

# WATER INFRASTRUCTURE BONDING REQUEST

**North Water Source** 

## S.F. No. 304

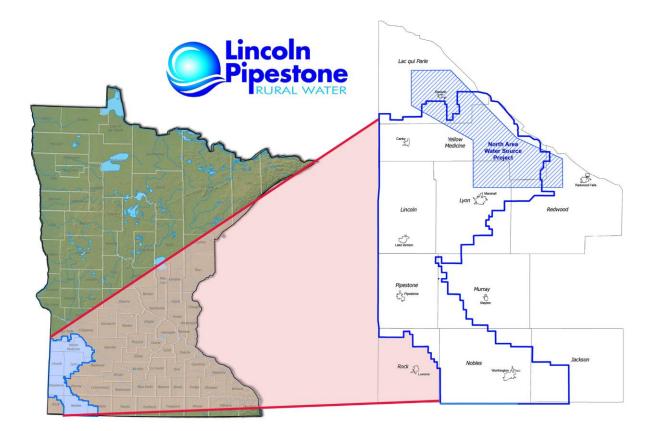
(Senate Authors: DAHMS and Weber)



## LINCOLN-PIPESTONE RURAL WATER SYSTEM BONDING REQUEST INFORMATION

### NORTH AREA (DAWSON-BOYD) WATER SOURCE DEVELOPMENT, TREATMENT AND DISTRIBUTION

\$15,750,000 is appropriated from the bond proceeds fund to the Public Facilities Authority for a grant to the Lincoln-Pipestone Rural Water System for water system development in its service area. This appropriation includes money for acquisition of land, design, construction, furnishing and equipping new wells, a water softening treatment plant (lime softening plant), and installation of new water distribution pipes. This appropriation is in addition to the appropriation in Laws 2020, First Special Session chapter 3, article 1, section 22, subdivision 17. Supported by S.F. No. 304 (Senate Authors: Dahms and Weber).





#### Background:

Lincoln-Pipestone Rural Water System (LPRW) has long sought a new water source to meet the demands in the northern portions of its system. In fact, a norther water source has been under development for over 15 years, and over \$1,500,000 already spent. Currently, LPRW has identified a potential, viable water source to develop as a long-term, sustainable option for existing customers and those rural residences and communities who desire to have high-quality, reliable drinking water through a centralized system. LPRW proposes to construct new groundwater wells, water treatment plant and distribution pipeline and facilities to fulfill this mission.

Two cities, Cottonwood and Clarkfield, are currently interested in acquiring water from LPRW in north system. LPRW cannot serve these communities until completion of a new water source, treatment and distribution lines to deliver high quality water. Furthermore, without funding support, connection costs for Clarkfield and Cottonwood would significantly increase by an additional \$410,000 and \$530,000, respectively.

#### Why the Project:

LPRW faces a number of issues that needs addressing to continue to provide water to existing customers and potential future customers. Issues include transmission restrictions due to high demands, water quality, water quantity, and encroaching on permitted capacities. LPRW currently has a moratorium imposed on any new large users or expanding of existing users within its northern supply area.

#### What the Project will do:

- Providing high quality, reliable drinking water to areas harboring poor water quality and/or limited quantities.
- Providing source water capacity to meet the demands of the region; while strengthening economics of the region and sustaining rural homes, businesses and communities for the future.
- Providing system redundancy, improving transmission and delivery, and allowing for long-term sustainability of resources, including protecting unique ecosystems such as calcareous fens.
- Reducing or eliminating wastewater stream loading for communities dealing with discharge issues and meeting compliance limits.



What supplemental State Funding will do:

- Allow LPRW to continue to fulfill its goal of developing a new water source in the northern portions of its system; provide proper treatment and necessary infrastructure to serve existing customers, as well as new rural customers and communities.
- Provide reliable, safe drinking water that is <u>affordable</u> for rural residents, businesses and communities.
- Make available options for communities suffering from poor water quality, limited quantities or waste stream compliance.
- Many cities are currently dealing with salt discharge issues in wastewater. Not only does LPRW provide cities with better quality drinking water, pre-softening cuts salt usage in water softeners by 60%. No city using LPRW water has chloride discharge issues. This project assists in eliminating the need for expensive treatment processes and facilities for small cities with small populations and limited financial resources.
- Good sources of water in southwest Minnesota are often hard to find. Water treatment
  plants are expensive to build, operate and maintain for small communities. A new LPRW
  water source and WTP can provide reliable, affordable, safe water service to multiple
  cities and rural residents and boost economic development throughout the region;
  allowing for continued economic growth and viability in southwestern Minnesota.

Success for Southwest Minnesota includes providing high-quality drinking water into the future.



#### Inflationary Impacts North Area Water Source Lincoln Pipestone RWS

	Source	Treatment	Distribution	Total	Capacity, gpd	Cost <i>,</i> er gpd
Original Cost Estimate June 2019	\$ 2,600,000	\$ 13,626,500	\$ 10,101,500	\$ 26,328,000	\$ 2,000,000	\$ 13.16
Previous Cost Opinion April 2021	\$ 1,041,000	\$ 16,513,000	\$ 8,126,600	\$ 25,680,600	\$ 2,000,000	\$ 12.84
Scope Cost Increase	\$ -	\$ 3,461,000	\$ 1,520,000	\$ 4,981,000		
Inflation Cost Increase	\$ 226,000	\$ 3,553,000	\$ 7,318,000	\$ 11,097,000		
Total Cost Increase	\$ 226,000	\$ 7,014,000	\$ 8,838,000	\$ 16,078,000		
Present Cost Opinion May 2022	\$ 1,267,000	\$ 23,527,000	\$ 16,965,000	\$ 41,759,000	\$ 2,000,000	\$ 20.88
Inflation Increase	22%	22%	90%	43%		

#### North Water Source Development – Engineers Estimated Costs Per Gallon Per Day:

2010	\$9,477,000	cost/gallon/day	\$8.50
2019	\$26,328,000	cost/gallon/day	\$13.16
2023	\$41,759,000	cost/gallon/day	\$20.88