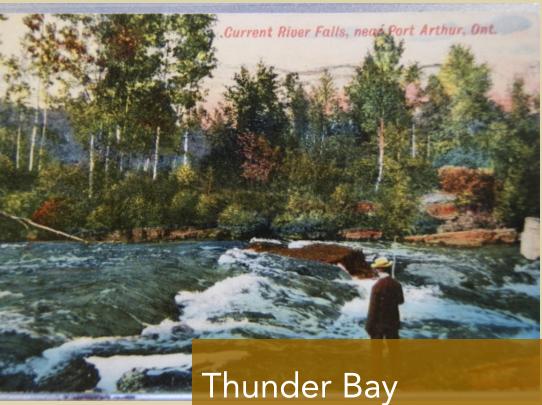


Natural. Valued. Protected.



Native Fisheries Rehabilitation —

Chronology of Development on the Current River

Upper Great Lakes Management Unit – Lake Superior

Miscellaneous Report 11-01

Revision 4 (August 2012)

AUTHOR

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Cover image: Current River Falls, near Port Arthur, Ont. (postcard, c. 1910)



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INTRODUCTION

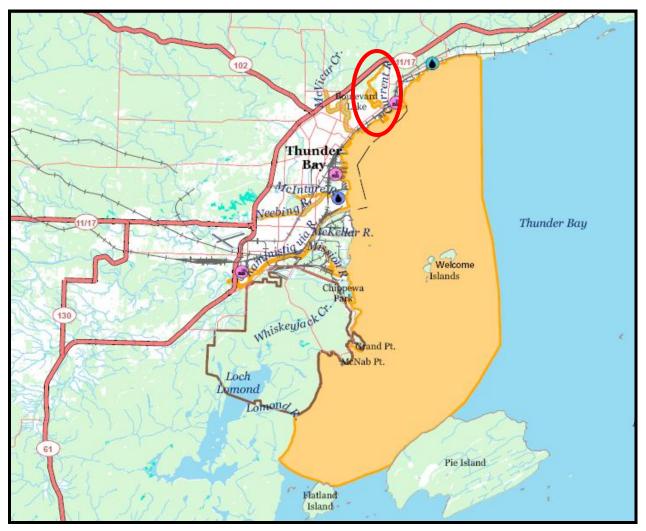
The Current River (fr. *Riviere aux Courants*) is a large tributary which flows from its headwaters at Current Lake (N48° 37′ W89° 11′) 63 kilometres to Lake Superior at Thunder Bay, in the north end of the City of Thunder Bay (formerly Port Arthur). The river is characterized by a high gradient and numerous rapids, particularly in its lower reach; notwithstanding the current reservoir at Boulevard Lake (N48° 27′ W89° 11′) the final 10 kilometres of the Current River comprise a continuous set of falls and rapids culminating in Current River Falls, a 12m vertical drop over the final 650m of the river. Most of this area is currently protected through a series of municipal parks and conservation areas. Upstream of the Cascades Conservation Area (N48° 30′ W89° 13′), development along the river corridor includes residential properties, forest harvesting, and a large aggregate quarry; despite this, the upper reach of the Current River remains in a near-natural state. However, the final kilometer of the river has been subject to impacts from industrialization since 1866, when a stamp mill was built at the mouth of the river to service a local silver mine.

Historically, the Current River supported a run of migratory coaster brook trout (*Salvelinus fontinalis*) (Thunder Bay Historical Society 1923); while the size of this run did not compare to that of the Nipigon River, the trout fishery, combined with the scenic Current River Falls, made this spot a destination for tourists to the region (Disturnell 1874; Roland 1887). While stream-resident brook trout persist upstream of Boulevard Lake (S. Bobrowicz, unpublished data), the coaster run has not been recorded in living memory. Through the 1970s and 1980s, the mouth of the river supported a popular urban fishery for pink salmon (*Oncorhynchus gorbuscha*) (T. Whalley, personal communications). Since the construction of a fish ladder at the Boulevard Lake dam in 1991, the Ministry of Natural Resources and the North Shore Steelhead Association have been working towards the establishment of a migratory rainbow trout (*Oncorhynchus mykiss*) population in the river. Walleye (*Sander vitreus*) spawn in at the mouth of the river, and it appears that this location is an important contributor to the walleye population in the Kaministiquia River (S. Bobrowicz, unpublished data). The mouth of the river also supports a popular dip-net fishery during the spring rainbow smelt (*Osmerus mordax*) spawning run.

In 1987, Environment Canada designated Thunder Bay, including the lower reach of the Current River and Boulevard Lake, as a Great Lakes Area of Concern (AOC), due to degraded water quality associated with pulp mill effluent and sediment contamination (Figure 1; Vander Wal et al. 2004). The Remedial Action Plan (RAP) for the Thunder Bay AOC contains two targets associated with the Current River:

- Target D1: Increased abundance of walleye using Current River estuary for spawning (double the 1991 population estimate of 1100 fish); increased egg deposition and fry production.
- Target D6: Restore access to productive spawning habitat: produce a self-sustaining rainbow trout population in the headwaters of the Current River.

—Vander Wal et al. 2004

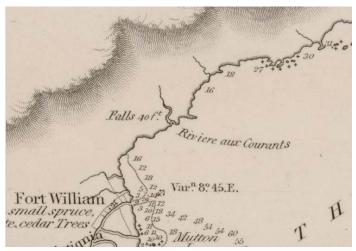


Thunder Bay Area of Concern, highlighting the portion of the Current River within the AOC (red oval).

The Thunder Bay RAP also contains a general recommendation to rehabilitate ecosystem function and structure, but focuses primarily on industries operating in the Thunder Bay riparian zone during the development of the RAP (1987-2004); the purpose of this document is to outline the history of anthropogenic impacts on the Current River, with focus on the area within the AOC, with the intent that the information may be useful in determining the predevelopment natural ecosystem state, and the development of management strategies which may help rehabilitate anthropogenic impacts which themselves have been long forgotten.

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1823- Lt. H.W. Bayfield, Royal Navy, surveys Lake Superior coastline. 1825



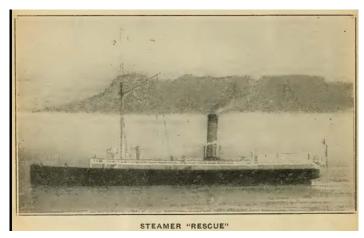
-Bayfield, 1828.

The area at the mouth of the Current River was known as *The Depôt* or *The Northwest Station;* this was headquarters of the Red River Expedition lead by Henry Gladman of the Hudson's Bay Company, assisted by Simon J. Dawson and Professor Henry Youle Hind. Dawson's report indicates that the area between the mouth of the river and Bare Point form a natural harbour that would be good for dockage:

"From the Depôt, eastward along the shore of Thunder Bay, the ground for a distance of several miles is practicable for a road, and there are facilities for the construction of wharves, in various places, more especially at a point a little to the eastward of Current River, where there is a small natural harbour, which, by means of piers, might be sufficiently extended." — Dawson, 1868.

1858 The first steamboat arrives at Fort William (*The Rescue*):

"Capt. James Dick, and Mr. McMurrich went fishing to Current River, about five miles to the north, where the speckled trout proved too large, and strong for their light rods and tackle, smashing the sops of their lines and flies as fast as they were thrown in and they had to give it up for want of material. One of the trout caught was the largest specked trout I have seen for many years."— Thunder Bay Historical Society, 1923.



1859 Lindsay Russell, the Surveyor-General for Canada, follows the Current River from its mouth at Lake Superior to its source:

"Current River, having a general course of north, winds about among steep, rocky hills, which sometimes rise straight up from its edge; from the top of one of these, about 6 miles from its mouth, we could see its course for a long distance through an exceedingly rough country. It is full of rapids and falls pouring through clefts of upheaved granite and slate. Opposite the second mile of the line it passes through slate, but higher up, granite." — Russell, 1859.

NB: The spot 6 miles from the mouth that he is referring to is The Cascades.

1866 Thunder Bay Silver Mine established near the site of the current Strathcona Golf Course. The stamp mill for the mine was built at the mouth of the Current River:

"Thunder Bay Mine, 2½ miles northeast of the mouth of the Current River. Discovered by Mr. Peter McKellar in 1866. Developed quite extensively, and a little village sprang up. Everything was destroyed by fire in 1873, and again in 1881." — Black, 1925.

1867 Shunia Mine established near the site of the current Trowbridge Park:

"Shunia Mine, formerly called Duncan Mine, discovered in 1867 by John and George McVicar; sold in 1870 for \$75,000." — Black, 1925.



Thunder Bay Silver Mining Company's Stamp Mill at Current River. Mine was near present site of P.A. Municipal Golf Links. Work continued from 1866-69 also for short time in 1824.

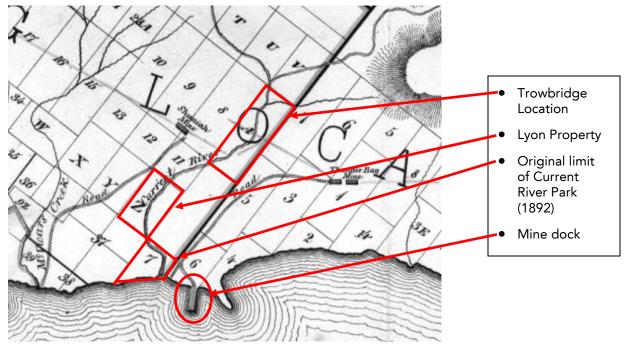
1867- Thunder Bay Silver Mining Co. builds the first dockage in the Port Arthur area, at the 1868 site of the current shipyards:

"The first dock built within the limits of what is now Port Arthur was constructed by the Thunder Bay Silver Mining Co., and was situated on Min. Loc. 4., close to its western boundary about half a mile east of Current River. It was 180 feet long with 10 feet of water at the outer end...It was constructed by Mr. Withrow in the winter of 1867-8

assisted by 12 experienced builders from Ottawa and was of wooden piers filled with stone." — Russell, 1915.

1870 Silver Islet Mining Company (New York) purchases mineral rights for Silver Islet site from the Montreal Mining Company. About this time, Charles A. Trowbridge, Secretary of the Silver Islet Mining Company, purchases mineral rights to 400 acres between the Shuniah and Thunder Bay mine sites, but this property is never developed:

"The Trowbridge Location:— This lies immediately east of the Shuniah property. It comprises a single lot of 400 acres, traversed throughout its entire length by Current River...No exploratory work, however, has been undertaken, as yet, with a view to their development, although they are undoubtedly of good promise." — Chapman, 1870.



-Savigny, c.1873

NB: Some sources (e.g. Wikipedia) state that it was William Petit Trowbridge who purchased 400 acres along the Current River, in 1865. While W.P. Trowbridge was a mining engineer, in 1865 he was a General in the Union Army (US Civil War). There is no indication that he had interests in the Lakehead (*New York Times*, August 13, 1892).



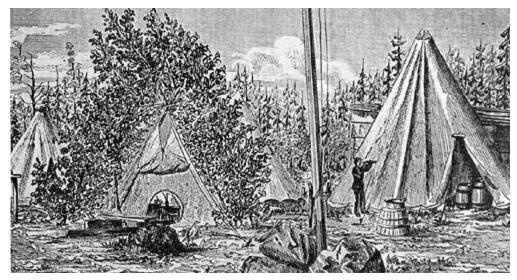
1870 May 15: Forest fire devastates the area:

"A tremendous fire had raged all through this district about ten days previously, devastating the country for hundreds of square miles, and doing much damage to the road. The buildings at Prince Arthur's Landing had been saved from destruction only by the greatest exertions...About three and a half miles to the north of Prince Arthur's Landing the Current River falls into the Bay in a succession of very pretty waterfalls. Three miles from its mouth, but away from the river, are rich silver mines worked by a company from Montreal. The recent fire committed sad havoc here, burning down eighteen houses and some stores of hay..." — Huyshe, 1871.

May 25: Col. Garnet Wolseley lands his 1200 troops (*"The Wolseley Expedition"*) at Thunder Bay and makes use of the Thunder Bay Silver Mining Company docks, as it was the only dockage suitable for his vessels:

"In 1867-68 the first dock was build by the Thunder Bay Silver Mining Company. It was 180 feet long and was situated one and a half miles east of Current River. Wolseley's expedition brought prominently into parliamentary view the convenience and safety of the harbour, and also its lack of adequate docking facilities. A plan for a 600-foot government dock was then prepared, and soundings taken." — Carthy, 1923.

Wolseley's encampment was made between McVicar's Creek and the Current River:



Wolsley's tent at Thunder Bay, 1870. — Henderson, 1968.

- 1873 Municipality of Shunia incorporated, including the mouth of the Current River.
- 1873- Forest fire destroys Thunder Bay Silver Mining Co. stamp mill and surrounding 1881 community:

"Docks, crib-work, and other buildings were also erected near the mill, all of which have been swept away by the fierce forest fires of 1873 and '81, when the last trace of the once substantial mill and dwelling houses were completely blotted out." — Roland, 1887.

- 1884 Port Arthur incorporated as a town.
- 1884 The Canadian Pacific Railway bridge is built over the Current River.



Original configuration of the CP Rail bridge, looking upstream from the mouth of the Current River.



First transcontinental train arrives in Port Arthur, June 30 1886.

1884 Thunder Bay Land and Mining Company of Montreal (formerly Thunder Bay Silver Mining Company) sells its assets in Shuniah and Port Arthur:



—Toronto Daily Mail. May 12, 1884.

1891- Lead by Town Councilor Alexander Lord Russell, Port Arthur annexes the mouth of the Current River (and a considerable distance upstream) from the Municipality of Shuniah. A steam plant is constructed to supply electricity for residential lighting and to power the new civic railway (streetcar). The northern terminus of the civic railway is the newestablished Current River Park, which originally encompassed lands on either side of the river, and a large beach area on the shore of Lake Superior. A streetcar bridge was built across the river at approximately the location of the current Cumberland Street bridge; the turnaround for the streetcar was located on the east side of the river. Park infrastructure would eventually include a dance hall, tourist camp, swimming pool, arena, and, for a short time, a moose in a fenced enclosure.

"Fed up with private schemes to generate electricity, Port Arthur built a generating station on the Current River in 1892 to power its new street railway. It originally ran on two 150 hp motors which were powered by steam boilers burning coal and wood; it was converted to hydroelectricity in 1901." — Tronrud and Nicholson 2005



FIRST ELECTRIC STREET CAR RAILWAY IN CANADA PORT ARTHUR 1892

1898 Pigeon River Lumber Company constructs a saw mill at the foot of Van Norman Street.

"The Pigeon River Lumber Company, after moving to Port Arthur, in 1898, sent hundreds of men to their camps every season and operated a mill in the town employing over one hundred. For years this was the chief industry, but the mill was closed a few years ago. The company still conducts a lumber business, however; and the Pigeon Timber Company employs hundreds in its pulpwood camps." — King 1927.

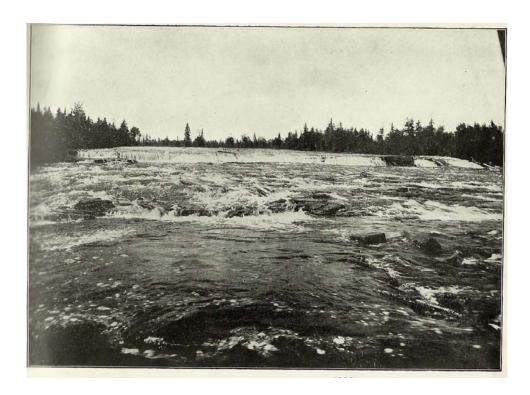
N.B. Some recent accounts state that there was a saw mill at the mouth of the Current River. This appears to be in error: the other mills in Port Arthur were the Vigars saw mill (1886) at the foot of Bay Street and the Graham, Horne & Co. planning mill (1888) on Front Street.

1901 Timber crib dam constructed at Current River Falls (now Boulevard Lake). The Current River Falls dam included a pair of wooden penstocks which fed the converted generation station at the mouth of the river. The original dam stood eight feet high, and had a storage capacity of 15 million gallons (68,000 cubic metres) (Port Arthur PUC, 1967).

"Port Arthur has its own water-power from the Current River, now supplying the lighting system of the town. About 5,000 h.p. is available now, and this can be extended when required by several thousand horse-power more. Some of this power has already been contracted for by the Ogilvies for their elevators and projected flour

mills and by Mackenzie, Mann & Co. in connection with the Canadian Northern Railway, and the blast furnaces in which they will be interested." — Anon. 1905

NB: 5,000 horsepower is incorrect. The maximum generating capacity of the Current River hydro facility was 1,850 kW (2,480 h.p), which was not available until the new dam was constructed in 1910 (Port Arthur PUC 1967).



Current River Falls prior to dam construction, c. 1900

- 1902 Onion Lake Dam constructed to provide increased storage for hydro generation. The original configuration of the Onion Lake Dam was a timber crib construction with a height of 21 feet (Port Arthur PUC 1967).
- 1903 Paquette Dam constructed near Stepstone to provide additional storage for hydro.
- 1904 September: Water supply for Port Arthur is established at Bare Point, with the water main crossing the Current River at the civic railway bridge.

"With reference to the scheme of taking the supply from a point opposite the town and outside the breakwater, the objections were the great expense to bring the water power from Current River, and the likelihood of contamination by sewage. To avoid such objections it would be necessary to go to a point at some distance, and the most favourable spot was at the other side of Bear Point, just north of Current River, where the water was 20 feet deep a short distance from shore. The trend of the shore line would tend to divert any sewage carried that way out into the open lake. This was the nearest available point to Current River where plenty of water power could be obtained at moderate cost."— Roland, 1887.



The original Current River Falls dam, c. 1905



Current River powerhouse from the CPR bridge, c. 1905

- 1906 Current River Service Reservoir (i.e. Boulevard Lake) enlarged.
- 1906 Height of the Onion Lake Dam is increased from 21 feet to 43 feet to provide additional storage.
- 1907 Port Arthur incorporated as a city.
- 1907 Dance pavilion built at Current River Park.
- 1908 May 28: The Current River Disaster. Paquette dam bursts, sending (by some reports) a thirty-foot wall of water down the Current River (MacFarlane 1970), causing damage to the Current River Falls dam, the hydro penstocks, the civic railway bridge, the municipal water mains, and the infrastructure of Current River Park. Water overtopping the CP Rail bridge causes the derailment of a west-bound freight train, killing five:

"Five lives lost and the destruction of property which will possibly reach a total of \$200,000, and possibly more, is the breaking away of the dam on Current River above the city power house last night. The rush of water striking a bend in the river about half a mile above the mouth broke through the banks and continued down its mad career over the city park, around the municipal power house and across the C.P.R. tracks. In going through the park it carried away all the dance halls, ice cream stands, pavilions, swings, etc. Crossing the C.P.R. it washed away the bridge over the river and also created havoc about the power house situated at the mouth of the river.

"With the C.P.R. bridge was washed away about three-quarters of a mile of track. Almost immediately after this a C.P.R. freight train came along from the east and crashed over the wrecked bridge into the river with eight or ten cars down on top of the locomotive. The fireman, engineer and brakeman went down and were killed or drowned, and also two unknown men who were stealing a ride on the train. The men killed were Engineer Savard, Fireman McBride and Brakeman Inman, all residents of Schreiber.

"The city power plant, light and water system are all crippled and it will be days before they are ready again." — Saskatoon Daily Phoenix, May 28, 1908

NB: Various documents incorrectly date the Current River Disaster at 1904 (e.g. Rasid 1988; Beak 1990) or 1906 (e.g. Port Arthur PUC 1967).

1908 October: Damages to Port Arthur infrastructure are estimated at ~\$300,000 (1908 dollars). Rather than restore the Paquette Dam, it is decided to rebuild the Current River Falls Dam, and to further enlarge the Onion Lake Dam. City ratepayers defeat a proposition to raise \$68,000 through taxes to pay for these projects. Beginning in January 1909, the Municipal government advertises 30 year debentures for sale in order to finance the repairs (*Financial Post*, October 24, 1908 & January 30, 1909). The sale of city-owned lands, including portions of Current River Park, is also considered as a source of funds.



Paquette Dam after the wreck, 1908



Wreckage of the train at Current River, with hydro penstocks in foreground, 1908



Looking upstream during the flood, 1908



Looking downstream from the CPR bridge during the flood, 1908



Erecting a temporary water main after the flood, June 1908. The civic railway bridge is in the background.



Remains of the Paquette Dam, 2011. Photo credit: Paul Holm.

- 1909 Construction begins on Western Dry Dock & Shipbuilding (later Port Arthur Shipbuilding Company) facility immediately east of the mouth of the Current River, at the site of the former Mine Dock:
 - "The site chosen was on a rock shelf in the north end of Port Arthur. The foundation of the drydock, which is 747 feet long and 98 feet wide, is as solid today as when built. Eighty percent of the Yard's buildings were on land reclaimed from Lake Superior." Benedet 1994.
- 1909 Further improvements to the Onion Lake Dam: Height increased by eight feet to its maximum height of 50 feet (15.25 m). The toe of the dam is reinforced by a secondary dam built of concrete (Port Arthur PUC 1967).
- 1910 February: Intake for municipal water supply extended to 3500 feet (1 km) offshore of Bare Point.



Installing the new water intake pipe off Bare Point, February 14, 1910.

1910 Construction of the new Current River Falls Dam completed. Port Arthur Generating Station comes back online with a capacity of 1,850 kW.



Early photograph of the second Current River Falls Dam.

1910 August: The Dominion Government enters into agreement with the City of Port Arthur to build a fish hatchery at the mouth of the Current River:

"The Dominion government, recognizing the importance of the fishing industry on Lake Superior, the terminus of water transportation into the Dominion, and at the center of Canada, has bade arrangements with the corporation of Port Arthur for the location there of a large modern fish hatchery, which will be located on an island at the mouth of Current river, and to secure an ample supply of cool, pure water, connections will be made with the city's pumping plant, which takes the water from 3,500 feet out in Thunder Bay.

"In this hatchery, lake and brook trout, whitefish and pickerel spawn will be placed, as it is the intention not only to stock the fishing grounds in Lake Superior, but to supply trout to replenish the many trout brooks in the neighbourhood.

"In view of this action the Country club, situated about three miles from the heart of the city, intend re-stocking the McIntyre river where it runs through their property. This will give an added interest to the club, which already has an eighteen-hole golf course well under construction.

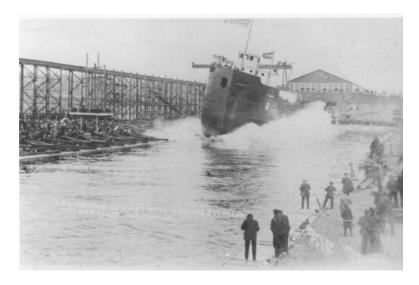
"The fish industry there, while very little has been said about it, is of material value as a producer of fish both for Canada and the States. There are at present 500 men employed with 20 tugs, and the output last year was well over \$250,000.

"This hatchery, supplying lake trout in unlimited numbers, will have the tendency to reduce the number of herring, which are multiplying in extraordinary numbers owing to the gradual decrease in trout, as they are a natural food for the trout." — Ottawa Citizen, August 4, 1910.



Port Arthur Fish Hatchery — McNab, 1917.

- 1911 Federal hatchery constructed; some eggs are collected, but the facility is not fully operational until 1912.
- 1911 March: First keel laid at the Western Dry Dock & Shipbuilding facility *Scow F.W. 45* launched June 27, 1911. 129 vessels would eventually be built at this facility prior to its closure in 1993 (Benedet 1994).



Launching of first boat – Western Dry Docks and Shipyards. 1911.

1911 Lyon family donates property surrounding the Port Arthur Service Reservoir (Boulevard Lake) to the city for the creation of a public park. Infrastructure for Lyon Park (now Boulevard Park), including the construction of Lyon Boulevard, completed through 1912.

1912 Black Bay Bridge completed — largest single span reinforced concrete bridge in the world:

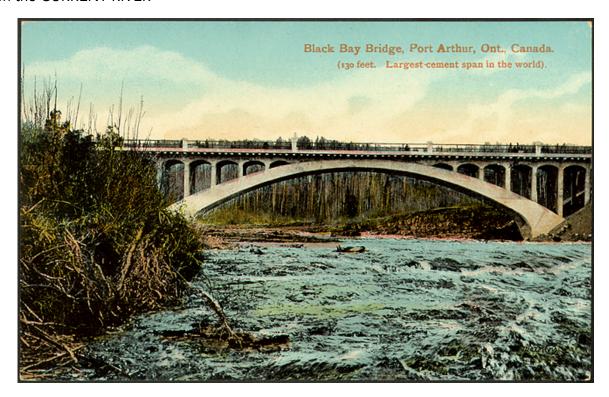
"The Black Bay Bridge is unique in that the method of construction used to erect the span was quite innovative at the time. Two previous wooden bridges had crossed Current River where the Black Bay Bridge now stands, and it was agreed upon that a more permanent structure was needed. The designers, Mr. Joachim Antonisen and Mr. L.M. Jones, decided upon reinforced concrete, despite the skepticism of other communities. However, the contractors and builders of the Lakehead had gained considerable experience with the medium due to the fact that the grain elevators of the city were constructed of reinforced concrete...

"The Black Bay Bridge was designed in 1910 by Joachim Antonisen, City Engineer and Commissioner of Public Utilities; the construction plans were drawn by L.M. Jones, City Engineer in 1911. Construction was handled by Seaman and Penniman, a local engineering and contracting firm who also build the Ruttan Block on South Court Street and the Bank of Montreal on Cumberland. This single span reinforced concrete bridge is characterized by arch ribs. Transverse struts between the ribs ensure lateral stability, and columns, spaced at 10 foot intervals on each rib, support the beam-and-slab deck of the bridge.

"The original sidewalks paralleling the road deck were cantilevered, a technique made possible by the use of reinforced concrete. The arches form a parabolic curve 130 feet in length with a height of 33 feet above the bed of the Current River. In addition to the arch ribs, the open spandrels between the arches and the abutment piers are unusual for this date. In 1912, other concrete bridges had filled spandrels, multiple spans or applied sculptural ornament. The Black Bay Bridge is unique because of its construction method, its aesthetic design, its unadorned functionalism and its early date." — City of Thunder Bay, 2008

- 1913 A channel is dredged at the mouth of the Current River to accommodate the launching of larger vessels from the shipyards.
- 1913 The Canadian National Railway bridge is constructed immediately adjacent to the Canadian Pacific bridge.
- 1913 City of Port Arthur receives first of several requests from area farmers to drive timber down the Current River as far as the service reservoir, where it would be removed and carried overland to mills. These requests are denied until late 1917:

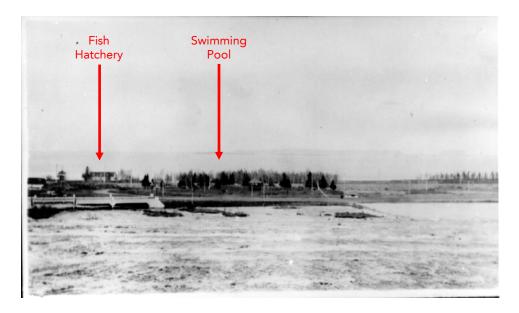
"There is no sluice-way in the storage dam at Current River that will allow ties and pulpwood to be driven through to the Lakeshore...The City has a large amount of money invested in the power plant and even if a sluice-way had been provided for driving logs to the lake it would very much impair the power plant." — A.E. Cole, October 9, 1913.



Black Bay Bridge, c. 1915.



Boy Scouts camped at Current River beach, c. 1915. View is looking south from the current location of the Viterra elevators.



Looking downstream from the dam, c. 1915.

- 1916- City of Port Arthur severs most of the Lake Superior shoreline from Current River Park
 1917 to allow the construction of three grain elevators (Richardson, Saskatchewan Co-op and United Grain Growers) and associated infrastructure.
- 1917 Local logger W.A. Kyro invokes the provincial *Rivers and Streams Act (1913)* which gives persons the right to float timber in rivers and streams in the spring, summer and fall, and which requires an apron or slide to be provided in dams to facilitate the movement of timber. City of Port Arthur modifies bay No. 9 in the dam to accommodate the sluiceway. Log driving begins in 1918, covering approximately a two week period each spring:

"[The] Parks Board consents to the driving of this timber through Current River Park in the spring of 1918, on condition that a sluice is constructed on plans approved by the City Engineer..." — City of Port Arthur, November 26, 1917.

1919 The Ontario Department of Game and Fisheries constructs additional hatchery facilities at the mouth of the Current River. This hatchery is administered separately from the federal facility:

"I am pleased to report that a hatchery 38' x 76' has been built in Current River Park, Port Arthur, under the supervision of Mr. George H. Rapsey, Superintendent of this Department, and to whom I desire to give due credit. The building is well constructed and fully equipped for the hatching of both speckled and lake trout, whitefish, herring and pickerel with ideal conditions as to the source and supply of pure water and the hatchery, as a whole is considered by the authorities to be as modern and efficient as any hatchery in the Dominion, having a capacity for 75,000,000 whitefish and 15,000,000 trout. The completion of this hatchery will place four hatcheries under the operation of this Department for the season of 1919...

- "For the first time the Department has been successful in collecting...1,500,000 speckled trout spawn from the famous Nepigon stock for the Port Arthur Hatchery."

 Ontario Game and Fisheries Department, 1919.
- 1920 The City of Port Arthur severs the final parcel of Lake Superior shoreline from Current River Park for the establishment of the Kaministiquia Pulp and Paper mill.
- 1920 December: Port Arthur enters into contract with the Ontario Hydro Electric Power Commission to receive power from the Cameron Falls GS on the Nipigon River. From this point, the Current River hydro facility is no longer used at full capacity; it is reserved for local load control and emergency power only (Port Arthur PUC, 1967). This arrangement necessitates the construction of a 110,000 volt transmission line which crosses the Current River at the present site of Centennial Park.
- 1922 Kaministiquia Pulp and Paper mill sold to Consolidated Water Power and Paper.
- 1923 "The Casino Dine & Dance" is constructed in Current River Park to replace the former open-air dance pavilion. This eventually becomes such a popular night spot that the park becomes unofficially known as *Casino Park*.



The Casino Dine & Dance, Current River Park.

- 1925 City of Port Arthur signs agreement with the Pigeon River Timber Company to manage the timber sluicing facility at the Current River dam, in order to facilitate their logging operation in the Onion Lake area.
- 1926 Provincial Government assumes operation of the Federal hatchery facilities at the mouth of the Current River:
 - "On July 1st, 1926, the Federal Government discontinued the propagation of fish in eight hatcheries located at:—

Collingwood Sarnia Wiarton Southampton Port Arthur Kingsville Kenora Belleville

"The operation of same, however, was continuous, as the Province of Ontario assumed control as soon as operations were discontinued by the Federal Government and after the distribution of fry and fingerlings was made." — Ontario Game and Fisheries Department, 1927.

1927 The United Grain Growers' elevator is reconstructed by C.D. Howe; on completion it is the largest grain elevator in the world.

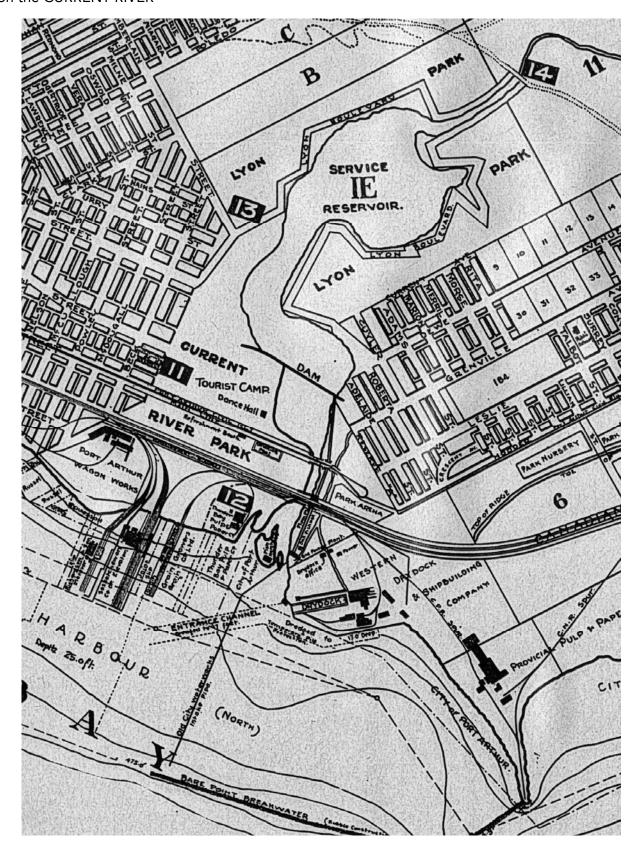


Construction of the second United Grain Growers' elevator, August 1927.

- 1927 Province of Ontario establishes the *Lakes and Rivers Improvement Act*, encompassing the former *Rivers and Streams Act* and several other pieces of related legislation.
- 1927- Consolidated Water Power and Paper constructs a new mill east of Bare Point: 1928

"Installation of a pipe line, between the Thunder Bay Pulp Mill at Current River, near Port Arthur, and the main paper mill at Bare Point, a distance of two and a half miles, is under way.

"The pipe line will be used for pumping the product from the Current River mill in slush form, direct from the grinders and convergers at the far end, along with the fresh stock from the Bare Point mill grinders. The equipment will be in operation before the fall.



Detail of a map of the City of Port Arthur — City of Port Arthur, 1924.

It will unite the two plants, making virtually one mill. The line is similar in construction and purpose to an installation at the Wisconsin Rapids plant, which carries sulphite through a pipe line, over four miles long.

"By means of a 'go-devil,' a unique instrument of rubber, and forced through the pipe by water pressure, the pipe line will be cleaned at regular periods. The installation is one of the few in Canada and certainly the longest. The expenditure on this undertaking will be considerable." — Financial Post, July 20, 1928.

1928 December: Consolidated Water Power and Paper sells its Port Arthur assets to Provincial Paper:

"The Consolidated Water Power and Paper Company, of Wisconsin Rapids, Wis., which has sold its local properties to a Canadian syndicate, operated the Thunder Bay Paper Company, having acquired the mill and properties of the Kaministiquia Pulp and Paper Company at Current River in 1922. A new mill was opened at Port Arthur on June 4, 1927, and today, following the placing of new plant equipment, it has a capacity of 250 tons of paper per day.

"Extensive timber rights were granted the Consolidated Company in 1926 by the Ontario Government, and it is understood these will be taken over by the purchasers. The Canadian syndicate will take possession of the properties on January 1.

"No statement of the value of the properties could be obtained locally, the paper company officers here stating that such a statement would have to come from L.R. Wilson, managing director of the Abitibi Power and Paper Company, one of the principal companies in the syndicate, of Montreal." — Montreal Gazette, December 28, 1928.

- 1930 Abitibi becomes sole owner of Provincial Paper.
- 1930- A series of forest fires (1930, 1932, 1936) damage the Onion Lake Dam. 1936

"So many blazes broke out near Port Arthur over the week-end that all could not be given attention by forestry officials.

"The towering Onion Lake Dam, 19 miles from Port Arthur, was saved after heavy week-end labour by fire fighters. It had been feared that the crib-work and sluice-way of the 45-foot water head might be gnawed away by the flames, sending a wall of water down the valley." — Schenectady Gazette, May 29, 1930.

NB: UMA Group (1972) states that the fire damaged the Onion Lake Dam occurred in 1921 or 1922, and that the upper part of the dam was burnt away and never repaired. This is unlikely based on the description of the dam in 1930 newspaper reports.

1931 At the request of the Pigeon River Timber Company, the timber sluicing facilities at the dam are expanded to bay No. 10, which allows for a greater volume of timber to pass the dam in a shorter period each spring. Guiding booms are installed below the dam

to facilitate better passage over the bald rock. Spring log drives continue in this fashion until the late 1930s.



Current River Dam from Cumberland Street bridge during the spring log drive, c. 1930. Photo courtesy of Mr. F. Gauley.

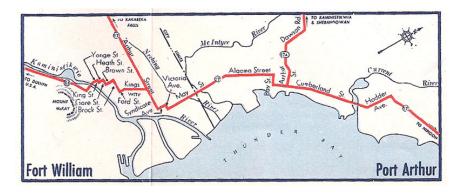
1932 Graves discovered near the mouth of the Current River:

"On Wednesday, August 17, 1932 Thunder Bay Paper Mill Company employees unearthed three skeletons close to the lake shore between the groundwood mill and the United Grain Growers' elevator. The workers first believed they had struck an old Indian burial ground, but W.J. Wallace of the C.P.R. Police offered another explanation.

As a boy, Inspector Wallace had camped near the spot where the skeletons were found. It was the summer of 1918, and as he wandered through the bust in the vicinity of the campsite, young Mr. Wallace stumbled upon two crosses almost totally concealed by the undergrowth. Names and dates had been inscribed on the crosses. Though worn and faded by time and the elements, Wallace was able to decipher them. The graves contained the bodies of two members of the Wolseley expedition." — Mauro 1981.

- 1932 September: Abitibi files for bankruptcy protection.
- 1932 September: Highway 17 officially opened between Port Arthur and Schreiber; the linkage between Schreiber and Wawa would not open until 1960. Until the construction of the Thunder Bay Expressway in the late 1960s and early 1970s,

Highway 17 followed Hodder Avenue, crossing the Current River at the Cumberland Street Bridge.



Inset map from 1946 Ontario road map. — Ontario Department of Highways, 1946.



Current River pool, facing east along Cumberland Street. Port Arthur semi-centennial celebration, July 2, 1934.

1937 Repairs to the Onion Lake Dam: owing to the reduced need for storage (resulting from the 1920 contract with Ontario Hydro), the head on the dam is reduced to its original height. Remaining woodwork is replaced with creosote timbers (Port Arthur PUC, 1967).

- 1939 Hydro penstocks replaced at Current River Falls.
- 1940 Cumberland Street is paved for the first time.
- 1940 Current River Park is temporarily seized by the Department of National Defence as a training base, and is renamed Current River Barracks. The Tourist Camp is converted to Army barracks; the Casino dance hall becomes the mess hall. Toward the end of the war, German prisoners-of-war are held at the camp:

"Clarence Frahm, German prisoner of war, was found dead at Current River military barracks Monday, military authorities announced Tuesday. He is believed to have hung himself. No other details were disclosed." — Saskatoon Star-Phoenix, October 25, 1944.

- 1946 Abitibi emerges from receivership.
- 1946 July: City of Port Arthur resumes control of Current River Park:

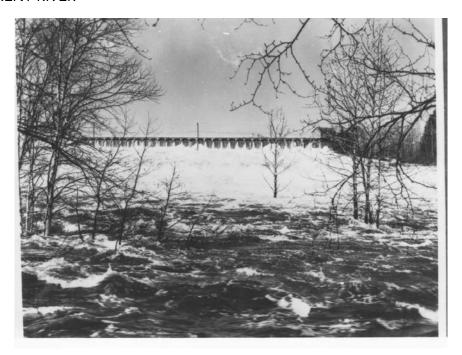
"The Port Arthur city council Thursday authorized immediate reoccupancy of the city's tourist cabins at Current River Park, under lease to the department of national defence since early in the war.

"Their action was taken following receipt of a telegram from G. H. S. Dinsmore of the War Assets Corporation at Montreal, who said possession by the city could not be authorized until such time as 'negotiations have reached a stage when we can expect a satisfactory agreement with you.'

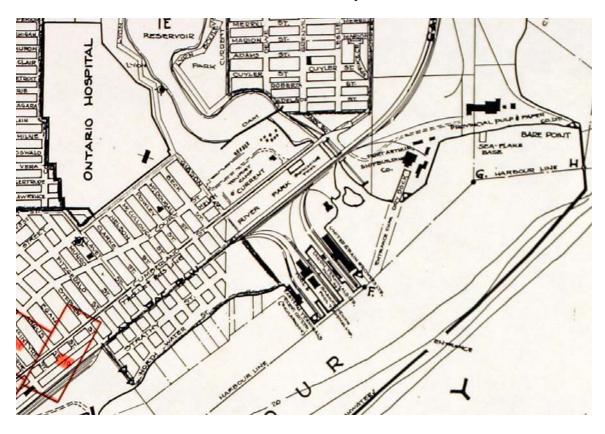
"Acting Mayor A. H. Knutson wired Mr. Dinsmore advising him of the city's decision. The camps were vacated by the army about a month ago." — Windsor Daily Star, July 4, 1946.

- 1948 Streetcar service terminated in favour of Brill trolley busses.
- 1948 Abitibi constructs new offices on the site of the former pulp mill. A road bridging the island at the mouth of the Current River is constructed to access the new office complex.
- 1951 May 3: Current River floods, reaching maximum peak flow of 11,400 cubic feet per second (323 CMS) at the Boulevard Lake Dam. This is this highest peak flow ever recorded at the dam, though it is likely that the 1908 flood was higher.

"In May of 1951, the river flooded again, this time because of excessive spring snow melt and runoff conditions. The waters topped Cumberland Avenue and also washed out the main lines of both the CNR and CPR to the east of Cumberland Avenue. Fortunately, no loss of life occurred." — James F. McLaren, ltd., 1970.



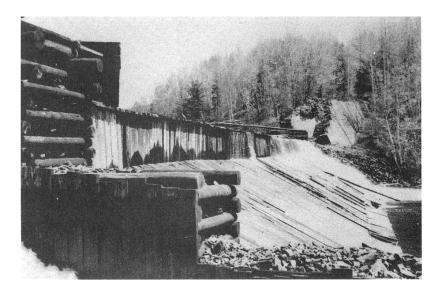
Boulevard Lake Dam, May 3, 1951.



Detail of Port Arthur fire insurance map — City of Port Arthur, 1942

1952 Boulevard Lake Dam repaired and enlarged.

1953 Major repairs to the timber portion of the Onion Lake Dam.



Onion Lake Dam, 1953 configuration. Upper timber section of the dam, looking east.

— James F. Maclaren ltd. 1970.

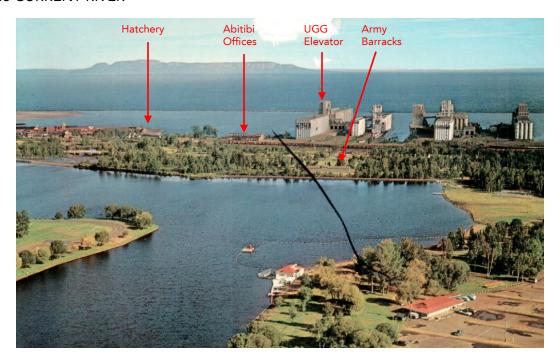
1956 Port Arthur fish hatchery inadvertently introduces pink salmon into Lake Superior:

"Although several different releases occurred, the disposal by hatchery managers of excess stock, about 21,000 fingerlings, into the Current River after the Hudson Bay stocking program had been completed, is probably the source of the Great Lakes pink salmon population. It was believed from knowledge of the reproductive biology and ecology of the species that these fingerlings would not establish reproducing populations in Lake Superior. In addition to the excess stock, other introductions occurred at the hatchery either as escapees during the transfer of fish to planes for transport to James Bay or as accidental releases into Lake Superior with the stocking of lake trout fingerlings." — Mills et al. 1993

1957 Another spring flood:

"Following [the 1951] flood, several alterations were made to the Boulevard Lake dam to increase its flow capacity. These changes proved beneficial as in the spring of 1957, a flood of similar magnitude was passed safely through the Boulevard Lake dam and the downstream channel to Lake Superior." — James F. McLaren, Itd., 1970.

1958 January 12: The Casino Dance Hall is destroyed by fire.



Postcard of Boulevard Lake, c.1957.



Spring fishing at the mouth of the Current River, c. 1960. One of the road bridges to the island is visible in the background.

1959 September 24: The outshore annex of the United Grain Growers' Terminal collapses without warning, eventually attributed to shifting of the foundation (Vervoort 1990). It is eventually replaced with a larger annex, bringing total capacity of the facility to 4,250,000 bushels:

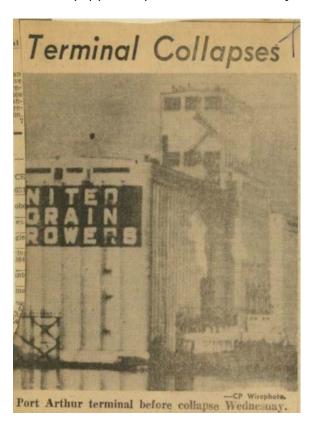
"A full investigation has started today into the collapse last night of a concrete elevator annex that spilled thousands of bushels of grain into the harbour. The loss was estimated at \$5,000,000.

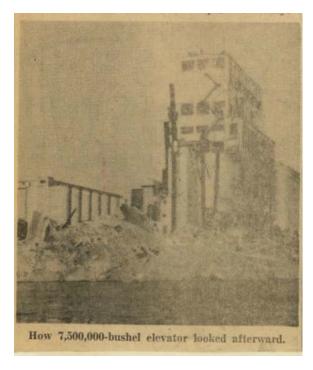
"The 110-foot high elevator was part of a group of 16 owned by the United Grain Growers Ltd. at its terminal here.

"J.E. Brownlee of Winnipeg, who arrived here today to attend a company dinner, said the annex was a complete loss. He said on the basis of recent construction costs it would cost \$2,000,000 to replace. Cause of the collapse would not likely be determined until the investigation was completed, he said.

"The elevator annex contained 2,250,000 bushels of grain, most of which slid into the water. It is not expected that grain can be recovered.

"The slabs of concrete and grain plunging into the water created a 12-foot tidal wave that swept the harbour and lifted a tug 100 feet up on shore and dislodged six float-equipped airplanes moored nearby." — Toronto Globe and Mail, September 25, 1959.

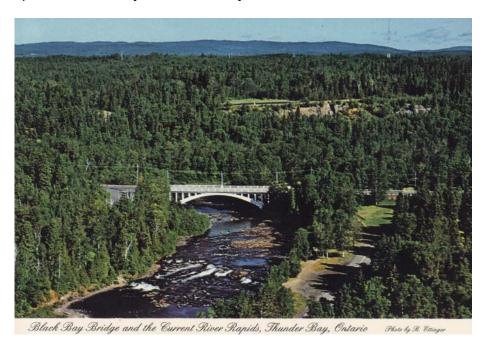




Before-and-after photos of the United Grain Growers' elevator — Toronto Globe and Mail, September 25, 1959.

- 1963 Based on recommendations from Ontario Hydro, major renovations are completed on the Boulevard Lake dam, including the reconstruction of the six northern-most sluiceways, enlargement of the overflow section, stability improvements and repairs to the gatehouse. At the same time, the pedestrian walkway over the dam is installed (Port Arthur PUC, 1967).
- 1963 January: The Neebing Valley Conservation Authority is enlarged, including the Current River watershed, and renamed the Lakehead Region Conservation Authority.
- 1963 Black Bay Bridge is widened:

"An addition was made to Black Bay Bridge in 1963, which doubled the span in width. The addition was constructed to be sympathetic to the original design, retaining the open spandrels." — City of Thunder Bay, 2008



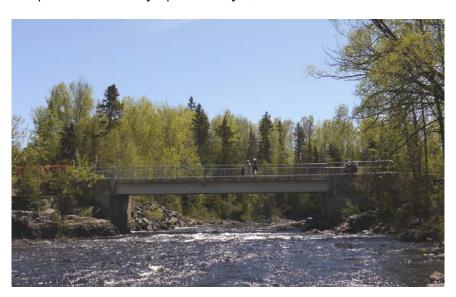
Black Bay Bridge, c. 1970

- 1963- Construction of Trowbridge Tent & Trailer Park. The creation of Trowbridge Park was 1969 completed in three stages: 1963-65; 1965-67, and 1967-69. At about the time Stage I was opened in 1965, operation of the city-owned Current River Tourist Camp was terminated, and the latter facility was converted to its current use as the Parks & Recreation Department service centre. The Trowbridge facilities included the pedestrian bridge over the Current River.
- c1967 Abitibi vacates its offices at Current River. The property is relinquished to the City of Port Arthur, and leased to Morton's Boatyards, Itd.



Trowbridge Falls pedestrian bridge

1964- Construction of Port Arthur Centennial Park. One of the first components of the
1967 construction of Centennial Park was the completion of the bridge spanning the Current River. The park was officially opened July 1, 1967.



Centennial Park pedestrian bridge

1969- Cascades Conservation Area established by Lakehead Region Conservation Authority: 1975

"The parcels of land comprising the Cascades were purchased by the Conservation Authority between 1969 and 1975. The Township of Shuniah previously owned some of the property and the rest was formerly in private ownership. The Authority's holdings are divided into two by a parcel which is owned by a resident of Oklahoma." — Hartley, 1983.

1969 Wishart Conservation Area established by Lakehead Region Conservation Authority:

- "Wishart was acquired in two parcels from the City of Port Arthur in 1969 in the same transaction of Hazelwood Lake. The area is located in Gorham Township and Onion Lake Road runs between the two parcels."— Hartley, 1983.
- c1969 The highway bridge over the Current River is constructed as part of the development of the Thunder Bay Expressway. With the opening of the Expressway in the early 1970s, Hodder Avenue and Cumberland Street lose their highway designation.
- 1970 Amalgamation of Fort William and Port Arthur to form the City of Thunder Bay.
- 1971 Port Arthur Fish Hatchery closes. Upgrades and expansion of the Dorion Fish Hatchery had made the Port Arthur Hatchery redundant for several years; the final fish are stocked in spring 1971 and the facility is mothballed later in the year, in advance of the Department of Lands and Forests reorganization. The buildings are used for storage for a few years, and finally demolished in 1974.
- 1972 Ontario Department of Lands and Forests re-organized as the Ontario Ministry of Natural Resources, effective April 1, 1972.
- 1972 A combined total of 1032 adult walleye from the Current and Pigeon Rivers are transferred to Black Bay in an attempt to rehabilitate the stock that collapsed there in 1968 (Furlong et al. 2006)
- 1972 Trolley bus service discontinued.
- 1974 City of Thunder Bay completes the Current River Recreation Strategy.
- 1976 As a result of engineering study (Cook 1975) the dam is further renovated and the storage capacity of Boulevard Lake is increased (Rasid 1988). The original hydro generation facilities are taken offline about this time and the penstocks are removed but the powerhouse remains in place until the mid-1980s. An initial proposal from a local citizen to MNR and LRCA for the installation of a fish ladder at the dam is not incorporated into the renovations.
- c1976 Morton's Boatyards Ltd. relinquishes its lease of the former Abitibi property. The two bridges and roadway across the island at the mouth of the Current River are demolished, but the building remains in place.
- 1978 A fire at the Thunder Bay Marina (Prince Arthur's Landing) destroys dockage and warehouses there. The Temple Reef Sailing Club leases the Morton's Boatyards facilities from the City of Thunder Bay for a period of five years for storage of their vessels.
- 1980 Onion Lake Dam further damaged by fire:

"A fire in September of 1980 caused serious structural damage to the dam. Temporary remedial action consisted of excavating a breach in the dam to create an opening of sufficient width and depth to handle the highest historical flows without failure." — Lakehead Region Conservation Authority, 2008

- Redevelopment of the north bank at the mouth of the Current River: the former powerhouse is demolished, and a parcel of shoreline is leased to the federal government for 25 years for use as a Small Craft Harbour. This project involves construction of a concrete boat ramp and four concrete piers/docks, which are primarily intended for use by commercial fishing vessels. The creation of the Small Craft Harbour necessitates dredging at the mouth of the river, which destroys a significant portion of the walleye spawning habitat there. Also about this time, a new road bridge is constructed over the river, immediately downstream of the railway bridges, extending Shipyard Road to the grain elevators.
- 1987 The current hydro facility at the Boulevard Lake Dam comes online. The new Current River Generating station is rated at 500kW, a fraction of the 1,850kW capacity of the original hydro facility. The site is leased until to the Current River Hydro Partnership until 2025:

"The waterpower facility draws water from the north side of the dam and diverts a maximum of 3.9 cubic metres per second through a 1,200 millimetre pipe approximately 200 metres downstream to the generating station. The generating station uses a single vertical propeller turbine known as a Kaplan turbine. The minimum estimated flow over the Boulevard Lake Dam under extreme drought conditions could drop to 0.2-0.3 cubic metres per second. This flow is considered to be barely enough to provide flow through one sluiceway." — Lakehead Region Conservation Authority, 2011.

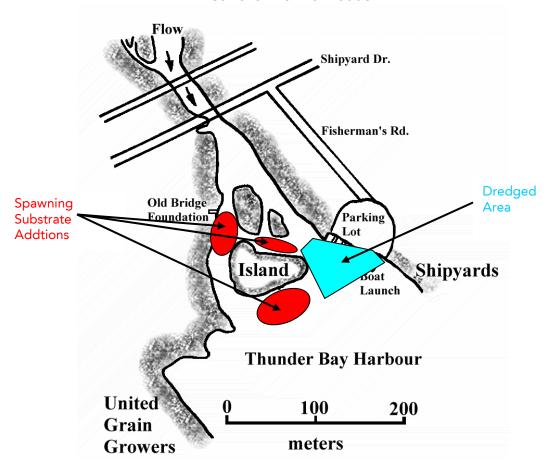
- 1987 Environment Canada designates Thunder Bay, including the Current River upstream to the Black Bay Bridge, as a Great Lakes Area of Concern.
- 1987 Port Arthur Shipbuilding sold to Canadian Shipbuilding and Engineering.
- 1988 The former Abitibi office building (Morton's Boatyard) is demolished.
- 1989 Black Bay Bridge is designated as a Heritage Property by the City of Thunder Bay.
- 1991 Remedial Action Plan Stage 1 completed for Thunder Bay AOC (Vander Wal et al. 1991).
- 1991 Fish ladder is constructed on the northernmost sluiceway of the Boulevard Lake dam; however, priority for water is mandated first to recreation and second to hydro generation.
- 1991 December: Artificial walleye spawning habitat is constructed at the mouth of the Current River to compensate for the area dredged for the Small Craft Harbour in 1984:

"We selected three sites of similar size for augmentation in the Current River estuary. The total surface area of the three sites approximated one half the area of habitat suitable for walleye spawning removed by dredging for dock construction. Two sites were downstream extensions of known remnant areas in lotic sections of the estuary. The third site was influenced more by Lake Superior than the river but was also suspected to have been used historically for spawning...

"The total surface area of the three sites was approximately 1,700 m². To this area we added 225 tonnes each of gravel and boulders and 125 tonnes of cobble." — Geiling 1995



Current River Fish Ladder



Current River estuary spawning habitat rehabilitation. Adapted from Geiling (1995)

- 1993 Port Arthur Shipyard closes. It eventually reopens as a repair yard under the name Lakehead Marine & Industrial.
- 1995 Several step pools are blasted into the bedrock below Boulevard Lake in order to allow an easier approach to the fish ladder by migrating steelhead.
- 1997 July: Scouts Canada National Jamboree. 13,000 Scouts from across Canada and several other countries are encamped at Boulevard Lake for one week:

"Thirteen thousand scouts from around the world didn't show up all by themselves. The City of Thunder Bay's Ad Hoc Advisory Committee worked wonders to make this dream become real. They started planning five years in advance to ensure that the CJ'97 would be the best Jamboree to date. Everyone involved put in extra effort to make this event stand out. Thunder Bay Transit arranged to let the scouts ride for a one-dollar fare. This was also the first Jamboree to employ paid workers as well as volunteers, as men and women were hired to build the floating bridge crossing Boulevard Lake and the stage used for the opening ceremonies." — Thunder Bay City Archives & Records, 2011



Scouts Canada 1997 Scout Jamboree, Boulevard Lake. — Thunder Bay City Archives & Records, 2011.

- 2000 Current River Greenway Master Plan is completed. This Millennial Project updated the 1974 Current River Recreation Strategy for City- and Conservation Authority-owned lands in the Current River corridor.
- 2001 United Grain Growers merges with Agricore to form Agricore United. A further merger with the Saskatchewan Wheat Pool in 2007 formed Viterra Inc., the current operator of the Current River grain elevator (now designated Viterra C).
- 2003 Cumberland Street Bridge rehabilitation:
 - "On Thursday, May 15, construction at the Cumberland Street Bridge over the Current River will begin. Bridge rehabilitation work including deck, sidewalk and barrier wall replacement will take place between May and October." Thunder Bay Chronicle-Journal, May 13 2003.
- 2004 Remedial Action Plan Stage 2 completed for Thunder Bay AOC (Vander Wal et al. 2004).
- The Ministry of Natural Resources completed a "simplified" Water Management Plan for the Current River, which expires March 31, 2016 (MNR 2006).
- 2007 Final decommissioning of the Onion Lake Dam. A portion of the concrete "toe" of the dam remains in place, but does not restrict flow under normal conditions.



Remains of the Onion Lake Dam, c. 2008

- 2007 Rehabilitation of the highway bridge on the Thunder Bay Expressway.
- 2009 The Northshore Steelhead Association spearheads a partnership to rehabilitate the site of the former powerhouse and fish hatchery. The site is re-designated as Fisherman's Park:

"The Millennial Project is still ongoing, however, the City of Thunder Bay has no plans to develop this area in the near future. Currently the City is working on extending the trial system between Cumberland Street and Shipyard Drive, which will bring users of the trail system to the entrance to Fisherman's Road, and the exact location the NSSA wishes to develop into a park.

"The goal of the NSSA is to reclaim this abused area, and return it to a natural setting, while offering a view of the lower Current River and the wildlife which abounds, as well as a place which the citizens of our city will want to visit." — NSSA 2011.



NSSA signage at Fisherman's Park.

2010 April 15: The cargo vessel *Federal Saguenay* crashes into the pier at the Viterra terminal, spilling a quantity of canary seed into Thunder Bay at the Current River Small Craft Harbour:

"The Federal Saguenay is the first ocean going ship of the season in the Port of Thunder Bay this year. It arrived Thursday morning and had a difficult time docking at the Viterra grain elevator. Heavy Fog made visibility very low and the ship ended up brushing a grain storage container causing minimal damage." — The Giant 105.3 News 2010



Federal Saguenay moored at Viterra C terminal, April 2010

2010 April: An unusually dry spring leads to dewatering of the river below the dam:

"The City of Thunder Bay is facing three charges from the province that could equal \$750,000 in fines.

"Officials from Ontario's Ministry of the Environment had the city in court Monday alleging the city reduced water levels on the Current River in April of 2010.

"According to the ministry, the reduced water levels jeopardized the spring smelt spawning run and left fish stranded on land.

"The city is also charged with failing to comply with conditions of its permit to take water. Another charge was levied against the city for not having that permit at the site."—TBNewswatch 2011.

2010 July: Trowbridge Falls pedestrian bridge is closed. Repairs are initially expected in 2011, but highway construction adjacent to Trowbridge Park delays the repairs until 2012:

"The Parks Division has closed the Trowbridge Falls Pedestrian Bridge due to safety issues. An engineering review found significant problems and to ensure the safety of the public, the bridge has been closed until repairs can be completed." — Thunder Bay Chronicle Journal, July 22, 2010.

2010 August: Ministry of Natural Resources partners with the Thunder Country Dive Club to conduct a clean up of the lake bed at the mouth of the Current River.



A portion of the refuse retrieved by the Thunder Country Dive Club, August 2010

2011 Federal lease on Small Craft Harbour facility expires; control returned to City of Thunder Bay.

- 2011 A Ministry of Natural Resources tagging study reveals that walleye spawning at the mouth of the Current River contribute significantly to the Kaministiquia River walleye population (S. Bobrowicz, unpublished data).
- 2012 Eco Divers Thunder Bay complete a second clean-up project off the mouth of the Current River, focusing on the west bank:

"Over the course of a few hours on Sunday, the local scuba diving group pulled eight tires, a car battery, an engine, a broken office chair and a truckload of rusty chain and cable out of the lake...There's lots of debris left in the area from an old marina, and some trash left by illegal dumpers, Mason said. It's enough waste to keep divers busy for a while." — Thunder Bay Chronicle Journal, July 16 2012.

2012 Glencore International purchases Vitera:

"Glencore International Plc, the world's largest publicly traded commodities supplier, said it received approval from the Canadian government for its acquisition of grain handler Viterra Inc.

"We are very pleased to receive Investment Canada (Act) approval, which recognizes the long term benefits for farmers and Canada from our acquisition of Viterra," Glencore director of Agricultural Products Chris Mahoney said Monday in a statement.

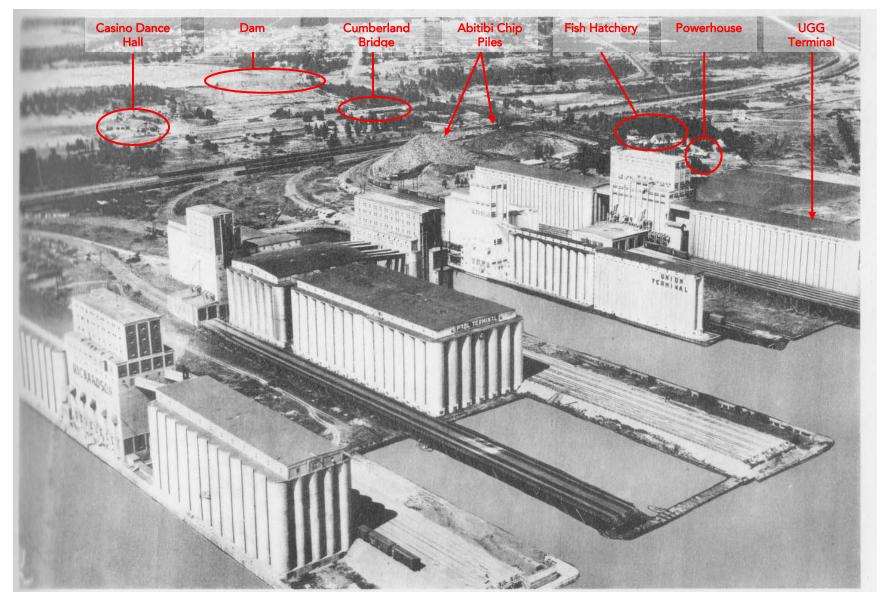
Glencore has been working with the government since the \$6.1 billion transaction was announced in March. The Baar, Switzerland-based company has agreed to increase Viterra's capital expenditures in Canada by more than \$100 million over five years and contribute to 'grain industry initiatives' in the province of Manitoba."— Financial Post, July 16 2012.

2012 City of Thunder Bay initiates Boulevard Lake Master Plan exercise:

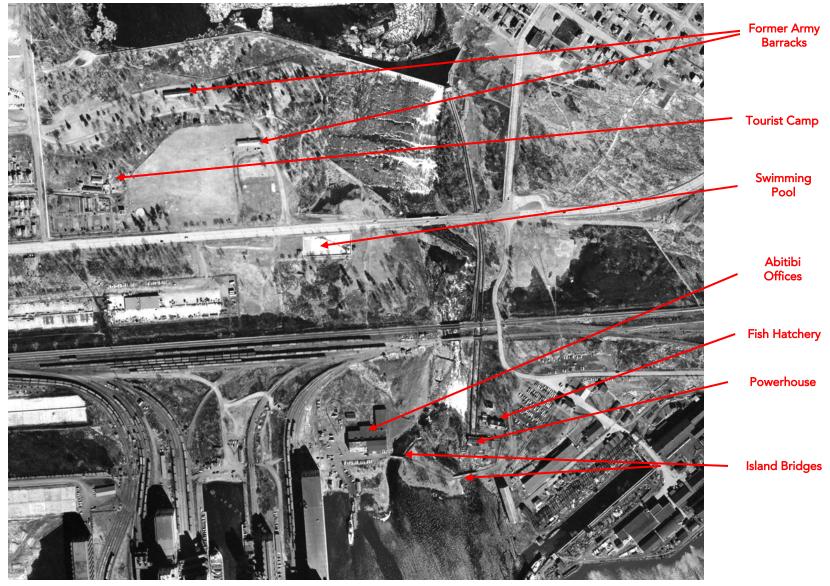
The City of Thunder Bay is working on a new plan to guide the development of the Boulevard Lake recreation area. The master plan will set priorities, such as where to construct trails or buildings, and make improvements to existing facilities.

Improving water quality at Boulevard is a priority, said Werner Schwar, who coordinates park planning for the city. "One thing we're looking at in the future is possibly dredging a section of the lake to increase the water depth, which gives us cooler water and things like fish habitat," he said. "Dredging will also increase the recreation potential for things like water sports ... [and] paddle sports."

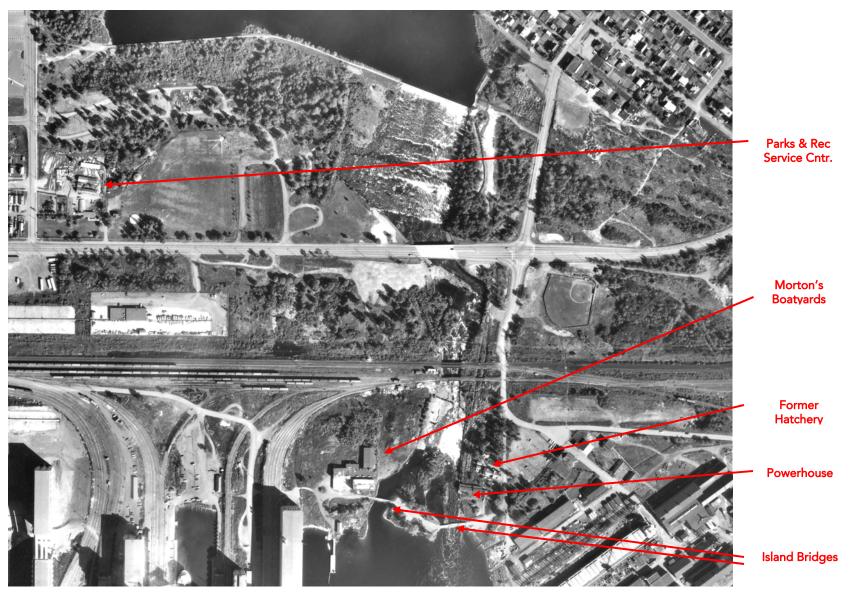
Schwar says there are also plans to reduce the habitat for geese that pollute the water, to refurbish the dam and to improve the parking lot. "We also know that improving parking and water runoff and reducing the geese habitat will help with potential water quality issues for swimming," he added. — CBC News, July 23 2012.



c.1928 aerial photography



1959 Aerial Photography



1974 Aerial Photography



1983 Aerial Photography



2010 Satellite Imagery

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