

History – Water Supply

Tract Names: Morgan's Delight, Samuel's Hope and Young's Delight, c 1694

1792 -Baltimore Water Works, a private company, was chartered, first chartered waterworks in the United States.

1853 – BWW purchased by Baltimore city along with their Lake Roland land

1857 – City purchased rights of way along the Jones Falls and other tributaries sometime afterwards completion in 1861).

Eagle Mill – Had a small pond in existence at the time of the 1857 purchase by Baltimore City. This pond was due east of the Relay House and the mill itself was powered by that pond and lay somewhere downstream (probably Lake Falls Village or the property just north of it). Eagle Mill was the successor of a grist mill built about 1914 (or renovated by) Jesse Tyson, father of Isaac Tyson who discovered chrome in the Bare Hills area, and grandfather to the Jesse Tyson who built Cylburn. After grandpa Jesse's death the works had been changed to cotton manufacturing and the name changed to Eagle Mills. It had many ownership transfers, bankruptcies, etc and name changes. The millrace may have been part of what we call Lakeside Drive.

1858 – Actual construction began

1859 – Balto Sun 7/18 – speaks of “dubbed Swan Lake” but it would be more properly designated Swamp Pond.

1861 - Supplying city with water. The conduit ran from Lake Roland to Hampden Reservoir. Construction of the dam encountered many difficulties. There was a Gatehouse, gate-house keepers cottage surrounded by wood paneled fence .

There were several names associated with the Lake – Jones Falls Lake, Lake Roland, and Swann Lake. It was referred to as Jones Falls Lake in early stages because the water of the Jones Falls flowed through it.

Then came the name Lake Roland - Lake Roland comes from the Roland Run a stream mentioned as long ago as 1694, when Roland (Rowland) Thornberry had a tract surveyed named Selsed.

Then Swann Lake. It was dubbed Swann Lake prior to opening in 1861. It was named Swann Lake in honor of Mayor Swann who was mayor at the time of its development. In Water Department reports it was referred to as Swann Lake even in 1867. The name was never changed on the Valve House which was completed in 1861. I actually read in the 1864 Lake Chrome and Mineral Company report A referral to “Swamp Lake”.

1862 – Water Department Report: Renamed Swann Lake report said there was a carriage road on Relay Hill, trees planted on banks and around carriage drives. Embankments near gate house were sodded

and a boat house erected.

A Bridge was added just south of dam. This was swept away in a flood in 1868 and replaced with a Bollman bridge (cast and wrought iron in 1871)

Proceedings of City Council May 16 & 17 would vote to put 2 signs at bridge Over lake saying "Swann Lake" so train passengers would see, then the 2nd Branch would vote to cross out Swann Lake and insert Lake Roland on signs.

Lake Roland was advised against and the Gunpowder was proposed, but as it Was more expensive, Lake Roland was chosen anyway.

From the beginning Lake Roland was plagued by problems due to siltation from the slopes surrounding the lake, and filth thought to be coming from the slaughterhouse in Towson town via the Towson Run. Banks of lake were ripped in 1862, 1879 and again in 1902 to try to eliminate the silting problem.

How did people arrive, Relay House, Hollins Station, Lake Roland elevated railway, Lakeside Park (date of),

1867 - Water Department Report - Reports refer to Swann Lake pg 278 lists property inventory as of 12/28/1867

1868 - Bridge below dam swept away in a flood (replaced 1871 with Bollman) Partial Water Dept Report from online: "I regret to report that the damage by the Flood of July last was severe at Lake Swann, along the conduit, to the line of 30 inch mains between Hampden reservoir and Druid Lake, and to the 10 inch main at Northern Boundary in Jones' Falls. During the storm of the 24th July . . . The culvert on our road through Mr. Sutton's Property had been washed away. The road along the conduit to the gate house, Together with the lower slopes, and the earth abutments on east side of dam, were Entirely washed out, down to the conduit and waste arch; the iron bridge Destroyed, and one of its abutments undermined and thrown over; the road from The gate house to the keeper's house covered with six feet of sand, and the Upper slopes much washed; the iron bridge of the N.C.R.W.C. packed with hay, Timber and rubbish of all kinds; the county road and N.C.R.W. embankment at Towson town Branch were entirely washed into the lake, together with the capping Of the culvert; the bridges from the mouth of Roland's run and Bryson's run Carried away and landed on opposite shores of the lake; and the banks of the lake Throughout its length covered with rubbish of every description. On the west side Of the lake, along the W. Md. R. W. embankment, there were three heavy slides; And the earth abutment on the west side of dam was entirely washed out to the Masonry. The dam, however, and its solid stone abutments, reaching into the . . .
Need to find the rest.

1869 - As predicted prior to building the dam, it was not enough water for a growing city. Severe drought caused the city to go looking for more water - went to the Gunpowder. A 36 inch cast iron pipe, a temporary measure was laid between the Big Gunpowder and Lake Roland. Water Department Report - House of keeper and gate-house were painted. Have received \$397.32 for hay at Lake land

- pg 310 lists property at Lake Roland in charge of John Boon
- 1870** – Water Department Report -Received from “Lake Roland” \$406.50; expenses \$1,784.06
Long and severe drought of last summer – supply kept ahead of use, the overflow of Lake Roland being constant, though light
Shut off Lake Roland 49 days due to muddy water
Slopes and riprapping thoroughly overhauled and repaired
Gate house wainscoted and painted.
15 tons of unsold hay
- 1871 – Bollman bridge built below dam to replace 1861 bridge lost in flood 1868
Water Department Report:
Drought of unexcelled duration – Lake Roland drawn lower than ever and no overflow for 8 months.
Income \$415; expenses \$810.65
Grass cut oftener to improve sod
Screws on gates sent to lathe
In October six men passed through conduit and swept its entire length from Harper’s waste Weir to Hampden Reservoir with hickory brooms (2.5 miles)
Property in charge of John Boon
- 1872** – Water Department Report:
Advantage taken of low water to remove large quantities of sand and earth accumulated at mouth of several streams. Removed 15,507 cubic yards. Work will continue until lake is restored to its original capacity. Cost \$3487.49.
April last erected a new iron bridge by Wendel Bollman to replace the one Washed away in 1868 (bridge dated 1871). Cost \$8,544.44
Daily city consumption almost now equals the daily inflow into Lake Roland.
Looking into bringing water in from Gunpowder – leaning towards the recommendation from Mr. Sickels in 1854.
Suggests running line from Gunpowder, near Mine Bank Run, up valley of Mine Bank Run and over intervening ridge, passing to south of Towsontown and thence down valley of Towsontown branch to Lake Roland (6 3/8 miles total). Will take 9 months to construct.
November 1871 first time in 8 months had to shut off Lake Roland for muddy conditions.
December 1871 – Ice 11” thick
Repaired roadway around carriage drive west side of dam
Repaving roadway to Charles street avenue
- 1873** – Water Department Report
November 1872 – still working on clearing out Lake Roland but interrupted very much in consequence of the horse disease.
Recommends purchase of a small dredging machine
648 panels of fencing put up around lake, whitewashing much more extensive on lake than usual **1874** – Water Department Report
Erected 598 panels of fencing around lake during the year
- 1875** – Water Department Report

To keep Lake Roland fish from going into Hampden Conduit he had a screen erected at the west weir near the lake. With the aid of waste gate in the conduit chamber, occasional flushings will discharge the collection of fish that is arrested by the screen into the falls.

Delay in getting proposals for dredging kept work from starting
Bridge painted, also boats

Cut about 40 tons of hay – that not consumed by the city's 3 mules and 2 Horses is sold.

1876 – Water Department Report

Contract for dredging awarded in December but did not begin until July
The profile of ground near the gatekeeper house, being so irregular as to render impossible the construction of some needed improvements, the Board is now having a culvert erected to take in the branch in the vicinity, which will give us a satisfactory grade over the masonry.

1876 - permanent telegraph line considered

1877 – Water Department Report

The unsightly run at the keeper's house has been arched over with a handsome stone culvert and the additional land surface thus obtained has been improved and the drainage diverted. Roads and slopes graded, a new fountain erected, also an ice house.

The Temporary Supply was used for the first time

Masonry joints were pointed on gate house

New fence similar to outer one at Druid Hill, erected from steps near bridge to the keeper's house

Masonry at Towsontown culvert completed

Keeper's house with 2 rooms on first floor, one of which is very limited, should have an additional room.

1878 – A scow for lake purposes was constructed

Water Department Report

Receipts \$123.43; expenses \$4,124.27; dredging \$28,144.62

Supply of water wasted constantly over the dam except Aug-Oct when there was a slight falling off – for 8 months water was cloudy, at times very turbid (26 days), so objectionable that conduit was closed nine days in February.

Bridge at Hizer's and abutments to same were repaired; 168 panels of fencing were erected between Mr. Carpenter's and the city property, and a new scow was constructed for lake services.

Extension of sixteen feet was added to keeper's house, a much needed improvement.

1879 – Water Department Report

Lake Roland dredging \$23,797.24

Received from Lake Roland \$205.31; Expenses \$2,866.30

Repairs to road and drain-paving near Mr. Suttons
Riprapping around slopes and erected culverts at Towsontown branch
Sand-trap of 1,000 yards capacity erected on Towsontown branch
274 panels new fencing put up near Roland Run joining Mrs. Handy
1,031 square yards of sodding on lake slopes near Keeper's House
32 barrels of corn made on five acres of new land on Jones' Falls and divided
between Lake Roland, city's stable and Druid Lake.
New fencing being required along NCRR
Conduit not used 23 days this year due to muddy waters
Hay sales \$57; ice sales \$61.76; Wood \$10.50

1880 – Water Department Report

Dredging \$3556.98; receipts \$148.53; expenses \$8553.65
Temporary pumps worked July 4-Nov 16 sending water from Gunpowder,
at Meredith's Ford to Lake Roland
Permanent supply works drawing near completion
September started with laborers, horses and carts to remove the material
which had been accumulating in the cove at Towsontown Branch, Sand Trap
and Jones' Falls.
Extensive repairs and painting done on the four boats. Iron bridge, gate house,
jacks, iron railing in gate house and iron railing near by were painted.
349 panels of new fencing erected along the NCRR north of bridge which
crosses the lake, and 306 panels west of the Western Maryland RR bridge.
Sale of ice \$43.00; Hay \$68; old lumber \$7.78

1881 – Water Department Report

Dredging \$13,730.36; receipts \$258.50; expenses \$3,525.21
Sales of Hay \$181.50; old mare \$30; corn \$45.50
Difficulty getting coal which accounts for the duty of pumps commencing in
September. In October water seven feet low and it was deemed advisable
to wagon coal from the city
Keeper's house and barn were painted; new spouting put up on house, and tin
roofing on part of same.
New flooring placed on iron bridge and the bridge at Hizer's repaired
Material dredged from lake and distributed over the land has been under
cultivation in corn in order to prepare it for grass.
Appendix at back of Part I has a good history of water in Baltimore

1882 – Water Department Report: Expenses \$3892.55; receipts \$233.02;
Water at surface found to be good whilst that at bottom tasted bad – wastewater
gates at bottom were opened and kept so whenever any water going over dam
Lake Roland: 225 A.M.T.; available capacity 400,000,000 gallons

1883 – Water Department Report: Receipts \$309.71; expenses \$3,617.86
Old plank fence on the west side of the lake and in valley of Towson branch has
been replaced by a wire fence (3,626 feet between WMR, now NCRR, and the

lake; also 3,668 feet around the city property binding on Towson branch at six cents per running foot).

Suggested that old fence on the line between the lake and NCRR, and between Hollins and Lake Stations, be replaced with wire fence.

Interior of gate house has been repainted and the slate roof repaired.

Willow trees on margin of lake have grown to such size that the high winds have broken some of them, and many of the branches of others.

One hundred seventy-five barrels of corn raised on land adjoining the lake and distributed to our different stables.

Twenty tons of hay on hand.

1884 – Water Department Report

Expenses \$4,041.02; receipts \$714.78; Hay, fodder sales \$524.79

Drought from Aug 10-Dec 7 – dam dropped 6 feet 7 ¼ inches below dam.

Used low water to remove large amount of sediment by carting from the several Approaches (14,130 cartloads).

The surroundings of Lake Roland have been much improved by the removal of some of the old willow trees and the erection of substantial wire fence. These trees were cut up into cord wood and sent to the High Service pump-house for fuel.

Good crops of corn, oats and hay were raised upon the city's land along the borders of the lake.

New wire fence constructed from near Lake Station, NCRR, where a wire fence was finished in 1883, and also from below Brightside Station, NCRR, on the east side, to Jones' Falls, below the dam. 7,257 feet of wire fencing built in 1884 and a total of 14,390 around the property.

135 barrels of corn raised; 300 bushels of oats.

1885 – Two hay barracks were put up. The grounds included a number of arable fields and the crops were sufficient to feed the work horses there and at other water supply stations.

Water Department Report:

Improvements have been the building of two hay barracks

Erection of 276 panels of wire and post, and rail fencing

Relaying of the wooden floor of the iron bridge near the dam

No water passed over dam from Aug 10-December 7

1886 – Water Department Report

The water in Lake Roland did not fall below the crest of the dam during the year There were 37 days when it was too muddy for use.

The conduit was flushed several times during the year

A new culvert and carriage road was completed in September, connecting Lake Roland with Charles street avenue. This road has been fenced through the city property.

1887 – Water Department Report

A new bridge over Roland Run, plank and wire fencing at the upper end of the lake and a new shed in the barn-yard at the keeper's house are improvements made during the year.

Conduit has been repeatedly flushed

1888 – Water Department Report:

Flow was not enough in summer to supply the demand, except after heavy rains.

1889 - Water Department Report: Water muddy 62 days; greatest flow in May;

August 15-Nov 28 water was kept 6 feet below crest to facilitate removal of mud deposit in Towson branch and Roland Run

1890 – Water Department Report:

Jones' Falls supply afforded less than one-half the amount of water it did in 1889

1891 – Water Department Report:

The rapid increase in the number of consumers upon the Jones' Falls supply, and the decreased flow of the tributaries supplying Lake Roland, rendered it necessary for the Board to discontinue furnishing water for elevator or motor purposes from that source.

1892 – Water Department Report:

Less flow than in 1891, muddy 16 days

14,439 cubic yards of material removed and there is a great amount of deposit in the lake that can only be removed by dredging, which should be gotten out as soon as possible. No dredging done since 1880.

Yearly increase in demand demonstrates the necessity of an immediate relief being given to Jones' Falls.

1893 – Water Department Report: nothing new

1894 – Water Department Report: Nothing new

1895 – Water Department Report:

Two drowning cases – Nathan Morgan, Miss Hush and Henry Hush on Jan 15 about 8 pm. were skating near the NCRR bridge when the ice broke. Mr. Charles McMahon rescued Mr. & Miss Hush but was unable to save Mr. Morgan.

Mr. John Boone, Superintendent of Lake Roland, secured the body by eight o'clock the next morning. The other may have been a suicide, and Mr. Boon again found the body the next morning(Nov 8/9)

Floor of bridge below dam was again renewed (cost \$423.88)

Repairs made to stable and wagon-shed (cost \$45.93)

A horse costing \$100 was purchased for use at Lake Roland

Two rooms of keeper's house were papered and spouting repaired.

241 panels of picket fence, ninety-eight of wire and fifty panels of board have been built during the year.

\$1,194.24 was realized from sale of hay, sand, fodder, old lumber, ice.

1896 – Water Department Report:

Keeper's house and outbuildings were painted (cost \$293.25)

1897 – Water Department Report:

Conduit to Hampden is brick

Lake Roland is rapidly filling up and in early 1897 the Water Board decided to dredge the reservoir. The plan was to remove the materials from the bottom of the lake to property owned by the city adjacent to the reservoir. A few days subsequent to the award of the contract an injunction was filed by Charles M. Ellicott, restraining the city from dredging. He was interested in another bidder. The road leading from the dam to Lakeside park has been repaired and is now in good condition.

It has been customary to allow ice to be cut from this lake, and also to permit skating upon it. This I consider dangerous, particularly at night, as large crowds gather upon it, and there being no lights, they cannot see the weak places. Signs are placed at various places, but these are pulled up almost as soon as they are placed.

The Roland Park Company was granted permission to use a portion of this property for golf grounds

1898 – Water Department Report:

Injunction restraining city from dredging Lake Roland was withdrawn during October last. Work will commence as weather permits. Lawsuit was filed by Someone who wanted the proposal of an unsuccessful competitor.

Necessity for dredging is urgent

Muddy water 13 days

October 18, water 10.3 feet below crest of dam

No water passed over dam 8/19-11/23

New steel fence erected at upper end of lake along Ruxton Road.

12/4 during heavy gale several trees were uprooted and fence leveled, the corn-house demolished and barn and shedding damaged.

Sale of Hay, wood, sand, etc \$627.47

1899 – Water Department Report:

Dredging began April 1 (161,032 cubic yards removed)

Painters employed in the Department have painted the exterior and first floor interior of keeper's residence, barn, corn crib, wagon shed, iron fence, railing around dam, gate house and bridge.

Receipts from sale of hay, sand, wood and fodder \$850.42

There is a crack in the crown of the Jones' Falls Conduit about midway between "Clyburn" and Mt. Washington.

1900 – Water Department Report:

Dredging began March 1st and went continuously to end of year 230,000 cubic yards removed. (cost \$43,855.90). Still about one month's work to be done in

spring. Still will not be down to original depth. The dredging company is required to trim up the slopes after dredging is completed.
Painted interior of keeper's residence and overhauled gate screws in gate house.

1901 – Water Department Report: Missing

1902 – Water Department Report:

The Towson Branch has been cleared of sediment from the NCR to the Sand Trap
The Jones' Falls Branch has been cleaned out from the NCR to the limit of back-water.

About 6,000 feet on both banks of the Jones' Falls arm of the lake have been rip-rapped.

The banks made by deposits of material dredged in previous years have also been cleaned and dressed.

1903 – Water Department Report:

The new automatic water stage register has been erected. It will produce a graphic record on a ruled chart showing the height of water in the lake for every hour and minute during the day. The records are used to determine the amount of water flowing over the dam.

Water too muddy for use 85 days and below crest of dam 44 days

5,600 feet of riprap laid along the Jones' Falls and Roland Run Branches.

The dwelling and outbuildings should be painted.

1904 - Water too muddy to use for 30 days.

Erected a new wire fence along Ruxton Rd

Repaired screen in front of the influent to the gatehouse

Recommend dwelling, stable and outbuildings be painted

Realized from sale of sand, corn, wood, hay, fodder, etc. \$1033.56

1905 – Water too muddy 49 days.

July 5 heavy rain of 4.77 inches washed away most of the bridges above the lake but did little damage at the Lake

Installed 10 stop planks in gate house which should enable us to turn the water into the city earlier, after a rain, than heretofore, as we can now draw from an elevation of five feet below the dam and will not have to wait until the basin clears.

\$1132.30 realized from sale of hay, wood, old lumber, fodder, corn, sand, etc.

1906 – Water too muddy 40 days –

Dwelling, barn, sheds and iron fence have been painted.

\$1260.03 realized from sales.

1907 – Too muddy for use for 28 days

Morning of August 3 the body of Mrs. Florence Caltrider was removed from the lake opposite the keeper's house. She had been missing from home since

2 p.m. the previous day. The coroner pronounced it a case of suicide.

- 1908** - Too muddy 39 days, below crest of dam 166 days
Wainscoting around the walls of the gate house has been removed and the Entire walls replastered with a smooth finish white cement.
Realized from sales \$1314.60
- 1909** – Too muddy for use 10 days, below dam 193 days, no water passed over dam after June 28.
Iron rail along road from dwelling to dam as been painted by dept laborers
A new floor and timbers put in the bridge below the dam
Stable and shedding repaired.
Sales \$913.80
- 1910** - Too muddy for use 22 days, below dam 274 days (June 2-Dec 18)
Sept 13 began treating water with chloride of lime, using 5-20 lbs per million Gallons.
Wooden posts under the front of the boat-house have been replaced with Concrete pillars.
Sales \$964.02
- 1911** - Not in the book, Water Dept not even listed in index
HAER Report – In 1911, a chlorinating system consisting of a mixing machine, which utilized countershafter to connect belts to an engine, was installed in the Lake Roland gatehouse. Known thereafter as a hypochlorite plant, the Lake Roland waterworks was one of the two sites used for large-scale testing of the application of liquid chlorine to a public water supply system. Experiments conducted at the plant documented the merit of utilizing liquid chlorine and led to its widespread use in public water supply systems in the United States both before and after filtration. **Did report also say it was the first attempt by a city to establish a city-wide water supply system. ???**
- 1912** - Too muddy for use 27 days, below dam 169 days, no water used from Lake between Sept 7 and Nov 28 during the prevalence of typhoid fever in Towson
- 1913** - Original capacity of Lake Roland four hundred million gallons. Largely reduced by deposits of silt, but by means of dredging its present capacity is about three hundred million gallons. Originally 40 square miles.
The sanitary condition of this source of supply is rapidly becoming a menace To the city, but it cannot be completely abandoned until the new dam is Completed at Loch Raven.
The masonry aqueduct from Lake Roland to Hampden Reservoir is five feet Wide, six feet four inches high and about four miles long.
Too muddy for use 22 days, below dam 169 days.
- 1914** - Too muddy for use 16 days, below dam 237 days, no water passed over dam since May 8.

Ninety-eight tons of hypochlorite has been used in purifying the water
Sales \$655.25

- 1915** - No Water Dept report in book nor in index.
Loch Raven system begun, November 1915, but had a leak and Lake Roland turned back on. last used as water source on December 2, 1915. Lake left in care of groundskeeper.
- 1916 – March 17 – City to auction all landed property (70 acres) at Lake Roland, keeping only the water and riparian rights.
- 1916** – Some parcels of land sold to L’Hirondelle Club(14.5 acres) to be used as a golf course only for at least 20 years to prevent pollution of the Jones Falls
No Water Dept report in book, nor index
- 1917 – MdHS only has Board of Fire Commissioners Report**
February 21, 1917 – Letter to the Editor says he has it on good authority that Water was so insufficient from new system that Lake Roland water had to be used.???
- 1918** - No Water Dept Report in book, nor index
- 1919** - No Water Dept Report in book, nor index
August 25, 1919 Baltimore Sun – Water survey being undertaken to increase Supply. Mayor Broening also wanted the question asked if Lake Roland and Jones Falls could be used again with its 14 million gallons per day.
- 9/18/1919 It was felt that Lake Roland with its crest elevation of 225 feet would offer
Little storage due to the silt in the bottom.
- 1921** – John Boone, gatekeeper, died and obituary says that he had worked at Lake Roland from the time it was first surveyed before the Civil War until the Position was abolished a few years ago.
- 1923 – Lake Roland again discussed as part of a solution to water problems. August 15, lake will be drained and fish saved in order for PA RR to build new bridge.
- 1926** - Baltimore Sun 9/26/1926 – photo of Bollman Bridge: “50 year old bridge near lake Roland. It spans the stream at the end of the lake and adds a touch of charm to the striking driveway it carries over the water.
- 1930 – December 26 – If severe drought continues, serious consideration will be given to using Lake Roland again.
- 1953 – Plans to run a sewer pipe under Lake Roland from Lutherville area. Pipe under In Spring and summer water was drained to clean out debris and Lake filed Again.

1954 Pipe was laid with water in Lake

1955 Lake portion of pipe completed in March of 1955 but rest of line needed to be laid. Lake drained again to construct boathouse.

1957 – the old conduit was used again to refill Hampden Reservoir which was drained to find a pistol used to kill Vincent Depietro. Water was run slowly so as to not put too much pressure on the conduit.