Historic photograph of LLR)

Historic documents prove that Little Logan River is a river

Historic documents provide that the North Branch of the Logan River (Little Logan River) is a natural river, not a canal. Documents illustrate MANY BENEFITS OF THIS NATURAL RIVER in our community, Cache Valley, Utah.

That is why residents treasure our rivers. A survey of Logan residents shows that we value rivers above ALL OTHER LANDSCAPE FEATURES.



Survey participants were asked about the influence of landscape features on their wellbeing. Natural landscapes including mountains, city parks, trails, rivers and streams were found to have an overwhelmingly positive influence on wellbeing. In terms of development and industry in the landscape, respondents were more divided.

The Role of Landscape Features in Logan Residents' Wellbeing



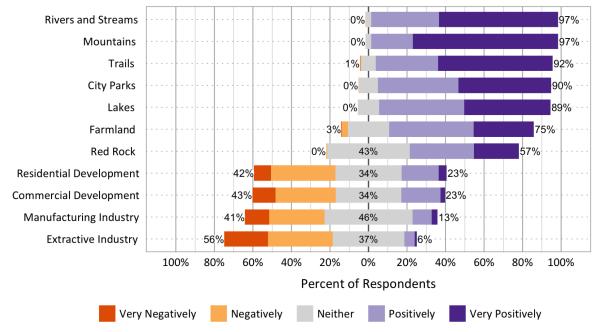


Fig LOVINGRIVERS. Wellbeing study shows that Logan residents value our rivers extremely highly.

The North Branch of the Logan River powered the first electric company in Utah and was the main source of water for our growing community. Fishing provided food for families, hydropower energized a range of industries, irrigation water generated crops and supported cattle, dairy, and sheep, and other farms.

Evidence that the Canyon Road Waterline might exacerbate dozens of <u>landslides in Logan Bluff</u>

The <u>High and Dry plan</u> for the Little Logan River was an attempt to privatize a public river. It took a threat of a lawsuit to sidelined it.

<u>Understanding how the secondary irrigation upgrades will</u> <u>impact our community</u>, rivers and Great Salt Lake using QUESTIONS

<u>Historic photographs and maps</u> documenting the Little Logan River's long celebrated history in our community

Great Salt Lake is in crisis and needs every extra drop

<u>Evidence that the Little Logan River</u> is a natural and legal river-an entire talk

The hundred year-old ash trees along Canyon Road could be saved if sponsors realize that their preferred alignment is likely to exacerbate the already significant risk of landslides in the Logan Bluff.

Report on the dozens of Landslides of the Logan Bluff

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Fig. Another Mill that was powered by the rivers.

http://exhibits.usu.edu/items/show/19541 SCAP0324Bx008Fd07Img062.jpg," USU Digital Exhibits, accessed December 18, 2024, http://exhibits.usu.edu/items/sh

SCAP0359Bx001Fd02Img007.jpg

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Fig Fish were plentiful and valued in both branches of the Logan River.

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Fig. Map of Logan's island 1860-1890.

https://docs.google.com/document/d/1hQfkwdAshazECsSsJL79B0wOZ9Kgm5ApwCHWQjQP_IM/edit?tab=t.0#bookmark=id.ekl1bhkian8z Logan's island 1860-1890. The date of this map is ambiguous.

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PLEASE CLICK LINKS for reports on projects that impact our community in Cache Valley (BLUE):

Historic photograph

Historic photograph with buildings

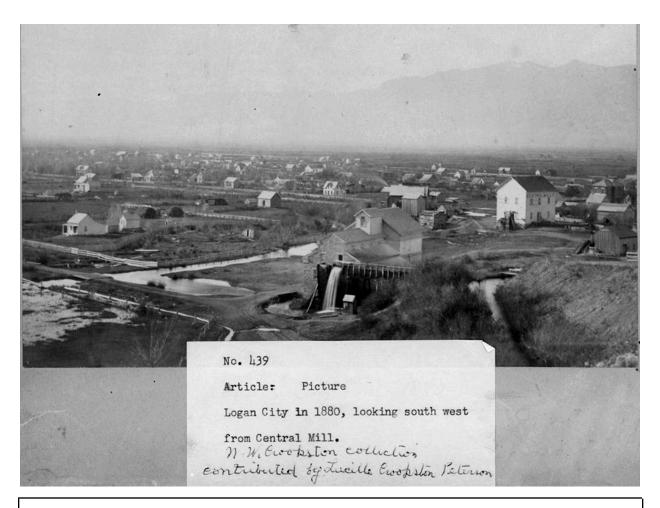


Figure **Historic photo from 1880** looking southwest from near Logan's Temple. We see water of the North Branch of the Logan River (Little Logan River) at work as it powered many mills of Logan City. The two largest buildings in the lower right are the brick Deseret mill and White Central Milling flour mill. Second East is the dirt road

with the bridge at the left edge of the photo.

Canals had been dug and the Northfield Canal in the lower right was diverting a lot the water out of the North Branch. Despite that, the Little Logan River in the lower left was wide enough to require a bridge for crossing on 200 East. The river was 15-30 feet wide based on the spacing of fence posts nearby. The river was flooding into its flood plain in the left half of the photograph. That field became Merlin Olsen Central Park. Photo is in the Museum on Main street.



Fig. Historic photograph of Thatcher Mill

http://exhibits.usu.edu/items/show/19531 Hydropower was vital to Logan in its first century. The Little Logan River powered dozens of businesses, like this one. See also http://exhibits.usu.edu/items/show/19530



Fig. Another Mill that was powered by the rivers. http://exhibits.usu.edu/items/show/19541

SCAP0324Bx008Fd07Img062.jpg," *USU Digital Exhibits*, accessed December 18, 2024, http://exhibits.usu.edu/items/sh



Fig. Another Mill that was powered by the Little Logan River.

"Union Roller Mills," *USU Digital Exhibits*, accessed December 18, 2024, http://exhibits.usu.edu/items/show/19607.

Home > Regreening of Cache Valley > Deseret Mill on the north branch of the Logan River while the river is flooding, Cache County, Utah.

Deseret Mill on the north branch of the Logan River while the river is flooding, Cache County, Utah, ca. 1899

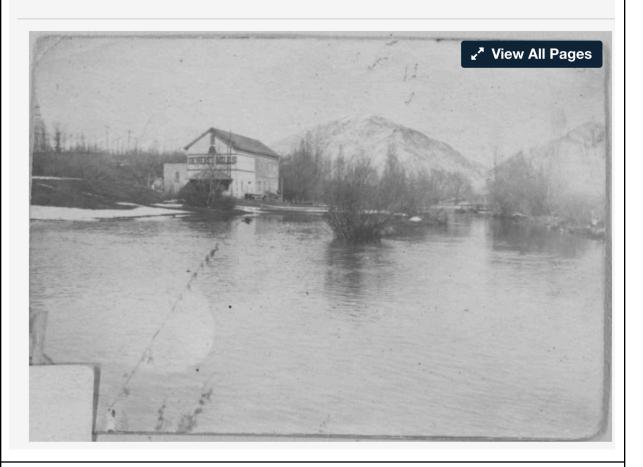


Fig. Mill surrounded by flood waters of the Little Logan River

https://digital.lib.usu.edu/digital/collection/regreening/id/422/rec/6 USU archives.



Fig. Historic photograph of the Logan River before First

Dam was constructed

Historic photograph of settlements on the north bank of the Logan River at current location of First Dam reservoir. http://exhibits.usu.edu/exhibits/show/regreeningcachevalley/item/12523 "Landscape view showing unidentified homes and barns in the distance," *USU Digital Exhibits*, accessed December 18, 2024, http://exhibits.usu.edu/items/show/12523.

See many other historic photographs of our region form a regreening of Cache Valley exhibition.

http://exhibits.usu.edu/exhibits/show/regreeningcachevalley/photos

FISHING in the Rivers of Cache Valley



Fig Women and men used the fish in our rivers.

This fishing party was along the Blacksmith Fork of the Logan River. USU digital archives. Greening of Cache Valley. https://digital.lib.usu.edu/digital/collection/regreening/id/437/rec/13





Fig Fish were plentiful and valued in both branches of the Logan River.

This mural at the west edge of Merlin Olsen Central Park celebrates that history. Christ Peterson Artist.



Fig. Trout continue to thrive in the Little Logan River.

That is despite the winter desiccation and interfering irrigation structures. Oct 30, 2024. This trout was stranded in the pool of water in Jens Johansen Park. More fish-friendly withdrawal of water could benefit fish like this one. It is about 14 inches long. Susanne Janecke photographer.

Fishing party in Logan Canyon

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Fig. Fishing party in Logan Canyon.

USU archives. https://digital.lib.usu.edu/digital/collection/regreening/id/383/rec/12



Fig. Historic photograph of people fishing along the Logan River. USU digital archives.



Fig. Thirty fish are displayed on a table.

Cache Valley USU archives.

https://digital.lib.usu.edu/digital/collection/regreening/id/430/rec/5

Historic maps of the Logan Rivers.

Some maps are repeated from <u>Little Logan River</u>: An urban jewel, its history, threats and detailed information.

Historic maps of rivers around Logan's Island

Modified slightly and expanded from an excellent collection on the <u>Logan Library web</u> <u>page</u>.

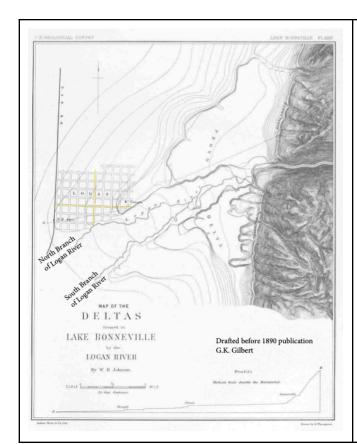


Fig Map of the North and South branch of the Logan River,

1890. G.K. Gilbert.

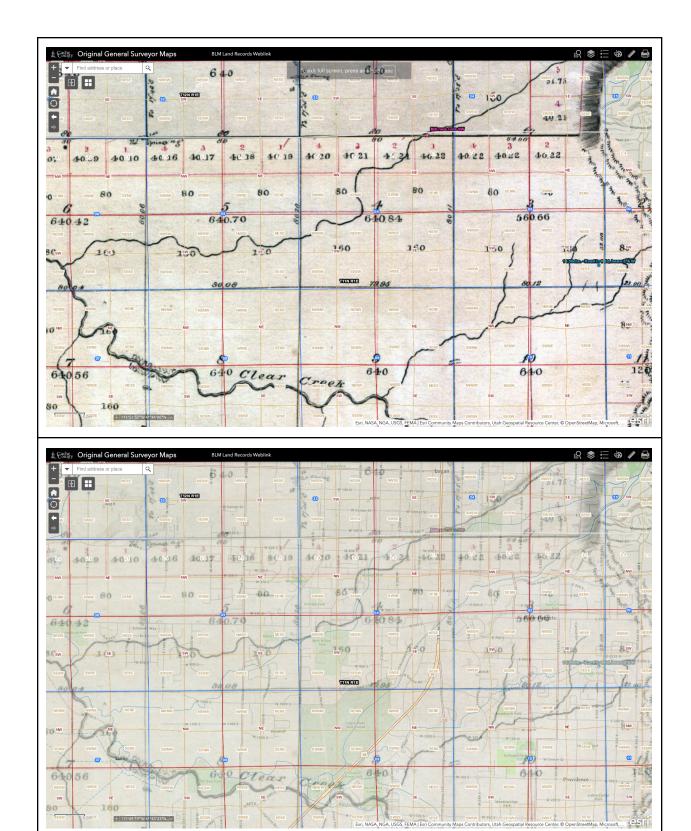


Fig. CAPTION: Maps showing how the South Branch of the Logan River was not even included on several of the first maps of Cache County.

This map dates from 1856. Cache County's historic map collection was used to generate this direct comparison. https://cacheut.maps.arcgis.com/ The faint blue lines in the second/bottom map depicts the actual locations of the Logan Rivers around the Island. The label "Clear Creek" is wrong on the historic map. That label applies to the Logan River west of its confluence with two tributaries at the bottom center of this map area. Rivers are black meandering lines. almost 3 miles of the South Branch of the Logan River (Logan River) were not depicted! A version of this map in township 12 repeated this oversight until about 1890.



Fig. Historic map of the Logan rivers, Island, and city. 1891. https://cms9files.revize.com/loganutlibrary/quickimages/Research%20_Learn/LocalHistory/Maps/Surveyors_map_full.jpg

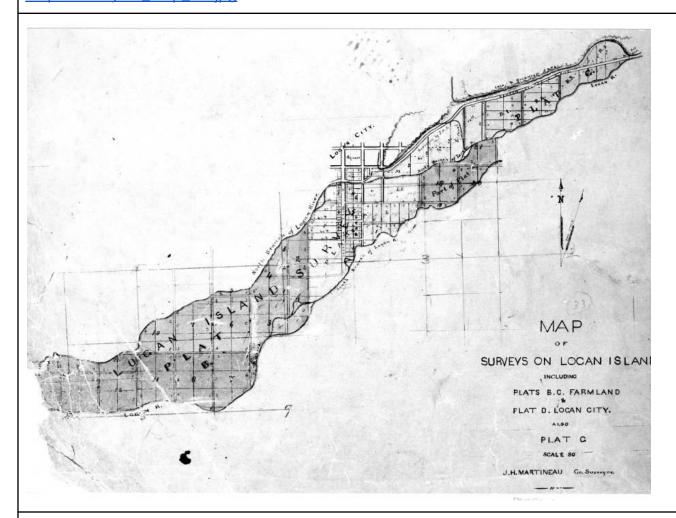


Fig. Map of Logan's island 1860-1890. https://docs.google.com/document/d/1hQfkwdAshazECsSsJL79B0wOZ9Kgm5ApwCHWQjQP_IM/edit?tab=t.0#bookmark=id.ekl1bhkian8z_Logan's island 1860-1890. The date of this map is ambiguous.

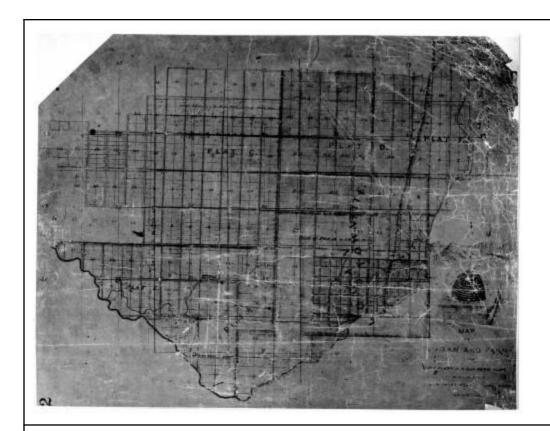


Fig. Logan map in 1860.

Logan, Utah and farms with city flats, 1860s

USU library. https://cdm16944.contentdm.oclc.org/digital/collection/p16944coll5/id/4

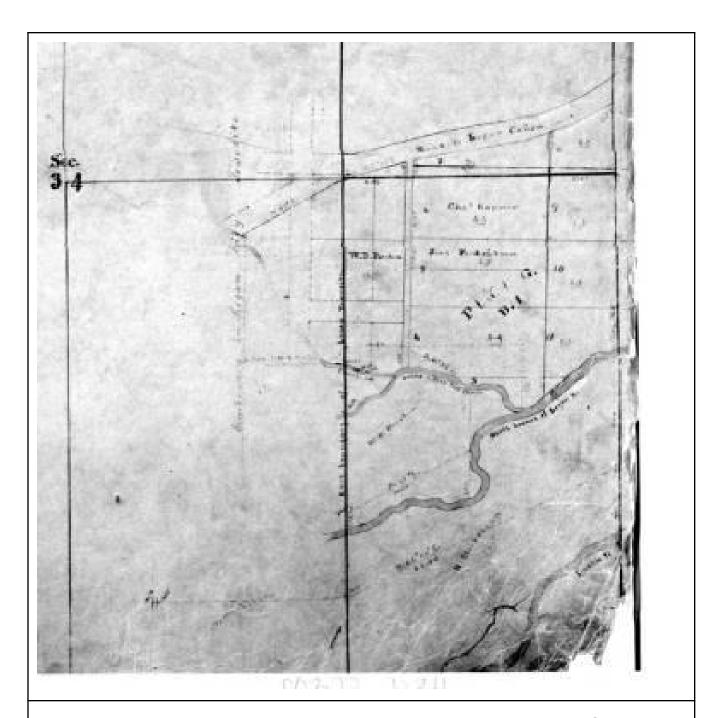


Fig. Historic map of North Branch of the Logan River showing that part of the Crockett Canal was originally a natural river

Rivers meanders and have wavy geometries whereas man-made canals are straight or arcing across the landscape. This old map from 1877 shows that part of a waterway that is called the Crockett Canal, was in fact a natural river. Settlers used part of that natural river as the starting point for the Crockett-Northfield Canal of today. The waterway was a meandering natural river from its branchpoint with the North Branch of the Logan River as far west as Preston Avenue. From that point the natural river flowed to the SW, whereas a

canal dug from its banks diverted water northwestward to the Logan Bluff. The old river bed has nearly disappeared from the landscape. The additional river channel was yet another distributary of the Logan River system that produced an island.

The current canal is man-made from about Preston avenue northwestward. The South Branch and a mini Island in the Preston Avenue area. 1877. <u>USU plat map collection in Cache County</u>.

https://cdm16944.contentdm.oclc.org/digital/collection/p16944coll5/id/33/rec/33

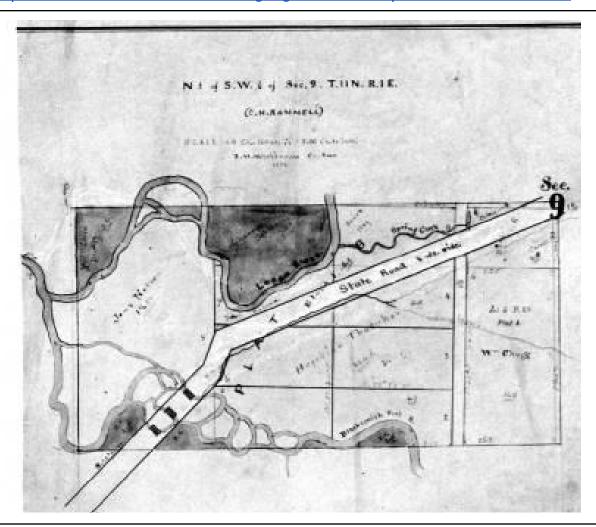


Fig. Historic map depicting a small area around Rendezvous Park along the South Branch of the Logan River.

Blacksmith Fork flows along the base of the map. This area and most of Logan's Island was a wetland in 1877, and many small Islands complicate the channel of the rivers. Very few of these islands survived urbanization and river straightening efforts along rivers near the confluence of the South Branch of the Logan River, Blacksmith Fork, and Spring Creek in 1877.

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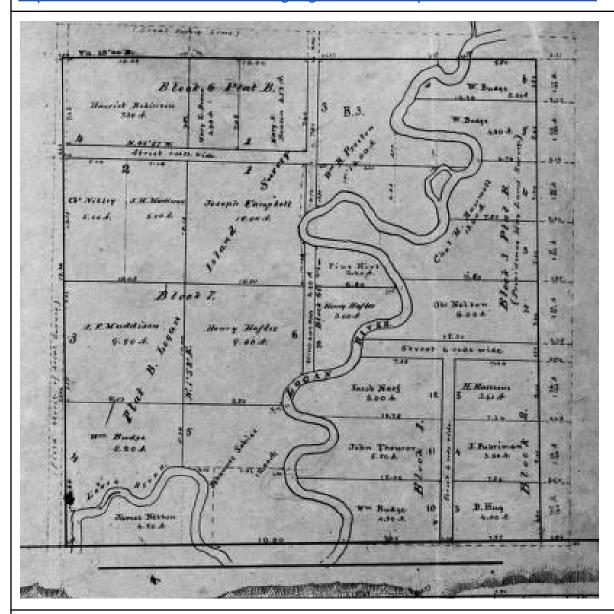


Fig. Historic map depicting the original meandering geometry of the South Branch of the Logan River in 1876.

John Monson map showing many meanders and Islands of the river. This part of the Logan River was straightened so much that it is difficult to recognize its original course on modern maps. The map is mostly in the Logan River Golf Course.

.https://cdm16944.contentdm.oclc.org/digital/collection/p16944coll5/id/1/rec/2 https://cdm16944.contentdm.oclc.org/digital/collection/p16944coll5/id/33/rec/33

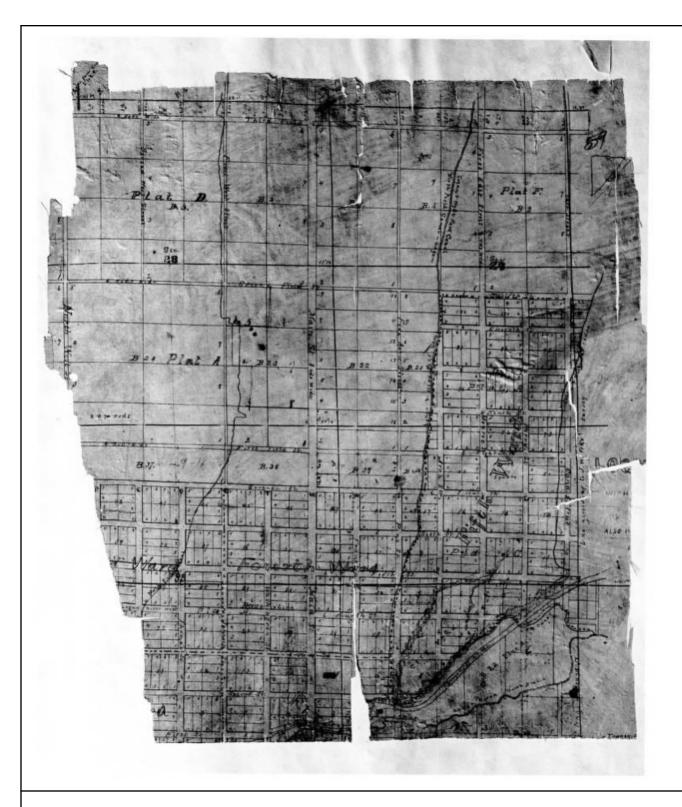


Fig. Old historic map of Logan and some of the NBLR, and Crockett-Northfield canal. https://cdm16944.contentdm.oclc.org/digital/collection/p16944coll5/id/15

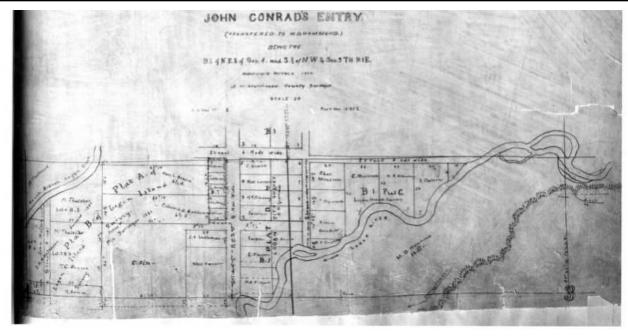




Fig. Another historic map depicting the meandering route of the original Logan River and comparing it to the highly modified and straightened current route of the Logan river, below.

The meanders and islands along the south branch of the Logan River shown here, no longer exist. The river crossed Main Street, at the bottom of both maps. A small section of the North Branch is in the upper left corner in the original plat map. This part of the North Branch was shifted northwestward in order to power mills on 3rd West.

https://cdm16944.contentdm.oclc.org/digital/collection/p16944coll5/id/39

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Fig. Another wetland and island complex along the South Branch of the Logan river on a historic map

Historic map depicting meanders and islands along the south branch of the Logan River. None of these exist today.

https://cdm16944.contentdm.oclc.org/digital/collection/p16944coll5/id/39

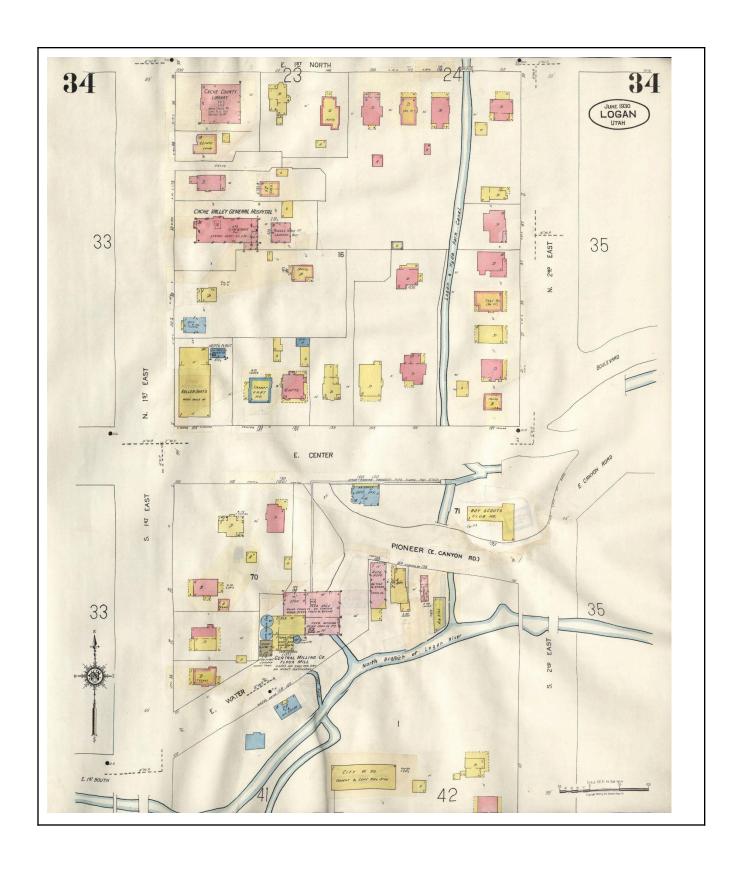


Fig. Complex mix of river channels and canals that existed in Logan Utah in 1955 on a <u>Sanborn Fire Insurance map</u>.

Despite all of the modifications to the Little Logan River, it was clearly labelled as a North Branch of the Logan River as it flows toward downtown Logan. Every generation of maps label the Little Logan River as a river.

Originally, the NBLR had so much water that a dozen mills were powered by its waters 125 years ago. Its power generated the first municipal electricity in Utah. See the industry that was reliant on the Little Logan River in the Sanborn map below.

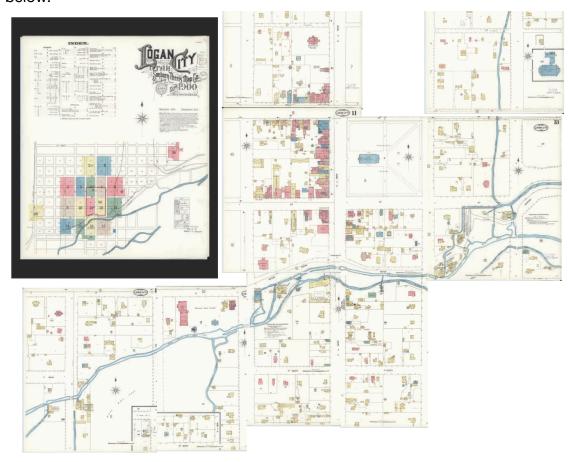


Figure Sanborn map showing a dozen businesses being powered by the Little Logan River in 1900.

Merged by Janecke from https://www.loc.gov/item/sanborn08860_002/. The natural river was modified to drive waterwheels across our city. That process required the construction of

mill-races and tail-races. Mill-races are canals that carry water uphill of where it would have been in the natural river. Tailraces are steep canals that connect the millrace and natural river to one another. Waterwheels built into the tailrace turn as a virtual waterfall of water moves across the paddles. In Logan, the southernmost channel is the natural river bed. It can be identified by its curving meandering geometry.

Aerial photographs of Logan's Island





Fig. Two aerial views of Logan River and Logan's east bench in 1959.

Center of the upper aerial image is about 16th East and 14th north. Logan River is black or gray in the bottom 15% of the scene. The photograph is not aligned perfectly, and north is in about N25E.

Lower image is cropped from the upper one. The middle of the photograph is near Riverside Drive and 150 N. USU digital archive.

http://exhibits.usu.edu/files/original/57f8fe0fb839d6cb6cd7271d28d7e412.jpg





Fig. Caption for Aerial photograph of the Branchpoint between the North and South Branches of the Logan River.

The Crockett Diversion structure is clear as a white feature located above a white waterfall in the center of the photo, 20% of the way down from the top edge. The rivers show as black water with dense alignments of trees on their banks. https://cacheut.maps.arcgis.com/apps/MapTour/index.html?appid=9f84afb25f3b45c 8886140c7248ed8c7#info Click the arrows at the bottom of the web page to navigate east or west in this dataset.

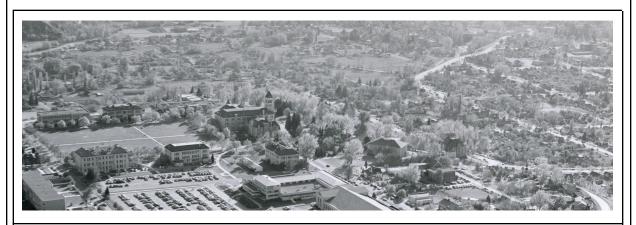


Fig. Aerial view from USU Campus to Island. Both Rivers are visible in the upper half of cropped photograph.

http://exhibits.usu.edu/items/show/17337

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<u>Evidence that the Little Logan River</u> is a natural and legal river-Link to an entire talk about that topic.

Frequently asked questions about the Little Logan River.

MOST PRESSING ISSUEs are trees and landslides:

Report on the dozens of Landslides of the Logan Bluff

More Resources:

https://library.loganutah.gov/research learn/Maps.p hp#outer-1017

Regreening of Cache Valley USU collection: https://digital.lib.usu.edu/digital/collection/regreening

Early settlement of Cache Valley, 1923, Hovey Early History of Cache County by M.R. Hovey

https://digital.lib.usu.edu/digital/collection/regreening/id/44/rec/1

https://digital.lib.usu.edu/digital/collection/regreening/id/551/rec/2

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