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Defensibility checklist for water and wastewater utilities

25 questions to assess whether your capital plan will hold up to financial pressure, regulatory oversight, and board scrutiny.

How defensible is your capital plan?

Capital plans get tested at the worst possible moments: during rate proceedings, regulatory reviews, board presentations, and after an infrastructure failure. In those moments, 'the engineers decided' isn't enough. Decision-makers want traceability – data, methodology, and documented rationale.

This checklist helps you assess whether your capital planning process meets that standard. Work through each section honestly. The goal isn't to grade your team – it's to identify the gaps before someone else does.

How to use this checklist: Check each item your current process fully satisfies. Items you cannot check represent gaps to address. Review your results against the outcome guide at the end.

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- Data foundation
- Risk and prioritization methodology
- Financial and regulatory alignment
- Planning continuity and currency

Section 1: Data foundation

Capital decisions are only as defensible as the data behind them. This section evaluates whether your asset data is current, complete, and connected to your planning workflow.

☐	Our GIS data accurately reflects the current state of our network (pipe segments, materials, ages, and attributes) and is updated on a regular basis. *Outdated or incomplete GIS data is one of the most common sources of credibility gaps in capital planning presentations.*
☐	Inspection results (CCTV, condition assessments) are current for a material portion of our high-risk network, with a documented inspection cycle. *Regulators and boards frequently ask: when was this last inspected? If the answer is more than five years ago for high-risk assets, that gap is hard to defend.*
☐	Inspection data is directly connected to our risk model and capital prioritization, not stored in a separate system that requires manual reconciliation. *Manual data transfers introduce errors and create gaps between condition findings and capital decisions.*
☐	Condition scores follow a documented, consistent methodology that can be explained to someone outside our department. *Methodology consistency is essential for defensibility. Scoring that varies by inspector or by year undermines the credibility of your rankings.*
☐	We can identify which assets have not been inspected recently and have a plan to address those gaps. *Known data gaps are far more defensible than undiscovered ones as long as there's a documented plan to close them.*
☐	Our asset inventory is complete enough to support program-level capital analysis. We know what we have, where it is, and its approximate age and condition.

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Section 2: Risk and prioritization methodology

A defensible capital plan is built on a risk methodology that is documented, consistent, and explainable. This section evaluates whether your prioritization process can withstand scrutiny.

☐	We use a documented risk framework that combines likelihood of failure and consequence of failure to prioritize assets. *Risk-based prioritization is the current standard expected by regulators and boards.* *Point-based scoring without documented criteria is increasingly difficult to defend.*
☐	Our risk criteria (what constitutes high likelihood, high consequence) are defined in writing and applied consistently across the asset base. *If the criteria exist only in someone's head, they leave with that person.*
☐	We can explain why a specific project ranked above another in plain language, without having to reconstruct assumptions from a model or spreadsheet. *The board question 'why this project and not that one?' should have an answer that takes seconds, not days.*
☐	Our risk model reflects current condition data, not the results of the last inspection cycle or a study that is more than 12 to 18 months old. *A risk model based on outdated inspection data is a common audit finding and a significant credibility gap.*
☐	We have the ability to run alternative scenarios. For example, the impact of a budget cut or a change in regulatory priorities, without rebuilding the entire model. *Scenario flexibility is increasingly expected in board and regulatory presentations.*
☐	Our prioritization methodology has been reviewed and validated by qualified engineering staff, and that review is documented.
☐	We incorporate deterioration forecasting or remaining useful life estimates in our capital prioritization, not just current condition assessments. *Planning for future failure, not just current condition, is a hallmark of mature asset management programs.*

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Section 3: Financial and regulatory alignment

Capital plans must connect engineering priorities to financial reality. This section evaluates whether your plan holds up to the financial and regulatory scrutiny it will face.

☐	Our capital improvement plan is tied to a long-range financial plan that accounts for rate structures, debt capacity, and funding sources. *A capital plan disconnected from financial planning is an engineering document, not a decision-making tool.*
☐	We can trace specific capital line items back to inspection findings, risk scores, and documented engineering rationale. *Traceability is the foundation of a defensible capital budget request. 'This $4M project is in the plan because of this risk assessment, this inspection finding, and this deterioration projection' is a statement that holds up.*
☐	Our capital program can demonstrate that rate increases are grounded in documented infrastructure need, not just operational cost increases. *Rate proceedings increasingly require documentation of capital necessity. A connected planning environment provides this by default.*
☐	If our utility is under a consent decree or regulatory reporting requirement, our capital plan directly addresses the asset categories and timelines specified. *Failure to demonstrate alignment between a consent decree and capital program is both a compliance risk and a credibility risk.*
☐	Our capital plan has been reviewed by legal or regulatory counsel for consistency with applicable requirements.
☐	We can produce documentation of capital planning decisions within 48 hours if requested by a regulator or legal proceeding. *If retrieving your planning documentation requires more than a few hours of manual effort, your documentation infrastructure needs attention.*

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Section 4: Planning continuity and currency

A defensible capital plan doesn't just exist – it stays current. This section evaluates whether your planning environment can adapt as conditions change.

☐	Our capital plan is updated at least annually, and more frequently when new inspection data or operational events warrant it. *A plan that is updated once every three to five years is not a living planning tool. It is a historical document.*
☐	New inspection results are incorporated into our risk model and capital priorities within a reasonable timeframe after completion. *If an inspection reveals a high-risk cluster of assets in January, your capital priorities should reflect that before the board presentation in March.*
☐	Multiple members of our planning team have access to the capital planning environment and understand the methodology, it is not dependent on a single person. *Single-person dependency in capital planning is a risk that boards and auditors are increasingly aware of.*
☐	Our capital plan is accessible to engineering, operations, GIS, and leadership – all working from the same data, not different versions of a shared file. *Version control failures are a surprisingly common source of credibility problems in capital planning reviews.*
☐	When a capital plan is presented to the board or leadership, it reflects conditions and data current within the prior three months.
☐	*We have a documented process for updating the capital plan when significant events occur: infrastructure failures, regulatory changes, budget adjustments.*

Continue to next section >

Evaluate your results

Count the items you checked in each section, then use this guide to assess where your program stands and what to prioritize next.

Result	What it means
80% or more checked Solid foundation	Your capital planning process is well-structured and substantially defensible. Focus on the specific gaps you identified and ensure that your ability to produce evidence quickly under scrutiny is as strong as your methodology.
50%–79% checked Gaps to address	You have a meaningful foundation, but identifiable gaps that could create credibility problems under regulatory or board scrutiny. Prioritize connecting your data sources, documenting your methodology, and ensuring that your plan is updated more frequently. The areas with the lowest check rates are your highest-priority improvement targets.
Below 50% checked High risk of challenge	Your current capital planning process has significant vulnerabilities that could create serious credibility problems in a rate proceeding, regulatory review, or board challenge. We recommend a systematic review of your data infrastructure, risk methodology, and planning workflow. This is also the profile where a connected capital planning platform typically delivers the most rapid and tangible value.

Take the next steps >

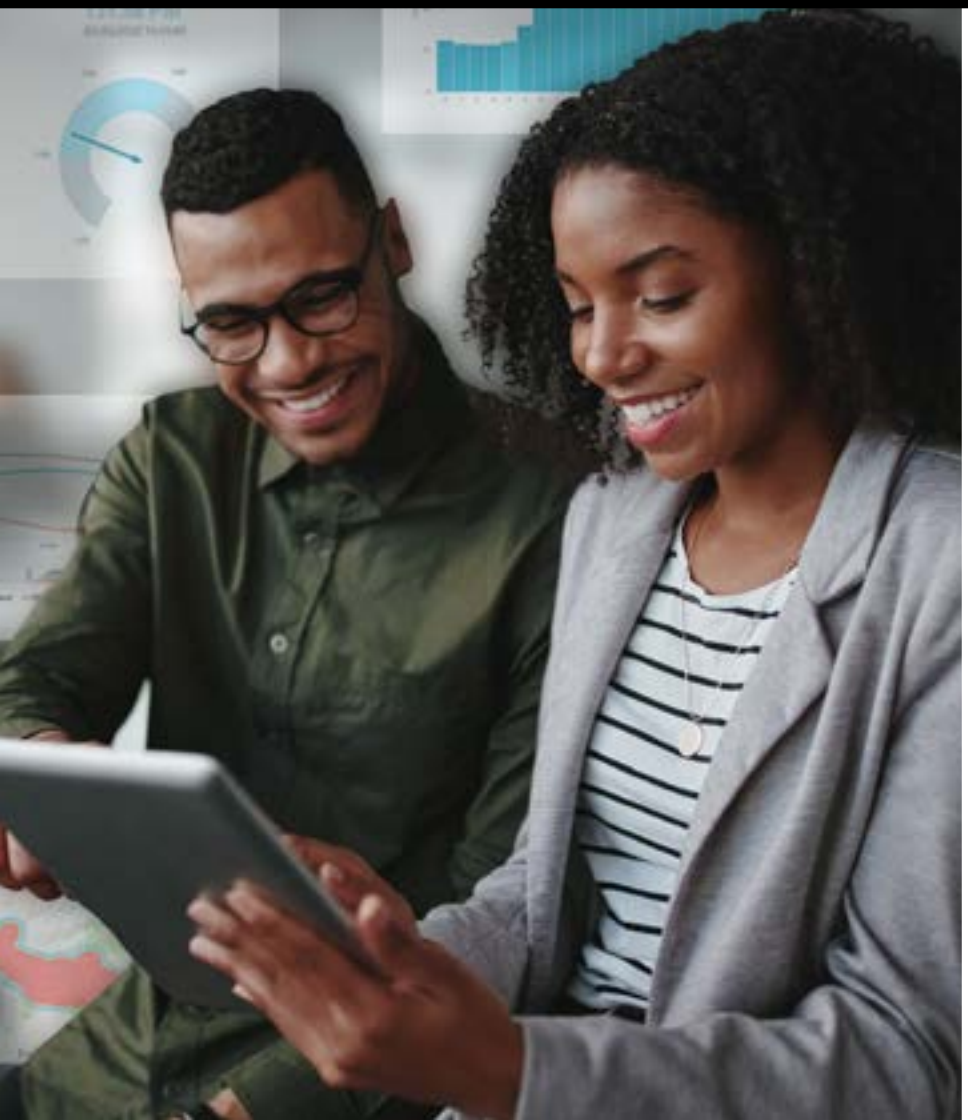
Defensible capital planning in practice

The gaps this checklist surfaces are not unusual. Most utilities have at least some of them, particularly around data connectivity, methodology documentation, and planning continuity. The utilities that close those gaps most effectively tend to share three characteristics:

Connected data environment. Inspection results, GIS, and risk modeling working from the same data, not separate systems that require manual reconciliation.

Documented methodology. A risk framework that is written down, consistently applied, and explainable to any stakeholder.

Continuous update discipline. A planning environment where new inspection data automatically refreshes risk scores and capital priorities to stay current.



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