

South Carolina is growing faster than its pipes. Your capital plan has to catch up.

Coastal booms in Charleston and Myrtle Beach, an Upstate surge around Greenville, a court-ordered sewer overhaul in Columbia, PFAS on every community system, and a \$15.5 billion 20-year need — every one of those forces reshuffles the projects on your list. Invizion helps South Carolina utilities re-sequence a capital portfolio in a click, and defend every decision.

\$15.5B¹

South Carolina's 20-year drinking water + wastewater infrastructure need — \$8.1B drinking water, \$7.4B wastewater.

+21.8%²

Population growth in Horry County (Myrtle Beach) from 2020 to 2025 — among the fastest in the country.

\$1.47B³

ARPA-funded water & sewer grants awarded through South Carolina's SCILP program — 219 grants across all 46 counties.

\$750M⁴

Sewer-system overhaul the City of Columbia agreed to under its 2013 federal Clean Water Act consent decree.

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THE SOUTH CAROLINA 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.

DEMAND — GROWTH

Coastal and Upstate growth outrunning the system

South Carolina added residents faster than almost any state this decade — up 8.8% since the 2020 Census to about 5.57 million⁶. The pressure is not evenly spread. Horry County, home to Myrtle Beach, grew 21.8% in five years, and Charleston County added residents at 6.8%²⁵.

Every new service connection is a capacity commitment. Growth-driven capital — new mains, treatment expansions, lift stations — competes for the same dollars as renewal and compliance, and the sequencing between them is exactly what boards fight over.

COMPLIANCE — AGING SYSTEMS

Old collection systems, and a consent decree to prove it

The City of Columbia entered a federal Clean Water Act consent decree in 2013 requiring roughly \$750 million in sewer-system rehabilitation over about 12 years, plus a \$476,400 penalty and a \$1 million supplemental environmental project, to stop unauthorized overflows of raw sewage⁴.

Columbia is the visible case, not the only one. Aging clay and cast-iron mains, inflow-and-infiltration, and lead service lines sit on the books across the state — and federal SRF dollars now earmark about \$128 million specifically for lead line replacement¹.

QUALITY — PFAS

PFAS is now a statewide capital line item

From 2020 to 2023, the state sampled for PFAS at every Community Water System in South Carolina, building the baseline utilities now have to act on as federal limits take effect⁷.

Treatment for PFAS is expensive and long-lead. South Carolina has stood up an Emerging Contaminants grant channel for small and disadvantaged systems, but the capital sits alongside — not instead of — growth and renewal⁸.

AFFORDABILITY — THE CAPITAL GAP

A \$15.5 billion need on a ratepayer base that pushes back

South Carolina's drinking water and wastewater systems carry an estimated \$15.5 billion in 20-year needs — \$8.1 billion for drinking water and \$7.4 billion for wastewater¹.

New obligations don't replace the old backlog; they stack on top of it. With every rate increase scrutinized — investor-owned rate cases in particular draw organized opposition — the question is no longer just what to build, but what to build first, and how to defend the order¹⁰.

WHO RUNS SOUTH CAROLINA'S WATER

Large municipal and authority systems, a handful of regulated private providers

South Carolina's biggest metros and Lowcountry regions run their own water and wastewater systems through cities, commissions, and special-purpose authorities. A smaller set of investor-owned utilities is rate-regulated by the Public Service Commission. The pressures are shared; the accountability path differs.

Municipal & authority systems

Rates set by city councils, commissions & authority boards

Charleston Water System	Largest Lowcountry water & sewer provider — greater Charleston region
Greenville Water	750,000+ served · ~196,000 accounts · ~3,200 mi of pipe ⁹
City of Columbia	Regional water & sewer · under federal consent decree ⁴
Mount Pleasant Waterworks	Fast-growing coastal Charleston-area system
Beaufort-Jasper Water & Sewer Authority	Lowcountry regional authority
Spartanburg Water & Upstate systems	Growing Upstate municipal providers

Investor-owned & small systems

Rates & capital recovery regulated by the PSC of South Carolina

Blue Granite Water Company	~28,000 customers · formerly Carolina Water Service ¹⁰
Kiawah Island Utility & other IOUs	PSC-regulated private providers ¹¹
Numerous small & rural systems	Special-purpose districts where funding gaps hit hardest

In its last major case, Blue Granite sought an approximate 50% increase (nearly \$12M on ~\$24M of revenue); the PSC approved about \$5M, and the South Carolina Supreme Court affirmed the outcome in part and reversed in part in 2021.¹⁰

Every capital dollar has to be defensible

Whether you answer to the Public Service Commission or a city council, the question is the same: why this project, why now, why at this cost? South Carolina's oversight bodies are asking it harder than ever.

Public Service Commission of South Carolina (PSC) regulates rates and capital recovery for investor-owned water and wastewater utilities such as Blue Granite Water and Kiawah Island Utility¹¹

Contested rate cases are the norm, not the exception — Blue Granite's ~50% request was cut to roughly a \$5M increase, with the return on equity set at 7.46% and the case fought up to the state Supreme Court.¹⁰

City councils, commissions & authority boards approve municipal and authority capital plans in public, in front of ratepayers — no PSC filing, but no less scrutiny.

SC Department of Environmental Services (SC DES, formerly DHEC) administers Safe Drinking Water Act compliance — PFAS monitoring, lead service line work, and the compliance capital that follows⁷

EPA & DOJ consent-decree oversight — Columbia's Clean Water Act decree shows how a compliance schedule can dictate a decade of capital sequencing.⁴

The money is moving — can your plan absorb it?

South Carolina 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.

~\$450M in federal State Revolving Fund water dollars has flowed to South Carolina since 2022 — about \$310M in Drinking Water SRF (including ~\$128M for lead lines) and ~\$141M in Clean Water SRF¹

\$1.47B in ARPA water & sewer grants awarded through the state's SCIFP program — 219 grants reaching all 46 counties, administered by the SC Rural Infrastructure Authority³

Emerging Contaminants (EC-SDC) grants — a dedicated SRF channel for PFAS and other emerging contaminants in small and disadvantaged communities, administered by SC DES⁸

Federal backstop — the Bipartisan Infrastructure Law put roughly \$43B into the SRFs nationally, including \$11.7B for the Drinking Water SRF, feeding South Carolina's annual capitalization¹²

SOUTH CAROLINA WATER, IN BRIEF

Questions South Carolina utility leaders are asking

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

How much does South Carolina need to invest in water infrastructure?

About \$15.5 billion over 20 years — \$8.1 billion for drinking water and \$7.4 billion for wastewater — against a population that grew 8.8% between 2020 and 2025. That gap is the backdrop for every capital decision in the state¹⁶

What is the Columbia sewer consent decree?

In 2013 the City of Columbia entered a federal Clean Water Act consent decree committing to roughly \$750 million in sewer-system rehabilitation over about 12 years, plus a \$476,400 civil penalty and a \$1 million supplemental environmental project, to eliminate unauthorized sewage overflows⁴

Who sets water rates in South Carolina?

The Public Service Commission of South Carolina regulates rates for investor-owned utilities such as Blue Granite Water and Kiawah Island Utility. Municipal and authority systems — Charleston Water System, Greenville Water, Columbia, and others — set rates through their own councils, commissions, and boards. Either way, capital spending has to be justified, and PSC cases in particular are heavily contested¹⁰

What funding is available for South Carolina water projects?

Roughly \$450 million in federal SRF water funding has reached South Carolina since 2022 (about \$310M Drinking Water SRF, ~\$128M of it for lead lines, and ~\$141M Clean Water SRF), and the state has awarded \$1.47 billion in ARPA-funded SCIP grants across all 46 counties. Dedicated Emerging Contaminants grants target PFAS in small and disadvantaged systems¹³

Is PFAS a concern for South Carolina utilities?

Yes. From 2020 to 2023 the state sampled for PFAS at every Community Water System in South Carolina, establishing the baseline utilities must now act on as federal limits phase in. Treatment is expensive and long-lead, and the capital competes directly with growth and renewal projects^{7,8}

How does Invizion help South Carolina water utilities plan capital?

Invizion is scenario-based capital portfolio optimization for water utilities. It lets you model how a growth surge, a consent-decree deadline, a PFAS mandate, or a funding award reshuffles your whole project list, re-sequence the portfolio automatically, and keep a defensible record of every decision for the PSC, your board, or ratepayers. 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. U.S. Census Bureau, QuickFacts — Horry County, SC: 427,551 (July 1, 2025 est.), +21.8% from the April 2020 Census (351,036). census.gov
3. South Carolina Rural Infrastructure Authority — SC Infrastructure Investment Program (SCIIP, ARPA-funded): 219 grants totaling \$1.469B across all 46 counties; \$1.7B in cumulative RIA grants, 2025. ria.sc.gov
4. U.S. EPA, "City of Columbia, South Carolina Clean Water Act Settlement" — 2013 consent decree: ~\$750M in sewer improvements over ~12 years, \$476,400 civil penalty, \$1M supplemental environmental project. epa.gov
5. U.S. Census Bureau, QuickFacts — Charleston County, SC: 436,200 (July 1, 2025 est.), +6.8% from the April 2020 Census. census.gov
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8. SC Department of Environmental Services, "State Revolving Fund (SRF) Program" — low-interest loans for drinking water, wastewater and stormwater, plus the Emerging Contaminants (EC-SDC) grant program for small/disadvantaged communities, administered with the SC RIA. des.sc.gov
9. Greenville Water, "About Us" — serves 750,000+ residents, ~196,000 accounts, ~3,200 miles of pipe (Table Rock & North Saluda reservoirs and Lake Keowee), operating since 1889. greenvillewater.com
10. South Carolina Supreme Court, "In re Application of Blue Granite Water Co.," Op. No. 28055 (Sept. 1, 2021) — ~28,000 customers; requested ~50% increase (nearly \$12M on ~\$24M revenue); PSC approved ~\$5M; ROE set at 7.46%; affirmed in part, reversed in part. law.justia.com
11. Public Service Commission of South Carolina — regulates rates for investor-owned water and wastewater utilities; "Water and Wastewater Rates." psc.sc.gov
12. U.S. EPA, "Water Infrastructure Investments" (Bipartisan Infrastructure Law) — ~\$43B for the State Revolving Funds nationally, including \$11.7B for the Drinking Water SRF. epa.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 South Carolina capital plan looks like — book a 20-minute first meeting.

Book your first meeting →