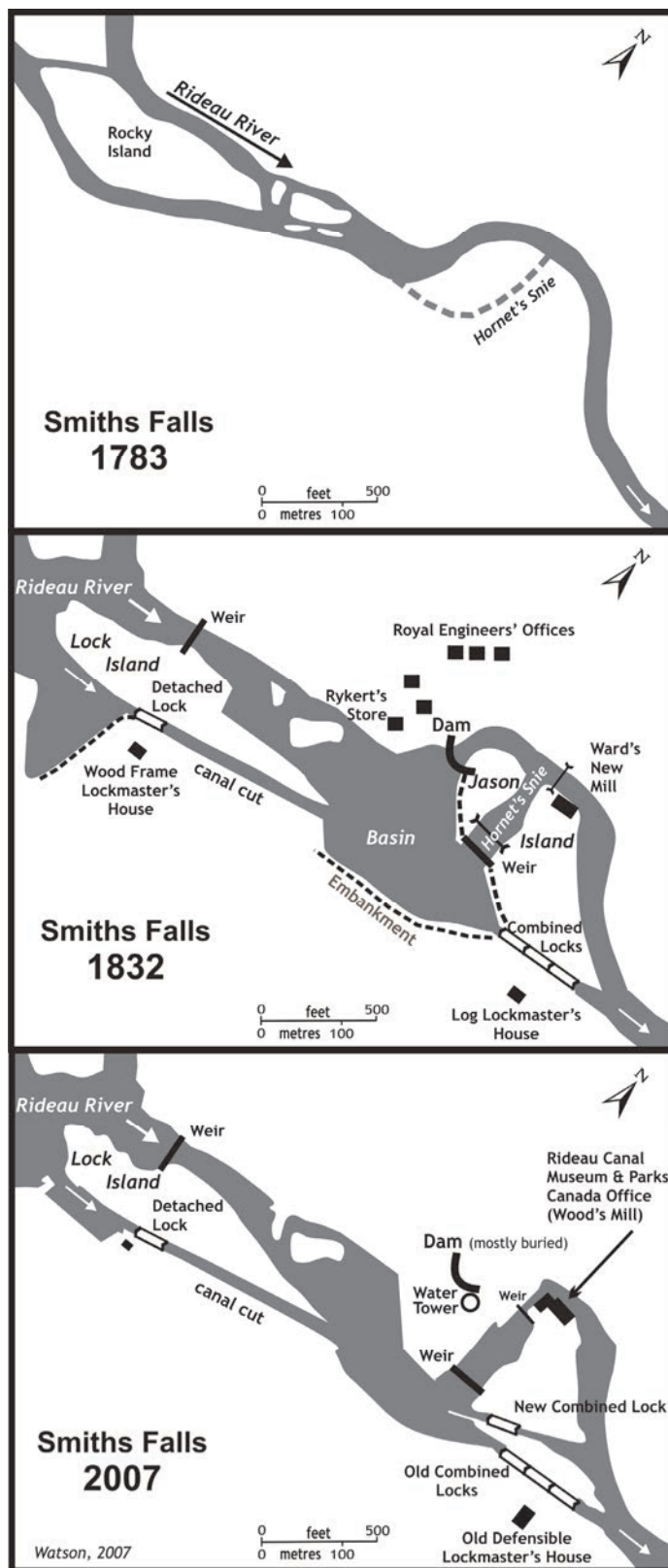
The problem that took down the stone dam at Hogs Back is likely exactly what happened at Smiths Falls. Puddled clay placed during the winter froze before it was fully compacted, allowing fractures to form. Water from spring flooding put huge hydraulic pressure on those fractures, opening them up and washing away the clay. Lt Pooley observed that the water from the leak was muddy, evidence that the clay puddle was being eroded. The solution was to dig down through the clay puddle in front of the stonework, to locate the cavity the water was creating. The contractor Rykert was away in Brockville so it was Lt. Pooley who took full charge, directing the foreman and thirty men to dig out the clay and also collect “fresh puddle, brushwood, sheeting poles, horse dung, etc.” that would be used to choke the leak once it was found.

The work was hard and included blasting out frozen clay, but eventually they got down to the source of the leak and sealed it off and so the dam was saved. The completed dam was not a shining example of good construction, a traveler in 1830 commented “The Dam is of very inferior workmanship, both as to the form and qualities of the materials. The stones are far too light for such a work, and very indifferently put together. It may stand, but the fact is questionable.”

The dam did stand, and today there is no danger of it falling down since it’s mostly buried, both upstream and downstream. Only the top few feet of the original dam remains visible. You can easily see that today since the top of the old dam forms a wall to the parking lot under the Smiths Falls water tower.

The locks, weirs and dams worked as the Royal Engineers intended. The fractured rock continued to create problems and work was done over the years to prevent leakage. Changes to the site have been mostly a result of urban development. It was in the late 1950s that the area in front of the dam was filled in, and later the area below the dam was filled in as well. In the 1970s, a new Combined lock was built to accommodate a fixed low level bridge resulting in the layout we see today.

- Ken Watson



**Schematic showing changes at Smiths Falls**

From “The Rideau Route” by Ken W. Watson, 2007, p.33.



## 2015 AGM

Friends of the Rideau's AGM took place on May 9 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 that despite the poor weather in 2014 we had a reasonable year at the Depot in Merrickville and that our partnership with Ted Hitsman for canoe and kayak rentals is working out very well. Hunter thanked those that have helped us (see the *Message from the Chair* for specifics).

Hunter also expressed our concerns about the state of heritage presentation and preservation of the Rideau Canal. He noted that we were still attempting to get a copy of the 2013 Periodic Report to UNESCO which Parks Canada has refused to release. He also expressed hope that we would be allowed input into the upcoming revisions to the Rideau Canal Management Plan as has been the case in the past.

On a positive note, Hunter indicated that the new owners of the Opinicon Resort at Chaffeys Lock are restoring it to its former glory. Hunter also briefly outlined two new potential Friends' projects, one helping to set up a tour of the Old Combined Locks in Smiths Falls and another to revive the Rideau Canal Passport for Canada's 150th in 2017. He also looked forward to our participation in several Rideau summer events including Colonel By Day in Ottawa, the BRLA 100th Anniversary Celebrations in Portland and the Rideau Ferry Regatta.

The minutes of the 2014 AGM and the 2014 financial report were reviewed and approved.

Elections were held for directors, with Cheryl Gulseth, Brian Osborne, Jo MacFadden and Dave Brett being elected for a 2 year term. They join existing directors Ed Bebee, Hunter McGill, Ken Watson, Gillian Organ and Victor Suthren.

The featured talk was by Phil Jenkins, who gave a presentation titled *Chapter and Verse: The Rideau Canal*, recognizing the Rideau as both an historic achievement and an inspiring traveller's route, which has moved authors and songwriters for almost two hundred years. Phil Jenkins, who is himself both an author and musician, presented Friends with a compendium of songs and writings. It was a very interesting and entertaining presentation.

## HELP

Do you have a passion for the Rideau? If so, you might consider joining the Board of Friends of the Rideau. We're a working board and we're looking for a few new members. If you have an interest, please contact Hunter McGill – [huntermcgill1@gmail.com](mailto:huntermcgill1@gmail.com)

## Message from the Chair

It was a good season on the Rideau in 2015 and I hope you were able to make the most of it. After the scramble to vacate our office at 1 Jasper Avenue (the Lockmaster's House) in Smiths Falls as a consequence of Parks Canada's decision to re-purpose the building, we focussed our energies on The Depot. We had more visitors than in 2014, thanks to warmer, sunnier weather and more American neighbours coming across the St Lawrence (peacefully this time, unlike 1812!) It was a pleasure to see so much interest and enthusiasm for the Rideau Canal.

As part of our role to draw attention to heritage protection and presentation on the Rideau, Friends has written to the new Minister of the Environment and Climate Change, Catherine McKenna, who is responsible for Parks Canada. The letter is printed elsewhere in this newsletter. While the Minister's mandate letter from the Prime Minister ([pm.gc.ca/eng/minister-environment-and-climate-change-mandate-letter](http://pm.gc.ca/eng/minister-environment-and-climate-change-mandate-letter)) does not specifically mention heritage, we are confident she will be very aware of the importance of this element of her portfolio. After all, the Rideau Canal is the boundary of her constituency and she lives one kilometre from the canal in downtown Ottawa.

We have written also to Montague Township Council regarding a development proposal close to the Rideau, just to the west of Merrickville. The project would involve establishment of a cement plant on what is now farmland, with consequences in the form of truck traffic, dust and possible contamination of groundwater. Friends' cited concerns for the heritage landscape along that stretch of the Rideau. Our letter has been posted on our website ([www.rideaufriends.com](http://www.rideaufriends.com)).

An important part of our work depends on partnerships with a number of governmental agencies which provide us with funding. We are grateful for the support we have received this year from the Village of Merrickville-Wolford, the Ontario Ministry of Tourism, Culture and Sport, the Canada Summer Jobs program, and the ongoing assistance from Parks Canada. We were also very pleased to receive a donation this summer from Mrs. McGarrigle's fine food shop in Merrickville – unexpected but most welcome. We also have a merchandising arrangement with the Bytown Museum in Ottawa which we believe is mutually beneficial and helps us reach a larger audience.

Several weeks ago Parks Canada announced that boat cruises on the downtown Ottawa section of the Rideau Canal will return in 2016, a most welcome piece of news. The process to select companies to offer attractions for

*Continued on page 5*

## Thanks Ed! by Ken Watson

Long time Friends of the Rideau board member and volunteer extraordinaire is moving away from the Rideau and hence leaving Friends of the Rideau. Friends of the Rideau owes its existence today to Ed who led the organization through some rough patches. Ed has also made huge contributions to the heritage of the Rideau Canal including the history of fishing with books about guiding on the Rideau Canal and the history of the locks staff, from 1832 to present.

I first met Ed by email in 1996 a couple of months after I'd launched my [www.rideau-info.com](http://www.rideau-info.com) website on the Internet. Ed found my site and contacted me, introducing me to Friends of the Rideau. Within a few weeks we hatched a plan to create a website for Friends of the Rideau with Ed supplying much of the content. In 1997, Ed invited me to join the Board of Friends of the Rideau.

We hit a rough financial patch near the end of the 1990s and Ed led the way, with myself and Dave Brett (another volunteer extraordinaire) helping, to sort out the very serious problems we were having. A year or so later under Ed's superb leadership we were back on track.

Ed also got Friends into the book publishing business in the late 1990s. At that time there wasn't a single book about the Rideau Canal available for the public to buy. At a Friends' board meeting I mentioned a website project I was doing to detail the building of each lockstation. On hearing that Ed quipped, "that would make a great book." I foolishly agreed since I had no idea at the time of what it would take to actually create and publish a book. I gave that book, "A History of the Rideau Lockstations" to Friends for use as a fundraiser, a role it continues to serve to this day.



**Top:** Ed played many roles, including the Pirate Judge at Merrickville Canalfest a few years ago (Mayor Doug Struthers was found guilty and got a dunking).

**Bottom:** Here we see Ed in his more formal role as Chair of Friends of the Rideau, accepting the Parks Canada Volunteer Flame being awarded to our association, from Alan Latourelle, Parks Canada CEO.

We then looked at what else we could publish, Legget's "Rideau Waterway" was the obvious choice. But U of T Press, who owned the publishing rights, wanted \$5,000 up front before they would republish it. It was Ed that led the fundraising efforts and in 2001 "Rideau Waterway" was back in print. Robert Passfield's "Building the Rideau Canal" followed two years later, fundraising for that again led by Ed.

Ed also led the way to focussing Friends on financial sustainability. Our financing, then as today, comes primarily from memberships, donations and retail sales. At the time we had two main venues for sales, on-line sales and The Depot in Merrickville, which had been started by Dave and Jeanne Brett in 1995. The Depot, then as now, served as both an interpretive centre for the Rideau Canal (its main purpose) and as a retail sales outlet for Friends. Ed added events as a third component for sales. He led the way to having a Friends of the Rideau booth at various Rideau events, allowing us to talk face to face with people about the wonders of the Rideau and hopefully also sell a few books to support our organization. Ed's mantle of

leadership in this has now been taken up by Hunter McGill.

The book bug obviously bit Ed and he decided to write a book that was on a subject he loved, fishing. Ed, an avid angler, was well aware of the role fishing has played on the Rideau Canal. But that story had never been told and with much of that heritage, the fishing guides, dwindling in number, the clock was ticking. Ed embarked on a huge project to find and interview these guides, to get their stories down in print so that part of the Rideau's heritage wouldn't be lost. In 2004 he



published “Pathfinders, The Guides of the Rideau,” graciously giving the book to Friends to use as a fundraiser. In 2007 he followed that up with “Fish Tales, The Lure and the Lore of the Rideau.”

Ed also recognized another large gap in the history of the Rideau Canal. Many Rideau authors, myself included, focus on the “brick and mortar” stories, the building and engineering of the canal. Ed wanted to focus on the people, without which we wouldn’t have an operating canal. So he set himself a mammoth task, to document the history of the locks staff, from 1832 to present. This meant hours (and hours) slaving away in Library and Archives Canada digging up all sorts of interesting information. He completed the enormous task of putting it all together into a cohesive story and published “Invisible Army” in 2010.

Ed has always been a pleasure to work with – his keen sense of humour, even in dire times, always brightened the mood. His enthusiasm for all things Friends and Rideau Canal was infectious. He has left a tremendous legacy, our organization itself, Friends of the Rideau, that continues to tell the story of the Rideau Canal today, and his books, which will live on forever in one form or another, allowing future generations to learn about the fascinating heritage of the Rideau Canal.

Ed you’ll be missed, the Rideau could use a dozen more like you.

- Ken Watson

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### Letter from the Chair continued ...

visitors in the Ottawa section of the Canal – Hogs Back to Ottawa lockstations – continues as this newsletter is being written.

As always, Friends hopes that heritage will feature prominently in the results of this program. There is a new Associate Director of Ontario Waterways, Johnny Festarini, who will have lead responsibility for the Rideau Canal, working with Jewel Cunningham, the Director. We look forward to meeting him and working with him and the Rideau team.

Best wishes for the quiet time on the Rideau until the spring.

- Hunter McGill

## Hail and Farwell Ed Bebee

It’s with a lump in the throat that we say goodbye to Ed Bebee, who is leaving the board of Friends of the Rideau as he moves to Cobourg to be closer to family. Many of you know Ed from his writing, as the author of three fascinating books on the social history of the



Ed signs a copy of his book, *Pathfinders*, for an appreciative customer visiting our booth at the BRLA event this past summer in Portland (you can see Hunter McGill behind Ed).

Rideau; “Pathfinders”, and “Fish Tales” on the recreational fishing communities along the waterway; and “Invisible Army,” essential reading to understand the operations of the Rideau Canal from 1832 to 2012. Ed has also been a guiding presence on the board of the Friends for many years, steering the organization through a crisis in the 1990s and initiating the practice of taking part in events along the Canal, as described in the article in this newsletter on Summer Activities. Ed is known for his encyclopaedic knowledge of the Rideau, his willingness to share his knowledge and for those of us who have worked with him, his subtle, very dry sense of humour. We will miss his guidance and his friendship, and we hope to lure him back to Friends’ events from time to time.

- Hunter McGill

## Summer Activities

Friends took part in several activities along the Rideau this past summer, thanks to invitations from the organizers. August seems to be the popular month, and as you might expect we were part of Canalfest in Merrickville, as well the Classic Boat Show in Portland which was held together with the 100<sup>th</sup> anniversary celebration of the Big Rideau Lake Association. Then, a week later, we were off to the Rideau Ferry Regatta.

We had hoped to be part of Col. By Day at Ottawa Lockstation but rain prevented us from being there, though other organizations braved the morning deluge.

For those of us who take part, these events are great fun to meet members, recruit new friends and spread the word about the Rideau Canal. We’ll be back in 2016, starting with the Ottawa Boat and Sportsmen’s show in February and then during the canal operating season. See you then.

We can always use more help, if you’ve got some time to help out at our booth and meet others with an interest in the Rideau Canal please contact Hunter – [huntermcgill1@gmail.com](mailto:huntermcgill1@gmail.com)

## Perth & District 200th Anniversary

On April 17, 1816 the first group of settlers arrived in Perth after having trekked from Brockville and boated down Rideau Lake. By the fall of 1816, there were 1,500 settlers in the region.

In 2016, the four municipalities that make up this region, the Town of Perth, Tay Valley Township, Drummond/North Elmsley Township and Beckwith Township, will be celebrating this 200th Anniversary.

Your editor (Ken Watson) will be giving a talk on January 21, 2016 to the Perth & District Historical Society about those first 1816 routes to Perth. For details on the talk and other planned events for 2016 see [www.perthhs.org](http://www.perthhs.org)

## Merrickville 2017

On July 1, 2017 Merrickville will be taking itself back to 1867 with several planned activities in celebration of Canada's 150th. These include a STEAMBOAT FLOTILLA; an 1867-theme Canada Day PARADE; a MILITIA ENCAMPMENT and dramatic SHAM BATTLE; a Ceremonial ARCHWAY over St. Lawrence Street; traditional MUSIC; costumed ACTORS playing 1867 vignettes on the street corners; Blockhouse Park ANIMATION and FAMILY FUN; an open-air, public MAYOR'S 1867 LEVEE; all manner of HORSE-drawn vehicles; a GARDEN contest; a comic MILITIA Muster; a BEARD and MOUSTACHE contest; and many more delights.

It will be a wonderful celebration of Canada. We'll of course be at the Depot, participating in this great event. We'll have more details as the time draws closer.

## 2015 Boating Stats

After five years of steady decline we had some good news this year with boating numbers on the Rideau Canal showing a 13.4% increase compared to 2014. In addition, mooring was also up, by 12.4% compared to 2014.

Most of the boaters are from Ontario at 66.8% of the total. Quebec boaters make up 23.5%, American boaters 8.7% and 1% are categorized as "Other."

For a listing of the stats for some of the individual lockstations see:

[www.rideau-info.com/canal/statistics.html](http://www.rideau-info.com/canal/statistics.html)

## Letter to the Honourable Catherine McKenna

November 9, 2015

Dear Minister McKenna,

Congratulations on your election victory and on your appointment as Minister of the Environment, responsible for Parks Canada. Friends of the Rideau is a not-for-profit, volunteer-run organization working in cooperation with Parks Canada to promote awareness of the Rideau Canal's heritage and place in Canada's history, and to enhance visitor understanding and enjoyment of the canal, a UNESCO World Heritage Site.

We recognize that you entered the Cabinet with a large, complex and important set of issues confronting you. We hope that before long you will be able to engage with what we see as pressing issues regarding Parks Canada's responsibilities for Canada's cultural and natural heritage. Friends of the Rideau shares the concerns of many volunteer organizations and a large segment of the general public that Parks Canada has lost sight of its primary mandate as the custodian of the country's national historic sites and national parks. Simply put, Parks Canada has been subject to such major budget cuts in recent years that the organization has been left significantly constrained in its capacity to fulfil its heritage protection, preservation and presentation mandates.

Over the last decade too much attention has been given to meeting the direct costs of heritage sites and national parks. Revenue generation has replaced cultural and natural presentation as Parks Canada's primary focus on the Rideau Canal. Heritage presentation and preservation, core mandates of Parks Canada, are no longer being done on much of the canal. We have observed that a consequence has been that many visitors are surprised to learn the Rideau Canal is a working example of early 19<sup>th</sup> century technology and a significant part of Canada's history. In fact the Rideau is the oldest continuously operating canal in North America and we have a responsibility to Canadians to preserve and protect it. Indeed, Canada made a commitment to UNESCO, in proposing the Rideau Canal as a World Heritage Site in 2007, to do just that.

Friends of the Rideau wishes you every success as Canada's Minister of the Environment. During your tenure we look forward to strengthening and deepening our cooperation with a renewed Parks Canada, and we look forward also to welcoming you to the Rideau in both your official and personal capacity. After all, the Rideau Canal is at your doorstep.

With warmest regards,

*Hunter McGill*  
Chairman