

# Duluth Past and Present



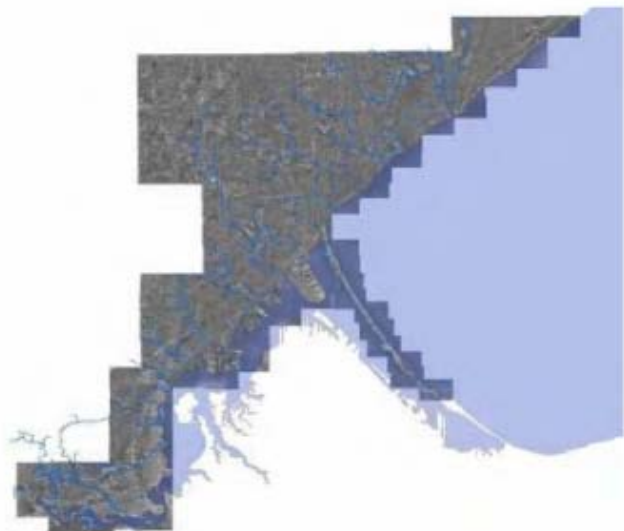
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**City of Duluth**

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## City of Duluth, Minnesota

- Provides service for 86,000 + residents
- 26 miles long, 8 miles at its widest point
- Lake Superior 602 ft above sea level
- Thompson hill 1,485 ft above sea level
- Elevation difference of 883 ft
- City was Established 1856



# Sewers

- **Duluth has 2 Sewer Systems**

- **Sanitary sewer system**

Used to carry waste water from your home or business to the WLSSD treatment plant

- **Storm Sewer System**

Used to drain water off the roadways and surrounding land



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## Storm Sewer System in 2007

- 609 miles of road
- 300 miles of storm sewer
- 138 miles of ditch
- 16 sedimentation boxes
- 9000+ catch basins
- 43 named creeks/streams
- 10 Trout streams
- Wood pipe used until 2006



# Storm Sewer System

- Duluth's storm sewer's date back to the 1880's
- Records before 1900 are somewhat incomplete
- Some creeks were piped to allow the city to expand, and roads and homes to be built
- As the City expanded, the storm sewer system was expanded, up the hill and along the Lake Superior



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## Stream crossing in early Duluth

- 1865 (9 years after Duluth became a City)
  - The Indian trail (Vermillion Trail) went from Minnesota Point to Lake Vermillion. This trail would ford Brewery creek at Washington Ave just (above?) below 1<sup>st</sup> St. approximately 7<sup>th</sup> Ave E
  - The trail forded Chester creek just above the falls near 14<sup>th</sup> Ave E (Chester bowl area)
  - The trail forded Tischer creek at Woodland Ave & St. Marie St. this was a shallow ford with a low banks (Mt. Royal area)

THE VERMILLION LAKE ROAD AND INDIAN TRAIL:  
FROM MINNESOTA POINT TO VERMILLION LAKE  
By Richard E. Carey

*(written approximately in December, 1936)*

## Duluth, December 1870



A View of Duluth, Minnesota; looking waterward; taken December, 1870.  
CREATED/PUBLISHED  
1870 December, c1871.  
NOTES Copyright deposit: Thomas Dowse; 1871

## Gully, Creek or Storm Sewer? 1871



SUPERIOR STREET, 1871. This very early photo of the Duluth business district was taken looking east from about First Avenue West. Early businesses were wooden buildings with false fronts, very likely with residences on the second floors. The third building from the left with the sign "Banking House" was Duluth's first bank, run by George Sargent and George C. Stone for Jay Cooke. The church on the hill was the 1870 Presbyterian Church. The sidewalks in 1871 were four-foot wide boards which bridged the gullies. An early description of Superior Street claimed, "To walk it was hazardous in the daytime and sure death after dark," and to "actually cross [was] an act of recklessness, forfeiting your life insurance."

## *“Creek history by Todd”*

- As the City was expanding and homes and business were being built, the creeks were used for a few different things, **recreation and as a way to remove storm water from roads and land**
- Many of the creeks had path ways to access the water, these creeks were used for Sunday picnic's, and as a way to cool off on the hot summer days and for other recreational activities
- As the city expanded, roads, cars changed how people used the creeks, people were able to go the other places to picnic and cool off and the parks and creeks were not viewed as important as they once were

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### Woodland @ present day Hartley Field



YMCA PLEASURE GROUNDS, WOODLAND. The Duluth street cars traveled up Woodland Avenue to a wooded park, on the site of present day Hartley Field. The park was a favorite picnic spot at the time of this photo in 1890.



Images of America DULUTH MINNESOTA by Maryanne C. Norton and Sheldon T. Arubut

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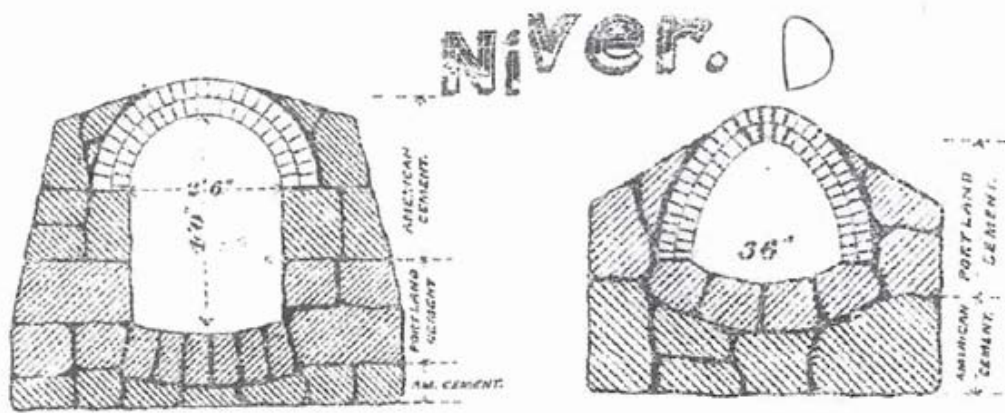
## Eastern Duluth (Oregon Creek Watershed) around 1915



# Early Storm Sewer Pipe



# Tunnel Design



Brick Arch Pipe

Delta pipe

# Oregon Creek



Entrance to the 4' x 5'  
Brick Arch Tunnel under  
4<sup>th</sup> St at 22 Ave E



Oregon Creek  
4' x 5' Brick Arch  
Tunnel at 4<sup>th</sup> Street



## 43<sup>rd</sup> Ave E Creek



Constructed in 1920  
43<sup>rd</sup> Ave E between  
Superior St & London Rd

## Clarkhouse Creek

At Cascade Park  
1<sup>st</sup> Ave W & 6<sup>th</sup> St



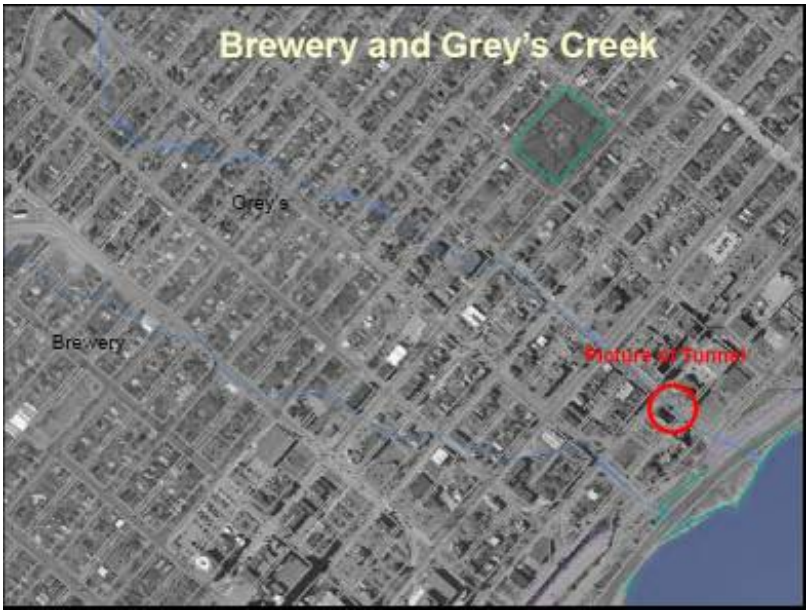
image courtesy of [www.duluth-mn-usa.com](http://www.duluth-mn-usa.com)

## Lester River

At Lester Park  
60<sup>th</sup> & Superior St



image courtesy of [www.duluth-mn-usa.com](http://www.duluth-mn-usa.com)



### Grey's Creek 1891

9th Ave E at  
1st St alley

2'6" x 4' Brick  
Arch Tunnel  
24 ft deep



### Brewery Creek





Brewery Creek  
going under an  
apartment building



Brewery Creek  
at Lake  
Superior



## Rain storms of 1972

- August 20, 1972 rainfall of 2.95" in 24 hours with 1.48" in only 1 hour
- September 20, 1972 rainfall of 3.77" in 12 hours



## Summer 1972 floods



Brewery Cr. In tube on 5<sup>th</sup> Street  
**Duluth Rain Storms of 1972**

### **A Memorable Northland Storm**

[Compiled by the National Weather Service Duluth, MN]

- Flash Flooding, August 20, 1972
- ~ 3 inches of rain fell in less than 24 hours on already saturated ground.
- Storm sewers kicked up excess water and caused flooding washouts and power outages in portions of the East and Central Hillside, West End and Park.
- Sidewalks and streets were ripped up and sent down the hill.
- President Nixon declared the area a Federal Disaster. Damage was \$8.9 million (or \$18 million, depending on the source).
- Another 3+ inches fell 30 days later, causing \$22.5 million in damage.

## Summer 1972 Floods



**Brewery Cr. in tube at 6<sup>th</sup> St &**



**Washout along Skyline Parkway**



**Miller Cr. In Lincoln Park**



**Stormwater inputs to Buckingham Creek  
along Skyline Parkway at 9<sup>th</sup> Ave West**



**Washout due to runoff at First Ave. East**



**Buckingham Creek at 12<sup>th</sup> Ave. West**



**Washout of First Ave. East due to runoff**



**Clarkhouse Cr. below Cascade Park  
along First Ave. West**

# What we are seeing today (2007)



## Sargent Creek



We removed 256 tires in 11 days in August 2004



1 year later 2005





**Duluth has 43 named streams**  
*Take a few minutes and enjoy one*

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**For more information visit**  
[www.lakesuperiorstreams.org](http://www.lakesuperiorstreams.org)

