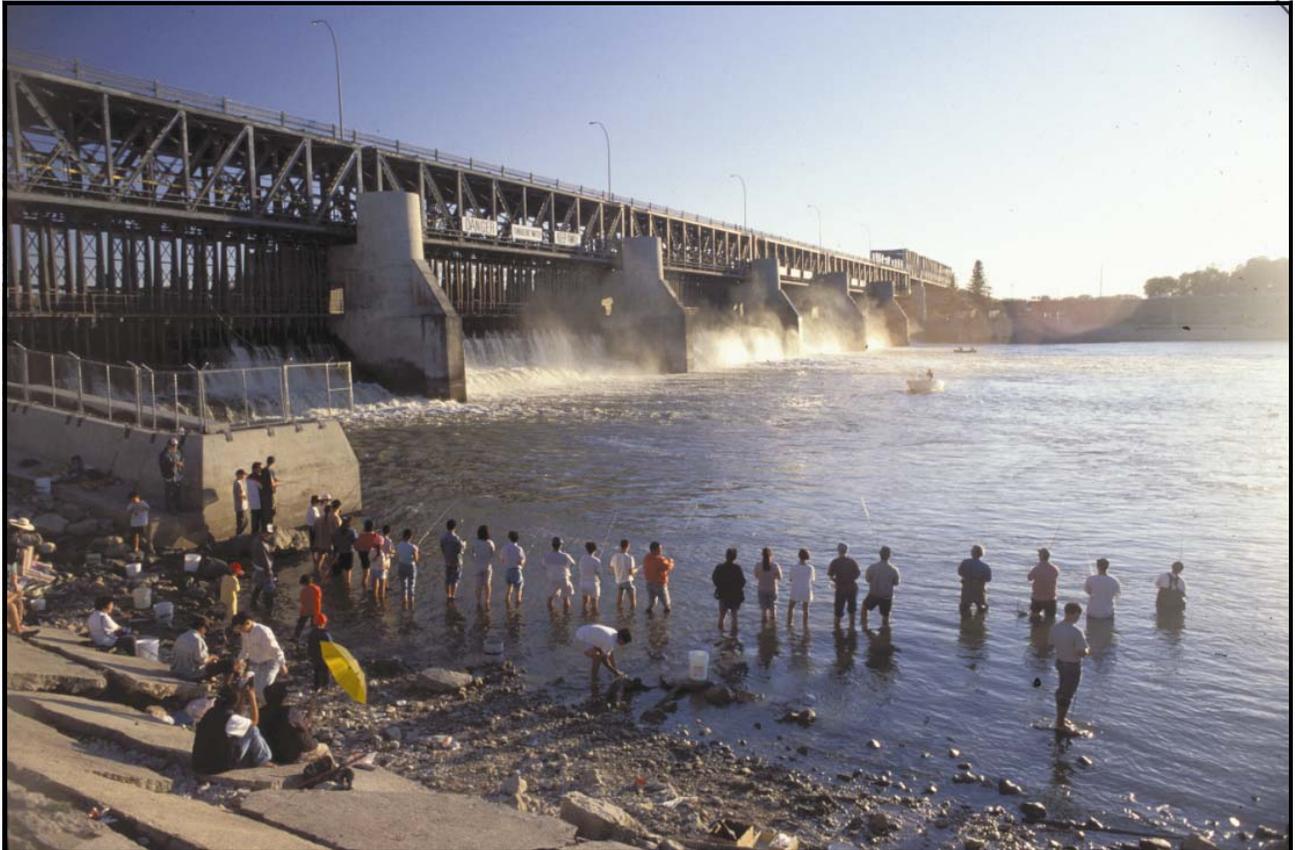


**CURRENT PERSPECTIVE  
RIVERS CONFERENCE '07  
Winnipeg, Manitoba  
June 10-13, 2007**



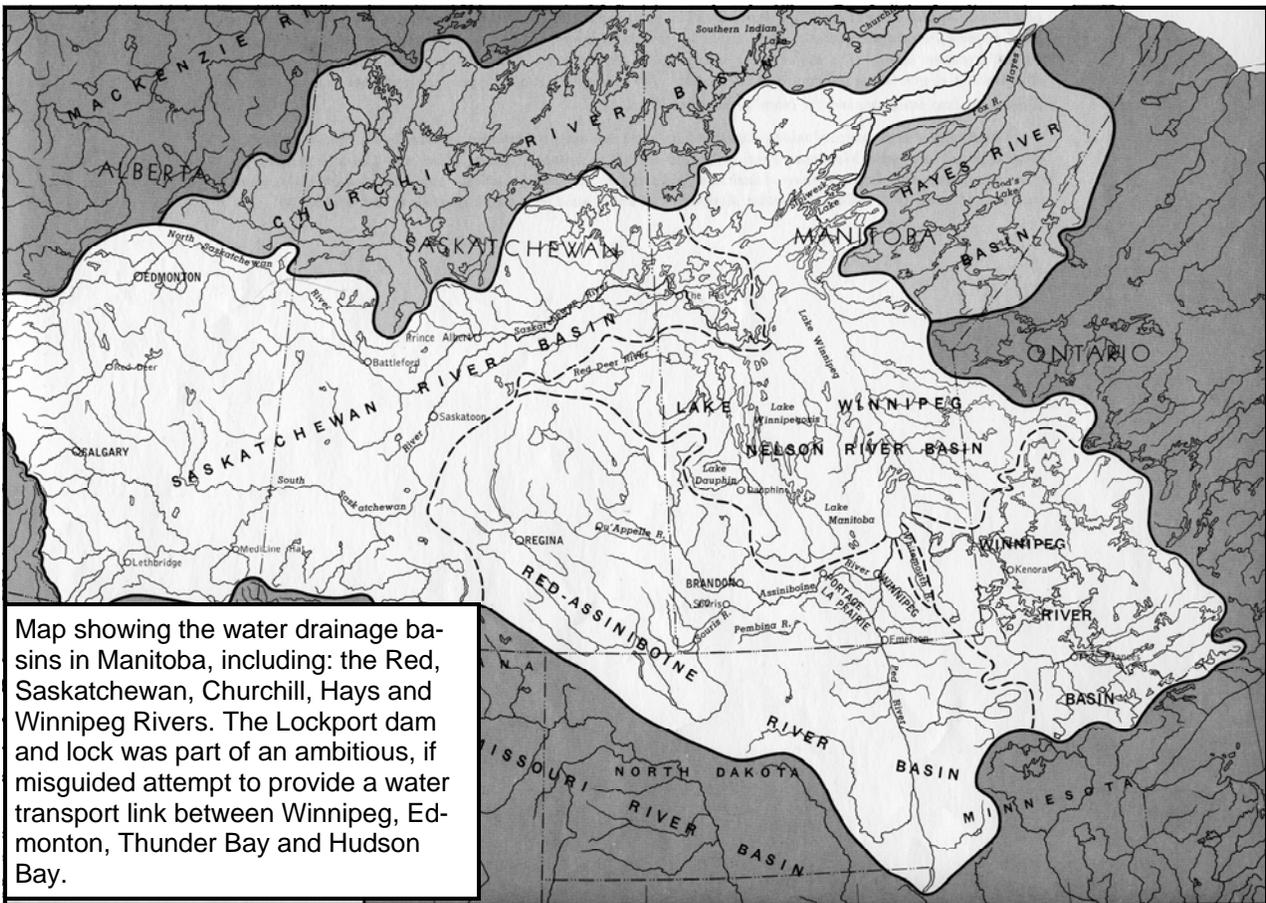
**ST. ANDREWS LOCK AND DAM  
LOCKPORT, MANITOBA**

Info Package compiled by Ed Ledohowski  
Historic Resources Branch

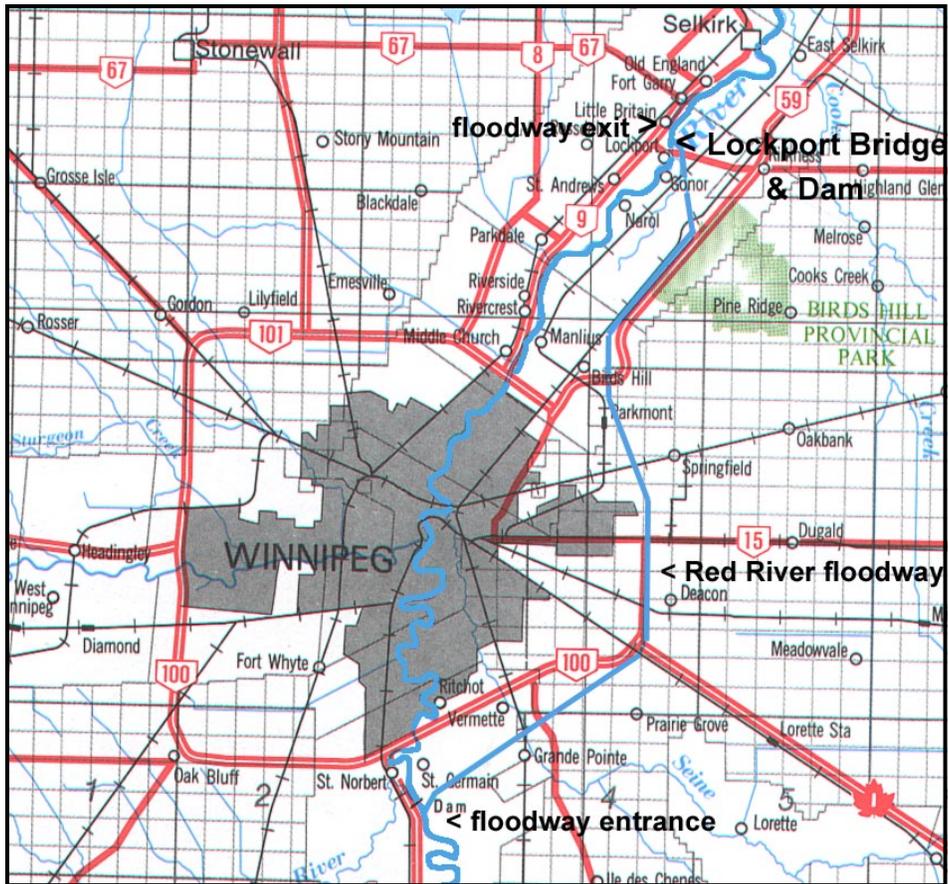
Tuesday June 12, 2007  
Field Workshop  
“History Along the Red River”  
Guide: Sherry Dangerfield



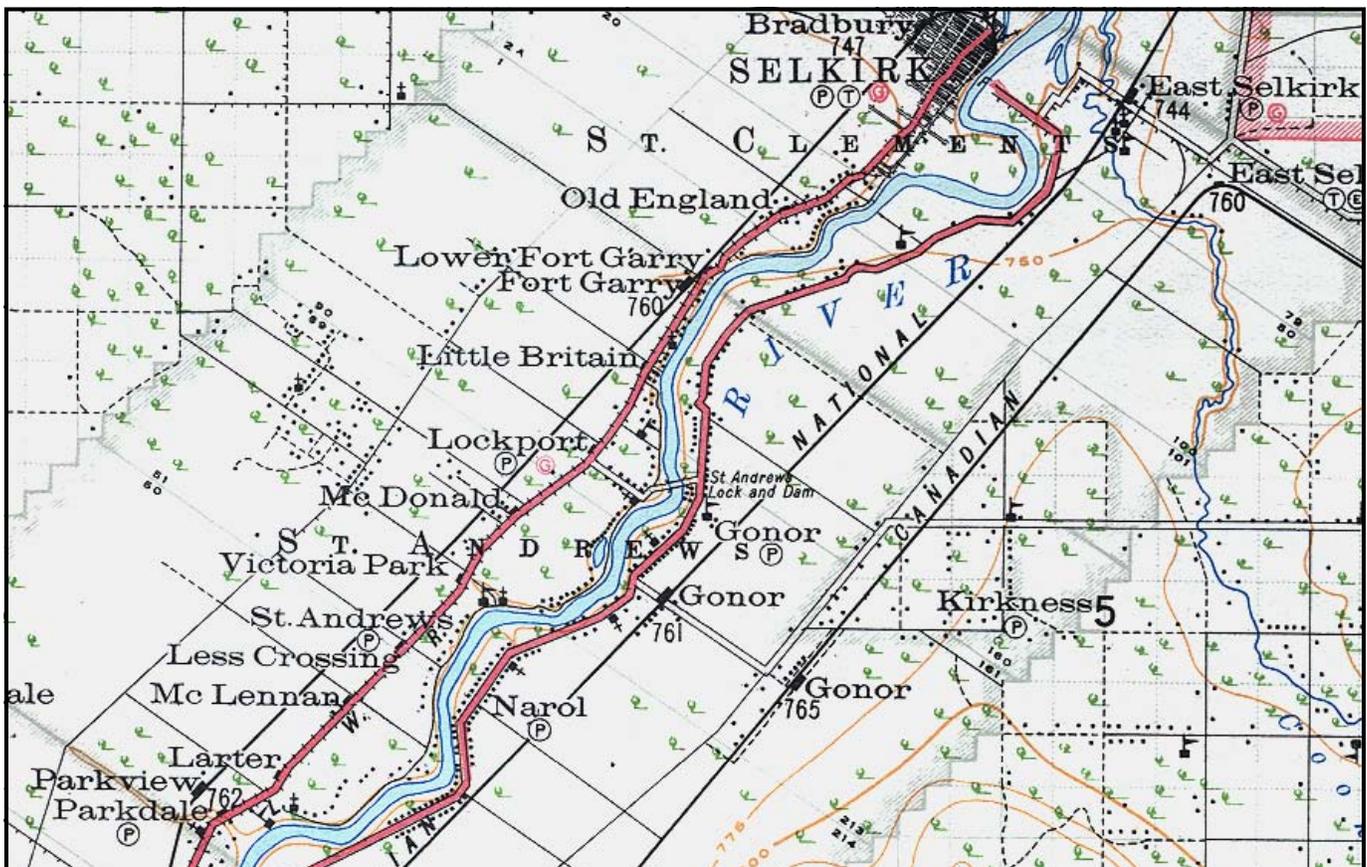
Oblique aerial photo of the Red River south of Winnipeg showing the 'river lot' survey system, farmsteads, a riverside community, and remnant of 'river bottom' forest..



Map showing the water drainage basins in Manitoba, including: the Red, Saskatchewan, Churchill, Hays and Winnipeg Rivers. The Lockport dam and lock was part of an ambitious, if misguided attempt to provide a water transport link between Winnipeg, Edmonton, Thunder Bay and Hudson Bay.



Map of the Winnipeg area, showing among other items, the Red River, the "Red River Floodway" diversion channel, and the Lockport Bridge and Dam site.



Detail from a 1922 Dominion Sectional Map showing the Red River, railway lines, and road network in the St. Andrews, Lockport, Lower Fort Garry and Selkirk districts north of Winnipeg. Note also the river lot and township survey systems.

# St. Andrew's Camere curtain dam

by Kip Park

Winnipeggers take it for granted, but the structure that crosses the Red River at Lockport is a very unusual one, so much so, that it has been named a Canadian historic site.

Officially, it's known as the St. Andrew's Camere curtain dam, but most Winnipeggers just call it "Lockport," when they think of the bridge that spans the Red River about 30 kilometres north of the city.

It's the only structure of its kind in North America, and only one of four of its kind in the world. The others, according to Canadian Heritage, are on the Moldau River in Czechoslovakia, on the Oder River in Germany, and at the outlet of Lake Geneva in Switzerland.

Early in September, this largest Camere dam in the world was recognized by Historic Sites and Monuments Canada for its role in a proposed river steamboat navigation route that was to extend from Winnipeg to Edmonton.

Besides that, "it's unique, because it's the only dam with a roll-up curtain on the continent," said Chris Colp, marine project manager with Public Works Canada, who is co-ordinating a \$19.5-million four-year reconstruction of the water control structure, which was built across the Red between 1901 and 1910 at a cost of about \$1.3 million.

The locks were originally built to allow navigation up and down the Red River. A series of five major rapids between Lake Winnipeg and Winnipeg impeded riverboat navigation. At the time, riverboats were an important transportation mode.

At the turn of the century, the 3.9 metre (13 feet) drop in elevation between Middlechurch and the site of the dam created a stretch of very rough waters, known as the Lister Rapids. Prior to construction of St. Andrew's locks, which were named after one of the rapids, the only time that boats of any size could reach Winnipeg from the lake was during spring runoff.

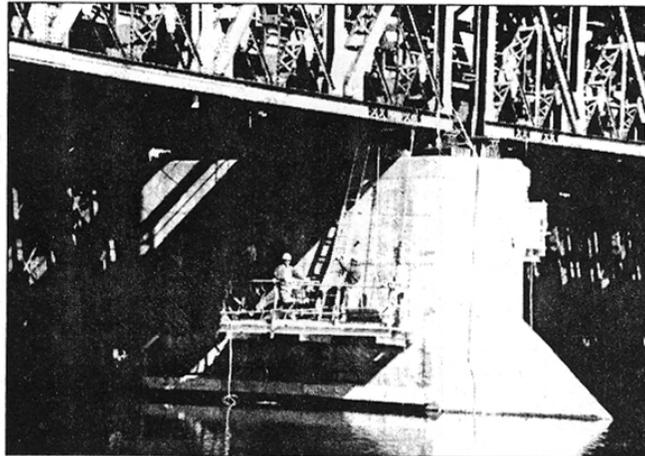
The "water level control structure" was to be a linchpin in the efforts of turn-of-the-century Manitoba entrepreneurs to extend water trade to Edmonton. Some thought a series of canals and locks could bring large vessels to Winnipeg from either Hudson Bay or Thunder Bay.

Winnipeg businessmen started lobbying for the control structure as early as 1880, before the Canadian Pacific Railway spanned the nation. One of the principal movers for the idea was R.D. Waugh, later a mayor of Winnipeg, whose name now graces the intake of the Shoal Lake aqueduct supplying Winnipeg with potable water.

When built, the base of the dam was on bedrock, with a steel and wood



Gate levels regulate the Red River's flow.



A crew works on a pier supporting the bridge.

upper structure that was opened and closed to control water levels and to allow ice to move freely during spring break-up.

The bridge is about 240 metres (788 feet) long, supported by eight piers, allowing the river to flow through openings about 36 metres (118 feet) wide. A working deck is located below what is now the highway crossing the river, and it's from there that the movable wood and metal screens are operated.

The Camere curtains ("We never could find out what his first name was," quipped Colp) are the major feature. Each curtain is made up of about 50 individually-sized Douglas fir "laths," fitted onto a heavy cast-iron plate at the bottom.

The gates are about four metres (13 feet) high and 2.4 metres (eight feet) wide, and connected by bronze pins and hinges. After spring runoff is over, the curtains are installed, usually around the middle of May. "The earliest was April 18," noted Colp.

They rest on a concrete frame at the bottom of the river, and are

hoisted or lowered according to upstream rainfall.

The structure is "well-suited to the Red, where water flows are variable," said Colp. "It maintains a relatively stable water level in Winnipeg, where 'normal' levels are now 734 feet above sea level at James Avenue."

If the dam wasn't there, during a dry summer, it would be possible to walk across the Red or Assiniboine, barely getting one's feet wet.

"We keep a close eye on rainfall upstream," said Henry Wiechern, superintendent of St. Andrew's. Regular readings are received four times a day from gauges throughout the upstream watershed — from Emerson, Winnipeg, Portage la Prairie and even into Saskatchewan. It's a 100,000-square-mile drainage basin, he added.

"If it rains in Grand Forks, we have to be prepared, even though the run-off water won't get here for five or six days."

That means adjusting the gate levels to regulate the river's flow, which may cause concern with shoreline

residents — downstream levels might be higher than usual, while upstream, in Winnipeg, they might be too low.

Experience has taught Wiechern and his 10-man crew how to fine-tune gate adjustment to cause minimal disruption to river traffic. Gate levels are normally adjusted two or three times a day.

"Debris in the river is our biggest hassle," he said. "Logs and branches and other flotsam get jammed in the curtains so we can't raise or lower them. We try and get the stuff out of the river before it hits the curtain."

The dam operates by curtains rolling up from the bottom in half-metre (18-inch) lifts.

"The beauty of this system is it's a precise regulating system for water flows," said Wiechern. "But because it is so precise, it gets jammed (with debris) easily and it's very labor intensive to clear it."

Right now, the St. Andrew's structure is in the second year of repairs to the fixed dam and piers. The tops of the piers are being reconstructed, and in mid-September crews were drilling holes to allow reinforcing steel rods to hold the structure together, which is a common bridge repair technique. The piers are receiving a new top coating of concrete.

Underwater portions of the quay where boats dock will be repaired, and necessary repairs will be done to the dam curtains.

Working on a structure of this vintage can pose problems. In 1984, the lock gates had to be replaced, and that required a special search of forests near Seattle, Washington to find suitable Douglas firs. Specifications called for "dense select structural" timber, with annual rings no more than 4.25 millimetres (1.6 inches) apart. The trees used were estimated to be 350 years old.

A total of 108 timbers about 8.5 metres (28 feet) long, 838 millimetres (33 inches) wide and 381 millimetres (15 inches) thick were used to reconstruct the gates, which hadn't been replaced since 1935.

When present reconstruction is completed in 1997, the St. Andrew's Lock and Dam will withstand several more decades of service. It's role has changed since it was built, as the riverboat traffic to Edmonton was never realized, but upstream recreational use of the Red and Assiniboine would not now be possible. Besides, there's something fascinating about having a unique engineering marvel barely a half hour's drive from Winnipeg.



# Locks an aid to navigation

by Don Aiken

During Manitoba summers for the past 82 years, a popular destination for sightseers, Sunday afternoon drivers, tourists and ardent fishers has been the dam and locks structure at St. Andrews, 20 miles (32 kilometres) north of Winnipeg on the Red River.

Among the many thousands of people who go there every summer are large numbers of visitors to Winnipeg, some of them lured here from the United States by the prospect of good fishing, particularly of catfish. The river below the locks apparently is a favorite gathering place for the scaly denizens of the stream, and on weekends, scores of small boats carry eager anglers out into the somewhat turbulent water to seek their prey.

The presence of the dam and locks is well-known, but the reason for the existence and the details of their construction are facts generally tucked away and forgotten in archives and old newspaper files.

The why of their existence is a 13-foot drop in the level of the river between Middlechurch and the site of the dam, a drop which created a stretch of very rough water originally known as Lister Rapids.

In spring when the river level was high, it was possible for small craft to make the passage between Selkirk and Winnipeg, but for most of the year, these rapids made Selkirk the furthest point which ships of any size could travel.

That wasn't too much of a problem in the early years of European exploration, trading and settlement here. True, the river and the lake were vital to transportation since almost all trade and travel was north to Hudson Bay, and York boats were the biggest vessels used.

But by the 1890s there were more than 30 steamships providing freight and passenger service to the lower reaches of the river and to Lake Winnipeg settlements, with connections via Grand Rapids to steamboat service on the Saskatchewan River.

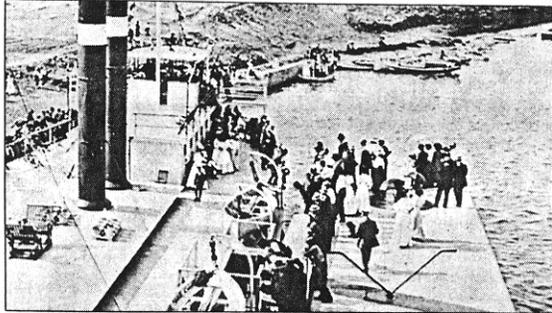
Before the dam was built, only one ship of any size, a flat-bottomed, stern-wheeler made the passage all the way upriver to Winnipeg and back again, and that was during a year of higher than usual water levels.

In the last years of the 19th century, there was a great flurry of interest and investment in companies intended to provide transportation in the West. While most of these were railway-oriented, one of two included the word canal in their names, and there was at least one grandiose proposal to create a series of canals which would bring large vessels to Winnipeg from either Hudson Bay ports or from the Lakehead.

## Proposal turned down

By 1895, the City of Winnipeg was firmly convinced it would be the great metropolis of Western Canada, and city council made an offer to the federal government to build the dam and locks if Ottawa would chip in with a \$500,000 grant. One of the principal movers in this idea was R.D. Waugh, later to become mayor of the city.

Ottawa turned down Winnipeg's proposal, but was apparently convinced of the need for an aid to navigation on the Red River and lake system. Early in the 1880s, the federal government decided to build the dam



The grand inauguration of the dam and locks was on July 14, 1910. (Manitoba Archives photo.)

and locks, and in 1908, a Montreal construction company was awarded the contract.

For the design of the structure, the architects and engineers selected to model it on the tidal dam on the Seine River at Poses, France. At that time, the French dam was the only one of its kind in the world, and Manitoba's would be the second. The design involved what is called a movable dam with connected locks for raising and lowering vessels. In fact, the St. Andrews complex is one of only three in the world.

The base of the dam is solid concrete laid down on bedrock and holds back 12 feet of water. Above it, the steel and wood upper structure can be opened and closed to control water levels and, of course, to allow for the free passage of ice in the annual spring breakup.

During construction, the concrete work was done in sections from one bank to the other, and a tramway was suspended over the river carrying huge buckets for the transport of concrete. The whole structure is 788 feet long, six spans of 119 foot, eight inches and five piers each 14 feet wide. After the piers and basic steel work were completed, a working deck was built on which small work trains ran on rails to carry men and materials to where they were needed.

From the upper steel to the concrete dam, steel frames were installed with removable wood and metal screens which could be rolled up and down to release or hold back the water.

Most of the work was done in the winters of 1908 and 1909.

The whole project was not without problems. Several of the workmen died of injuries, were drowned or fell victim to typhoid fever which broke out during the construction. The worst accident occurred when a tramcar on the work railway fell from the top of the dam, killing two men.

The lock itself, at the west end of the dam, is 215 feet long, 45 feet wide and 22 feet deep, and the pumping mechanism which floods and drains the lock chamber can raise or lower the water by 20 feet in 10 minutes.

The massive lock gates, which were last replaced in 1935, are of steel and wood, and the builders had to undertake a wide search to get exactly the right type of wood for the purpose. The timbers used were 28.5 feet long and almost three feet wide, and the wood selected was very dense, having 15 annular rings per inch and estimated to be 350 years old.

The locks were completed early in 1910 and, although they were not officially open, the steamer Alberta made the passage on May 2.

The grand inauguration took place July 14, 1910 with a large number of federal, provincial and municipal dignitaries present, including the then prime minister, Sir Wilfrid Laurier, whose government had been instrumental in making the decision to build the structure.

As usual, there were speeches, bands, lavish decorations and refreshments, and the event was fully covered by the media which, in those days, meant the newspapers. Orators forecast a great future for shipping on the river and the lake, and there was even a mention — product more of wishful thinking than of practicality — of future waterway expansion in all directions.

## Attracted attention

Even before the official opening, the dam and lock had attracted a great deal of attention in engineering circles. On August 28, 1909, the British Association in Winnipeg organized an excursion to see the work. A special train took members from Winnipeg and back, at a cost of 45 cents return, allowing them two hours to inspect the project.

And after the locks were in operation, several professional journals, particularly in the U.S., devoted considerable space to detailed, technical descriptions and reproductions of the plans. *Engineering News*, October 6, 1910, in an eight-page feature, called it "one of the finest pieces of concrete work on the continent," while both the *Engineering Record*, and *The Engineer* gave the complex good coverage.

Even while the dam and lock were being built, the extension of railway traffic had spelled the start of a steady decline in the use of waterways for freighting and passenger service.

At the time the dam and lock were finished, there was no roadway across the top. It was strictly a water control and navigational system. A couple of years later, a fish ladder was added at the east side to enable fish indigenous to the river to go upstream to spawn.

To assist in navigation, an artificial island was created on the upstream side of the lock, with an ice-breaker at its upstream tip — an important feature since the ice which forms on the river in winter is very destructive to all kinds of man-made objects.

When the top of the lock and dam was built up and paved to provide a bridge across the river, the original approach at one end was at right angles to the bridge, because the owner of a plot of land, needed to provide straight access, refused for some time to sell his property.

To allow for the passage through

the locks of ships with high masts or funnels, the upper works of the dam and road were provided with a bascule-type hinged apparatus which could raise the whole section out of the way of the vessels passing beneath.

Beneath the road surface, there is a work floor with rails on which a movable crane runs to provide a means of carrying out the various operations of the dam apparatus.

During its first year of operation, the lock provided passage for 1,600 vessels, both commercial and pleasure.

Since then, the largest ship ever to go through the lock is the Lord Selkirk II, which used to sail on regular schedules to Norway House, calling at several lake ports on the way.

Incidentally, the bascule lift had to be raised to let the Lord Selkirk through and on one occasion at least, when the lift section did not rise enough, the ship's mast scraped the bridge slightly.

When there are several vessels of different kinds waiting to go through the lock, there is a definite order of precedence enforced. First priority goes to government ships such as the Coast Guard's *Namao*, the Reserve Navy's vessels and ships involved in surveys and maintenance of navigational aids on the river and lake. Next are passenger and fresh cargo vessels on their way to take visitors and suppliers to such ports of call as Matheson Island, Grand Rapids and Berens River. Non-fresh freight vessels are next and last come pleasure boats.

A few additional statistics:

- 27,000 cubic yards of concrete were used for the dam.

- 15,000 cubic yards of concrete went into the lock structure.

- Total cost in 1910 dollars was \$3.5 million.

- St. Andrews dam and locks is the largest of its kind in the world. Others of this type are in use in Switzerland and Italy, as well as the original in France.

- No toll fee is charged for passage of vessels.

- Excavation down to bedrock was by teams of horses dragging Fresno scoops.

- 33 cubic yards was considered a good day's excavation in 1908.

- Wages were 12½ cents an hour to 15 cents an hour for unskilled labor, 25 cents an hour for skilled.

- Daily rate for a team, wagon and driver was \$2.50.

- In 1989, there was a almost steady stream of traffic round the clock.

- In 1984, when a sudden emergency demanded rapid lowering of the water level upstream, a seaplane which had been afloat was stuck on the mudbank left when the water went down and the owner threatened to sue the government.

- Today, in an average summer season, there are between 300 and 500 "lockings" of vessels larger than 40 feet in length, and from 1,000 to 1,500 passages of boats smaller than 40 feet. A "locking" is a passage through the locks of a vessel, one-way.



## **-Building Lockport's Lock and Dam-**

The St. Andrew's Lock and Dam is most commonly known for its unique structure. Its adapted French design was used to work with the environment, instead of attempting to control the forces of nature. The creation of the dam increased trade access along the Red River from North to South by raising the water level around major upstream rapids, which prevented boat traffic into the Winnipeg markets. This dam was a genuine accomplishment in Canada's architecture and was the first of its type to be constructed in North America.

Located on the Red River between the city of Winnipeg and Lake Winnipeg, the Lister Rapids were an immense obstacle in the region. Even since the beginning of the fur trade, these rapids, although picturesque, have blocked river access from Northern to Southern Manitoba. This barrier separated the province into two distinct trading regions, only allowing an insignificant amount of trade to occur by oxcart or canoe, as larger vessels and even York boats could not cross the rapids. Major commodities such as lumber and fish were unloaded and transported by road, which was costly. It was considered impossible and complete suicide to attempt to pass this torrent of water, measuring a 15-foot drop across a 10-mile distance. However, with the increase in trade by the revolutionary steamship, access to both Northern and Southern Manitoba was considered essential, and ideas were forming about how to pass the impassable.

In the late 1800's, surveyors were sent to determine what the best possible options were to overcome the obstacles in the river. The major suggestions that were presented were to either blast a channel through the rapids, forcing nature to change, or to build a dam and work with the ecosystem. In 1896, after failed attempts to dredge the rapids, it was concluded that a dam would be built three miles north of the St. Andrews Rapids, at what is now called Lockport. Here they would be able to harness and regulate the water levels, facilitating trade over the rapids. In 1899 the estimated cost of the project totaled \$150,000, and was labeled as "an improvement of the St. Andrews Rapids." It was unknown at the time how large of a project that they were actually beginning.

The Lockport site was chosen because it was considered ideal for two main reasons. Primarily, there was a long bend in the river at this location. This made it possible to cut a channel through the land adjacent to the dam, in which a lock could be built so that ships could by-pass the dam. Secondly, there was a natural fault in the rock strata. Because of this, the ground level was higher, giving easy access to the bedrock below for their footings.

A large amount of thought and foresight went into planning the Lockport dam. The proposed project involved an uncommon, and rarely seen, movable dam, which could raise its floodgates at any time. This was chosen for many reasons. Mainly, a permanent structure had the potential to cause an ice jam during the spring thaw, which would cause immense flooding upstream. A movable dam would have the ability to open its many gates with very short notice, in as little as a couple of hours. Atmospheric and wind pressure on Lake Winnipeg also had the ability to raise or lower the Red River by as much as 8 feet, creating a tidal type river, which would be difficult to control. This could be harnessed by the movable dam style. When considering all of these factors, they decided to use the Camere design. The prototype for this style of dam could only be found in one other place around the world, on the Seine River, a tidal river, in France. The Camere design was a fixed structure of concrete or stonework/brickwork with a series of steel truss bridges resting on piers. From these piers a number of frames operated, by containing roll off curtains of wooden lathers. A couple alterations were made on the original design, making this dam unique to the world. The final structure would reach a proposed height of 21 feet, creating an elevation of nine feet of water on the southern side of the dam to allow passage over the rapids.

The task began in January 1900, when men began removing boulders and cutting an 8 feet wide opening across the river through the ice. By March there were upwards of 35 men working on this preliminary task.

The resident supervising engineer was Mr. A.R. Dufresne. Mr. A. St. Laurent and Mr. H. Vautelet were the design engineers on the project. Construction of the dam involved a great deal of manual labour; mainly it was men with picks, shovels and wheelbarrows, and the use of horse teams drawing scrapers, dump wagons, and slushers. Labourers were paid as little as 15 cents an hour for unskilled workers, 25 cents for skilled, and \$2.50 per team for a 12 hour day.

The first sod was officially turned for the Locks on Monday afternoon of October 8, 1900, and the building process was not always easy. The workers endured many setbacks including outbreaks of typhoid and the loss of many workers to drowning in the unusually high water. Over the next few years, the project was continually thwarted by small failures but it persisted on. The completion of the project was scheduled for the start of the 1910 navigational season. The main bridge to accompany the dam was completed 1909. The lock at the west end of the dam measured 200 feet long and had a width of 45 feet, while providing a depth of nine feet of water over the mitre sill. It would accommodate vessels of about 1600 tons and had a maximum lift of 21 feet; the average regulated lift was 18 feet. The lock design was a very modern accomplishment with automatic self-balancing valves from which the lock could be filled and emptied. At the time, they were the largest lock valves of this type in the world. The total materials used for construction were 55,000 cu. yards of concrete and about 6,500,000 pounds of steel. The concrete work cost about \$1,500,000 and the steel calculated about half this amount. When the main bridge, lock and dam were completed, the total cost came in at an astounding 3.5 million dollars.

On July 14, 1910, ten years after the start of the project, Sir Wilfred Laurier officially declared the Locks open. This momentous event occurred with the steamer *Winnitoba* passing through the locks with approximately 3000 people on board, and an even larger crowd situated around the locks. By 1913, a bridge deck was completed allowing the movement of vehicles and pedestrians over the structure. A bascule lift, or drawbridge, was later installed over the lock structure to allow tall ships to pass through.

Over the years though, commercial shipping between Lake Winnipeg and the City of Winnipeg declined due to other lower cost of transportation by improved rail and road systems. Currently the primary use of the locks is for recreational and passenger vessels and to present day the dam still provides a stable water level for the river, as far upstream as the city of Winnipeg.

*Article written by Jared Laberge*

*St. Clements Heritage Advisory Committee – 07/14/05*

*St. Clements Historical Committee. East Side Of The Red. Winnipeg: Inter-Collegiate Press, 1984.*

[http://www.rmofstclements.com/History\\_damn.htm](http://www.rmofstclements.com/History_damn.htm)

## **Fishing; Its Why People Came.**

With a rich and colorful history that reaches back thousands of years, Lockport is a settlement with scores of stories to tell. It was first inhabited by North American peoples because of the abundance of fish found in the murky depths of the meandering Red River. The longstanding tradition of fishing is still alive today with thousands of people per year visiting the dynamic community off highway #44, slightly north of the city of Winnipeg. Centuries before the region received its name, Lockport's earliest inhabitants lived in dwellings made from local materials. Cone shaped structures covered with animal hides and buffalo robes were built by some groups, while others built dome shaped dwellings using twigs, weaved grasses, and animal skins.

Seventeenth century oral stories maintain peoples of the Assiniboine, Cree, and Sioux Nations travelled to and resided in the area. By the eighteenth century written records tell us the Saulteaux/Anishinaabe/Ojibwa peoples arrived ~ one of those members was the legendary leader know today as, Peguis. During the later part of the eighteenth century First Nations groups began to mix with European male fur traders serving both the Hudson's Bay and North West Companies, producing numerous offspring who also chose to remain in the area.

In 1812 the first group of Scottish settlers through the region of Lockport as they made their way south to the forks of the Red and Assiniboine Rivers. Then several English, Scottish, and Orcadian Hudson's Bay Company retirees and their Native American families migrated to the area to take up permanent residency with their newly obtained land grants from the Hudson's Bay Company. These families cut trees along the riverbanks and dug limestone from the riverbed to build their houses.

Soon a small school and library emerged in the home of Margaret (Swain) & Donald Gunn, a retired Hudson's Bay Company family. As the community grew neighbors erected fences and barns for their livestock, and a local blacksmith shop emerged. The settlers cut hay in the marshes, and cultivated land for grain and vegetables. Several water and wind powered grist mills arose throughout the community. Social events were frequent and always held at someone's house. St. Andrew's Church, ministered by Rev. William Cockran and his wife Anne, was the closest place of worship.

As early as 1829 the area was referred to as Little Britain, and by 1852 the name Little Britain was officially used. As the community grew, plans got underway for a community church. The stunning stone edifice named Little Britain United Church arose in 1874. Before the introduction of the paddleboats and steamships to Red River, the only types of boats to follow the meandering waterway were canoes and York boats ~ vessels that could be physically maneuvered over or around the rapids at St. Andrews south of Lockport. However, by the mid 1870s, the main mode of transportation had changed to bigger vessels. Unfortunately, these larger vessels were unable to traverse the rapids, preventing them from travelling between the forks and Lake Winnipeg. Therefore design and construction on a lock and dam to as a Camere system began around 1900. The locks took almost 10 years to build, being declared officially open in July 1910 by Prime Minister Sir Wilfrid Laurier. The new lock and dam controlled the water flow of the Red River, raising the water level at the rapids thereby permitting boat traffic to pass through. With the creation of the lock and dam, came the named Lockport.

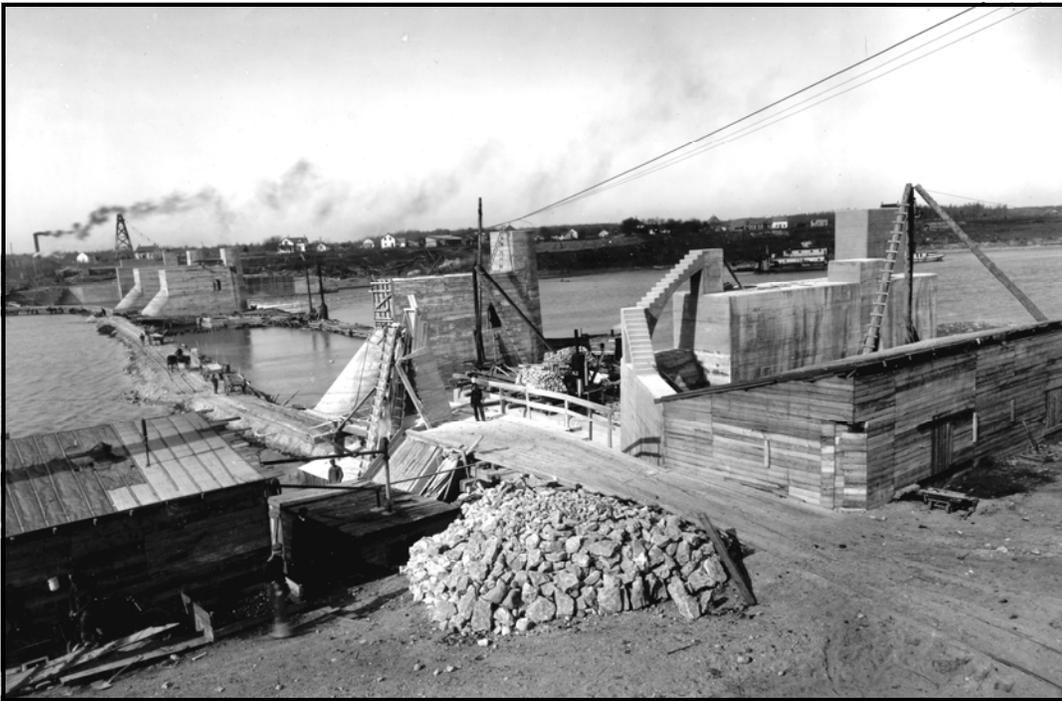
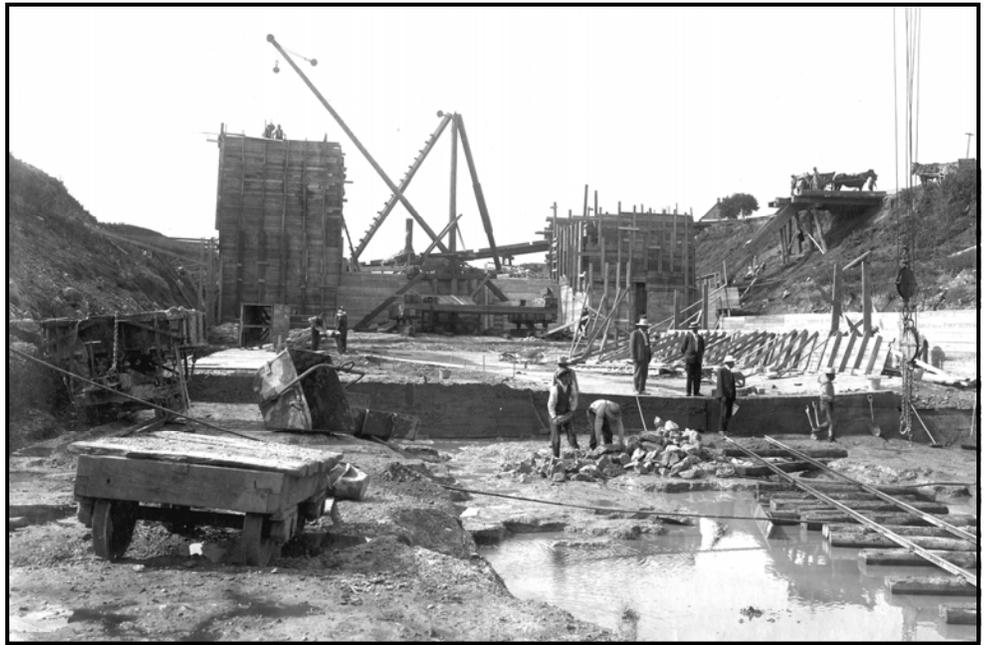
As the crew excavated the waterbed in preparation for the foundation of the lock, they unearthed an amazing amount of mud. That earth was placed slightly south of the locks, which today makes up the small island that each year becomes a temporary haven for thousands of migrating geese. A spur line was built from the town of Selkirk to the work site, enabling the men to get machinery and material to the site. After the lock and dam was completed the spur line was removed. With the completion of the lock and dam came a considerable increase in both visitors and residents to the area. Several businesses sprouted up. The Lockport Flour Mill Company started operations in 1917. In that same year a bus service called Bushman & Boatman serviced the community when Canada's first woman bus driver, Mabel Davis Richmond, chauffeured locals around in her Ford Model T bus. During 1919 she drove folk between Lockport and Winnipeg. The area also had one or two restaurants to feed hungry crews working on the construction of the lock and dam. In 1926, proprietor Mary Gunn sold a full steak dinner for 25 cents. Soon after, hotels with drinking parlors and room rentals became part of the landscape at Lockport.

In 1929 Lockport became home to the famous Skinners Restaurant as the Skinner family began selling a new tasty treat called the hotdog. People came from miles away to try the mouth-watering sensations for a mere 10-cents. Competition followed with the famous Half Moon hot dog and chip shop in 1940. In 1958, in an attempt to reduce the floodwaters from entering the city of Winnipeg, the Dufferin Roblin Administration decided to create the Red River (or Winnipeg) Floodway. The 30 miles stretch of channel often referred to as "Duff's Ditch," travels north to discharge back into Red River below the dam at Lockport.

Today Lockport is home to many families, several restaurants, retail outlets, two churches, one school, a provincial park, and a museum with the Cree name Kenosewun, which means, "There are many fishes."

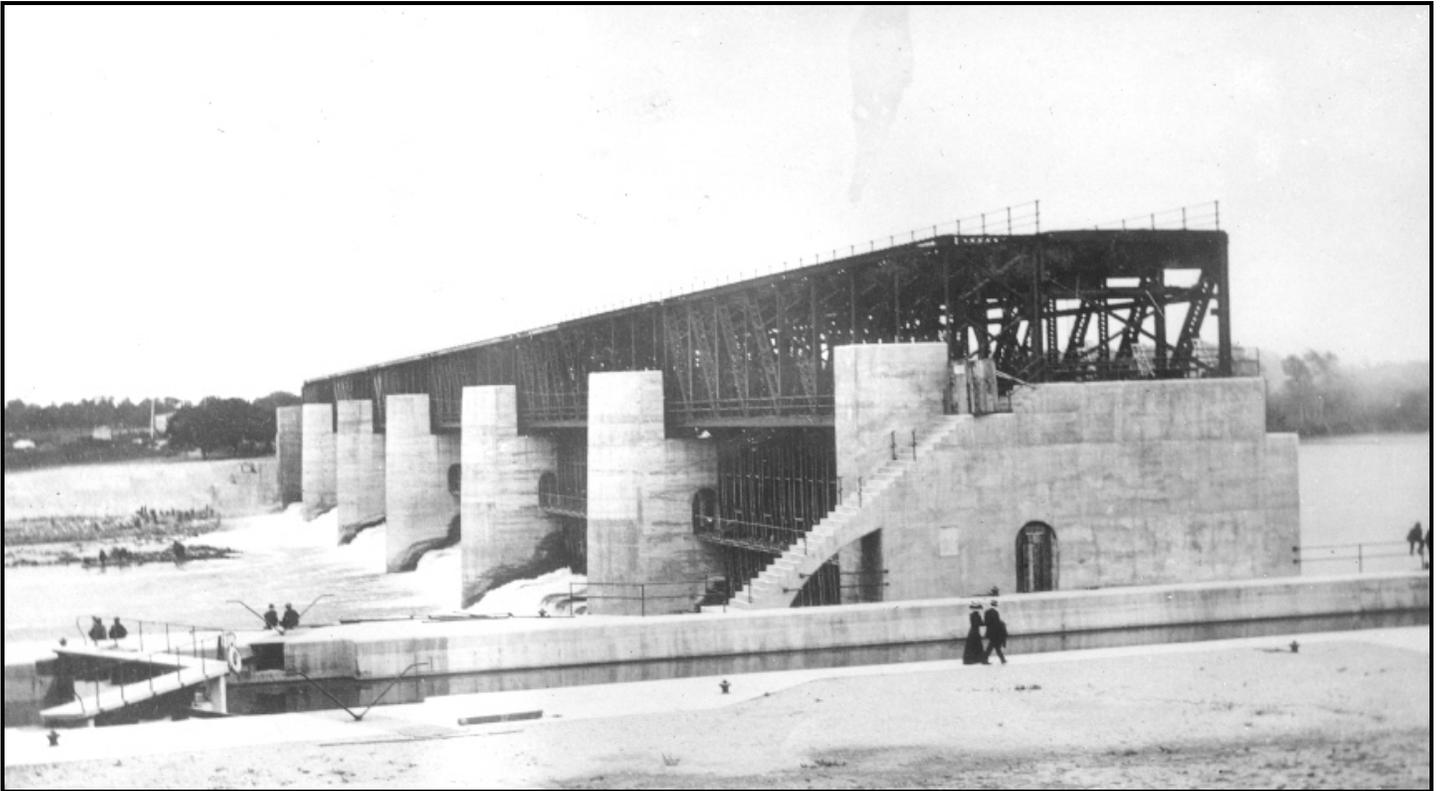
***Article written by Donna G. Sutherland  
St. Clements Heritage Advisory Committee - 04/12/04***

Left: A view of construction work being undertaken at lock site. Much of the excavation work was undertaken by manual labour and teams of horses dragging "Fresno" scoops. Wages were 15 cents an hour for unskilled labour and 25 cents for skilled. Daily rate for a team, wagon and driver was \$2.50. (Manitoba Archives Photo.)



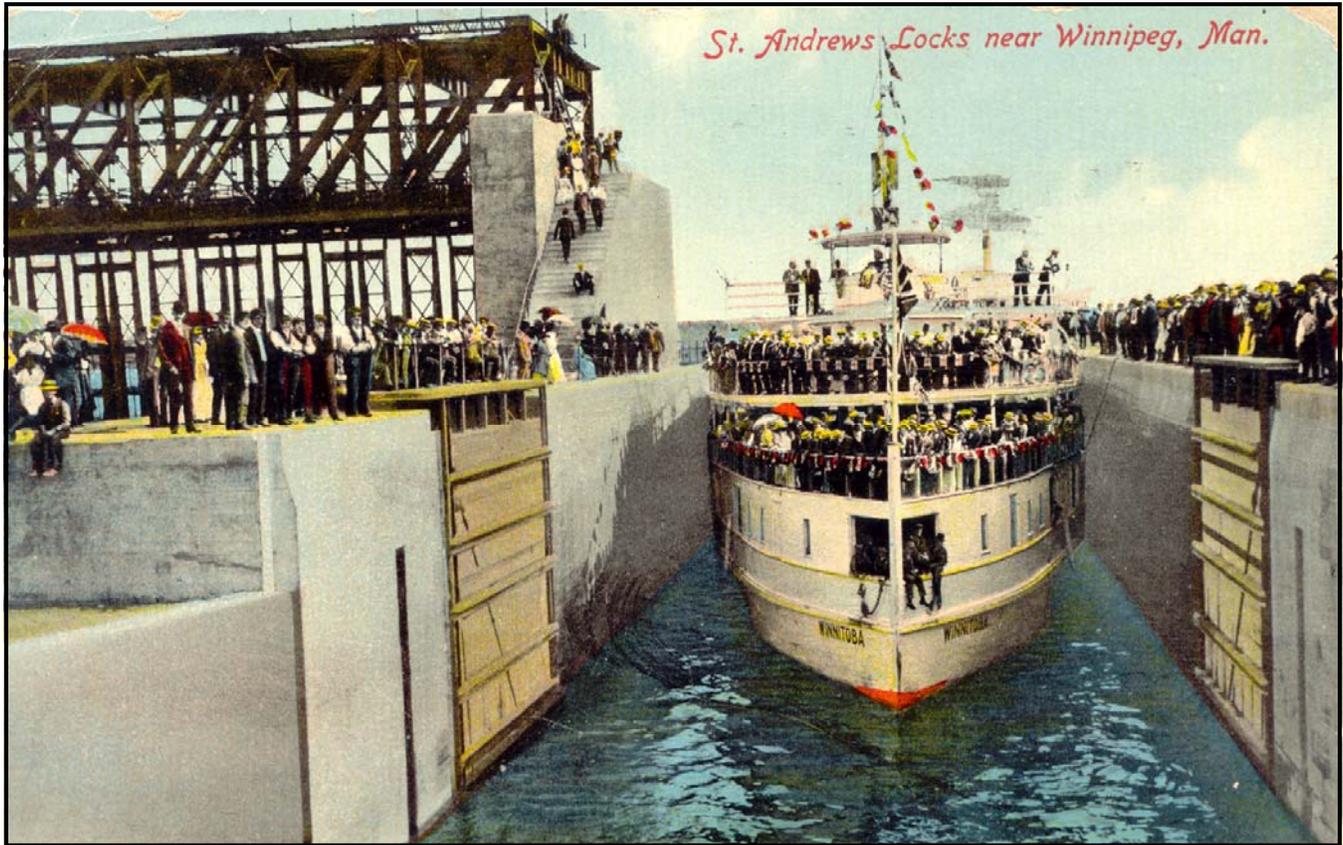
Left and below: View of the main piers under construction. Note the temporary causeway / roadway located on either side of the row of piers and the tower and the cable mechanism used to carry huge buckets of concrete from the shoreline to the piers. (Manitoba Archives Photo.)





Above and below: Two excellent views of the lock and dam soon after its completion in 1910. The roadway decking and approaches have yet to be constructed at the time of these pictures. Note the people fishing on the downstream side. (Manitoba Archives Photo.)

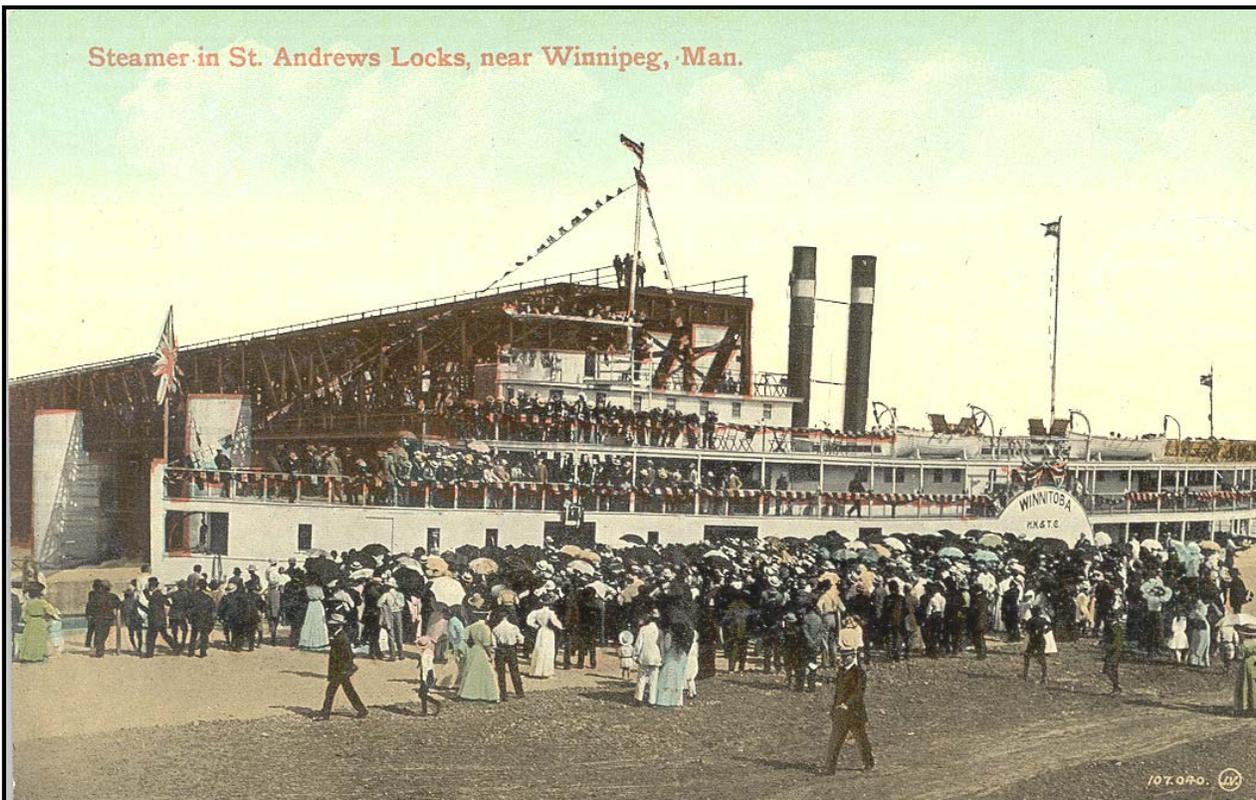




Views of the Grand Opening of the Lockport dam, July 13, 1910. The steamship "SS Winnitoba" was selected as the 'official' first vessel to pass through the locks. On board among other dignitaries and 2,000 passengers was Prime Minister Sir Wilfred Laurier. The SS *Alberta* was actually the first to pass through the lock some weeks earlier, as a test run to the official opening. (Manitoba Archives Photo.)

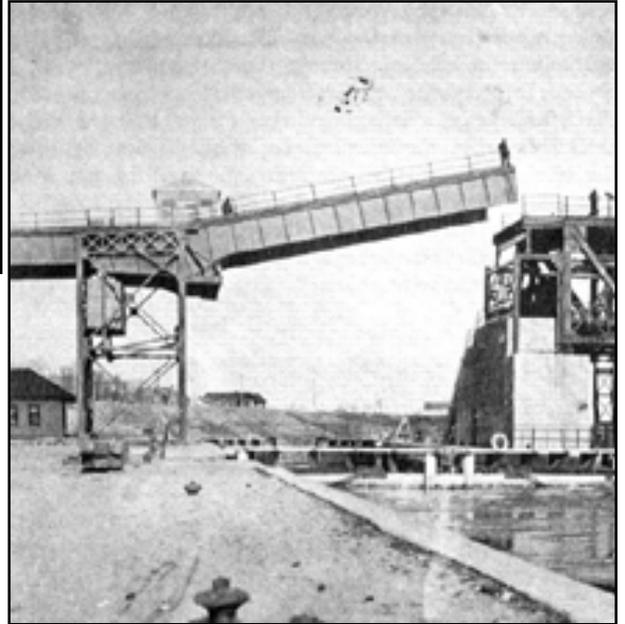
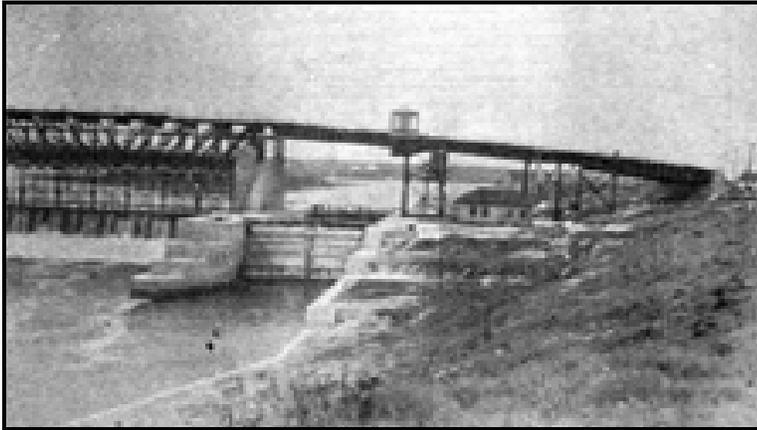


Steamer in St. Andrews Locks, near Winnipeg, Man.

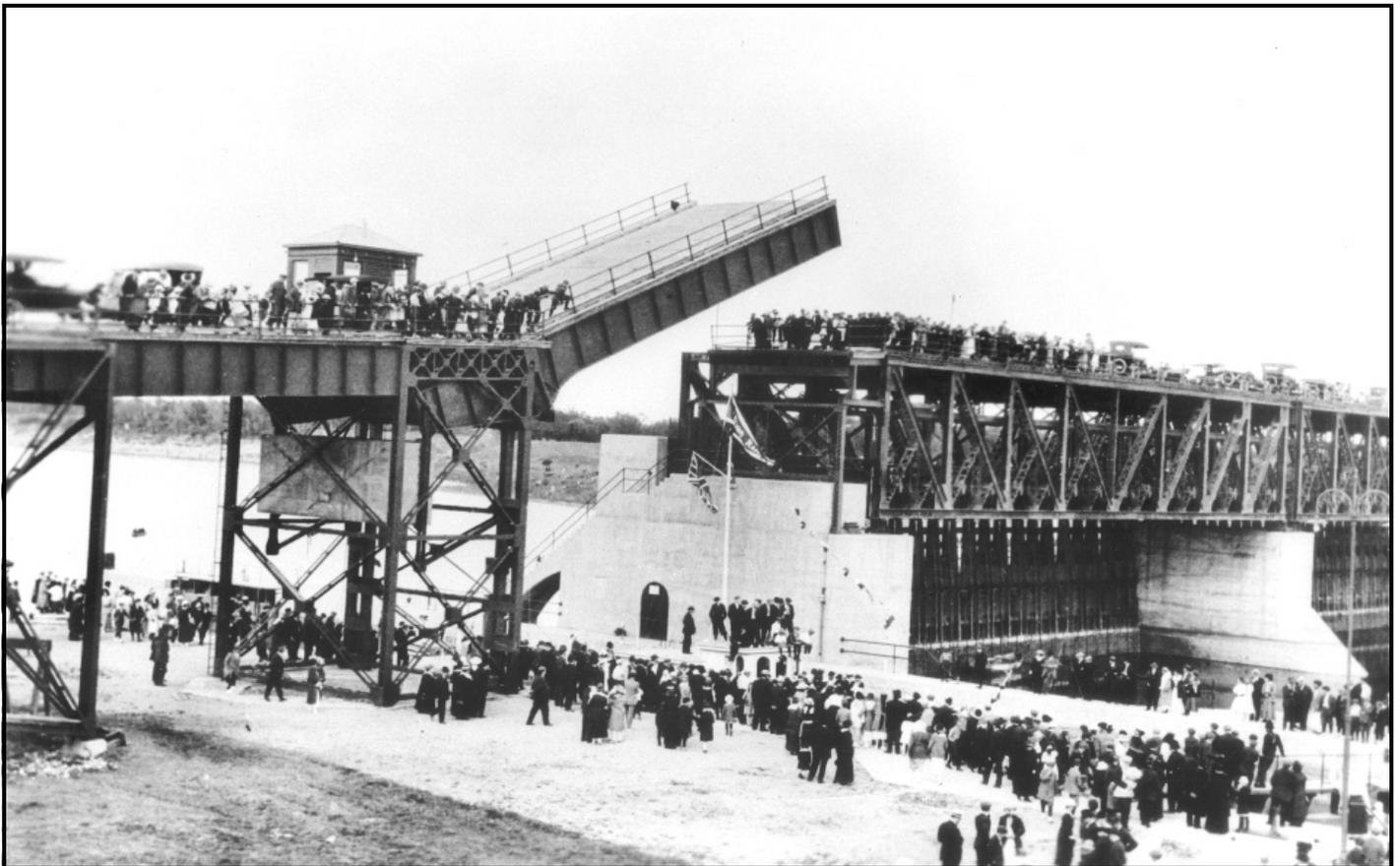


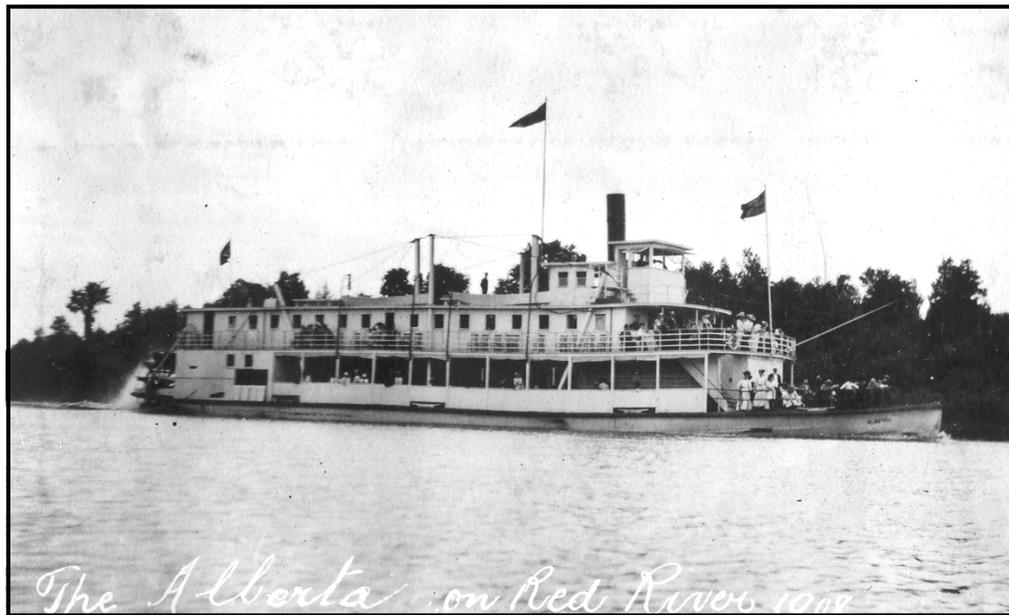
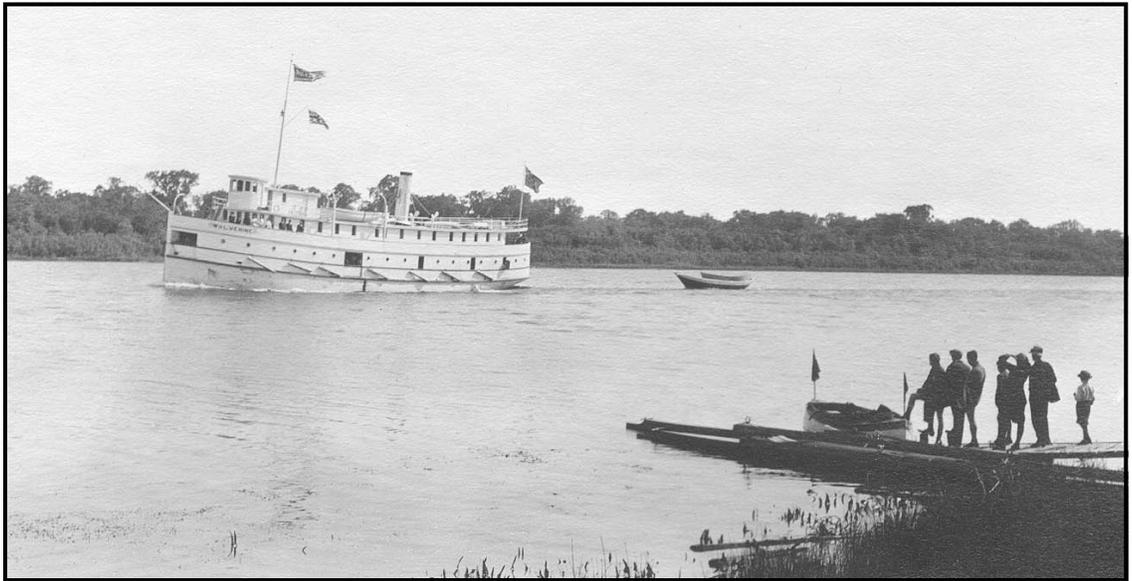
Additional views of the Grand Opening of the 'St. Andrew's Locks' and the steamship "Winnitoba" as it passes through the lock on July 14, 1910. Note the individuals in the lower photos checking out the clearance between the lock and the steamship. (Manitoba Archives Photo.)





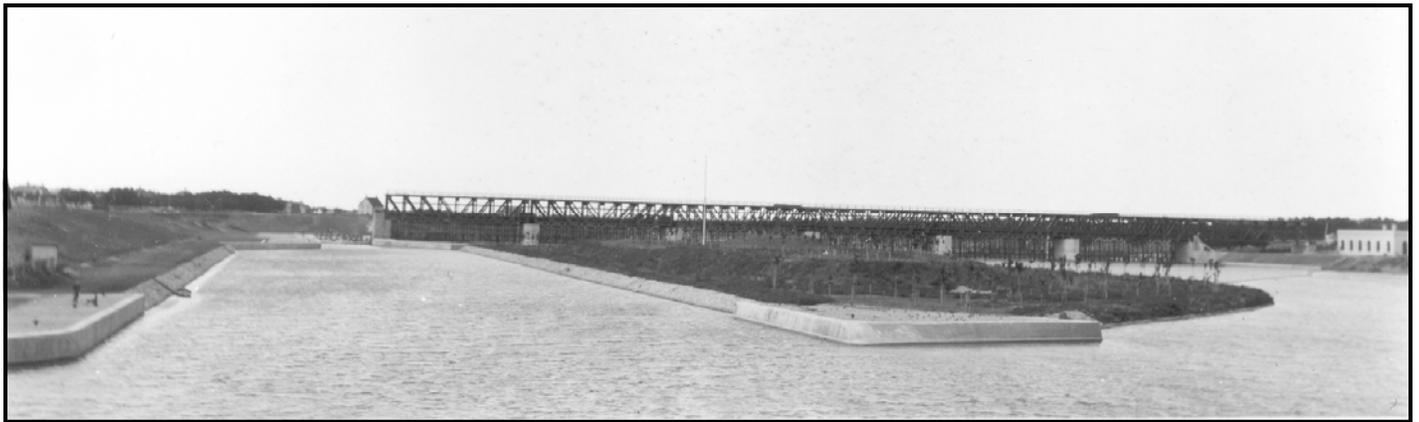
Views of the roadway approach and overpass soon after its construction. The completion of the bridge portion of the project was a much anticipated event, providing as it did the only crossing of the Red River between Winnipeg and Selkirk. (Manitoba Archives Photo.)





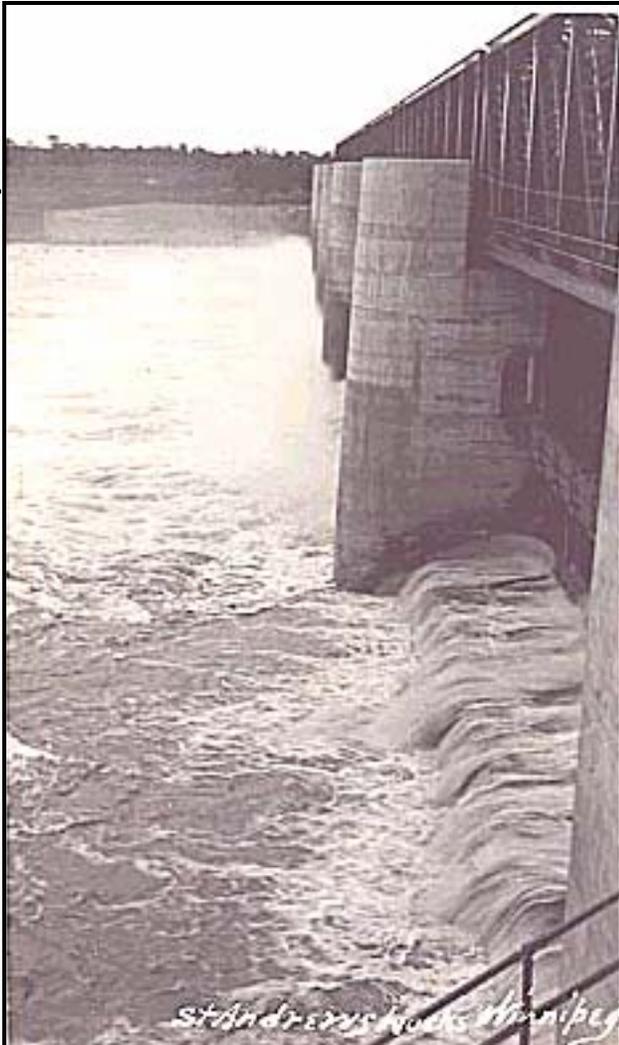
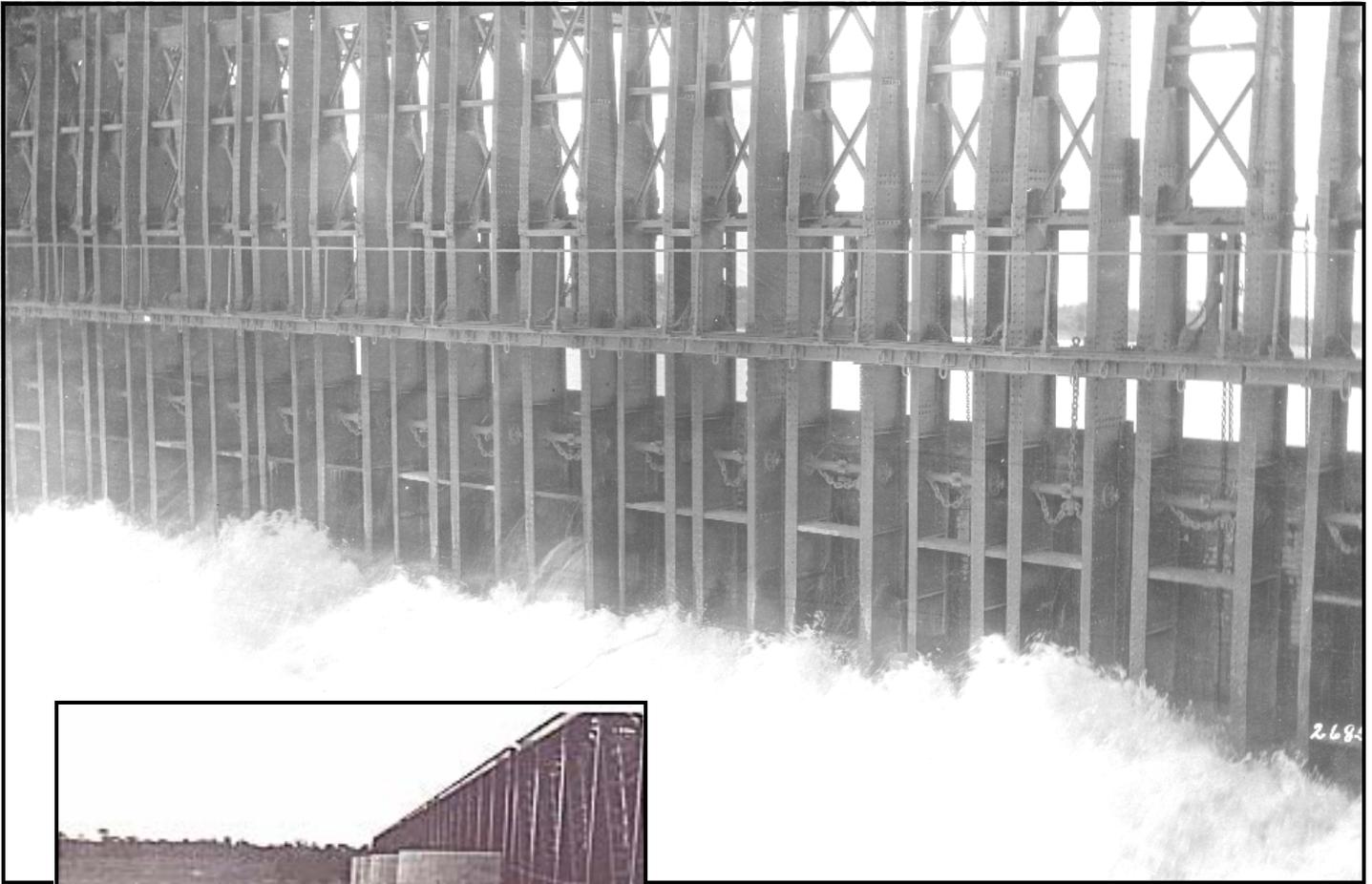
Views of some of the many stern-wheelers, lake steamers, and other vessels which plied the Red River and Lake Winnipeg during the early decades of the last century. River transport declined significantly during the 1930s and thereafter recreational boating soon replaced freight transport in terms of river traffic. The York Boat in the photo below was part of a Hudson's Bay Co. pageant (Manitoba Archives Photo.)



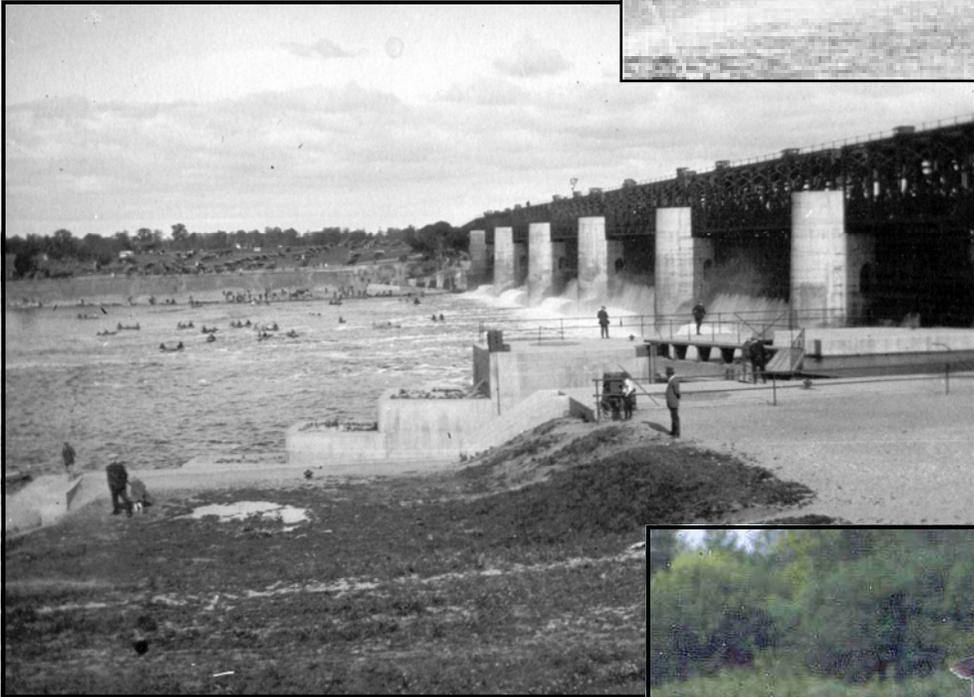


Views of the upstream approach to the lock, taken from the bridge and from on board an excursion steamer. The concrete abutment at centre acted as an ice breaker during the spring melt to help minimize damage to the structure as the ice flows passed through the open dam gates. Although the old time steamers are long gone, boating excursions are still popular. (Manitoba Archives Photo.)

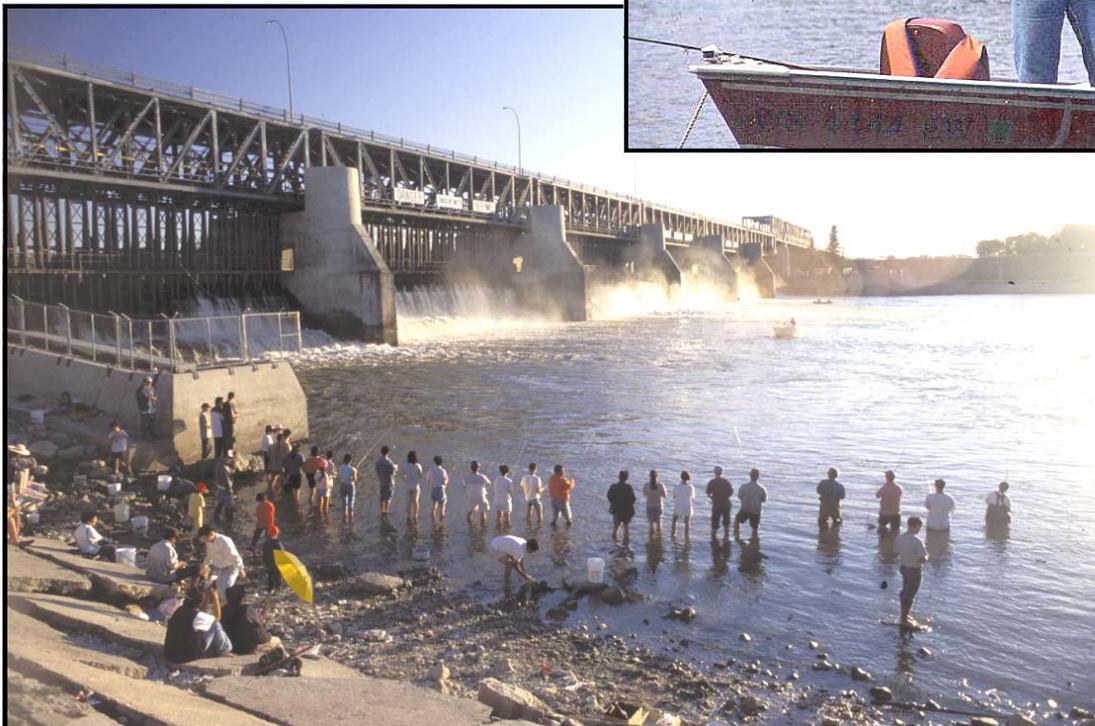
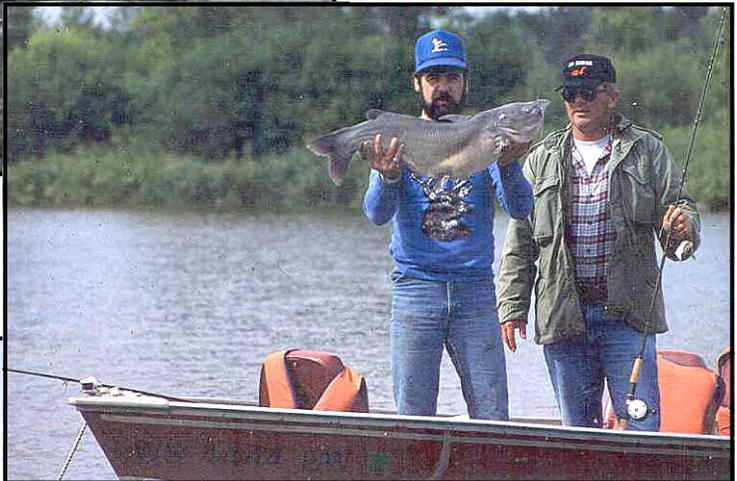




Views of the adjustable "Camera" curtain which can be raised or lowered as required to maintain water levels upstream from the dam and to allow ice to pass through the dam during the spring melt. The aeration which occurs as the water flow over the curtain and through the dam is one of the reasons why fish congregate at the site, attracting many recreational fishermen and picnickers. A fish ladder was constructed on east side of the dam, but was not designed to accommodate all species of fish inhabiting the river. The Lake Sturgeon in particular suffered a substantial decline in their numbers due to the barrier posed by the dam and absence of an appropriate fish ladder. (Manitoba Archives Photo.)



The Lockport Dam and Lock has been a popular fishing and picnic site for almost 100 years. A wide variety of fish species can be caught at the site, with the Channel Catfish being among the more popular, due to its size and 'fighting' nature. Page opposite shows common Manitoba fish species, many of which can be caught at Lockport.



# Common Manitoba Fish Species



Walleye



Yellow Perch



Bullhead



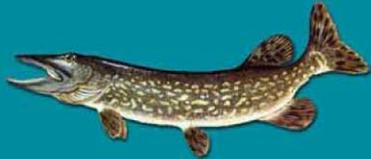
Sauger



Burbot



Channel Catfish



Northern Pike



Carp



Smallmouth Bass



Goldeye



Freshwater Drum



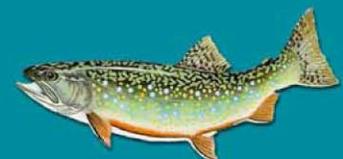
Lake Trout



Mooneye



White Bass



Brook Trout



View of the Red River Floodway outlet located just downstream from the Lockport Bridge and Dam. In this photo, the floodway has been opened during the spring melt. Normally the floodway channel would contain a trickle of water, particularly during the summer and autumn when river water levels are naturally low.



Views of the dam and bridge during the winter. Note that the curtains are in their fully retracted position.