

NEBRASKA · WATER UTILITIES · CAPITAL BRIEFING

Nebraska's water is mostly underground. The bill to protect it isn't.

Rising nitrate in the aquifer, lead lines on a federal clock, single-source cities planning a second supply, and a \$6.4 billion renewal bill that federal funding barely touches. Every one of those forces reshuffles the projects on your list. Invizion helps Nebraska utilities re-sequence a capital portfolio in a click — and defend every decision.

600K ¹	\$6.4B ²	\$337M ²	\$157M ³
People across metro Omaha served water by the Metropolitan Utilities District — Nebraska's largest public water utility, with 231,150 accounts and 3,200+ miles of main.	Nebraska's 20-year drinking-water and wastewater investment need — split almost evenly, about \$3.2B each.	Federal State Revolving Fund water dollars to Nebraska since 2022 — enough to cover only about 5.3% of the need.	M.U.D.'s 10-year lead-service-line replacement program — every known lead and galvanized line gone by 2035.

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THE NEBRASKA LANDSCAPE

Four forces are reshaping your capital plan

Nebraska's water challenges are quieter than a shrinking river — they live underground. But nitrate, lead, single-source risk, and a \$6.4 billion renewal bill are moving projects up your list whether the budget is ready or not.

SUPPLY — GROUNDWATER

Almost everything depends on the aquifer

The majority of Nebraska's drinking water is drawn from groundwater, much of it from the High Plains (Ogallala) Aquifer — the roughly 174,000-square-mile system that underlies parts of eight states and anchors one of the country's most important agricultural regions.⁵ The state has monitored groundwater levels since 1930 across more than 24,000 wells, because quantity and quality are a standing concern, not a distant one.⁴

Groundwater is managed locally by 23 Natural Resources Districts, each with authority over wells and water use in its basin.

⁶ For a utility, that means your supply, your neighbors' irrigation, and your treatment costs are all tied to the same water table.

QUALITY — NITRATE

Decades of fertilizer are showing up in the wells

Nebraska's median groundwater nitrate level has roughly doubled since 1978, driven largely by nitrogen fertilizer applied across the state's cropland.⁷ Because the majority of Nebraskans drink groundwater, that trend lands directly on public water systems.⁴

The health stakes are why it becomes a capital issue: Nebraska has the highest pediatric cancer rate of any state west of Pennsylvania, and communities already face millions of dollars to blend, treat, or drill away from nitrate-laced supplies.⁷ Nitrate you can't see today is a treatment plant you fund tomorrow.

COMPLIANCE — LEAD

Lead lines, on a federal clock

The EPA's 2024 Lead and Copper Rule Improvements require systems to inventory and then replace lead service lines within roughly a decade.⁹ Omaha's Metropolitan Utilities District has already committed: a 10-year, \$157 million program, begun in 2024, to remove every known lead and galvanized line — at about \$8,000 apiece — by the end of 2035.³⁸

M.U.D. is funding the first phase with a Drinking Water SRF loan and grants,⁸ but smaller Nebraska systems face the same mandate with far thinner balance sheets.

RESILIENCE — AGING & SINGLE-SOURCE

A \$6.4 billion bill, and too few backups

Nebraska's drinking-water and wastewater systems carry \$6.4 billion in 20-year needs, and federal dollars since 2022 cover only about 5.3% of it.² The rest falls to rates, local debt, and sequencing decisions.

Resilience is part of the bill. Lincoln has drawn its water from a single wellfield source since 1883 and is now planning "Water 2.0," a second water source, after the droughts of 2002 and 2012 exposed the risk of relying on one supply.¹⁰ A second source is a generational capital commitment that has to be weighed against everything else on the list.

WHO RUNS NEBRASKA'S WATER

Publicly owned, top to bottom — from big-city utilities to hundreds of small systems

Nebraska is a public-power, public-water state. There are almost no large investor-owned water utilities; instead, big municipal systems, local districts, and a long tail of small community systems share the same pressures with very different resources.

Municipal & public utilities

Rates set by elected boards and city councils

Metropolitan Utilities	600,000+ served · 231,150 accounts ·
District (Omaha)	3,200+ mi of mainline
Lincoln Water System	Serving Nebraska's capital since 1883 · pursuing a second source
Grand Island, Kearney, Fremont	Central & eastern municipal systems
Hastings Utilities, Norfolk, Columbus	Public utilities managing nitrate & renewal
North Platte, Scottsbluff, Bellevue	Western & metro municipal providers

Districts, rural & small systems

Local special-purpose entities and the long tail

23 Natural Resources Districts	Local groundwater management & well permittings
Sanitary & Improvement Districts (SIDs)	Suburban water/sewer around metro Omaha
Rural Water Districts	Multi-county rural distribution
Hundreds of small community systems	Where the funding gap bites hardest

Very few Nebraska water customers are served by investor-owned utilities. Here 'rate regulation' almost always means a local board or city council — not a state commission.

No PUC for your rates — but plenty of accountability

Nebraska has no public utilities commission setting municipal water rates. Oversight is split between local boards that answer to ratepayers and the state and federal agencies that enforce water quality — and both are asking harder questions about capital.

Nebraska Department of Water, Energy & Environment (DWEE)

administers the state's Drinking Water and Clean Water SRFs and oversees public water supply, groundwater, and water rights¹²

Elected local boards set the rates. M.U.D.'s water rates are set by an elected Board of Directors, which added a dedicated Infrastructure Replacement rider in 2025; Lincoln's are set by the City Council¹³

23 Natural Resources Districts regulate groundwater withdrawals and quality at the basin level — a layer of local control most states don't have.⁶

Federal drinking-water rules drive the capital. The 2024 Lead and Copper Rule Improvements and ongoing nitrate compliance turn quality mandates into funded projects.⁹

The money is moving — but it's a fraction of the need

Nebraska utilities have more low-cost capital available than in years past, but federal dollars cover only a sliver of the \$6.4 billion need. Positioning — readiness, eligibility, and timing — decides who captures it.

\$337M in federal SRF water funding has flowed to Nebraska since 2022 — about \$267M through the Drinking Water SRF (including roughly \$122M for lead lines) and \$70M through the Clean Water SRF.²

DWEE administers both revolving funds, offering low-interest loans and principal forgiveness; the Clean Water SRF alone has financed projects in more than 180 Nebraska communities¹⁴

Federal dollars cover only ~5.3% of the gap. Against \$6.4B in 20-year needs, most of the bill still falls to rates and local debt²

The IIJA window is closing. Its \$43 billion national SRF boost is being distributed only through 2026, so the time to line up shovel-ready projects is short.²

NEBRASKA WATER, IN BRIEF

Questions Nebraska utility leaders are asking

Short, sourced answers — the same facts we'll dig into on a call, in the context of your system.

Why is groundwater at the center of Nebraska's water picture?

The majority of Nebraska's drinking water comes from groundwater, much of it from the High Plains (Ogallala) Aquifer, and the state has tracked water levels across more than 24,000 wells since 1930. Groundwater is managed locally by 23 Natural Resources Districts, so supply, agricultural use, and treatment cost are all tied to the same water table⁴⁶

How serious is nitrate contamination in Nebraska's water?

Serious and worsening. The state's median groundwater nitrate level has roughly doubled since 1978, driven mostly by nitrogen fertilizer, and Nebraska has the highest pediatric cancer rate of any state west of Pennsylvania. Communities already face millions of dollars to treat, blend, or replace nitrate-affected supplies.⁷

Who has to replace lead service lines in Nebraska, and by when?

Under the EPA's 2024 Lead and Copper Rule Improvements, systems must inventory and replace lead service lines within roughly a decade. Omaha's M.U.D. has committed to a 10-year, \$157 million program to remove every known lead and galvanized line by the end of 2035, funded partly with a Drinking Water SRF loan; smaller systems face the same rule with fewer resources⁹³⁸

How much federal water funding is Nebraska receiving, and is it enough?

About \$337 million in federal SRF water funding has come to Nebraska since 2022 — roughly \$267M in drinking water (including about \$122M for lead lines) and \$70M in clean water. But that covers only about 5.3% of the state's \$6.4 billion 20-year need, and the IIJA boost runs only through 2026³

Who sets water rates and regulates utilities in Nebraska?

There's no state utilities commission for municipal water. Elected local boards and city councils set rates — M.U.D.'s Board of Directors and Lincoln's City Council, for example — while DWEE administers the SRFs and 23 Natural Resources Districts manage groundwater. Capital still has to be justified to ratepayers and to the agencies enforcing water-quality rules¹²¹³⁶

How does Invizion help Nebraska water utilities plan capital?

Invizion is scenario-based capital portfolio optimization for water utilities. It lets you model how a nitrate treatment mandate, a lead-line deadline, an SRF award, or a second-source project reshuffles your whole project list, re-sequence the portfolio automatically against your funding and rate constraints, and keep a defensible record of every trade-off for your board, your ratepayers, and DWEE. The best next step is a short first meeting to look at it against your own program.

REFERENCES

Sources

Every figure in this briefing is tied to a primary or authoritative source.

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2. Water Program Portal, "Nebraska's Federal Water Funding" fact sheet, citing EPA DWWSA / CWSN — \$6.4B in 20-year needs (\$3.2B drinking water + \$3.2B wastewater); \$337M federal SRF since 2022 (\$267M DWSRF incl. ~\$122M lead lines, \$70M CWSRF); ~5.3% of the gap; ILJA \$43B national SRF boost distributed 2022–2026, 2026. waterprogramportal.org
3. Metropolitan Utilities District, 2025 Consumer Confidence (Water Quality) Report — 10-year, \$157M lead service line replacement program; Missouri and Platte River sources; nearly 600,000 people served through 231,000+ homes and businesses. mudomaha.com
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7. Flatwater Free Press, "Nebraska's Nitrate Problem" — median groundwater nitrate roughly doubled since 1978; Nebraska has the highest pediatric cancer rate of any state west of Pennsylvania; communities facing millions to clean up nitrate-laced water, 2022–2023. flatwaterfreepress.org
8. Metropolitan Utilities District, "Lead Service Line Replacement Program" — program begun summer 2024, all lead lines targeted by end of 2035, average cost ~\$8,000/line, funded via a Drinking Water SRF loan and grants. mudomaha.com
9. U.S. EPA, "Lead and Copper Rule Improvements" — final rule Oct. 8, 2024; systems must inventory and replace lead service lines within roughly a decade; \$2.6B DWSRF dedicated to lead nationally. epa.gov
10. Lincoln Water System (Lincoln Transportation & Utilities) — has provided water to the City of Lincoln since 1883; historically reliant on a single supply source. lincoln.ne.gov
11. Lincoln Water System, "Water 2.0: Securing Lincoln's Second Water Source" — alternatives analysis 2022, plan selected Jan. 2023; current supply projected adequate ~20–25 years; the droughts of 2002 and 2012 spurred second-source planning. lincoln.ne.gov
12. Nebraska Department of Water, Energy & Environment (DWEE), "About" — administers the Drinking Water and Clean Water State Revolving Funds and oversees public water supply, groundwater, and water rights. dwee.nebraska.gov
13. Metropolitan Utilities District, "Rates & Fees" — water rates set by the elected M.U.D. Board of Directors; Schedule WIR Infrastructure Replacement rider effective January 2025. mudomaha.com
14. Nebraska DWEE, "Clean Water State Revolving Loan Fund" — low-interest loans and loan forgiveness; CWSRF loans made to more than 180 Nebraska communities statewide. dwee.nebraska.gov

ABOUT INVIZION

Capital program optimization for utilities

Invizion is a purpose-built capital lifecycle management platform for water and wastewater utilities. It integrates budgeting, CIP, scenario analysis, and funding-source tracking in one system — so utilities can re-sequence a capital portfolio in a click and demonstrate audit-ready, defensible decisions to regulators, boards, and rating agencies.

See what a defensible Nebraska capital plan looks like — book a 20-minute first meeting.

Book your first meeting →