

Backgrounder
2016 Trent-Severn Waterway National Historic Site Announcement
Grand total investment: \$267.5 M*

Trent-Severn Waterway National Historic Site

The Trent-Severn Waterway flows 386 kilometres across central Ontario, linking the Bay of Quinte on Lake Ontario to Georgian Bay, through a system of rivers, lakes, canals and locks. Operated by Parks Canada, the Trent-Severn Waterway is also Canada's largest national historic site as the Trent-Severn watershed covers an area over 18,000 km².

First Nations people have lived and travelled along the route that today makes up the Trent-Severn for many thousands of years. The formalized system of locks, canal and water control structures was built over a period of 87 years, with the first lock built in Bobcaygeon in 1833 and the waterway being completed in 1920.

In addition to being a navigable passage for boaters, the Trent-Severn Waterway offers Canadians and visitors from around the world an opportunity to marvel at remarkable feats of engineering – including 2 lift locks, 2 flight locks, a marine railway, 36 conventional locks, 50 km of canals, and approximately 160 dams and water control structures.

List of projects:

Project name: Glen Miller Dam 3 and Lock 3 Rehabilitation

Location: Quinte West, ON

Estimated total: \$13 M

Project description: The Glen Miller Dam 3, built in 1910, and Lock 3 embankment will undergo a comprehensive rehabilitation. The project will focus on improving infrastructure conditions and public safety, while also enhancing erosion control at the lock embankment.

Project name: Frankford Dam 6 at Lock 6 Rehabilitation

Location: Quinte West, ON

Estimated total: \$5 M

Project description: Frankford Dam 6 will undergo a rehabilitation which will improve the overall operational reliability of the dam. Concrete repairs will be undertaken on the retaining walls and work will be done to strengthen and enhance the earth embankments. Additional measures will also be taken to improve the public safety elements of this dam.

Project name: Rehabilitation of Glen Ross Dam 7 Electrical

Location: Quinte West, ON

Estimated total: \$700 K

Project description: The Glen Ross Dam 7 will undergo upgrades to the electrical system to improve the operation and reliability of the mechanical gates, thereby improving water management capabilities.

Project name: Rehabilitation of Meyers Dam 8

Location: Trent Hills, ON

Estimated total: \$9.1 M

Project description: The operational effectiveness and water management capabilities of Meyers Dam 8 will be improved. Stop log sluices will be mechanized and structural repairs will be completed.

Project name: Rehabilitation of Hagues Reach Dam 9

Location: Trent Hills, ON

Estimated total: \$11.1 M

Project description: The operational effectiveness and water management capabilities of Dam 9 at Hagues Reach will be improved. Stop log sluices will be mechanized, access improvements will be made to the site and miscellaneous concrete repairs will be completed as required.

Project name: Dam 10 at Lock 11/12 Ranney Falls Rehabilitation

Location: Trent Hills, ON

Estimated total: \$8 M

Project description: The water flow capacity of the dam at Ranney Falls will be assessed and improvements will be made.

Project name: Rehabilitation of McFarlane Street Bridge

Location: Peterborough, ON

Estimated total: \$1.5 M

Project description: The McFarlane Street Bridge, built in 1896 and replaced in 1962, will undergo a comprehensive inspection including an assessment of the bridge's substructure, concrete, embankments and guardrails and the necessary repairs will be completed.

Project name: Replacement of Burleigh Falls Dam

Location: Selwyn, ON

Estimated total: \$28.9 M

Project description: The Burleigh Falls Dam at Lock 28, originally built in 1912, will be replaced with a new dam with mechanized gates. Additionally, operator and public safety features will be added to the site.

Project name: Rehabilitation of Little Bob River Dam

Location: City of Kawartha Lakes, ON

Estimated total: \$5.5 M

Project description: Little Bob River Dam will undergo a comprehensive rehabilitation. The project will involve repairs to the concrete and earth embankment, the demolition and removal of the power generation structure and seal improvements. Public safety features will also be added to the site.

Project name: Rehabilitation of Bobcaygeon Swing Bridge

Location: City of Kawartha Lakes, ON

Estimated total: \$1.7 M

Project description: The Bobcaygeon Swing Bridge, built in 1921, will undergo a comprehensive inspection including an assessment of the bridge's substructure, concrete, embankments and guardrails and the necessary repairs will be completed.

Project name: Rehabilitation of Fenelon Falls Dam at Lock 34

Location: City of Kawartha Lakes, ON

Estimated total: \$19.2 M

Project description: Fenelon Falls Dam, built in the early 1900s, will undergo a comprehensive analysis and then major rehabilitation or replacement of the structure will occur as a part of this project.

Project name: Comprehensive Investigation and Repairs of the Kirkfield Lift Lock

Location: City of Kawartha Lakes, ON

Estimated total: \$5 M

Project description: The Kirkfield Lift Lock is recognized as a cultural resource of national significance. The Kirkfield Lift Lock will undergo a comprehensive investigation and then necessary repairs will be conducted to ensure the continued safe operation and historic preservation of this asset.

Project name: Rehabilitation and/or reconstruction of Port Severn Dams and Bridges

Location: Port Severn, ON

Estimated total: \$13.8 M

Project description: The project scope entails a comprehensive rehabilitation / reconstruction of many of the dams and associated assets within the TSW Northern Sector in the Port Severn Area. The dams include the Port Severn Main Dam, Bayview Dam E, Little Chute Dam G, and Port Severn Blind Dams B, C, and D. Also included within this project are repairs to the Port Severn fixed bridge and the Bayview Dam E Bridge. Further investigation is required to determine the specific work necessary for each individual asset. Mechanization is being considered for the Port Severn Main Dam to further enhance water management capabilities.

Project name: Rehabilitation and/or reconstruction of Northern Sector Dams

Estimated total: \$19.5 M

Project description: The project scope entails a comprehensive rehabilitation / reconstruction of dams and associated assets within the Trent-Severn Waterway Northern Sector in the Six Mile Lake region. This includes the two Six Mile Lake Dams, Whites Portage Dam, the Pretty Channel Dams, Hungry Bay Dam, Crooked Bay Dam and Little Go Home Bay Dam. Mechanization is being considered for the Whites Portage and Pretty Channel Dams to further enhance water management capabilities.

Project name: Rehabilitation or replacement of Twelve Mile Lake Dam

Location: Minden Hills, ON

Estimated total: \$3 M

Project description: Twelve Mile Lake Dam will undergo a major rehabilitation or replacement. The project will include concrete repairs, improvement to the embankments and abutments to

enhance water management capabilities and other repairs, as will be identified through further investigation. In addition, enhancements to public safety will be undertaken through the installation of such measures as improved guard rails, increased signage, safety booms and metal gain covers.

Project name: Rehabilitation or replacement of Long Lake Dam

Location: Dysart et al, ON

Estimated total: \$3.3 M

Project description: Long Lake Dam will undergo a major rehabilitation or replacement. The project will include concrete repairs along the dam and the wingwalls and other repairs, as will be identified through further investigation. In addition, enhancements to public safety will be undertaken through the installation of such measures as improved guard rails, increased signage, safety booms and metal gain covers.

Project name: Rehabilitation or replacement of Elliot Falls Dam

Location: Haliburton Highlands, ON

Estimated total: \$8 M

Project description: Elliot Falls Dam will undergo a major rehabilitation or replacement. The project will include concrete repairs and other repairs, as will be identified through further investigation. Mechanization is being considered for the Elliot Falls Dam to further enhance water management capabilities. In addition, enhancements to public safety will be undertaken through the installation of such measures as improved guard rails, increased signage, safety booms and metal gain covers.

Project name: Rehabilitation or replacement of Esson Lake Dam

Location: Haliburton Highlands, ON

Estimated total: \$3.3 M

Project description: Esson Lake Dam will undergo a major rehabilitation or replacement. The project will include concrete repairs on the dam, abutments and wingwalls and other repairs, as will be identified through further investigation. In addition, enhancements to public safety will be undertaken through the installation of such measures as improved guard rails, increased signage, safety booms and metal gain covers.

Project name: Rehabilitation or replacement of Canning Lake Dam

Location: Minden Hills, ON

Estimated total: \$3 M

Project description: Canning Lake Dam will undergo a major rehabilitation or replacement. The project will include concrete repairs on the dam, abutments and wingwalls and other repairs, as will be identified through further investigation. In addition, enhancements to public safety will be undertaken through the installation of such measures as improved guard rails, increased signage, safety booms and metal gain covers.

Project name: Rehabilitation or replacement of Red Pine Dam

Location: Dysart et al, ON

Estimated total: \$4.5 M

Project description: The current Red Pine Dam is constructed using timber cribbing in a style of construction that was common up until the late 1800s. This project will undertake a major rehabilitation or replacement of the Red Pine Dam. Further investigation will be conducted to determine the full extent of work that is required and the type of dam that would be constructed should a replacement be required.

Project name: Repairs to Various Bridges

Estimated total: \$2.8 M

Project description: This project will include minor repairs and rehabilitation of bridges along the Trent-Severn Waterway including: Carrying Place fixed bridge in Quinte West, Ranney Falls swing bridge in Campbellford, Youngs Point foot bridge and Couchiching Lock bridge #56. Additionally, this project will include detailed engineering inspections of bridges throughout the Trent-Severn Waterway system as part of the ongoing asset monitoring program.

Project name: Rehabilitation of Kushog Lake Dam

Location: Algonquin Highlands, ON

Estimated total: \$900 K

Project description: The Kushog Lake Dam will undergo a rehabilitation. The project will include concrete repairs along the dam and the culvert passing beneath the roadway bridge. Further investigation is required to determine the full extent of work that is required. In addition, enhancements to public safety will be undertaken through the installation of such measures as improved guard rails, increased signage, safety booms and metal gain covers.

Project name: Ontario Waterways - Public Safety Improvements

Estimated total: \$3.9 M

Project description: This project addresses public safety issues along the Trent-Severn Waterway and Rideau Canal National Historic Sites. Various initiatives will be covered such as handrails, signage, lighting, and other measures that will enhance visitor safety.

**Previously announced projects that are receiving additional funding.
Information about these projects can be found in this [backgrounder](#).**

Project name: Rehabilitation of Campbellford Dam 11 and Lock 13

Location: Trent Hills, ON

Announced in 2015: \$5.5M

Additional estimated funding: \$18.6 M

Estimated total: \$24.1 M

Project description: This project will include the rehabilitation and mechanization of the Campbellford Dam as well as repairs to the approach walls and embankments at Lock 13. Additionally, public safety measures will be enhanced at this site.

Project name: Haliburton Sector Concrete Rehabilitation (Various Dams)

Announced in 2015: \$10.6 M

Additional estimated funding: \$2.4 M

Estimated total: \$13 M

Project description: Concrete rehabilitation will be completed on 17 dams throughout the Haliburton sector of the Trent-Severn Waterway including: Halls Lake, Big Hawk Lake, Little Brother Lake, Big Bob Lake, Little Bob Lake, Gull Lake (both Dam 1 and 2), Drag Lake (North and South), Loon Lake, White Lake, Percy Lake, Gooderham Lake, Oblong Lake, Redstone Lake (the East dam), Moore Lake (the Norland Dam), Jacks Lake and Eagle (Moose) Lake, as well as the Scotts Mills Dam on the Mississagua River.

Project name: Southern Sector Concrete Rehabilitation

Announced in 2015: \$14.5 M

Additional estimated funding: \$8.4 M

Estimated total: \$23 M

Project description: Concrete repairs are required on various dams, walls and other concrete structures. These structures include: the breakwater at Trenton Lock 1, the lock and canal walls at Healey Falls, the canal and lock walls at Hagues Reach Lock 10, the lock walls at Percy Reach Lock 8, and the lock walls at Meyers Lock 9. Additional miscellaneous structures will also be repaired.

Project name: Crowe Bay Dam 12 and Lock 14 Rehabilitation

Location: Trent Hills, ON

Announced in 2015: \$7.8 M

Additional estimated funding: \$13.1 M

Estimated total: \$20.9 M

Project description: This project will involve repairs to the dam as well as the embankments and the locks. Additionally, improvements will be made to the work access bridge to the site. Overall, this work will ensure that the dam is reliable, functional, and that its water management capabilities are optimized.

Project name: Replacement of Horseshoe Lake Dam

Location: Minden, ON

Announced in 2015: \$700 K

Additional estimated funding: \$3.5 M

Estimated total: \$4.2 M

Project description: Initially this project was announced as a major rehabilitation, however, upon more in depth inspection it was determined that a full replacement is required. In addition to building a new dam, the wing walls will be raised to reduce flooding risk. The new dam will include an upgraded log lifter and added pedestrian crossing to enhance visitor experience at the site.

Project name: Mississagua Lake Dam Replacement

Location: Catchacoma, ON

Announced in 2015: \$2.8 M

Additional estimated funding: \$2.3 M

Estimated total: \$5.1 M

Project description: Initially this project was announced as a major rehabilitation, however, upon more in depth inspection it was determined that a full replacement with a new dam is required.

Project name: Nassau Dam at Lock 22 Replacement

Location: Peterborough, ON

Announced in 2015: \$10 M

Additional estimated funding: \$15.3 M

Estimated total: \$25.3 M

Project description: This project will include the design and construction of a new dam, complete with mechanized steel gates. The new dam will enhance water management capabilities on the Otonabee River, and improve visitor and operator safety at the dam site.

Project name: Glen Ross Swing Bridge Rehabilitation

Location: Quinte West, ON

Announced in 2015: \$2.1 M

Additional estimated funding: \$5.5 M

Estimated total: \$7.6 M

Project description: The Glen Ross Swing Bridge and Lock, built in 1909, will undergo a rehabilitation. The bridge's mechanical and electrical drive systems will be replaced while it is taken off site for structural steel repairs, timber deck replacement and repainting. While the bridge will remain a single lane, it will be upgraded from a 15 tonne load limit rating to a level 1 highway load rating. The lock will receive overall concrete re-facing to improve its condition. Additional work will also be completed on the canal approach walls.

Project name: Trenton Dam 1 Replacement and Lock 1 Rehabilitation

Location: Trenton, ON

Announced in 2015: \$25.3 M

Additional estimated funding: \$10.9 M

Estimated total: \$36.2 M

Project description: Trenton Dam 1 will be replaced and the water control systems will be mechanized. Trenton Dam 1 is one of the few remaining large dams on the Trent River that has not yet been mechanized. The project will improve public safety at this site, enhance operations and significantly improve the structure's condition. Additionally, water management capability will improve significantly for the Trent River section of the waterway. Work will also be undertaken on Lock 1 and the canal walls in order to rehabilitate these structures.

Project name: Rehabilitation of Coboconk Dam

Location: City of Kawartha Lakes, ON

Announced in 2015: \$1.2 M

Additional estimated funding: \$3.5 M

Estimated total: \$4.7 M

Project description: This project will include concrete repairs to the structure and deck as well as the replacement of railings. This work will ensure that the dam is reliable, functional, meets current safety codes and standards, and that its water management capabilities are optimized.

Project name: Comprehensive Inspection of Peterborough Lift Lock

Location: Peterborough, ON

Announced in 2015: \$2.5 M

Additional estimated funding: \$4.8 M

Estimated total: \$7.3 M

Project description: The Peterborough Lift Lock is a national historic site in its own right and an iconic feature along the Trent-Severn Waterway. More than 100 years old, this concrete structure now requires a comprehensive investigation similar to those mandated for all Parks Canada bridges and dams. This type of inspection will identify deficiencies, urgent repairs and long-term work needed to ensure the continued safe and sustainable operation of this engineering marvel.

Project name: Scotts Mills Dam Replacement

Location: Peterborough, ON

Announced in 2015: \$28.8 M

Additional estimated funding: \$2.3 M

Estimated total: \$31.1 M

Project description: This project will include the design and construction of a new dam, complete with mechanized steel gates. The new dam will improve water management capability on the Otonabee River, and improve visitor and operator safety at the dam site.

* Please note that the sum of individual project values may not equal the grand total indicated at the top of this document as some previously announced projects now receiving additional resources have not been included.