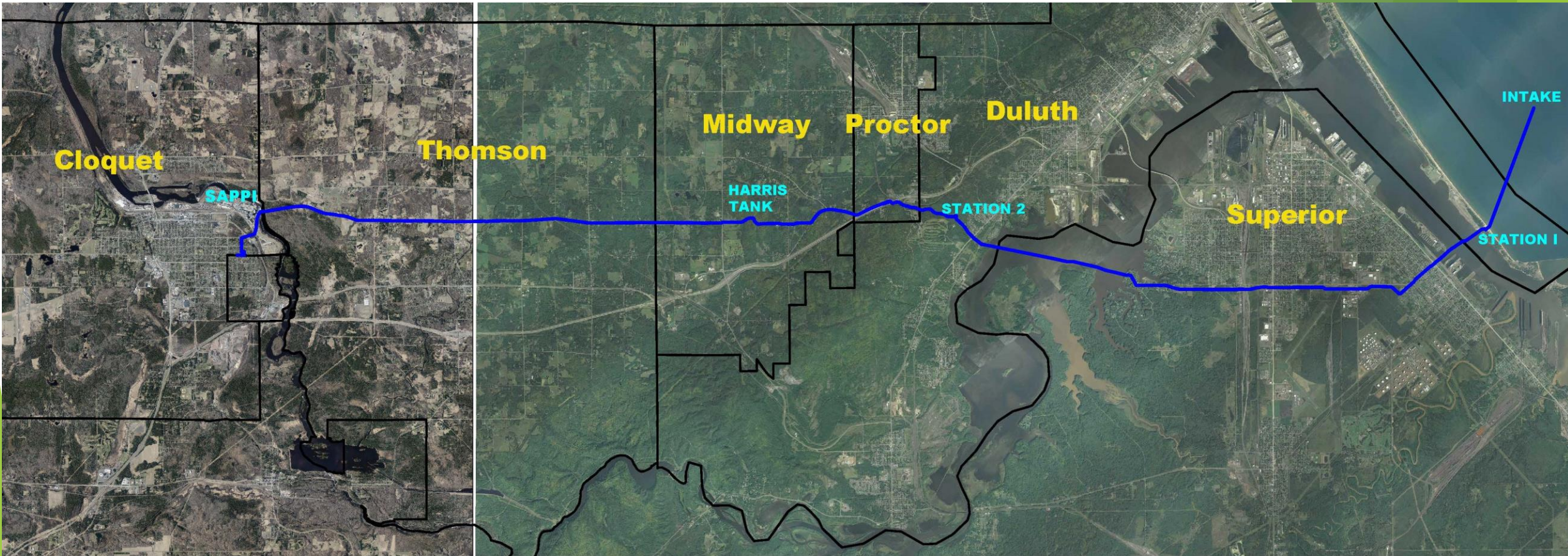




# Lake Superior Waterline

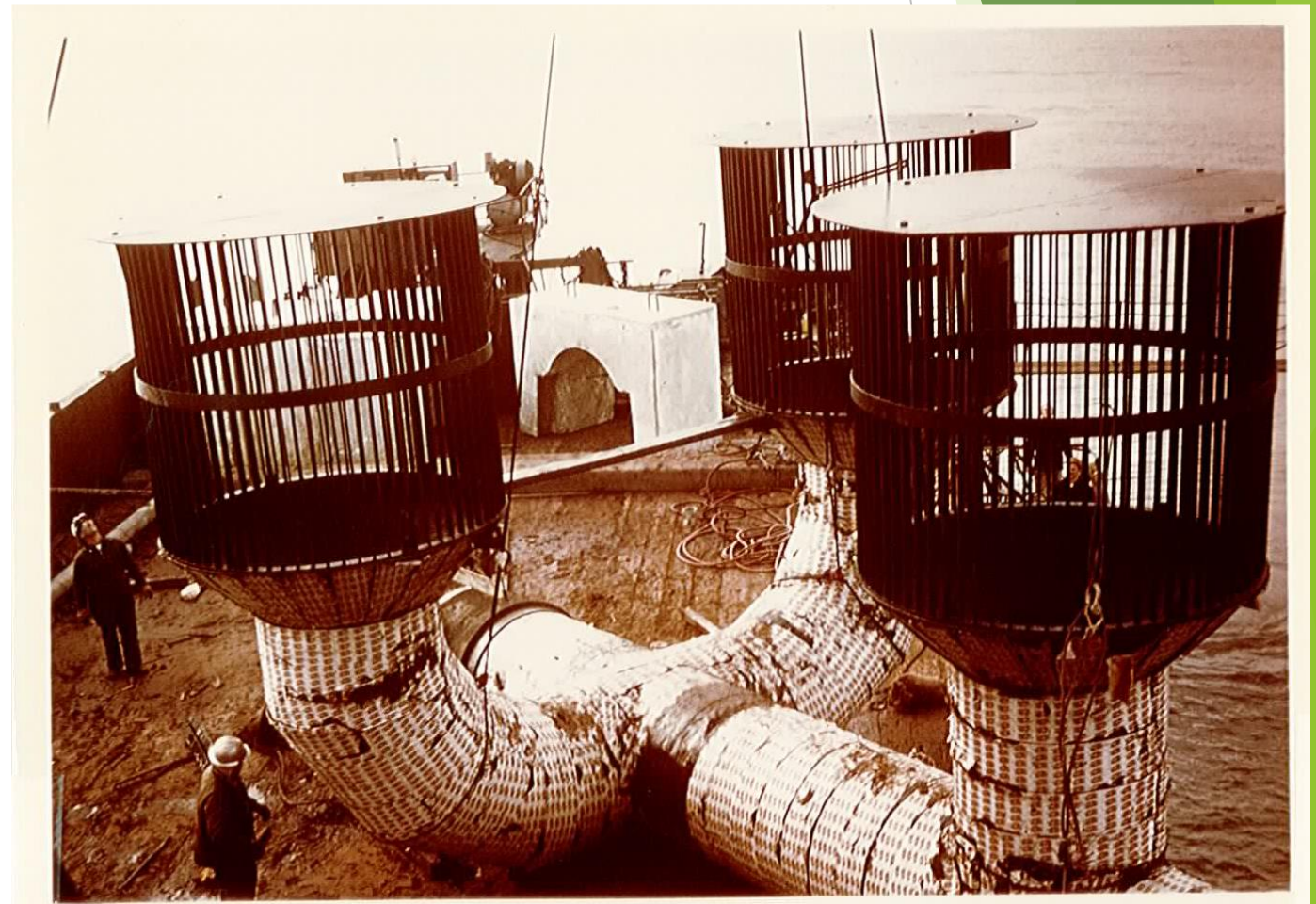




## Lake Superior Waterline

### Facility Highlights

- In service since 1969
- 20-mile pipeline which varies in size from 48” to 30”
- Traverses the Cities of Duluth, Superior WI and Proctor then west thru Midway and Tomson Townships to Cloquet.
- Routinely pump 10-12 million gallons/day of raw process water to Cloquet (Cloquet’s potable system produces 1-1.5 million gallons/day).
- Pipeline crosses the St. Louis River 3 times.
- Intake Structure is located 2-miles out from Park Point (Past Sky Harbor Airport) in 70 feet of water.
- Customers/Uses
  - Sappi (90+%), WLSSD, Specialty Minerals
  - Fire Protection Tomson, Midway
  - Emergency Back-up to Cloquet’s Potable System.





## Lake Superior Waterline

### Pump Station #1

- Located on Park Point (Duluth)
- 38-foot-deep wet well.
- Three 800HP turbine pumps.
- Routinely run two pumps in combination with a capacity of approximately 14,000 gallons per minute (GPM).
- Discharges to a 2-million-gallon reservoir located at Station #2 next to Spirit Mountain in Duluth.



**SUMMARY OF ELECTRICAL IMPROVMENTS CONSTRUCTION OPTIONS  
 LOCATED ADJACENT TO THE EXISTING ELECTRICAL  
 PRELIMINARY OPINION OF PROJECT COSTS  
 PUMP STATION NO. 1 ELECTRICAL IMPROVEMENTS PROJECT  
 PLANNING PHASE  
 CITY OF CLOQUET, MN  
 NOVEMBER 19, 2013 / SRC / DRAFT ESTIMATE**

OPTION	PROBABLE COST
OPTION NO.1 - FULL VOLTAGE MOTOR CONTROL WITH NEMA 3R WALK-IN ENCLOSURES	\$1,000,000
OPTION NO.1b - FULL VOLTAGE MOTOR CONTROL WITH NEMA 1 ENCLOSURES AND POLE BUILDING	\$990,000
OPTION NO.2 - VFD WITHOUT FV BYPASS MOTOR CONTROL WITH NEMA 3R WALK-IN ENCLOSURES	\$2,240,000
OPTION NO.2b - VFD WITHOUT FV BYPASS MOTOR CONTROL WITH NEMA 1 ENCLOSURES AND POLE BUILDING	\$2,030,000
OPTION NO.3 - VFD WITH FV BYPASS MOTOR CONTROL WITH NEMA 3R WALK-IN ENCLOSURES	\$2,450,000
OPTION NO.3b - VFD WITH FV BYPASS MOTOR CONTROL WITH NEMA 1 ENCLOSURES AND POLE BUILDING	\$2,200,000

Note:

1. Cost are estimated and include 16% Contingency.
2. Cost are estimated and include 16% Engineering.

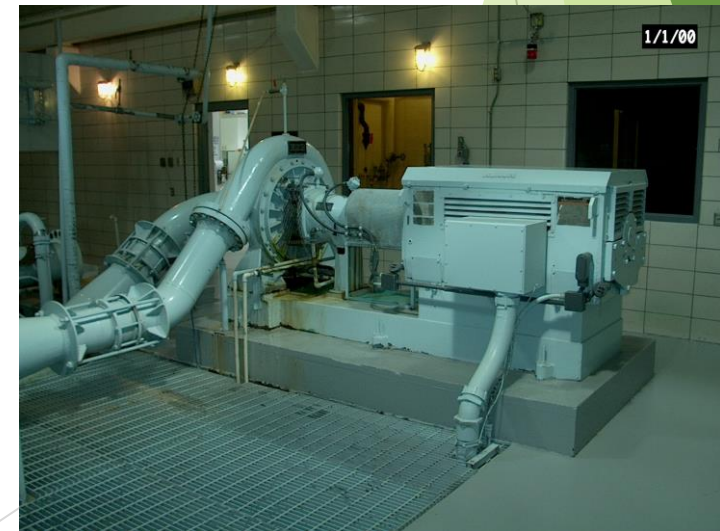




## Lake Superior Waterline

### Pump Station #2 & 2MG Reservoir

- Located East of Spirit Mountain off Grand Avenue (N 80<sup>th</sup> Ave W Duluth)
- Draws from 2MG Reservoir on-site (38' high, 95' diameter).
- Control center for Waterline and in-town operations (staffed 24 hours/day).
- Three 900HP turbine pumps, One 1,000HP centrifugal pump.
- Routinely run two pumps in combination with a capacity of approximately 9,000GPM (2021 Drought has mandated 3-pump operation at 11,000GPM).
- Discharge pressure exceeds 270PSI (3x a normal potable water system).
- Chlorine is added for disinfection (critical for Sappi process & permitting).
- Electrical Study still in process (Critical point of failure, limited downtime potential).
  - Transformer lead time was 26 weeks (prior to pandemic).
  - Replacement parts for motor controls no longer available.
- Reservoir Repairs & Coating are estimated at \$1.4 million.
  - Floor was done in 2012

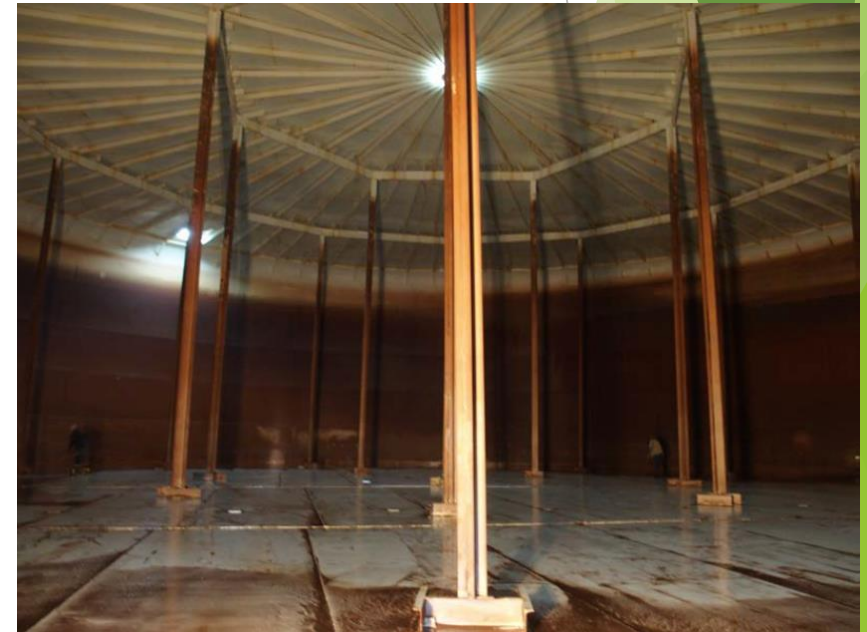




## Lake Superior Waterline

### Harris (5MG) Steel Ground Storage Reservoir

- Located 1-mile North of I-35 East of Midway Road.
- Draws from Station #2, Gravity to Cloquet. (43' high, 150' diameter).
- Last Painting/Repairs Completed in 1996.
  - 2020 Inspection Report (KLM) recommends recoating in 1-2 year to prevent structural damage.
  - Reservoir Repairs & Coating are estimated at \$2.9 million.



## Cloquet; Water Infrastructure Expansion Improvements

### Why we support

- The Lake Superior water transmission line is our primary water source.
- We use 19 million gallons per day of water.
- The LSW transmission line provides 13M gals and the St. Louis River 6M gals.
- St. Louis River DNR water appropriations permit limits intake in drought conditions.
- We need full capacity to operate. Basically, all or nothing.
- We cannot support our operation for extended periods with just St. Louis River water.
- Future expansion is dependent on increased capacity and improving reliability of the Lake Superior water transmission line
- This project support both those initiatives.

### Why it matters to the City of Cloquet

- Annual Mill Personnel – 700 Jobs - \$84 Million
  - 200 External Impact – 2800 Outside Jobs<sup>1</sup>
  - Annual Wood Buy – 2 Million Tons - \$110 Million
    - 220 Loggers - \$40 Million
    - 220 Truckers - \$40 Million
    - Land Owners (Public Lands) - \$30 Million
    - External Economic Activity - \$45 Million<sup>2</sup>
- 
- Total Wood Impact - \$155 Million**
- Annual Property Taxes - \$2.2 Million
  - Built Capital Projects – Construction Costs / Jobs / Payroll
    - Dissolving Pulp Conversion (2013) - \$175 Million / 1100 jobs = \$60 Million
    - Dissolving Pulp Expansion (2019) - \$25 Million / 125 jobs = \$8 Million
- 
- Total Construction Impacts - \$200 Million in 8 years**

<sup>1</sup> UMD Labovitz School of Business – one paper mill provides 3.5 to 4.5 additional outside jobs

<sup>2</sup> Minnesota Forest Industries/DNR – Every dollar spent to purchase lumber generates \$41 of economic activity





**Sappi North America**

**Cloquet Mill**

2201 Avenue B  
PO Box 511  
MN 55720 Cloquet  
UNITED STATES OF AMERICA  
Tel +1 218 879 2300

[www.sappi.com](http://www.sappi.com)

**Tom J. Radovich**  
Managing Director  
Direct tel +1 218 879 2332  
Cellphone +1 218 380 9086  
[Tom.Radovich@na.sappi.com](mailto:Tom.Radovich@na.sappi.com)

Dear Legislators,

Cloquet Water Infrastructure Expansion Improvement project is a significant liability for Sappi Cloquet Operations which is one of the largest manufacturing facilities in Minnesota. Below is summary of the situation with the Lake Superior water transmission line and the potential impact on our facility.

- The Lake Superior water transmission line is our primary water source. We cannot run the mill without this line and the pumping stations running at full capacity to meet our 17 to 18 million gallons per day demand. The St. Louis River is only used to supplement our process.
- The Lake Superior water transmission line pumping stations electrical systems are no longer supported and date back to the 1970s. This project would provide updated electrical systems and water reservoirs to support higher capacity necessary for future mill expansion.
- A catastrophic electrical failure at the pumping stations is a real potential scenario and would result in shutting down our facility for weeks or potentially months, laying off the majority of our 700 employees and having a significant impact on the regional economy which is estimated at \$6 billion annually.

I ask for your financial support of this critical infrastructure project to maintain the economic health to the region.

Sincerely,

Tom J. Radovich  
Managing Director  
Sappi Cloquet Operations





## *Minnesota Timber Producers Association*

903 Medical Arts Building • 324 West Superior Street • Duluth, MN 55802 • 218-722-5013 • Fax 218-722-2065 • [www.minnesotaforests.com](http://www.minnesotaforests.com)

March 1, 2023

Dear Legislators,

The Minnesota Timber Producers Association (TPA) is a trade association representing loggers, truckers, sawmills, and allied businesses in Minnesota's forest products industry.

We strongly support the inclusion of federal earmarks to fund the City of Cloquet's Lake Superior Waterline, which supplies the Sappi North America mill with the water it needs to operate.

The Sappi mill in Cloquet is critical for Minnesota logging businesses. 220 loggers supply wood to the mill, and a similar number of trucking companies are used to deliver this harvested timber. In total, the mill spends \$80 million just with these small businesses in rural Minnesota. That's on top of the millions spent for timber with forest landowners (including public agencies like the MN DNR), the 700 we-paying jobs in the Sappi mill, or the total economic impact of the mill to our region and state.

Sappi cannot operate with water just from the nearby St. Louis River. Potential future expansion is dependent on increased capacity of the water line. Improving the reliability of the Lake Superior Waterline will help solidify the future of the Sappi mill, as well as hundreds of important logging and truck jobs in rural Minnesota communities. We strongly support the Lake Superior Waterline bonding request.

Sincerely,

Ray Higgins  
Executive Vice President  
Minnesota Timber Producers Association





March 3, 2023

**RE: City of Cloquet's Lake Superior Waterline Project**

Dear Honorable Legislators:

Thank you for the opportunity to provide this letter of support for the City of Cloquet's Lake Superior Waterline project request. Minnesota Power, an electric utility based in Duluth, MN, serves 145,000 customers and 15 municipalities throughout northeastern and central Minnesota. We are proud to provide energy for some of the largest industrial facilities in the nation, including Sappi's integrated pulp and paper mill located in Cloquet, MN.

The Lake Superior Waterline is a 20-mile-long water transmission system that pumps water from Lake Superior in Duluth to Cloquet. The current system began operations in 1969 and its primary use today is to provide approximately 10-12 million gallons per day of raw process water to the Cloquet Mill. The Cloquet Mill employs 700 direct workers and provides an estimated economic impact of 3,500 total jobs and \$200M annually across the region. Beyond its importance to the greater regional economy, the waterline is also vital to local agencies. Serving as an emergency water supply for Cloquet's potable system, it also provides critical fire protection and life safety services to rural areas between Duluth and Cloquet.

At over 50 years in age, much of this line's infrastructure remains original and requires investment. Important improvements necessary in the next few years include electrical system replacement at both pump stations and recoating of the two at grade reservoirs. These critical points of failure have the potential to shut down Cloquet Mill operations for weeks at a time, potentially resulting in millions of dollars in impact to the region's economy. Additionally, future expansion opportunities for the Cloquet Mill hinge on upgrades to this line's capacity and improved reliability.

Thank you for the opportunity to share our comments with you about our support for this project and its importance both to the largest paper mill in our state and the community it calls home. We respectfully ask for your support of the Lake Superior Waterline Project and appreciate your time and consideration.

Sincerely,

Arik Forsman  
Regional Development Lead