

COLORADO · WATER UTILITIES · CAPITAL BRIEFING

Colorado is the river's headwaters — and the front line of the shortage. Your capital plan has to keep up.

A shrinking Colorado River, a Front Range that keeps growing, aging pipe, lead lines, PFAS, and a supply gap the state puts in the hundreds of thousands of acre-feet. For a utility CFO or capital lead, every one of those forces reshuffles the projects on your list. Invizion helps Colorado utilities re-sequence a capital portfolio in a click — and defend every decision.

\$20B¹ Estimated cost to meet Colorado's future water demands under the Colorado Water Plan.	13%² Of normal spring runoff forecast into Lake Powell in 2026 — the lowest inflow on record.	\$10.2B³ Colorado's 20-year drinking-water infrastructure need — plus \$4.7B more for wastewater.	1.5M⁴ People served by Denver Water — roughly a quarter of the state's population.
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THE COLORADO LANDSCAPE

Four forces are moving your project list at once

None of these is theoretical, and none of them waits for your next budget cycle. Together they mean the capital plan you approved last year may already be the wrong plan.

SUPPLY — COLORADO RIVER

Colorado holds the headwaters, and the shortage starts here

The Colorado River supplies about 40 million people across the West, and it begins in Colorado's mountains. In 2026, Lake Powell was forecast to receive just 13% of its normal spring runoff — the lowest April–July volume on record — with the reservoir sitting near 23% of capacity²

Colorado's Front Range doesn't just sit downstream of that risk — it depends on the river directly. More than 500,000 acre-feet a year is moved across the Continental Divide through transmountain diversions to cities where nearly 90% of Coloradans live, even though about 80% of the state's precipitation falls on the West Slope³ Post-2026 operating guidelines are still unsettled, so utilities are planning capital against a supply number that isn't final.

DEMAND — GROWTH & THE GAP

A widening gap between supply and a growing state

The Colorado Water Conservation Board projects a municipal and industrial supply gap of 240,000 to 740,000 acre-feet a year by 2050 under drier scenarios, and puts the cost of meeting the state's future water demands at roughly \$20 billion¹

The state has committed real money — about \$389 million spent on Colorado Water Plan projects in 2022–2024 alone — but the CWCB still estimates it needs \$1.5 billion more over the next 30 years to deliver on the plan¹ Growth-driven supply projects compete for the same dollars as renewal and compliance, and the sequencing between them is exactly what boards fight over.

RENEWAL — AGING SYSTEMS

Fifty-year-old pipe, on a compliance clock

Colorado's drinking-water and wastewater systems carry roughly \$10.2 billion and \$4.7 billion in 20-year needs, respectively. The state's treatment plants and conveyance pipe average about 50 years old — the edge of their design life — and infrastructure earned a "C—" on the most recent ASCE report card.

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Renewal backlog doesn't pause while new mandates arrive. It stacks underneath them, and something on the list has to move.

COMPLIANCE — LEAD & PFAS

Lead lines and forever chemicals, now funded mandates

Denver Water alone estimates 60,000 to 64,000 homes may have a lead service line, and is running a multi-year Lead Reduction Program to replace them at no direct cost to customers.

PFAS is a live capital driver on the Front Range too. In El Paso County, the Fountain, Security, and Widefield systems shut down wells after firefighting-foam contamination linked to Peterson Space Force Base — one district recorded PFOS at 235 times the EPA's proposed limit — and the Air Force funded a \$9 million ion-exchange treatment plant in Fountain. New federal PFAS limits turn that from a local response into a statewide compliance program.

WHO RUNS COLORADO'S WATER

A municipal and special-district state, not an investor-owned one

Colorado's water is delivered overwhelmingly by city utilities and special districts, not private companies. That means most capital decisions are made and defended locally — in front of boards and ratepayers — not at a state rate commission.

Municipal & district providers

Rates set by city councils and elected district boards

Denver Water ~1.5M served · 324,422 accounts · 3,000+
mi of pipe⁴

Colorado Springs Utilities 450,000+ served · four-service
municipals⁸

Aurora Water 400,000+ residents served⁹

Northern Water ~1.1M served · 550,000+ irrigated acres¹⁰

Pueblo, Fort Collins, Boulder Large municipal water & sewer utilities

Hundreds of special districts Water & sanitation districts statewide

Denver Water is planning to invest roughly \$1.7 billion over 10 years in system maintenance, repair, and upgrades — funded entirely from rates, not taxes.¹²

Investor-owned & wholesale

The narrow slice the PUC actually rate-regulates

PUC-regulated IOUs Only a handful statewide (e.g. Dallas Creek, Keeton Ranch)¹¹

Colorado-Big Thompson Project 200,000+ acre-feet/yr wholesale via Northern Water¹⁰

Small & rural systems Where funding gaps hit hardest

Unlike most states, Colorado has almost no investor-owned water sector — the PUC does not regulate municipal systems, water districts, or water & sanitation districts.¹¹

Every capital dollar has to be defensible — usually to your own board

In Colorado, the accountability path runs through local governing bodies far more than a state commission. The question is still the same: why this project, why now, why at this cost?

Colorado PUC approves rates only for investor-owned water utilities — a very short list — and expressly does *not* regulate municipal systems, water districts, or water & sanitation districts¹¹

City councils & elected district boards set rates and approve capital plans for the vast majority of Colorado water customers — in public, in front of ratepayers.

CDPHE holds Safe Drinking Water Act primacy: lead service line inventories, the Lead and Copper Rule Revisions, PFAS monitoring, and the compliance capital that follows¹⁷

Colorado Water Conservation Board steers the Colorado Water Plan and the grant and loan money attached to it — a de facto driver of which supply projects move¹

The money is moving — can your plan absorb it?

Colorado utilities have more capital funding available than they've had in a generation. The constraint is no longer only dollars — it's readiness: which projects are shovel-ready, which qualify, and how the timing lines up with everything else on the list.

Drinking Water Revolving Fund — the CWRPDA/CDPHE program projected roughly \$170 million in 2025 loan capacity, with about \$82 million in Bipartisan Infrastructure Law money split across general supplemental, emerging contaminants (~\$13.4M), and lead service lines (~\$35M).¹³

Water Pollution Control (Clean Water) Revolving Fund — about \$97 million in 2025 loan capacity, including roughly \$18.2 million in BIL general supplemental and \$1.7 million for emerging contaminants¹⁴

\$32.8 million in dedicated BIL funding for identifying and replacing lead service lines in Colorado, announced in 2024¹⁵

\$91.5 million in DWSRF drinking-water funding flowed to Colorado in a single 2023 round, with set-asides for lead lines and PFAS¹⁶
Disadvantaged communities can qualify for 20–80% principal forgiveness.¹³

COLORADO WATER, IN BRIEF

Questions Colorado utility leaders are asking

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

How exposed is Colorado to the Colorado River shortage?

Deeply, and on both ends. The river starts in Colorado's mountains and supplies about 40 million people across the West; in 2026 Lake Powell was forecast to get just 13% of normal runoff, the lowest on record. The Front Range also imports more than 500,000 acre-feet a year of that water across the Continental Divide, so a drier river hits Colorado's own cities, not only downstream states²⁵

How big is Colorado's water funding gap?

The Colorado Water Conservation Board estimates it will cost roughly \$20 billion to meet the state's future water demands and projects a municipal and industrial supply gap of 240,000 to 740,000 acre-feet a year by 2050. On top of supply, the state carries about \$10.2 billion in 20-year drinking-water needs and \$4.7 billion in wastewater needs¹³

Does the Colorado PUC set my utility's water rates?

Almost certainly not. The PUC regulates rates only for a small number of investor-owned water companies. Municipal utilities — Denver Water, Colorado Springs Utilities, Aurora Water — and the state's many water and sanitation districts set their own rates through city councils and elected boards. Capital still has to be justified, just to a local body rather than a state commission¹¹

What funding is available for Colorado water infrastructure?

The Drinking Water Revolving Fund projected about \$170 million in 2025 loan capacity and the Clean Water fund about \$97 million, both boosted by Bipartisan Infrastructure Law dollars for general projects, lead service lines, and emerging contaminants like PFAS. Colorado also received a dedicated \$32.8 million for lead line replacement in 2024, and disadvantaged communities can qualify for 20–80% principal forgiveness³³¹⁵

How serious is PFAS in Colorado?

Serious enough to have already taken wells offline. In El Paso County, the Fountain, Security, and Widefield systems responded to firefighting-foam contamination tied to Peterson Space Force Base — one district measured PFOS at 235 times the EPA's proposed limit — and the Air Force funded a \$9 million treatment plant in Fountain. New federal PFAS limits will push similar compliance capital to systems across the state⁷

How does Invizion help Colorado water utilities plan capital?

Invizion is scenario-based capital portfolio optimization for water utilities. It lets you model how a deeper Colorado River cut, a funding award, or a new PFAS or lead deadline reshuffles your whole project list, re-sequence the portfolio automatically against the constraints you set, and keep a defensible record of every decision for your board, ratepayers, or CDPHE. 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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3. PCL Construction, citing EPA DWWSA and ASCE — Colorado 20-year needs of \$10.2B (drinking water) and \$4.7B (wastewater), “C–” grade, ~50-year-old pipe. pcl.com
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10. Northern Water — serves 1.1M+ residents and 550,000+ irrigated acres across eight counties; Colorado-Big Thompson Project delivers 200,000+ AF/yr. northernwater.org
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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 Colorado capital plan looks like — book a 20-minute first meeting.

Book your first meeting →