



Commission Work Session

MARCH 23, 2023

To follow the 03/23 Regular Meeting

Commission Work Session Agenda

March 23rd, 2023

Chair J. Hart	—	Commissioner J. Bayliss	—
Commissioner P. Garrity	—	Commissioner J. Babich	—
Commissioner C. Andria	—	Legal Counsel A. Borland	—
General Manager L. Peterson	—	Auditors Sterle & Co., LLP	—
Utility Operations S. Dickinson	—	Energy & Pricing P. Plombon	—
Safety & Facilities P. Rutchasky	—	Admin & Comm E. Dixon	—
City Administrator G. Pruszinske	—	Local 94 President Rich Kampsula	—

1. Water System Planning and Funding Needs & Bonding Bill Request

March 14, 2023

Honorable Senator Robert Farnsworth
95 University Avenue W.
Minnesota Senate Bldg., Room 232
Saint Paul, MN 55155

Dear Senator Farnsworth;

The Hibbing Public Utilities Commission (HPUC) provides utility service for electric, gas, steam, and water for the City of Hibbing and its residential, commercial, and industrial users with a population of 16,000. The existing system includes 10 wells, two water towers, one treatment facility and over 100 miles of distribution pipe. A system map showing the wells and water treatment facility has been enclosed for your reference.

Water Sources - Treatment & Supply

Dewatering activities of Hibbing Taconite have eliminated the use of Hibbing's Scranton Well, which in the past was HPU's crown jewel of wells, producing 600 gallons / minute of water that did not need water. As a result, HPUC's system is at risk of not having enough water supply for its town, especially at critical peak times when the system is forecasted to be short 200,000-2,000,000 gallons a day with the loss of a key asset due to mining activity

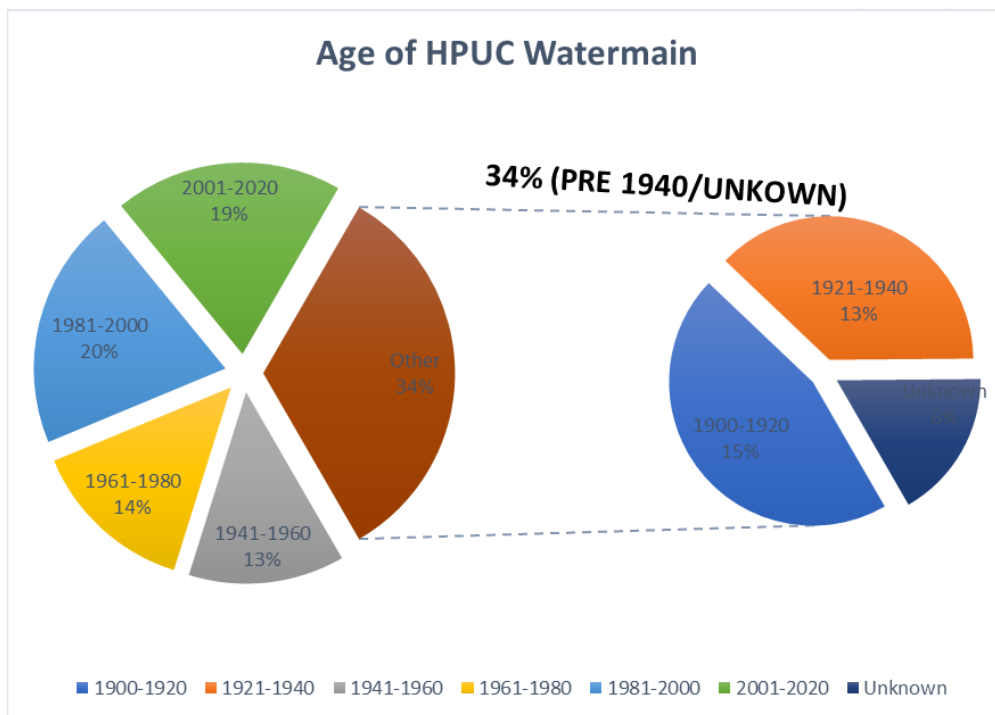
The utility needs to establish an alternate water supply for the Scranton Well that does not create conflicting interests between the utility and Hibbing Taconite.

In 2013 the HPUC constructed well #18 (Carey Valley Well) in anticipation of the future dewatering activity in the Scranton Pit. However, the water quality for well #18 is poor and addition of a treatment facility is required before this well can be put into operation.

HPU is requesting \$ 7 million of a total project cost of \$12 million for the Carey Valley Water Treatment Plant to ensure Hibbing customers are not left without water.

Water Distribution – Capital Improvement Plan

The existing water distribution system includes over 100 miles of pipe. The water supply system is aging and in need of significant improvements to provide safe and reliable drinking water for the community of Hibbing. There have been more than 400 watermain and service lines breaks and leaks over the last 5 years with each break costing approximately \$10,000 to repair. The table below summarizes the age of the system, almost 50% of the system is 60+ years old, far beyond its 50-year intended design life.



In 2022, the HPUC worked with a consultant engineer to develop a capital improvement plan (CIP) for the water distribution system. This document is a systematic approach to planning and initiating capital improvement projects on the water distribution system and considers overall location, timing, and financing. Projects were identified and prioritized based on several criteria including break frequency, infrastructure age, overall functionality, and system optimization. The following table identifies planned improvement projects for the next five years which average approximately \$5.5 million per year. This equates to replacing approximately 2% of the system annually and would require at least 50-years to replace the entire system.

Project	2023	2024	2025	2026	2027
Stuntz Drive & Hematite Street*	\$ 2,077,000.00	-	-	-	-
18th Avenue & 27th Street	\$ 2,248,000.00	-	-	-	-
Minnesota Street & 8th Avenue*	\$ 2,617,000.00	-	-	-	-
3rd Avenue East (31st to 22nd)	-	\$ 4,523,000.00	-	-	-
5th Avenue East (31st to 24th)	-	-	\$ 3,405,000.00	-	-
First Avenue (4th to 1st - Kelly Lake)	-	-	\$ 2,119,000.00	-	-
West Wegener Road to 41st St.	-	-	-	\$ 5,264,000.00	-
41st Street (12th Ave E to 19th St E)	-	-	-	-	\$ 2,367,000.00
19th Avenue E (28th St to 34th St)	-	-	-	-	\$ 2,326,500.00
Total	\$ 6,942,000.00	\$ 4,523,000.00	\$ 5,524,000.00	\$ 5,264,000.00	\$ 4,693,500.00

*In coordination with City of Hibbing paving operations

The Hibbing Public Utilities Commission needs to make these improvements to its distribution systems and will require assistance in the form of grants from the State of Minnesota to make the projects affordable. The HPUC has recently authorized a consultant engineer to begin final design for the 2023 Capital Watermain Improvement project. The project is expected to be bid in spring of 2023 with a planned completion in fall of 2023. Hibbing has a median family income approximately 65% of the statewide average and a poverty rate of 15% compared to the state average of 9%. The economic hardships that can be created by necessary infrastructure projects can add difficulty to implementation of necessary improvements.

HPU is requesting \$ 10 million of a total project cost of \$22 million to replace our water distribution mains to ensure Hibbing customers are not left without water.

These funds would be a significant investment in an iron range community that has been a vital contributor to America’s infrastructure the last 100 years.

Public Safety – Hydrants

The existing water distribution system includes over 100 miles of pipe and 649 hydrants. The water supply system is aging and in need of significant improvements to provide safe and reliable drinking water for the community of Hibbing. There are approximately 207 of the 649 hydrants that need some form of repair or replacement, including 151 that are completely non-functioning. This creates a significant risk to the entire City that must be addressed in a timely manner.

Hydrant Report Summary	
Total # of Hydrants	649
Out of Service	151
Need Repair	56
Undetermined	41

The estimated cost per hydrant replacement is approximately \$16,000 which includes a new hydrant, gate valve and repair of surrounding surface (pavement, sidewalk). The cost to completely replace all the faulty hydrants on the watermain system would be approximately \$4.0 million. Phasing this over a 5-year period, would reduce the annual cost to about \$800,000.

The Hibbing Public Utilities Commission needs to expedite replacement of the hydrants to ensure fire suppression needs are reliably met. Approaching the problem under a 5-year phasing plan would still require assistance in the form of grants from the State of Minnesota to make the project affordable.

HPU is requesting \$ 3 million of a total project cost of \$4 million to to ensure Hibbing Fire Department can fight fires in Hibbing with working Hydrants water.

HPU’s Water System Funding Need

Hibbing Public Utilities Commission Water System Needs		
Issue	Solution	Capital Cost Estimate
Water Treatment Plant Improvements	Replace Seepage Basins with Reclaim System and Replace Other Aging Components	\$4 million
Loss of Scranton Well	Construct Water Treatment Facility at existing Well #18.	\$7 million
Watermain Breaks	Replace Watermains and Service Lines Susceptible to Breaks	\$10 million, over 5 years
Public Safety Hydrants	Replace 207 Hydrants in need of repair	\$3 million
Total Needs		\$24 million

The Hibbing Public Utilities Commission needs to complete significant improvements to its water treatment and distribution systems which will require assistance in the form of grants from the State of Minnesota to make the projects affordable. Hibbing has median family incomes that have been around 65% of the statewide average along with a poverty rate of 15% compared to the state average of 9%. Community economic hardships as these add difficulty to implementation of necessary improvements. Therefore, we are requesting inclusion of a water improvements project for the HPUC in the 2023 bonding bill. The total cost of the improvement projects is estimated between \$32M to \$40M.

These projects will provide the necessary improvements to ensure safe drinking water supply for Hibbing for the next 20 plus years. The project will also resolve conflicts of interest resulting from the utilities largest supply well being located on Hibbing Taconite property adjacent to an open pit mine. Eliminating this conflict will allow both the City of Hibbing and Hibbing Taconite to thrive now and in the future.

March 15, 2022

Honorable Senator David Tomassoni
President Pro-Tem
75 Rev. Dr. Martin Luther King Jr. Blvd.
Capitol, Room 328
St. Paul, MN 55155

Re: HIBBING'S WATER SITUATION

Dear Senator,

We are respectfully requesting an Emergency \$7.1M to fund the water treatment facility portion of the of the Hibbing Public Utility Commission Water System needs to fund a water treatment facility that will allow Hibbing residents to have clean water while Hibbing Taconite dewateres Scranton Pit, which renders HPU's Scranton Well unsuitable for drinking.

The Hibbing Public Utilities Commission (HPUC) provides utility service for electric, gas, steam, and water for the City of Hibbing and its residential, commercial, and industrial users. The existing system includes 10 wells, two water towers, one treatment facility and over 100 miles of distribution pipe. A system map showing the wells and water treatment facility has been enclosed for your reference.

The treatment facility is over 40 years old and the wells range in age from 1 to 78 years with an average age of 35. Roughly half of the distribution system is over 90 years old with another quarter of the system ranging between 60 and 80 years old. The water supply and distribution system are aging and in need of significant improvements to provide safe and reliable drinking water for the community. Major concerns for the water utility include the following.

1) Aging pipelines and proximity to the blasting zone for Hibbing Taconite have led to over 400 combined watermain and service lines breaks and leaks over the last 5 years. Each year this results in water losses exceeding 50 million gallons.

2) The utilities largest producing well (Scranton Well) is located on Hibbing Taconite property and is being affected by dewatering activities of the mine as they lower their mining operations to access valuable iron deposits. These deposits cannot be reached without dewatering of the mine which will impact the adjacent aquifer from which the Scranton well produces its water.

Historically the Scranton Well has produced around 30% of the total water supply for Hibbing.

Dewatering activities of Hibbing Taconite are likely to significantly reduce the capacity of the well or eliminate its production completely. The utility needs to establish an alternate water supply for the Scranton Well that does not create conflicting interests between the

utility and Hibbing Taconite. In 2013 the HPUC constructed well #18 (Carey Valley Well) in anticipation of the future dewatering activity in the Scranton Pit. However, the water quality for well #18 is poor and addition of a treatment facility is required before this well can be put into operation.

3) The seepage basins at the existing water treatment facility are not functioning properly and may be impacting a nearby wetland. Other major components of the water treatment facility, including the electrical system, are past their useful life and need to be replaced.

The HPUC has recently authorized over \$50,000 in consulting engineering fees to investigate the above issues and develop a capital improvement plan for the water system. The work on this plan remains in progress with completion anticipated in the next couple months. Preliminary findings from the investigation are summarized in the following table.

Hibbing Public Utilities Commission Water System Needs		
Issue	Solution	Capital Cost Estimate
Watermain Breaks	Replace Watermains and Service Lines Susceptible to Breaks	\$20M - \$30M (Over next 10 Years)
Loss of Scranton Well	Construct Water Treatment Facility at existing Well #18.	\$7.1M
Water Treatment Plant Improvements	Replace Seepage Basins with Reclaim System and Replace Other Aging Components	\$3.9M
Total Needs		\$30M+

The Hibbing Public Utilities Commission needs to complete significant improvements to its water treatment and distribution systems which will require assistance in the form of grants from the State of Minnesota to make the projects affordable. Hibbing has median family incomes that have been around 65% of the statewide average along with a poverty rate of 15% compared to the state average of 9%. Community economic hardships as these add difficulty to implementation of necessary improvements. Therefore, we are requesting inclusion of a water improvements project for the HPUC in the 2023 bonding bill. The total cost of the improvement projects is estimated between \$30M to \$40M.

We are respectfully requesting and Emergency \$7.1M to fund the water treatment facility portion of the project costs. The project will provide the necessary improvements to ensure safe drinking water supply for Hibbing for the next 20 plus years. The project will also resolve conflicts of interest resulting from the utilities largest supply well being located on Hibbing Taconite property adjacent to an open pit mine. Eliminating this conflict will allow both the City of Hibbing and Hibbing Taconite to thrive now and in the future.

Thank you for consideration of this request.
Sincerely,

HIBBING PUBLIC UTILITIES COMMISSION

A handwritten signature in black ink that reads "Luke J. Peterson". The signature is written in a cursive style with a large initial "L".

Luke J. Peterson,
General Manager

LJP/plr