



King County

1200 King County
Courthouse
516 Third Avenue
Seattle, WA 98104

Meeting Agenda Regional Water Quality Committee

Councilmembers:
Claudia Balducci, Chair
Reagan Dunn, Rhonda Lewis

Sound Cities Association: Vice Chair, Laura Mork, Shoreline; Dave Hamilton, Bellevue; Sarah Moore, Burien; Jessica Rossman, Medina

Alternates: Hanan Amer, Auburn; Melissa Stuart, Redmond

Sewer/Water Districts: Chuck Clarke, Woodinville Water District; Lloyd Warren, Sammamish Plateau Water District

Alternate: Ryika Hooshangi, Sammamish Plateau Water

City of Seattle: Joy Hollingsworth, Eddie Lin
Alternate: Rob Saka

Non-Voting Member: John McClellan, Metropolitan Water Pollution Abatement Advisory Committee

Lead Staff: Jenny Giambattista (206-477-0879)
Committee Clerk: Marka Steadman (206-477-0887)

3:00 PM

Wednesday, May 6, 2026

Hybrid Meeting

REVISED AGENDA

Hybrid Meetings: Attend the King County Council committee meetings in person in Council Chambers (Room 1001), 516 3rd Avenue in Seattle, or through remote access. Details on how to attend and/or to provide comment remotely are listed below.

Pursuant to K.C.C. 1.24.035 A. and F., this meeting is also noticed as a meeting of the Metropolitan King County Council, whose agenda is limited to the committee business. In this meeting only the rules and procedures applicable to committees apply and not those applicable to full council meetings.

HOW TO PROVIDE PUBLIC COMMENT: The Regional Water Quality Committee values community input and looks forward to hearing from you on agenda items.

	<p>Sign language and interpreter services can be arranged given sufficient notice (206-848-0355). TTY Number - TTY 711.</p> <p>Council Chambers is equipped with a hearing loop, which provides a wireless signal that is picked up by a hearing aid when it is set to 'T' (Telecoil) setting.</p>	
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The Committee will accept public comment on items on today's agenda in writing. You may do so by submitting your written comments to Committees@kingcounty.gov. If your comments are submitted before 2:00 p.m. on the day of the meeting, your comments will be distributed to the committee members and appropriate staff prior to the meeting.

HOW TO WATCH/LISTEN TO THE MEETING REMOTELY: There are three ways to watch or listen to the meeting:

- 1) Stream online via this link: www.kingcounty.gov/kctv, or input the link web address into your web browser.
- 2) Watch King County TV on Comcast Channel 22 and 322(HD) and Astound Broadband Channels 22 and 711(HD).
- 3) Listen to the meeting by telephone.

Dial: 1 253 215 8782

Webinar ID: 827 1536 1574

To help us manage the meeting, please use the Livestream or King County TV options listed above, if possible, to watch or listen to the meeting.

1. Call to Order

2. Roll Call

3. Approval of Minutes

*April 1, 2026, meeting minutes. **p. 4***

4. Chair's Report

5. MWPAAC Report

6. Wastewater Treatment Division Report

To show a PDF of the written materials for an agenda item, click on the agenda item below.



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Briefing

7. [Briefing No. 2026-B0064](#) **p. 8**

Briefing on Proposed Ordinance 2026-0066 Regarding Capacity Charge Methodology

Andy Micklow, Council staff

Jenny Giambattista, Council staff

Caitlyn Hall, Chief Financial Officer, Wastewater Treatment Division

Andrés Bas Moore, Rates & Financial Planning Supervisor, Wastewater Treatment Division

Luke Slaughterbeck, Senior Financial Analyst, Wastewater Treatment Division

8. [Briefing No. 2026-B0062](#) **p. 56**

Executive's Proposed 2027 Sewer Rate and Capacity Charge (Proposed Ordinance 2026-0103)

Caitlyn Hall, Chief Financial Officer, Wastewater Treatment Division

Kamuron Gurol, Director, Wastewater Treatment Division

9. [Briefing No. 2026-B0061](#) **p. 86**

Proposed Motion 2026-0038 acknowledging receipt of a plan describing the analysis to be completed for the policy questions identified in the Regional Wastewater Services Plan Update scope document as adopted by Regional Water Quality Committee Resolution 2025-02, prepared in accordance with the 2026-2027 Budget Ordinance, Ordinance 20023, Section 115, Proviso P1.

Jenny Giambattista, Council staff

Darren Greve, Government Relations, Wastewater Treatment Division

Janice Johnson, RWSP Project Manager, Wastewater Treatment Division

10. [Briefing No. 2026-B0063](#) **p. 174**

Briefing Regional Wastewater Services Plan Update Policy Questions Initial Analysis
Group 3: Asset Management and Renewal

Darren Greve, Government Relations, Wastewater Treatment Division

Janice Johnson, RWSP Project Manager, Wastewater Treatment Division



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- 11. [Briefing No. 2026-B0002](#) **p. 230**

Discussion of 2026 Regional Water Quality Committee Work Program

Jenny Giambattista, Council staff

Other Business

Adjournment



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Meeting Minutes Regional Water Quality Committee

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Non-Voting Member: John McClellan, Metropolitan Water
Pollution Abatement Advisory Committee

Lead Staff: Jenny Giambattista (206-477-0879)
Committee Clerk: Marka Steadman (206-477-0887)

3:00 PM

Wednesday, April 1, 2026

Hybrid Meeting

DRAFT MINUTES

1. **Call to Order**

Chair Balducci called the meeting to order at 3:01 p.m.

2. **Roll Call**

Present: 14 - Balducci, Clarke, Dunn, Hollingsworth, Lewis, Moore, McClellan, Mork,
Rossman, Warren, Lin, Hooshangi, Amer and Stuart

Excused: 1 - Hamilton

3. **Approval of Minutes**

Commissioner Warren moved approval of the March 4, 2026, meeting minutes. There being no objections, the minutes were approved.

Chair's Report

Chair Balducci commented on the recent South Plant tour and addressed topics on the committee agenda.

MWPAAC Report

John McClellan, MWPAAC Chair, reported that the March 25th MWPAAC general meeting focused on the letter to the King County Executive regarding the rate trajectory, MWPAAC is interested in receiving RWQC input on the draft letter, and noted that the MWPAAC April general meeting will be Wed. April 29th.

Wastewater Treatment Division Report

Kamuron Gurol, Director, Wastewater Treatment Division (WTD), reported on the following: opportunities to discuss the 2027 sewer rate process and the provision of input to the King County Executive; WTD's continued work with MWPAAC on the refinement of WTD's process, increased transparency and additional predictability for the capital plan and the rate-setting process; the provision of briefings to RWQC members on the sewer rate; the process to select a consultant for third-party oversight of the sewer and capital work plan (CWP); activity related to the public engagement strategy for the CWP; the recent South Treatment Plant tour; activity at the North Mercer Enatai project; and an upcoming contractor outreach and networking event.

Briefing

4. [Briefing No. 2026-B0045](#)

Proviso Response and Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 2: Source Control and Legacy Pollution

Jenny Giambattista, Council staff, provided an introductory overview. Darren Greve, Government Relations, Wastewater Treatment Division (WTD); Erika Kinno, Environmental Programs Supervisor, WTD; and Debra Williston, Water Quality Program Manager, WTD; briefed the committee and answered questions from the members.

This matter was Presented

5. [Briefing No. 2026-B0046](#)

Wastewater Treatment Division's 2027 Sewer Rate and Capacity Charge Recommendations and Options

Chair Balducci commented on the status of the County Executive's transmittal and the option of sending a rate letter to the County Executive. Discussion ensued regarding what topics might be covered in the letter and how to proceed.

This matter was Presented

6. [Briefing No. 2026-B0034](#)

Briefing on Pending Ordinance Related to Proposed Capacity Charge Code Changes

Luke Slaughterbeck, Senior Financial Analyst, Wastewater Treatment Division, briefed the committee and answered questions from the members.

This matter was Presented

7. [Briefing No. 2026-B0002](#)

Discussion of 2026 Regional Water Quality Committee Work Program

Chair Balducci noted that there are no major changes this month. Plans for an August meeting are in progress.

This matter was Deferred

Other Business

There was no further business to come before the committee.

Adjournment

The meeting was adjourned at 4:57 p.m.

Approved this _____ day of _____

Clerk's Signature



King County

**Metropolitan King County Council
Regional Water Quality Committee**

STAFF REPORT

Agenda Item:	7	Name:	Jenny Giambattista and Andy Micklow
Proposed No.:	2026-B0064	Date:	May 6, 2026

SUBJECT

A briefing on Proposed Ordinance 2026-0066, which would amend King County Code 28.86.160, Financial Policies, to update the methodology that King County uses to calculate the capacity charge for new sewer connections.

SUMMARY

The proposed ordinance would update the methodology that King County uses to calculate the capacity charge for new sewer connections. The purpose of the capacity charge is to ensure that new customers pay the growth costs of expanding the wastewater system. The current methodology for calculating the capacity charge has been in place since 1999. In 2016, the King County Auditor reviewed the capacity charge program and recommended that the methodology be simplified and made more transparent.

Proposed Ordinance 2026-0066 would maintain the principle that growth pays for growth, but would make significant changes to the current code. It would remove most of the existing methodology and replace it with more broadly defined direction on how the charge would be calculated. Many of the proposed changes to the methodology are not explicitly included in the proposed ordinance language but have been explained through presentations to MWPAAC and RWQC, and in response to questions from Council staff. The staff report identifies policy considerations for the committee, largely related to the level of specificity and guidance for the proposed methodology that should be included in code.

The Executive's proposed 2027 sewer rate and capacity charge (Proposed Ordinance 2026-0103) are based on a capacity charge calculated using the methodology in this proposed ordinance.

Council staff analysis is ongoing.

BACKGROUND

System Development Charges. King County uses the term "capacity charges" to refer to system development charges (SDCs) for the sewer system. SDCs are one-time charges imposed on new and expanded development as a condition of water, sewer, and stormwater service so that such property developments pay their equitable share of the cost of the respective utility system.¹ According to Department of Commerce guidance, SDCs should be calculated and implemented on the core premise that growth should pay for growth. The authority that the RCW grants jurisdictions to impose SDCs is oriented toward recovering an equitable share of the costs of existing and future system facilities from new and expanded development, not to revenue generation.²

The basic SDC calculation determines a cost per unit by dividing eligible system facility costs by the applicable system capacity. Under traditional approaches, the unit cost is usually based on the average potential demand of a single-family residential customer.

There are three common methods used by jurisdictions in developing SDCs: the system buy-in approach, the incremental approach, and the average cost (or combined) approach.

- The *system buy-in approach* requires new or upsized connections to invest at a level similar to the average investment made by existing customers. DOC guidance notes that "this approach is most suitable when existing system facilities have capacity exceeding current customer demands, such as mature systems that are at or near full development and anticipate limited future growth."³
- The *incremental approach* calculates the cost of future system expansion facilities and assigns those costs solely to projected new incremental capacity units. DOC guidance notes that "this approach is most suitable for systems experiencing rapid growth and major system expansion needs."⁴
- The *average cost (or combined) approach* recognizes that the utility invests in system infrastructure to benefit both existing and future customers equally. With the average cost approach, existing assets and planned future capital are divided by the total customer base that the existing and planned infrastructure can serve. DOC guidance notes that "this approach is commonly used in Washington state because it results in generally moderate and stable SDC over time and provides a straightforward and equitable allocation of system costs between existing and new customers."⁵

Capacity Charge in State Code. RCW 35.58.570 gives metropolitan municipal corporations that provide sewage services, like King County, the authority to charge

¹ Washington State Department of Commerce, *Residential Proportional Impact Fees and System Development Charges Guidebook*, 12-1

² *Residential Proportional Impact Fees and System Development Charges Guidebook*, 12-1

³ *Residential Proportional Impact Fees and System Development Charges Guidebook*, 12-6

⁴ *Residential Proportional Impact Fees and System Development Charges Guidebook*, 12-7

⁵ *Residential Proportional Impact Fees and System Development Charges Guidebook*, 12-7

SDC. According to RCW 35.58.570.1, the capacity charge shall be based on the cost of the sewage facilities' excess capacity necessary to provide sewerage treatment for new users of the system. RCW 36.94.140 requires that the capacity charge rate be uniform within the same customer classification.

Capacity Charge Billed to New Customers by King County. King County funds wastewater system expansion through a combination of monthly sewer rates paid by all customers and a one-time capacity charge imposed on new connections to the system. The capacity charge is a charge in addition to sewer service billed to customers who connected to the sanitary sewage system on or after February 1, 1990.⁶

As a system development charge, the purpose of the capacity charge is to ensure that new customers pay the growth costs of expanding the wastewater system. Financial Policy 15(1)(b)⁷ states that "New customers shall pay costs associated with the portion of the existing wastewater conveyance and treatment system that serves new customers and costs associated with expanding the system to serve new customers. New customers shall pay these costs through a combination of the monthly sewer rate and the capacity charge. Such charges shall be designed to have growth pay for growth."

The capacity charge is triggered by connection to the sewer system, not an upfront development cost at the time of permitting.⁸ Unless a developer voluntarily pays the capacity charge, it becomes an additional cost that buyers will encounter when purchasing properties with new sewer connections. The capacity charge is billed directly to customers by King County, unlike the wholesale sewer rate. The capacity charge can be paid as a lump-sum upfront with a discount, or as a monthly charge amortized over 15 years. If a buyer purchases property with an outstanding capacity charge, the new buyer becomes responsible for the capacity charge payments.⁹

Existing Capacity Charge Methodology. The capacity charge is calculated, as defined in code,¹⁰ as:

$$\frac{(\text{Total System Costs} - \text{Rate Revenue from Existing Customers}) - \text{Rate Revenue from New Customers}}{\text{Number of New Customers}}$$

Total system costs include the costs to operate, maintain, and expand the wastewater system over the life of the RWSP.

Where King County:

1. Calculates what new growth will cost by subtracting rate revenue from existing customers from the total system costs
2. Subtracts what new customers will already pay in monthly rates

⁶ K.C.C. 28.84.050.O.1

⁷ K.C.C. 28.86.160.C

⁸ State statute does not allow the County to require up-front payment of the capacity charge by the developer.

⁹ Under K.C.C. 28.84.050.O.5, the capacity charge is the responsibility of the current owner. The department shall collect the capacity charge directly from the current legal property owner.

¹⁰ K.C.C. 28.86.160.C FP-15

3. Divides the remaining growth cost evenly across all new sewer connections.

Capacity charges are assessed based on the projected volume of domestic water consumption for a given structure type, expressed in Residential Customer Equivalents (RCE).¹¹ The proposed 2027 capacity charge is \$83.10 per residential customer equivalent (RCE) per month. This rate would go into effect for properties connecting to the sewer system on or after January 1, 2026.

Other County Policy Requirements. Under FP-15, the capacity charge cannot exceed the capital cost of facilities needed to serve new customers, at least 95 percent of projected growth-related capital costs (treatment, conveyance, biosolids capacity) must be allocated to new customers, each new customer should pay the same share regardless of the year they connect, and growth and cost projections must be updated every three years.

Additionally, FP-15 includes update provisions that customer growth and projected costs, including inflation, shall be updated every three years beginning in 2003, and that the County should periodically review the capacity charge to ensure that the actual costs of system expansion to serve new customers are reflected in the charge.

2020 Capacity Charge Rate Structure Update. In 2020, the King County Council adopted Ordinances 19153 and 19156 to restructure the capacity charge to align the amount charged according to size and type of housing as a proxy for the average number of persons accommodated by the housing type. Commercial connections continued to pay based on the number of fixtures, and discounts for low-income housing remained in place. These changes did not impact the methodology used to determine the total costs of growth.

Update to Projected Customer Numbers and Projected Capital Costs. The Regional Wastewater Services Plan (RWSP), covering 2003 through 2030, is the comprehensive plan for regional wastewater services and serves as the basis for projecting customer numbers, capital projects needed to maintain capacity, and financial assumptions for the capacity charge. K.C.C. 28.86.160 currently requires an update of customer numbers and projected capital costs used to calculate the capacity charge every three years. The last capacity charge update occurred in 2024 and covers the capacity charge calculations for 2025 and 2026.

2016 Auditor's Report. In 2016, the King County Auditor's Office reviewed whether current wastewater capacity charge practices ensure that new development pays for the costs of expanding the wastewater system: "does growth pay for growth?" The audit concluded that it is unclear whether growth is paying for growth for three reasons: a highly complex financial model, methodology choices that appear inconsistent with policy intent, and ambiguous financial policies.

1. Overly complex computer model: According to the audit, WTD relies on a highly complex capacity charge model that lacks transparency, cannot be independently verified, and is vulnerable to errors. The model's complexity

¹¹ K.C.C. 28.84.050.O.3

makes it difficult for decision-makers to confirm whether growth is actually paying for growth.

2. Methodology choices appear contrary to policy intent: The audit found two areas where the methodology used does not appear to align with the intent of Council-adopted policies. First, certain modeling assumptions effectively charge new customers interest on growth costs initially paid by existing customers, even though financial policies do not authorize charging interest. At the same time, the model likely underestimated pre-2003 growth costs, shifting costs away from new customers. These two issues have opposing effects on the capacity charge and partially offset each other, making it difficult to determine whether growth is paying the appropriate share of costs.
3. Ambiguous financial policies: Several sections of the County's financial policies are unclear or internally inconsistent. For example, policies requiring each new customer to pay an equal share of growth costs conflict with the current approach, under which customers pay different capacity charge amounts depending on the year they connect. According to the audit, in practice, the policy of growth paying for growth has consistently outweighed the policy that each new customer should pay an equal share. Additionally, one financial policy governing capital cost allocation appears to contain drafting errors that set a minimum of 95%, rather than a maximum, percentage of costs to be allocated to new customers. According to the report, using "minimum" in this section appears contrary to the legislative history. WTD reports that this language mirrors the language in the local contracts.

The audit concludes that without a simpler, more transparent approach, the County risks continued uncertainty and potential misallocation of hundreds of millions of dollars between new and existing customers. Key recommendations include simplifying the capacity charge model, aligning methodology with clarified policy intent, resolving policy ambiguities, and establishing regular independent reviews of the model.

Appendix 1 of the Auditor's Report provides a technical explanation of the computer model used by WTD to calculate the capacity charge, as well as an example of a simpler alternative approach for achieving the policy goal that growth pays for growth. The appendix focuses on the model's structure, methodology, and internal logic, and does not evaluate the accuracy of underlying assumptions or forecasts.

Auditor's Report Follow-up. The Executive concurred with almost all the audit findings and recommendations and noted that the desire for a simpler capacity charge approach is a long-held goal of WTD. In 2019 and 2022, the Auditor released follow-up reports tracking the progress of the seven recommendations. Prior to the transmittal of the proposed ordinance, most of the recommendations had not yet been implemented. The Auditor's Office reports that it plans to release a formal audit recommendation status report later this year.

Process to Update Capacity Charge Methodology. In 2020, WTD engaged a consultant to develop a new approach that is simpler and reflects current industry standards. In 2021, WTD briefed MWPACC on the consultant's findings in a series of

meetings. Later that year, WTD paused work on the capacity charge methodology review. WTD reports that in 2024, it requested that the consultant resume its work on revising the methodology for the capacity charge. WTD engaged with MWPAAC at least eight times over the last several years on the capacity charge methodology update. WTD reports that these discussions did not result in any substantive change to the recommended methodology.

ANALYSIS

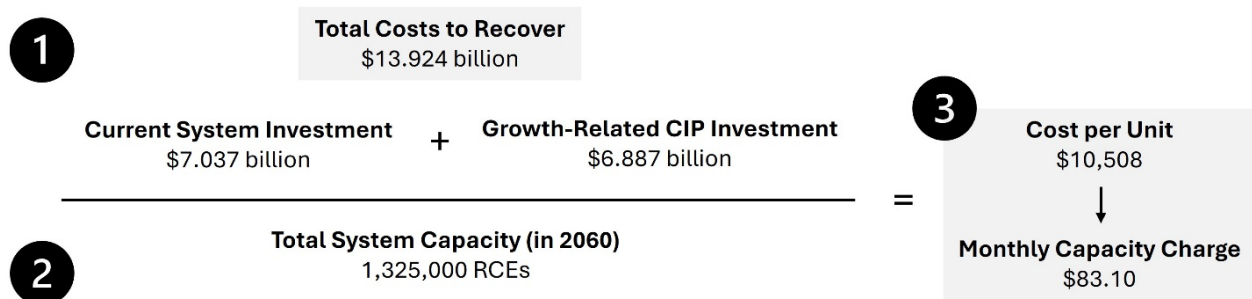
Summary of Changes to Proposed Methodology. The proposed approach would calculate the capacity charge using the average cost approach to system development costs, where "eligible system facility costs" are divided by the "applicable system capacity" to derive a cost per unit (RCE). Many of the proposed changes to the methodology are not explicitly included in the proposed ordinance language but have been explained through presentations to MWPAAC and RWQC, and in response to questions from Council staff.

1. *System facility costs* are not defined in the proposed ordinance, but according to WTD, industry practice defines them as the existing system cost, together with future system costs. Existing system cost is the amount that WTD has invested in the sewer system infrastructure used to provide service today.¹² Future system costs, also not defined in the proposed ordinance, are based on WTD's Capital Improvement Plan (CIP), preliminary long-range capital project needs, and the identification of the portion of those capital costs attributable to new customers (i.e., growth). Council staff have asked WTD the time period for which future costs are calculated.
2. WTD then determines the *total system capacity* of the existing and future system, in RCEs. Capacity charge RCEs are based on the amount of biochemical oxygen demand (BOD), or "load", from a single-family home, because loadings are the treatment constraint at each of the three major plants.
3. By dividing the eligible system facility costs by the total system capacity, the *cost per unit* is calculated. The monthly capacity charge is calculated by dividing the cost per unit over 15 years. In calculating the monthly charge, WTD reports that it applies a "discount" rate of 5.14 percent to the cost per unit to ensure that customers paying over time are not effectively being charged less than customers who pay in a lump sum.

¹² Adjusted to exclude ineligible items like the Vashon Island and Carnation treatment facilities, grant-funded assets, small equipment, and capitalized equipment, and to add allow carrying costs per RCW 35.58.570.

A sample capacity charge calculation is shown in Figure 1.

Figure 1.
Sample Capacity Charge Calculation¹³



Comparison of approaches. The proposed approach differs from the existing approach in how the cost assigned to new customers is calculated. The existing approach starts with total system costs, subtracts the portion expected to be recovered from existing customers through sewer rates, and then further subtracts the share that new customers will pay through those same rates. The remaining amount must be recovered through the capacity charge, which is then divided by the number of new customers. The existing approach relies on a complex computer model and WTD's long-term financial forecasts, including assumptions about rate revenues, customer growth, and system costs, to calculate the capacity charge.

The proposed approach would calculate the cost per unit by dividing the capital costs of existing facilities (the amount that WTD has invested in the sewer system infrastructure used to provide service today) and the facilities required to serve growth by the total system capacity, and applying that unit cost to new connections. The proposed approach would link the capacity charge to system capacity and capital investment in the wastewater system.

WTD reports that, with the proposed methodology, the capacity charge each year would increase by the Construction Cost Index (CCI). The CCI provision is not included in the proposed code changes.

Additionally, WTD reports that, with the proposed methodology, 100 percent of the projected capital costs for new and existing treatment, conveyance, and biosolids capacity needed to serve new customers will be allocated to new customers. Under the current approach, as allowed by code, WTD allocated 95 percent of these costs to new customers. Council staff have asked for additional clarification on this change.

Summary of Proposed Code Changes. The proposed update to the capacity charge methodology would be effectuated through changes to K.C.C. 28.86.160, Financial Policies. The proposed changes are focused on Policy FP-15 (Rates and Capacity Charges). Policies FP-1 through FP-14 and FP-16 through FP-18 are not proposed for amendment other than for technical changes.

¹³ Numbers in Figure 1 are from WTD's presentation on April 1, 2026 to RWQC.

The proposed changes to Policy FP-15 are summarized below. A matrix showing the changes by line number is included as Attachment 2 to this staff report.

Growth pays for growth (Lines 163 to 172, Line 230, and Lines 260 to 273). The adopted approach divides the costs of the wastewater system between existing customers and new customers. While most of the language providing guidance on how such costs are to be divided is maintained, the proposed ordinance would delete the language specifying that existing customers are responsible for the "portion of the existing and expanded conveyance and treatment system that serves existing customers," and new customers responsible for the "costs associated with the portion of the existing wastewater conveyance and treatment system that serves new customers and costs associated with expanding the system to serve new customers." This language effectuates the principle of growth pays for growth. This framing language is proposed for deletion, but the principle of growth paying for growth is retained on line 230.

Simplifies the capacity charge formula (Lines 190 to 230). The proposed ordinance would replace the capacity charge formula and definitions (Lines 206 to 226) with an approach that determines the capacity charge by dividing "eligible system facility" costs by the "applicable system capacity." "Eligible system facility costs" and "applicable system capacity" are not currently defined in the proposed ordinance.

Lines 229 to 230 of the proposed ordinance include language that the capacity charge calculation would "continue to be based on an accepted industry approach that produces a transparent charge and aligns with the principle of growth pays for growth." According to information presented to RWQC and MWPAAC, the capacity charge would be calculated using a combined approach to system development charges.¹⁴ A description and comparison of the proposed approach is provided in the next section of the staff report, Summary of Changes to Proposed Methodology.

The proposed ordinance would not modify the capacity charge rate structure in K.C.C. 28.84.050.O.3. which outlines the amount charged based on the size and type of structure or dwelling unit.

Changes update provisions (Lines 245 to 252). The triennial update requirement (2003 baseline), 2021/2024 transition deferral language, and periodic review requirement would be removed. They would be replaced by a new update cycle in the new capacity charge subsection on lines 194 to 196 of the proposed ordinance. The new requirement would have the Department of Natural Resources and Parks update the capacity charge "inputs and calculation at least every five years or when substantial system capacity investments are completed or updated."¹⁵

Connection to RWSP. The current code requires that the capacity charge be based on "costs, customer growth, and related financial assumptions used for the Regional Wastewater Services Plan" (lines 242 to 244). The proposed ordinance would require that the capacity charge be based on the "planned system capacity and costs provided

¹⁴ Department of Commerce guidance labels the combined approach as the "average cost approach."

¹⁵ System development charges are discussed in the Background section of the staff report.

for in the Regional Wastewater Services Plan adopted by Ordinance 13680" (lines 192 to 193). An update to the RWSP began in 2025, and transmittal to Council is estimated in 2029. When asked if any changes to the capacity charge approach are anticipated with the RWSP update, WTD reports that it "will reexamine capacity charge methodologies when updating calculations every five years. The Financial Policies, including those that govern the capacity charge, are part of the RWSP and will be reviewed per the RWSP Update schedule. There could be possible changes at that time."

Code-related Considerations for Councilmembers. Council staff analysis is ongoing. Council staff have identified a preliminary list of code-related considerations for councilmembers.

Reduced transparency in code. The proposed ordinance would delete the existing specific formula and replace it with broadly defined direction to "determine a cost per unit by dividing eligible system facility costs by the applicable system capacity...based on an accepted industry approach that produces a transparent charge and aligns with the principle of growth pays for growth" (Lines 227 to 230). Under the proposed ordinance, it is not possible to determine how growth costs are calculated without requesting the information from the division. By removing the formula from code, WTD could update assumptions and methods without Council approval.

Several terms in the proposed ordinance are not defined, including eligible system facility costs, system capacity, cost per unit, applicable system capacity, accepted industry approach, and transparent charge. In response to Council staff, WTD has provided definitions for these items.

Councilmembers may wish to consider whether additional details or definitions could be added to the proposed ordinance to ensure transparency and consistency.

Reduced scheduled updates and reviews. The proposed ordinance would reduce the required update intervals from three to five years or when substantial system capacity investments are completed or updated (lines 193 to 196). The proposed ordinance does not define the term "substantial system capacity investment." The proposed ordinance would also delete language requiring the County to periodically review the capacity charge to ensure that the actual costs of system expansion to serve new customers are reflected in the charge.

The proposed ordinance only specifies that the "capacity charge inputs and calculation" be reviewed periodically. It is unclear whether calculation would include the methodology or only re-running the model to derive a capacity charge cost per unit. WTD reports that DNRP will wholly review the capacity charge methodology at least every five years. However, according to WTD, there is a high likelihood that the overall methodology will be determined to still be optimal and only the inputs will eventually change. Councilmembers may wish to consider adding reporting or periodic review requirements to allow for Council oversight of the new approach after it is implemented.

Additional Considerations for Councilmembers. In addition to the code-related considerations identified above, council staff have also identified the following preliminary policy considerations.

Fiscal implications. The proposed ordinance does not set the capacity charge, and as such, the fiscal note shows no impact on WTD's revenue. The proposed ordinance would change the methodology used to determine the capacity charge, which could affect the capacity charge revenue recovery. Council staff have requested additional information on any potential revenue impacts.

Connection to 2027 Capacity Charge and Proposed 2027 Rate Ordinance. The Executive's proposed 2027 sewer rate and capacity charge assumes a capacity charge based on the methodology in the proposed ordinance. If the Council does not adopt the proposed ordinance, changes to the proposed sewer rate and capacity charge ordinance¹⁶ could be needed.

Does the Proposed Ordinance Address the 2016 Auditor's Report. Council staff requested that the Auditor review the proposed ordinance to better understand the extent to which the proposed ordinance addresses the concerns raised in the 2016 audit.

Review Schedule. The proposed ordinance was referred to the Budget and Fiscal Management Committee and the Regional Water Quality Committee as a mandatory dual referral. The schedule below has been agreed upon by the chairs of the committees.

**Table 2.
Review Schedule**

Action	Committee/Council	Date
Briefing	RWQC	May 6 th
Discussion Only	BFM	May 13 th
Discussion/Possible Action	BFM	May 27 th <i>Striker Distributed (if applicable) May 22nd</i> <i>Line Amendment Direction to Staff May 25th</i>
Discussion/Possible Action	RWQC	June 3 rd
Final Action	Full Council	June 16 th

INVITED

- Caitlyn Hall, Chief Financial Officer, Wastewater Treatment Division (WTD)
- Andrés Bas Moore, Rates & Financial Planning Supervisor, WTD
- Luke Slaughterbeck, Senior Financial Analyst, WTD

¹⁶ [Proposed Ordinance 2026-0103](#)

ATTACHMENTS

1. Proposed Ordinance 2026-0066
2. Proposed Code Changes Matrix
3. Transmittal Letter
4. Fiscal Note
5. WTD PowerPoint Capacity Charge Methodology Update April 1, 2026



KING COUNTY
Signature Report

ATTACHMENT 1
1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Ordinance

Proposed No. 2026-0066.1

Sponsors Balducci

1 AN ORDINANCE updating the capacity charge
2 methodology; and amending Ordinance 13680, Section 16,
3 as amended, and K.C.C. 28.86.160.

4 **STATEMENT OF FACTS:**

5 1. The council, as the legislative body of the metropolitan municipal
6 corporation, has authority to impose a capacity charge under RCW
7 35.38.570.

8 2. The capacity charge is based on the cost of capital facilities necessary
9 to provide wastewater treatment to new users of the system. Revenues
10 collected through the capacity charge must be used for construction of
11 wastewater facilities designed to protect water quality.

12 3. All structures connecting to a local wastewater collection system that
13 conveys wastewater flows to King County's regional wastewater system
14 since February 1, 1990, have been subject to a capacity charge.

15 4. The office of the King County auditor reviewed the methodology in
16 2016 and recommended developing a simpler and more transparent
17 approach to calculating the capacity charge, which would also allow for
18 independent and periodic review.

19 5. The wastewater treatment division ("WTD") engaged a consultant,
20 beginning in 2020, to prepare an updated capacity charge methodology

21 based on current industry-accepted practices and consistent with RCW
22 35.58.570.

23 6. Utility planning documents provide the system capacity and cost data
24 that informs calculation of a capacity charge.

25 7. The initial Clean Water Plan effort was underway in 2020 when WTD
26 initiated the consultant study and was to be the source of planning inputs
27 for the updated charge. When the Clean Water Plan was paused, the
28 methodology update was put on hold as well.

29 8. An update to the Regional Wastewater Services Plan ("RWSP") plan
30 began in 2025 and transmittal to the council is estimated in 2029. Interim
31 planning documents that identify conveyance and treatment plans out to
32 2060 will be used to source the capacity charge calculation inputs until the
33 updated RWSP is complete.

34 9. This ordinance's changes are necessary to update the capacity charge
35 methodology to reflect current industry practice. The capacity charge
36 methodology produces the cost of one Residential Customer Equivalent
37 ("RCE") of capacity in the system. The capacity charge rate structure then
38 determines how much of one RCE is charged to the residential property
39 connecting. This ordinance does not change the capacity charge structure.

40 10. The changes in this ordinance are consistent with the assumptions for
41 developing the executive's proposed 2027 Sewer Rate and Capacity
42 Charge that will be considered for action in spring 2026. The council
43 must adopt the sewer rate by June 30 each year in accordance with the

44 sewer contracts between WTD and local sewer agencies. The capacity
45 charge is historically adopted on the same timeline given the
46 interdependence of the revenue sources.

47 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

48 SECTION 1. Ordinance 13680, Section 16, as amended, and K.C.C. 28.86.160
49 are hereby amended to read as follows:

50 A. Under the King County Charter and RCW 35.58.200, these financial policies
51 are hereby adopted and declared to be the principal financial policies of the
52 comprehensive water pollution abatement plan for King County, adopted by the
53 Municipality of Metropolitan Seattle (Metro) in Resolution No. 23, as amended, and the
54 RWSP, a supplement to the plan.

55 B. Explanatory material.

56 1. Financial forecast and budget. Policies FP-1 through FP-10 are intended to
57 guide the county in the areas of prudent financial forecasting and budget planning and are
58 included to ensure the financial security and bonding capacity for the wastewater system.
59 This set of policies also addresses the county's legal and contractual commitments
60 regarding the use of sewer revenues to pay for sewer expenses.

61 2. Debt financing and borrowing. Policies FP-11 through FP-14 are intended to
62 guide the county in financing the wastewater system capital program. These policies
63 direct that capital costs be spread over time to keep rates more stable for ratepayers by the
64 county issuing bonds. A smaller share of annual capital costs will be funded directly
65 from sewer rates and sewer revenues and capacity charges.

66 3. Collecting revenue. Policies FP-15 through FP-17 are intended to guide King
67 County in establishing annual sewer rates and approving wastewater system capital
68 improvement and operating budgets. Monthly sewer rates, which are the primary source
69 of revenue for the county's regional wastewater system, are to be uniformly assessed on
70 all customers. Customers with new connections to the wastewater system will pay an
71 additional capacity charge. The amount of that charge is set by the council, within the
72 constraints of state law.

73 4. Community treatment systems. Policy FP-18 is intended to guide the county
74 in the financial management of community treatment systems.

75 C. Policies.

76 1. Financial forecast and budget.

77 FP-1: The county shall maintain for the wastewater system a multiyear financial
78 forecast and cash-flow projection of six years or more, estimating service growth,
79 operating expenses, capital needs, reserves and debt service. The financial forecast shall
80 be submitted by the executive with the annual sewer rate ordinance.

81 FP-2: If the operations component of the proposed annual wastewater system
82 budget increases by more than the reasonable cost of the addition of new facilities,
83 increased flows, new programs authorized by the council, and inflation, or if revenues
84 decline below the financial forecast estimate, a feasible alternative spending plan shall be
85 presented, at the next quarterly budget report, to the council by the executive identifying
86 steps to reduce cost increases.

87 FP-3: The executive shall maintain an ongoing program of reviewing business
88 practices and potential cost-effective technologies and strategies for savings and

89 efficiencies; the results shall be reported in the annual budget submittal and in an annual
90 report to the RWQC.

91 FP-4: New technologies or changes in practice that differ significantly from
92 existing technologies or practices shall be reported to the council and RWQC with
93 projected costs prior to implementation and shall also be summarized in the RWSP
94 annual report.

95 FP-5: Significant new capital and operational initiatives proposed by the
96 Executive that are not within the scope of the current RWSP nor included in the RWSP,
97 or are required by new state or federal regulations will be reviewed by the RWQC and
98 approved by the council to ensure due diligence review of potential impacts to major
99 capital projects' schedules, including Brightwater, the bond rating or the sewer rate and
100 capacity charge.

101 FP-6: The county shall maintain for the wastewater system a prudent minimum
102 cash balance for reserves, including, but not limited to, cash flow and potential future
103 liabilities. The cash balance shall be approved by the council in the annual sewer rate
104 ordinance.

105 FP-7: Unless otherwise directed by the council by motion, the King County
106 department of natural resources and parks or its successor agency shall charge a fee that
107 recovers all direct and indirect costs for any services related to the wastewater system
108 provided to other public or private organizations.

109 FP-8: Water quality improvement activities, programs and projects, in addition to
110 those that are functions of sewage treatment, may be eligible for funding assistance from
111 sewer rate revenues after consideration of criteria and limitations suggested by the

112 metropolitan water pollution abatement advisory committee, and, if deemed eligible,
113 shall be limited to one and one half percent of the annual wastewater system operating
114 budget. An annual report on activities, programs and projects funded will be made to the
115 RWQC. Alternative methods of providing a similar level of funding assistance for water
116 quality improvement activities shall be transmitted to the RWQC and the council within
117 seven months of policy adoption.

118 FP-9: The calculation of general government overhead to be charged to the
119 wastewater system shall be based on a methodology that provides for the equitable
120 distribution of overhead costs throughout county government. Estimated overhead
121 charges shall be calculated in a fair and consistent manner, utilizing a methodology that
122 best matches the estimated cost of the services provided to the actual overhead charge.
123 The overall allocation formula and any subsequent modifications will be reported to the
124 RWQC.

125 FP-10: The assets of the wastewater system are pledged to be used for the
126 exclusive benefit of the wastewater system including operating expenses, debt service
127 payments, asset assignment and the capital program associated therewith. The system
128 shall be fully reimbursed for the value associated with any use or transfer of such assets
129 for other county government purposes. The executive shall provide reports to the RWQC
130 pertaining to any significant transfers of assets for other county government purposes in
131 advance of and subsequent to any such transfers.

132 2. Debt financing and borrowing.

133 FP-11: The county shall structure bond covenants to ensure a prudent budget
134 standard.

135 FP-12: King County should structure the term of its borrowings to match the
136 expected useful life of the assets to be funded.

137 FP-13: The wastewater system's capital program shall be financed predominantly
138 by annual staged issues of long-term general obligation or sewer revenue bonds, provided
139 that:

140 All available sources of grants are utilized to offset targeted program costs;
141 Funds available after operations and reserves are provided for shall be used for
142 the capital program; excess funds accumulated in reserves may also be used for capital;

143 Consideration is given to competing demands for use of the county's overall
144 general obligation debt capacity; and

145 Consideration is given to the overall level of debt financing that can be sustained
146 over the long term given the size of the future capital programs, potential impacts on
147 credit ratings, and other relevant factors such as intergenerational rate equity and the
148 types of projects appropriately financed with long-term debt.

149 FP-14: To achieve a better maturity matching of assets and liabilities, thereby
150 reducing interest rate risk, short-term borrowing shall be used to fund a portion of the
151 capital program, provided that:

152 Outstanding short-term, variable rate debt comprises no more than twenty percent
153 of total outstanding revenue bonds and general obligation bonds; and

154 Appropriate liquidity is available to protect the day-to-day operations of the
155 system.

156 3. Rates - sewer rates and capacity charge.

157 FP-15: King County shall charge its customers sewer rates and capacity charges
158 sufficient to cover the costs of constructing and operating its wastewater system.
159 Revenues shall be sufficient to maintain capital assets in sound working condition,
160 providing for maintenance and rehabilitation of facilities so that total system costs are
161 minimized while continuing to provide reliable, high quality service and maintaining high
162 water quality standards.

163 1. ~~((Existing and new sewer customers shall each contribute to the cost of the~~
164 ~~wastewater system as follows:~~

165 a. ~~Existing customers shall pay through the monthly sewer rate for the portion~~
166 ~~of the existing and expanded conveyance and treatment system that serves existing~~
167 ~~customers.~~

168 b. ~~New customers shall pay costs associated with the portion of the existing~~
169 ~~wastewater conveyance and treatment system that serves new customers and costs~~
170 ~~associated with expanding the system to serve new customers. New customers shall pay~~
171 ~~these costs through a combination of the monthly sewer rate and the capacity charge.~~
172 ~~Such rates and charges shall be designed to have growth pay for growth.~~

173 2.)) Sewer rate. King County shall maintain a uniform monthly sewer rate
174 expressed as charges per residential customer equivalent for all customers.

175 a. Sewer rates shall be designed to generate revenue sufficient to cover ~~((, at a~~
176 ~~minimum, all)) the total annual costs of the system ((operation and maintenance and all~~
177 ~~capital costs incurred to serve existing customers)) after adjusting for other revenue~~
178 ~~sources such as capacity charge, industrial waste surcharge, interest earnings, and other~~
179 ~~non-sewer rate revenue.~~

180 b. King County should attempt to adopt a multiyear sewer rate to provide
181 stable costs to sewer customers. If a multiyear rate is established and when permitted
182 upon the retirement by the county of certain outstanding sewer revenue bonds, a rate
183 stabilization reserve account shall be created to ensure that adequate funds are available
184 to sustain the rate through completion of the rate cycle. An annual report on the use of
185 funds from this rate stabilization account shall be provided annually to the RWQC.

186 c. The executive, in consultation with the RWQC, shall propose for council
187 adoption policies to ensure that adequate debt service coverage and emergency reserves
188 are established and periodically reviewed.

189 ~~((3-))~~ 2. Capacity charge.

190 a. The capacity charge shall be set such that each new or expanded connection
191 shall pay an equitable share of the cost of the system, as authorized in RCW 35.58.570.
192 The capacity charge shall be based upon the planned system capacity and costs provided
193 for in the Regional Wastewater Services Plan adopted by Ordinance 13680. The King
194 County department of natural resources and parks should update the capacity charge
195 inputs and calculation at least every five years or when substantial system capacity
196 investments are completed or updated.

197 b. The ~~((amount of the))~~ capacity charge per residential customer equivalent
198 shall be ((a uniform charge)) applied uniformly to each residential customer class
199 structure type based on an estimate of the average persons-per-household occupancy for
200 each such a residential customer class structure type.

201 c. The amount shall be approved annually and shall not exceed the cost of
202 capital facilities necessary to serve new customers. ~~((The methodology that shall be~~

203 applied to set the capacity charge is set forth in FP-15.3.a.)) Capacity charge structure
204 and senior resident, low income, and special purpose housing discount rates are governed
205 by KCC 28.84.050.O.

206 ~~((a.)) d. The capacity charge ((shall be based on allocating the total cost of the~~
207 ~~wastewater system (net of grants and other non rate revenues) to existing and new~~
208 ~~customers as prescribed in this subsection. The total system cost includes the costs to~~
209 ~~operate, maintain, and expand the wastewater system over the life of the RWSP. Total~~
210 ~~estimated revenues from the uniform monthly rate from all customers and capacity~~
211 ~~charge payments from new customers, together with estimated non rate revenues, shall~~
212 ~~equal the estimated total system costs. The capacity charge calculation is represented as~~
213 ~~follows:~~

214 Capacity = ~~———— [Total system costs — rate revenue from existing customers] ———— Rate~~
215 ~~revenue from new customers~~

216 Charge

217 ~~—————~~
218 ~~—————~~ Number of new customers

219 where:

220 ~~(1) total system costs (net of grants and other non rate revenues) minus rate~~
221 ~~revenue from existing customers equals costs allocated to new customers.~~

222 ~~(2) costs allocated to new customers minus rate revenue from new customers~~
223 ~~equals the total revenue to be recovered through the capacity charge.~~

224 ~~(3) total capacity charge revenue requirements divided by the total number of~~
225 ~~new customers equals the amount of the capacity charge to be paid by each new~~
226 ~~customer.~~

227 ~~b.) calculation shall determine a cost per unit by dividing eligible system~~
228 ~~facility costs by the applicable system capacity. This calculation shall continue to be~~
229 ~~based on an accepted industry approach that produces a transparent charge and aligns~~
230 ~~with the principle of growth pays for growth.~~

231 ~~e.~~ The capacity charge may be paid by new customers in a single payment or
232 as a monthly charge at the rate established by the council. The county shall establish a
233 monthly capacity charge by dividing that amount by one hundred eighty (twelve monthly
234 payments per year for fifteen years). ~~((The executive shall transmit for council adoption~~
235 ~~an ordinance to adjust the discount rate for lump sum payment. The executive shall also~~
236 ~~transmit for council adoption an ordinance to adjust the monthly capacity charge to~~
237 ~~reflect the county's average cost of money if the capacity charge is paid over time.~~

238 ~~e.)~~ ~~f.~~ King County shall pursue changes in state law to enable the county to
239 require payment of the capacity charge in a single payment.

240 ~~((d. The capacity charge shall be set such that each new customer shall pay an~~
241 ~~equal share of the costs of facilities allocated to new customers, regardless of what year~~
242 ~~the customer connects to the system. The capacity charge shall be based upon the costs,~~
243 ~~customer growth, and related financial assumptions used for the Regional Wastewater~~
244 ~~Services Plan adopted by Ordinance 13680 as such assumptions may be updated.~~
245 ~~Customer growth and projected costs, including inflation, shall be updated every three~~
246 ~~years beginning in 2003. For only the update of customer growth and projected costs~~

247 ~~scheduled for 2021 and anticipated for transmittal to the council with the proposed sewer~~
248 ~~rate in 2022, the update shall be deferred until the next annual sewer and capacity charge~~
249 ~~rate proposal following council approval of the Clean Water Plan as an update to the~~
250 ~~RWSP or 2024, whichever occurs earlier.~~

251 ~~e. The county should periodically review the capacity charge to ensure that the~~
252 ~~actual costs of system expansion to serve new customers are reflected in the charge.)) g.~~

253 All reasonable steps should be taken to coordinate the imposition, collection of and
254 accounting for rates and charges with component agencies to reduce redundant program
255 overhead costs.

256 ~~((f.))~~ h. Existing customers shall pay the monthly capacity charge established
257 at the time they connected to the system as currently enacted by K.C.C. 28.84.055. New
258 customers shall pay the capacity charge established at the time they connect to the
259 system.

260 ~~((g.))~~ i. To ensure that the capacity charge will not exceed the costs of
261 facilities needed to serve new customers, costs assigned and allocated to new customers
262 shall be at a minimum ninety-five percent of the projected capital costs of new and
263 existing treatment, conveyance and biosolids capacity needed to serve new customers.

264 ~~((h.))~~ j. Costs assigned and allocated to existing customers shall include the
265 capital cost of existing and future treatment, conveyance and biosolids capacity used by
266 existing customers, and the capital costs of assessing and reducing infiltration and inflow
267 related to the use of the existing conveyance and treatment capacity.

268 ~~((i-))~~ k. Capital costs of combined sewer overflow control shall be paid by
269 existing and new customers, based on their average proportionate share of total customers
270 over the life of the RWSP.

271 ~~((j-))~~ l. Operations and maintenance costs shall be paid by existing and new
272 customers in the uniform monthly rate, based on their annual proportionate share of total
273 customers.

274 ~~((k-))~~ m. Any costs not allocated in FP-15.3. ~~((f-, g-))~~ h., i. ~~((and))~~, j., k., and l.
275 shall be paid by existing and new customers in the sewer rate.

276 ~~((l-))~~ n. Upon implementation of these explicit policies, the Seattle combined
277 sewer overflow benefit charge shall be discontinued.

278 ~~((4-))~~ 3. Based on an analysis of residential water consumption, as of December
279 13, 1999, King County uses a factor of seven hundred fifty cubic feet per month to
280 convert water consumption of volume-based customers to residential customer
281 equivalents for billing purposes. King County shall periodically review the
282 appropriateness of this factor to ensure that all accounts pay their fair share of the cost of
283 the wastewater system.

284 FP-16: The executive shall prepare and submit to the council a report in support
285 of the proposed monthly sewer rates for the next year, including the following
286 information:

287 Key assumptions: key financial assumptions such as inflation, bond interest rates,
288 investment income, size and timing of bond issues, and the considerations underlying the
289 projection of future growth in residential customer equivalents;

290 Significant financial projections: all key projections, including the annual
291 projection of operating and capital costs, debt service coverage, cash balances, revenue
292 requirements, revenue projections and a discussion of significant factors that impact the
293 degree of uncertainty associated with the projections;

294 Historical data: a discussion of the accuracy of the projections of costs and
295 revenues from previous recent budgets, and

296 Policy options: calculations or analyses, or both, of the effect of certain policy
297 options on the overall revenue requirement. These options should include alternative
298 capital program accomplishment percentages (including a ninety percent, a ninety-five
299 percent and a one hundred percent accomplishment rate), and the rate shall be selected
300 that most accurately matches historical performance in accomplishing the capital program
301 and that shall not negatively impair the bond rating.

302 FP-17: Expenditures from the wastewater revenues to correct water pollution
303 problems caused by septic systems shall occur only if such expenditures financially
304 benefit wastewater system current customers when the additional monthly sewer rate
305 revenues from these added customers are considered.

306 FP-18: The cost of community treatment systems developed and operated in

307 accordance with WWSP-15 would not be subsidized by the remaining ratepayers of the
308 county's wastewater treatment system.

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Sarah Perry, Chair

ATTEST:

Melani Pedroza, Clerk of the Council

APPROVED this ____ day of _____, ____.

Girmay Zahilay, County Executive

Attachments: None

Proposed Ordinance 2026-0066 Changes by Line Number

Line Numbers	Change Type	Description	Old Text (struck)	New Text (underlined)
Lines 163 to 172	Deletion	Existing/new customer cost-split language deleted	"Existing and new sewer customers shall each contribute... a. Existing customers shall pay through the monthly sewer rate... b. New customers shall pay costs... growth pay for growth."	N/A
Lines 175 to 179	Replacement	Sewer rate cost coverage standard broadened	...at a minimum, all operation and maintenance and all capital costs incurred to serve existing customers	...the total annual costs of the system after adjusting for other revenue sources such as capacity charge, industrial waste surcharge, interest earnings, and other non-sewer rate revenue
Lines 190 to 196	Insertion	New capacity charge methodology subsection added; update provision added	N/A	The capacity charge shall be set such that each new or expanded connection shall pay an equitable share of the cost of the system, as authorized in RCW 35.58.570. The capacity charge shall be based upon the planned system capacity and costs provided for in the Regional Wastewater Services Plan adopted by Ordinance 13680. The King County department of natural resources and parks should update the capacity charge inputs and calculation at least every five years or when substantial system capacity investments are completed or updated.
Lines 197 to 200	Replacement	Capacity charge per-RCE unit made explicit; "uniform charge" phrasing revised	amount of the... a uniform charge	per residential customer equivalent... applied uniformly
Lines 202 to 205	Replacement	Internal policy reference replaced with cross-reference	The methodology that shall be applied to set the capacity charge is set forth in FP-15.3.a.	Capacity charge rate structure and senior resident, low income, and special purpose housing discount rates are governed by KCC 28.84.050.O.
Lines 206 to 230	Replacement	System cost definition removed and formula replaced with simplified unit-rate approach	...shall be based on allocating the total cost of the wastewater system (net of grants and other non rate revenues) to existing and new customers as prescribed in this subsection. The total system cost includes the costs to	calculation shall determine a cost per unit by dividing eligible system facility costs by the applicable system capacity. This calculation shall continue to be based on an accepted industry approach that produces a transparent

Line Numbers	Change Type	Description	Old Text (struck)	New Text (underlined)
			<p>operate, maintain, and expand the wastewater system over the life of the RWSP. Total estimated revenues from the uniform monthly rate from all customers and capacity charge payments from new customers, together with estimated non rate revenues, shall equal the estimated total system costs. The capacity charge calculation is represented as follows:</p> <p>Capacity Charge = [Total system costs - rate revenue from existing customers - rate revenue from new customers] / Number of new customers (plus sub-parts (1)(2)(3))</p>	<p>charge and aligns with the principle of growth pays for growth.</p>
<p>Lines 234 to 237</p>	<p>Deletion</p>	<p>Executive ordinance-transmittal sentences deleted</p>	<p>The executive shall transmit for council adoption an ordinance to adjust the discount rate for lump sum payment. The executive shall also transmit for council adoption an ordinance to adjust the monthly capacity charge to reflect the county's average cost of money if the capacity charge is paid over time.</p>	<p>N/A</p>
<p>Lines 240 to 250</p>	<p>Deletion</p>	<p>RWSP-based formula and triennial update requirement (2003 baseline; 2021/2024 transition) deleted</p>	<p>The capacity charge shall be set such that each new customer shall pay an equal share of the costs of facilities allocated to new customers, regardless of what year the customer connects to the system. The capacity charge shall be based upon the costs, customer growth, and related financial assumptions used for the Regional Wastewater Services Plan adopted by Ordinance 13680 as such assumptions may be updated. Customer growth and projected costs, including inflation, shall be updated every three years beginning in 2003. For only the update of customer growth and projected costs scheduled for 2021 and anticipated for transmittal to the council with the proposed sewer rate in 2022, the update shall be deferred until the next annual sewer and capacity charge rate proposal following council approval of the Clean Water Plan as an update to the RWSP or 2024, whichever occurs earlier.</p>	<p>N/A</p>

Line Numbers	Change Type	Description	Old Text (struck)	New Text (underlined)
Lines 251 to 252	Deletion	Periodic review provision deleted	The county should periodically review the capacity charge to ensure that the actual costs of system expansion to serve new customers are reflected in the charge.	N/A

**Executive Girmay Zahilay**

Chinook Building, CNK-EX-0800
401 Fifth Avenue, Suite 800
Seattle, WA 98104-2391

March 25, 2026

The Honorable Sarah Perry
Chair, King County Council
Room 1200
COURTHOUSE

Dear Councilmember Perry:

This letter transmits a proposed Ordinance that would, if enacted, update the County's methodology for calculating the capacity charge for new sewer connections to align with current industry standards. Approval of this proposed legislation will ensure the capacity charge continues to implement the principle of growth pays for growth consistent with King County Code 28.86.160 Financial Policy-15 while providing a transparent, simpler calculation for administrative purposes and easier to understand for customers.

In 1990, new connections to sewer began paying a capacity charge to fund the capital infrastructure necessary to handle added flow coming into King County's regional wastewater treatment system from growth in the region. The current methodology used to calculate the capacity charge has been in place since the adoption of the Regional Wastewater Services Plan (RWSP) (Ordinance 13680) in 1999.

In 2016, the King County Auditor reviewed the capacity charge program and recommended the charge should be updated to a simpler, more transparent calculation. The Department of Natural Resources and Parks (DNRP) began the process to update the RWSP in 2019, including Financial Policy-15. This planning effort was paused to consider and respond to feedback on the process. In 2024, DNRP reinitiated the planning effort known now as the RWSP update. In the interim, DNRP engaged a consultant, Raftelis, to develop the proposed capacity charge methodology to respond to the Auditor's recommendations and align with current industry standards for connection charges.

The proposed methodology for calculating the capacity charge for new sewer connections in the proposed legislation ensures that each new or expanded connection pays an equitable share of the cost of the system, as authorized in Revised Code of Washington (RCW) 35.58.570. The capacity charge inputs and the calculation are to be updated at least every five years or when substantial system wastewater capacity investments are completed or updated.

DNRP sought input from the Metropolitan Water Pollution Abatement Advisory Committee, an advisory committee consisting of representatives from local sewer agencies served by King County's regional

The Honorable Sarah Perry

March 25, 2025

Page 2

wastewater system, during the consultant study and the resulting consultant recommendation for an updated methodology.

Thank you for your consideration of this proposed Ordinance. This important legislation will help to modernize the capacity charge methodology, making it easier to calculate and more transparent for King County residents.

If your staff have questions, please contact Kamuron Gurol, Division Director, Department of Natural Resources and Parks, at 206-263-5767.

Sincerely,



for

Girmay Zahilay
King County Executive

Enclosure

cc: King County Councilmembers
 ATTN: Stephanie Cirkovich, Chief of Staff, King County Council
 Melani Hay, Clerk of the Council
Karan Gill, Deputy Executive, Office of the Executive
Jasmin Weaver, Chief of Staff, Office of the Executive
Sierra Howlett Browne, Government Relations Director, Office of the Executive
Garrett Holbrook, Council Relations Manager, Office of the Executive
John Taylor, Director, Department of Natural Resources and Parks

Ordinance/Motion: 20206-XXXX
Title: Capacity Charge Ordinance
Affected Agency and/or Agencies: Wastewater Treatment Division, Department of Natural Resources and Parks
Note Prepared By: Luke Slaughterbeck
Date Prepared: 02/25/2026
Note Reviewed By: Caitlyn Hall Elena Davert, Executive Office
Date Reviewed: 02/26/2026 3/11/2026

Description of request:

This legislation amends the capacity charge calculation methodology contained in K.C.C. 28.86.160 Section 3 and amends Ordinance 13680, Section 16, as amended, and K.C.C. 28.86.160. It removes the existing capacity charge calculation methodology and establishes WTD's ability to use an industry-standard approach when calculating the capacity charge. It does not impact existing capacity charge customers connecting in previous years, whose charges remain at rates established for their year of connection.

Revenue to:

Agency	Fund Code	Revenue Source	2026-27	2028-29	2030-31
Water Quality/WTD	4611	Capacity Charges	0	0	0
TOTAL			0	0	0

Expenditures from:

Agency	Fund Code	Department	2025	2026-2027	2028-2029
Water Quality/WTD	4611	Capacity Charges	0	0	0
TOTAL			0	0	0

Expenditures by Categories

	2025	2026-2027	2028-2029
	0	0	0
TOTAL	0	0	0

Does this legislation require a budget supplemental? No

Notes and Assumptions: This ordinance only updates the methodology itself, and does not establish a new capacity charge for 2027. The 2027 capacity charge will be adopted along with the 2027 sewer rate before July 1, 2026.

Capacity Charge Methodology Update

Regional Water Quality Committee

April 1, 2026

Existing Capacity Charge Background

- 1999 Robinswood Agreement established guiding principles to manage wastewater through **2030**

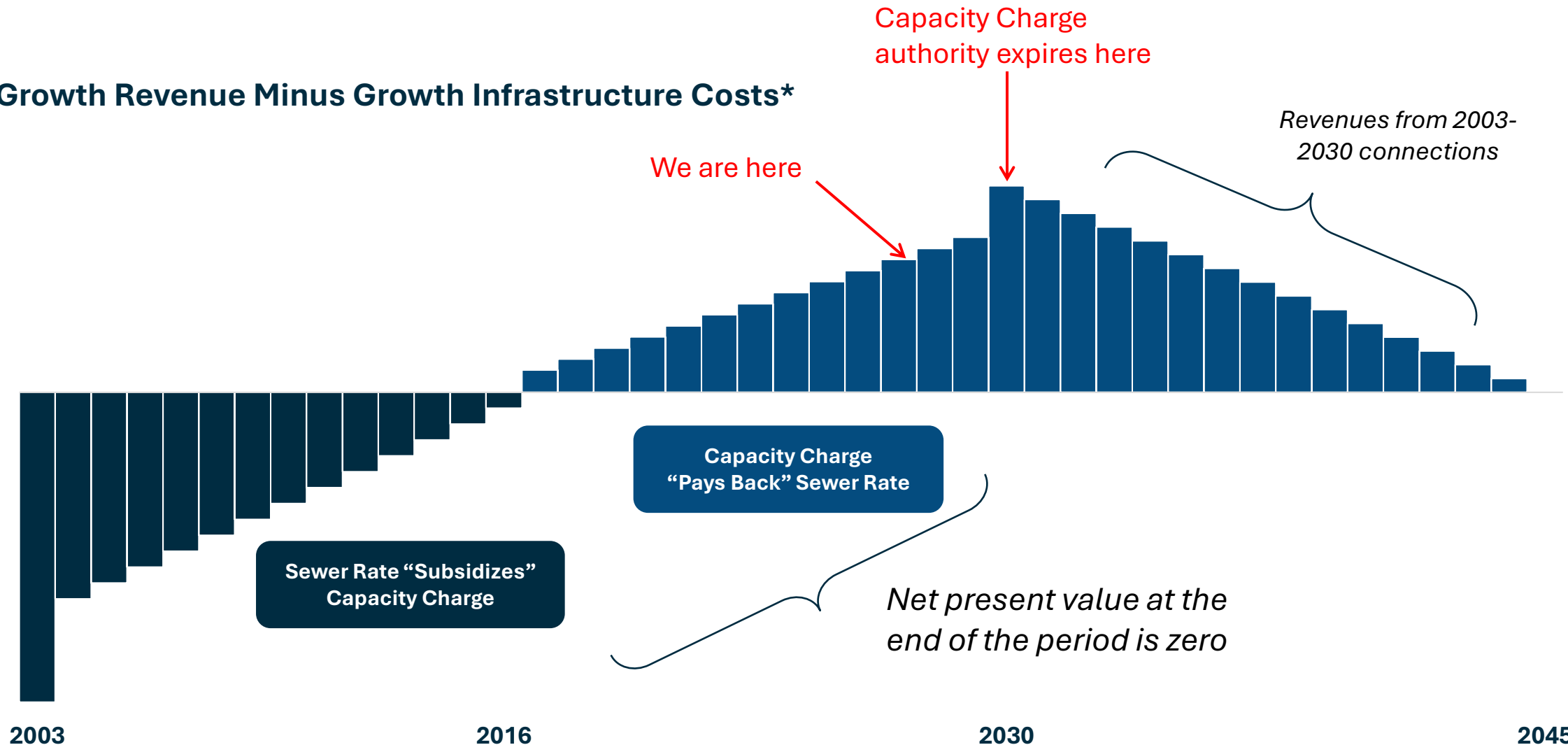
“The regional wastewater financing structure should reflect uniform regional rates for existing and new customers and achieve the principle of “growth pays for growth.”

What is the capacity charge?

- A separate charge assessed on development that results in new connections to the sewer system
- Billed by and paid to King County in addition to the regular monthly sewer rate over 15-year timeframe, unlike other similar charges
- How it works:
 1. Growth-related costs are identified
 2. Monthly rate revenue from growth customers is calculated
 3. Capacity charge is set to cover any shortfall from rate revenues
 4. Includes discount rate for payment upfront

How existing methodology implements “growth pays for growth”

Growth Revenue Minus Growth Infrastructure Costs*



2003

2016

2030

2045

Why Change Methodology?

- We're now 26 years into a 30-year Regional Wastewater Services Plan (RWSP) – the system is different than it was in 2000
- RWSP Update in progress that will help identify capital needs over the next 40 years
- Practically, complex to keep track of existing v. growth-related costs and subject to volatility based on past performance and market conditions (discount rate)
- 2016 Auditor's report recommended a more transparent model

Goals of Methodology Update in Proposed Ordinance 2026-0066

- Aligned with Revised Code of Washington (RCW) Requirements
- Key concept in RCW 35.58.570 is “equitable share”
- Industry standard methodologies are aligned with the “equitable share” concept
- Accounts for current system investments and capacity, and future expanded capacity investments
- Based on the value of system assets (existing and future)
- Existing and future capacity will determine cost per Residential Customer Equivalent (RCE)
- More transparent and predictable calculation

Methodologies endorsed by water sector associations AWWA & WEF

- Buy-In Approach
 - Focuses on existing facilities with available capacity to serve new customers
 - Analysis based on fixed asset records
- Incremental Cost Approach
 - Focuses on additional facilities required to meet anticipated growth
 - Analysis based on capital improvement plan
- Combined Approach

System Development Charges

A *system development charge* (SDC) is a one-time charge paid by a new water system customer for system capacity. It is also assessed to existing customers requiring increased system capacity. The receipts from this charge are used to finance the development of growth-related or capacity-related water facilities and are an important funding/financing source for these facilities.

Although a one-time charge, SDCs are not always paid up front. Some states require utilities to offer an option to pay the SDC in installments if the fee is over a certain amount. Utilities often offer such an option with the potential for financing terms that allow for installment payments spread over several months or years.

The development of the appropriate level of SDCs provides utilities and policymakers with a cost-based analysis of the value of existing and planned capacity that is available or will be developed to serve and accommodate new capacity demands. By understanding the costs of providing capacity, policymakers can make an informed decision concerning the equity of allocating system capacity costs between existing and new customers.

Utilities make investments in capacity-related facilities that will provide service to new development in advance of when the new development occurs. Typically, the capacity-related facilities are constructed in fairly large increments, and the new customers that this capacity is intended to serve will typically connect to the system over many years. As a result of the size of the capacity expansion and the timing of when customers connect to the system, the timing of receipts generated from the SDCs is rarely synchronized with the construction of the capacity-related facility. Therefore, SDCs provide an equitable method for recovering the costs of system capacity additions from those who will use the increased capacity; although in most cases, some portion of the capacity-related costs must still be recovered from user rates and charges assessed to all customers due to the aforementioned timing issues.

In general, SDCs are based on the costs for major backbone infrastructure components that are necessary to provide service to all customers, including source-of-supply facilities, raw water transmission, treatment facilities, pumping facilities, storage tanks, and major treated-water transmission mains (e.g., "general benefit" facilities; see

Washington Dept. of Commerce endorses the average cost approach

- “The average cost approach acknowledges that the utility invests ... to benefit both existing and future customers equally.”
- “Commonly used ... because it results in generally moderate and stable SDC [System Development Charge] over time and provides a straightforward and equitable allocation of system costs between existing and new customers.”
- Equivalent to the combined approach

$$\frac{\text{(Existing system cost + future system cost - adjustment for asset retirement*)}}{\text{RWQC (Meeting Materials the system can serve)}} = \text{SDC per unit}$$



Capacity Charge

	Adopted	Proposed	Forecast			
Capacity Charge	2026	2027	2028	2029	2030	2031
Monthly Charge	\$77.99	\$83.10	\$85.86	\$88.71	\$91.65	\$94.69
Increase %	2.50%	6.55%	3.32%	3.32%	3.31%	3.32%
Increase \$	\$1.90	\$5.11	\$2.76	\$2.85	\$2.94	\$3.04
Annual Total	\$936	\$997	\$1,030	\$1,065	\$1,100	\$1,136
Total Payments (15 years)	\$14,038	\$14,958	\$15,455	\$15,968	\$16,497	\$17,044
Upfront Payment*	\$9,870	\$10,516	\$10,865	\$11,226	\$11,598	\$11,983

*Discount Rate of 5.14%

- WTD’s rate consultant (Raftelis) recalculated the proposed capacity charge based on industry standard methodology for 2027
- Broadly in line with previous charge
- Propose indexing capacity charge to Construction Cost Index (CCI)
- Will update after RWSP process results in new capital plans

Q & A

Luke Slaughterbeck, Financial Planning Senior Analyst
lslaughterbeck@kingcounty.gov



King County | Wastewater Treatment

Appendix: Summarized Charge Calculation

WTD has invested \$6.8 billion in sewer system infrastructure used to provide service today

Existing Facilities Purchase Costs (Millions \$)	Treatment Plants	Conveyance	CSO/Regulatory	General Plant
Interceptors and Lines	\$980	\$1,035	\$320	\$289
Buildings	1,504	265	325	27
Land	191	21	23	13
Machinery/Equipment	857	238	106	151
Building Improvements	55	24	25	61
Other Misc.	29	5	10	32
Total	\$3,619	\$1,591	\$810	\$819
Grand Total				\$ 6,839

The asset investment is adjusted as part of the System Buy-in calculation

- Exclude ineligible items:
 - Vashon Island and Carnation treatment facilities
 - Grant-funded or contributed assets
 - Small equipment and vehicles
 - Capitalized interest
- Add allowable carrying costs per RCW 35.58.570

(Millions \$)	All Assets
Total Assets	\$ 6,839
Capitalized Interest, Small Equipment, and Vehicles	(335)
Vashon and Carnation Treatment Plants	(52)
Grant-funded Assets	(431)
Debt Credit	(1,924)
Plus Carrying Cost	2,939
Grand Total	\$7,037

Capital Improvement Plan (CIP) and preliminary long-range capital project needs reflect \$6.9 billion in growth-related incremental costs through 2060

- Capital project sources:
 - 2019 Treatment Plant Flows and Loadings Study
 - 2017 Collection System Improvement Plan
- Projects designed to meet service requirements through 2060
- Project costs will ultimately be updated RWSP following the RWSP planning process

2025 Dollars (\$ Millions)	Est. Costs of Growth Projects	Growth Share of Cost
South WWTP	\$ 4,860	\$ 2,793
West WWTP	1,719	1,244
Brightwater WWTP	616	616
Conveyance System	3,675	2,235
TOTAL	\$ 10,870	\$ 6,887

Capital projects can address both renewal/replacement and capacity improvement. Engineering and planning identified the portion of each project that will serve future growth.

The Combined Approach uses the total costs to serve current and future system RCEs¹

- Current system investment and future capital projects are included in capacity fee calculations, like the average cost approach²
- The \$7.0 billion of investment in the existing system can serve approx. 910,000 RCEs
- The \$6.9 billion of growth-related CIP will serve approximately 415,000 new RCEs by 2060

1. The capacity charge RCE is based on a medium-sized, single-family home of 2.88 persons per household and an average loading per person of 0.15 lbs Biological oxygen demand (BOD) per month

2. Methodology recommended by the State Dept. of Commerce in "Residential Proportional Impact Fees and System Development

Guidebook"

Combined Approach Calculation

		Total Investments (Millions \$)		
		Current System Investment	Growth-Related CIP Investment	Total Costs to Recover
System Investment				
	Treatment Plants	\$ 3,994	\$ 4,653	\$ 8,647
	Conveyance	2,056	2,235	4,290
	CSO/Regulatory	987	-	987
Total	(a)	\$ 7,037	\$ 6,887	\$ 13,924
Total Available System RCEs (2060)				1,325,000
	Total Fee Per RCE	(a/b)		\$ 10,516
	Total Monthly Charge	(1)		\$ 83.10

(1) Per State law, the capacity charge is assessed monthly over 15 years. The monthly charge is calculated using the current early payoff discount rate.



King County

Wastewater Treatment

King County 2027 Sewer Rate Proposal

Regional Water Quality Committee Meeting

May 6, 2026

Key Takeaways

- Executive's 2027 rate proposal maintains:
 - **12.75%** rate increase forecast last year
 - Regulatory **compliance**
 - **High priority investments** in asset renewal and replacement and capacity projects
- Alternative scenarios that shift project timing were considered
 - Deferred asset renewal/replacement and capacity projects would add **risk with modest, near-term rate reductions** and higher long-term costs
- Review of regulatory requirements
 - Combined Sewer Overflow (CSO) consent decree, National Pollutant Discharge Elimination System (NPDES) permit, nutrient regulations
 - Evaluating tools under Clean Water Act, meeting with regulators
 - Requires **successful negotiations**, process may take some time
- WTD continuing to undertake variety of **cost containment** efforts

Sewer Rate and Capital Work Plan

- **Third-party independent review** of WTD's capital program to begin Q3 2026, King County Auditor's Office is project manager
- **Incorporating affordability** policy options and metrics into Regional Wastewater Services Plan Update
- **Advocating for federal support** for investments in Puget Sound
- Building on 2025 Utility Rate Summit and **collaborating with RWQC members** to develop next steps

Sewer Rate and Capital Work Plan continued

- **Two MWPAAC representatives will attend select WTD capital portfolio management meetings**
- **Provided rate briefings** for MWPAAC, City of Pacific, Seattle Public Utilities' Customer Review Panel, and City of Bellevue (scheduled)
- **Multi-year rate proposal for 2028-2029 will provide a longer timeline and further improved engagement and predictability** in the rate development process



King County

Wastewater Treatment

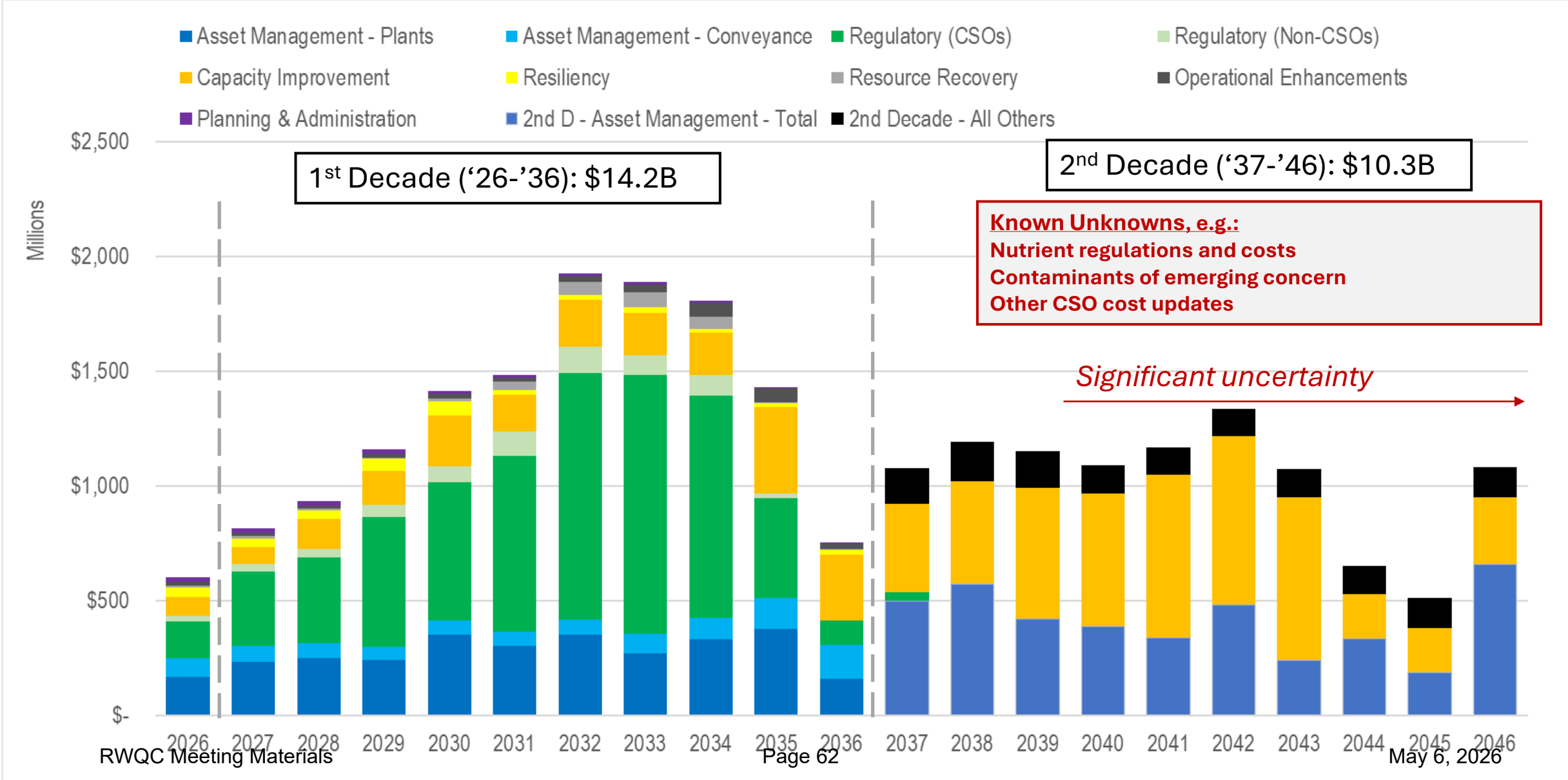
Executive's Proposed 2027 Rate and 10-Year Forecast

	Adopted	Proposed									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Rate Increase %	7.50%	12.75%	12.75%	12.75%	12.75%	11.25%	11.25%	8.00%	8.00%	8.00%	1.75%
Monthly Sewer Rate	\$62.66	\$70.65	\$79.66	\$89.82	\$101.28	\$112.68	\$125.36	\$135.39	\$146.23	\$157.93	\$160.70
Rate Increase \$	\$4.38	\$7.99	\$9.01	\$10.16	\$11.46	\$11.40	\$12.68	\$10.03	\$10.84	\$11.70	\$2.77
All-In Debt Service Coverage	1.62x	1.60x	1.74x	1.68x	1.60x	1.58x	1.61x	1.49x	1.51x	1.55x	1.55x

		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Rate Increase %		1.75%	3.75%	3.75%	3.75%	2.25%	2.25%	2.25%	0.50%	0.50%	0.00%
Monthly Sewer Rate		\$163.52	\$169.66	\$176.03	\$182.64	\$186.75	\$190.96	\$195.26	\$196.24	\$197.23	\$197.23
Rate Increase \$		\$2.82	\$6.14	\$6.37	\$6.61	\$4.11	\$4.21	\$4.30	\$0.98	\$0.99	\$0.00
All-In Debt Service Coverage		1.52x	1.54x	1.58x	1.61x	1.60x	1.63x	1.64x	1.66x	1.67x	1.69x

- Maintains the same rate for 2027 as forecasted last year: 12.75% increase to \$70.65 monthly
- Prioritizes regulatory compliance and critical, high-risk asset management projects, and assumes deferral of low-to-mid risk projects
 - Assumes completion of Combined Sewer Overflow (CSO) Consent Decree projects by 2037
 - Provides operational and staffing funding to support prioritized capital projects and ongoing operational and maintenance costs
- Continues the cash-funding approach based on depreciation with an average 27% cash funding of the Capital Improvement Program over 10-year forecast period

20-Year Rate Capital Forecast by Portfolio Category



2027 Sewer Rate Process Calendar

Agency	Date	Briefing
Executive Budget Office	1/29/2026	2027 WTD Preliminary Sewer Rate Proposal
Regional Water Quality Committee (RWQC)	2/4/2026	2027 WTD Preliminary Sewer Rate Proposal
MWPAAC Rates & Finance (R&F) Subcommittee	2/5/2026	2027 WTD Preliminary Sewer Rate Proposal
MWPAAC General meeting	2/25/2026	2027 WTD Preliminary Sewer Rate Proposal
Executive Team	2/26/2026	2027 WTD Sewer Rate Proposal
RWQC	3/4/2026	2027 WTD Sewer Rate Proposal
MWPAAC R&F	3/5/2026	2027 WTD Sewer Rate Proposal
Executive	3/19/2026	2027 WTD Sewer Rate Proposal
MWPAAC General Meeting	3/25/2026	2027 WTD Sewer Rate Proposal
Executive	3/26/2026	Tech Memo due to the Executive
RWQC	4/1/2026	Discussion on potential letter on sewer rate
County Council	4/23/2026	Executive transmitted 2027 Rate Proposal to Council
MWPAAC General Meeting	4/29/2026	Action on potential letter to KC Council
RWQC	5/6/2026	Briefing
RWQC	6/4/2026	Briefing
Budget and Fiscal Management (BFM) Committee	May 2026	Tentatively on May 13 and May 27 BFM agendas
County Council Approval Required by	7/1/2026	

Capacity Charge

	Adopted	Proposed	Forecast			
Capacity Charge	2026	2027	2028	2029	2030	2031
Monthly Charge	\$77.99	\$83.10	\$85.86	\$88.71	\$91.65	\$94.69
Increase %	2.50%	6.55%	3.32%	3.32%	3.31%	3.32%
Increase \$	\$1.90	\$5.11	\$2.76	\$2.85	\$2.94	\$3.04
Annual Total	\$936	\$997	\$1,030	\$1,065	\$1,100	\$1,136
Total Payments	\$14,038	\$14,958	\$15,455	\$15,968	\$16,497	\$17,044
Upfront Payment*	\$9,870	\$10,508	\$10,857	\$11,217	\$11,589	\$11,974

*Discount Rate of 5.14%

- WTD’s rate consultant (Raftelis) recalculated the capacity charge based on industry standard methodology for 2027
- Legislation (Proposed Ordinance 2026-0066) to implement the updated methodology is pending at King County Council
- New methodology would allow for indexing capacity charge to Construction Cost Index (CCI)
- Will update after RWSP process results in new capital plans

Wastewater Treatment Division (WTD’s) Sewer Rate and Capital Work Plan to Continue to Improve Engagement, Transparency, and Accountability – May 6, 2026, Status Update

Note: Changes from the last month’s update are in bold, blue font.

Major Recommendations from RWQC Letter	Wastewater Treatment Division Tasks	Working Timeline	Status
<p>1. Meaningful and Timely Engagement in Development of Sewer Rate. For the 2027 rate process and on-going, Wastewater Treatment Division (WTD) should implement an updated rate process that includes:</p> <ul style="list-style-type: none"> a. Regular discussions throughout the year with the Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC), Regional Water Quality Committee (RWQC), and King County Council at the relevant level of detail for each body on key factors and assumptions affecting the rate and forecast. This includes transparency on capital improvement program assumptions. b. Time for more in-depth review and understanding of costs, discussion of specific rate scenarios/options, and effects during rate discussions with MWPAAC, RWQC, and other stakeholders, at the relevant level of detail for each body. c. Ensure that the long-term rate forecast methodology requested by Motion 16449 is used to develop scenarios to evaluate options. 	<ul style="list-style-type: none"> • To promote meaningful and timely engagement, WTD will host regular meetings with MWPAAC and/or its subcommittees to review: <ul style="list-style-type: none"> • 10-year Capital Improvement Program. • Project prioritization, including transparency on how decisions are made and policy drivers of capital prioritization. • Timely updates on changes in large project costs that may impact rates as information becomes available. • Expenditure forecast assumptions and impacts to different types of projects across the capital program. • Work with King County Executive's Office to schedule early 'look ahead' presentations on known and potential factors affecting the 2027 rate proposal and forecast. • As part of the 2027 rate proposal, include options for multiple rate scenarios, including those that offer various capital portfolio options. Scenarios should detail tradeoffs and associated risks and benefits. This should include a discussion about the level of service WTD is able to deliver under each option. • The report on long-term forecasting model required by Motion 16449 was presented to RWQC in September 2025. To increase transparency and credibility in the long-term forecasting model, WTD will work with a MWPAAC work group to identify the model details that should be shared and further refined in order to improve understanding of the assumptions, formulas, data sets, and policy implications embedded in the long-term rate model and allow for 	<p>Q4 2025 and ongoing</p> <p>Q1/Q2 2026</p> <p>Q2 2026</p> <p>Q3 2025 and ongoing</p>	<p>Briefings provided on WTD’s capital project prioritization process and key capital projects impacting the rate in Q3/Q4 2025.</p> <p>“Look Ahead” briefings to MWPAAC scheduled for Q4 2025 and Q1 2026. WTD briefed MWPAAC on 1/28/26 on the rate strategy for 2027 and assumptions. WTD provided a preliminary sewer rate and capacity charge briefing to MWPAAC on 2/5/26 and 2/25/26, and a briefing on WTD’s proposed rate on 3/5.</p> <p>WTD presented preliminary scenarios for illustrative purposes to RWQC on 2/4/26 and MWPAAC Rates and Finance Subcommittee on 2/5/26, and as part of WTD’s proposed rate on 3/5/26. Two scenarios, in addition to the Executive’s proposed rate, are included in the Technical Memorandum transmitted to Council with proposed Ordinance 2026-0066.</p> <p>An independent consultant selected by MWPAAC members briefed MWPAAC on 1/28/26 and a video of the presentation can be found here. Further briefings on implementation of the long-term forecasting model will be provided to MWPAAC with an opportunity to suggest any further improvements to align with</p>

Wastewater Treatment Division (WTD's) Sewer Rate and Capital Work Plan to Continue to Improve Engagement, Transparency, and Accountability – May 6, 2026, Status Update

Note: Changes from the last month's update are in bold, blue font.

Major Recommendations from RWQC Letter	Wastewater Treatment Division Tasks	Working Timeline	Status
	<p>informed questions. The MWPAAC work group should identify areas of improvement to continue to align with industry best practices to inform suggestions for improvements.</p> <ul style="list-style-type: none"> Work with MWPAAC Executive Board member(s) to develop a process for members to observe WTD Capital Portfolio management staff meetings while not hampering WTD's process and progress. 	Q1/Q2 2026	<p>industry standards.</p> <p>WTD is engaged with MWPAAC's Executive Board to provide an opportunity to observe the Definition and/or Delivery Board meetings in the Portfolio Management process beginning in Q1 2026. MWPAAC's Executive Board selected two representatives to attend WTD Capital Portfolio management meetings beginning in Q2 2026.</p>
<p>2. Early visibility and transparency on large project planning. Develop mechanisms for MWPAAC and RWQC to engage in the planning and development process for large capital projects prior to decision-making to improve knowledge and confidence.</p>	<ul style="list-style-type: none"> Develop and implement a process for MWPAAC and RWQC (as requested) to review a limited number of large capital projects selected by MWPAAC that substantively affect the rate. These reviews will happen at key phases in the development of these selected projects, including concept definition, alternatives analysis, alternative selection, and final design. Each engagement will create an opportunity to influence outcomes by collaboratively discussing comments and questions with WTD before a decision in each phase identified above is finalized. 	Q1 2026	<p>MWPAAC representatives at WTD Portfolio management meetings will help inform MWPAAC members regarding WTD's process for project prioritization and decisions. The topic of alternatives analysis for selected projects will be revisited at the next MWPAAC Executive Board in Q2 2026.</p>
<p>3. Improve multi-year rate predictability. Develop options and implement a mechanism to improve rate predictability to help partner agencies better plan and lessen large changes in rate proposals, especially for the first three years of the rate. A multi-year rate would provide more time for an in-depth review and understanding of costs and how investments are prioritized, and discussion of options and tradeoffs.</p>	<ul style="list-style-type: none"> Prepare and deliver options for multi-year rate predictability, including options for a multi-year rate commitment. Options should be prepared in discussion with MWPAAC's Executive Board and partner agencies and in coordination with King County Executive's Office and county budget process. Any multi-year option should include a process for WTD to update the rate if there are significant changes that impact the rate forecast. 	Q3 2025 – Q2 2026 (Options identified by end 2025 and multi-year rate implementation by end of Q2 2027 for 2028 and 2029 rates)	<p>WTD began discussions with MWPAAC's Executive Board and King County's budget office in Q3/Q4 2025 on options for rate predictability. MWPAAC received an initial briefing and provided feedback on potential options at its 12/4/25, Rates and Finance Subcommittee meeting. Further discussion of options for rate predictability is planned for MWPAAC's Rates and Finance Subcommittee on June 4, 2026.</p>
<p>4. Evaluate regulatory requirements and develop options to</p>	<ul style="list-style-type: none"> Evaluate the costs/benefits of seeking regulatory changes to 	Q3 2025 – 2026	<p>WTD's Planning team is meeting in Q1</p>

Wastewater Treatment Division (WTD's) Sewer Rate and Capital Work Plan to Continue to Improve Engagement, Transparency, and Accountability – May 6, 2026, Status Update

Note: Changes from the last month's update are in bold, blue font.

Major Recommendations from RWQC Letter	Wastewater Treatment Division Tasks	Working Timeline	Status
<p>address financial sustainability. Evaluate consent decree and permit deadlines for major projects and investments associated with multiple and concurrent requirements and identify options to address financial sustainability while optimizing water quality benefits and maintaining permit compliance.</p>	<p>improve the environmental and financial sustainability of the regional system.</p> <ul style="list-style-type: none"> Coordinate on outreach plan with local agency partners, to state and federal government. The outreach plan should address regulatory issues and funding availability from state and federal agencies. 	<p>Q3 2025 – 2026</p>	<p>2026 and will coordinate with the King County Prosecuting Attorney's Office and County Executive's Office to evaluate potential regulatory changes.</p> <p>WTD is initiating outreach with its local agency partners on a federal/state outreach strategy. WTD and Seattle Public Utilities (SPU) coordinated on delegation meetings as part of Water Week (April 12 – 18, 2026) in Washington, D.C. Additionally, WTD is coordinating with City of Bellevue on key messages in advance of the city's D.C. trip in June 2026.</p>
<p>5. Independent, third-party oversight. Provide for independent third-party review for WTD's capital program, including <i>mega</i> capital projects such as the Mouth of Duwamish Combined Sewer Overflow Program.</p>	<ul style="list-style-type: none"> Develop a proposal in coordination with MWPAAC's Executive Board for review by the Executive's Office to procure an independent consultant to review WTD's capital program, including large capital projects. 	<p>Q4 2025 – Q2 2026</p>	<p>WTD provided an opportunity for MWPAAC's Executive Board to review the scope of work to procure an independent third-party consultant. The King County Auditor's Office has agreed to serve as the Project Representative. MWPAAC has selected a representative from its Executive Board to participate in the consultant proposal and interview process. The advertisement for the independent consultant contract opened on 2/10/26 and closed on 3/11/26. A consultant, <u>PMA Consultants</u>, has been selected and work is scheduled to begin in Q3 2026.</p>
<p>6. Regional Utility Affordability Summit. In partnership with local municipal leaders, prepare a multi-jurisdictional summit to address affordability and access to essential utilities.</p>	<ul style="list-style-type: none"> Work with RWQC, Sound Cities Association, Seattle, and sewer districts to bring a wastewater perspective to the development and planning of the regional utility affordability summit. Identify and implement resources to execute follow-up steps agreed upon at the summit. 	<p>Q3 2025 – Q1 2026</p> <p>Q4 2025-Q1 2026</p>	<p>The Regional Utility Rate Summit was held in SeaTac on November 14, 2025, with approximately 150 attendees. WTD participated in the Staff Committee and Steering Committee for planning the Summit and as a participant presenting at the Summit.</p> <p>Follow-up will be coordinated with participants, including a potential</p>

Wastewater Treatment Division (WTD's) Sewer Rate and Capital Work Plan to Continue to Improve Engagement, Transparency, and Accountability – May 6, 2026, Status Update

Note: Changes from the last month's update are in bold, blue font.

Major Recommendations from RWQC Letter	Wastewater Treatment Division Tasks	Working Timeline	Status
	<ul style="list-style-type: none"> Develop public engagement strategy for rate payers in coordination with local contract agencies to explain why wholesale WTD rates are increasing and provide opportunities for public engagement. 	Q1 2026	<p>second summit in 2026. Sound Cities Association (SCA) and County staff participated in a discussion with MWPAAC at its April 28 General Meeting to solicit input on next steps.</p> <p>WTD held two sessions in January 2026 with local agency public information officers and similar staff to gather feedback. The sessions included discussion of what local agencies are hearing from customers, more information on current outreach efforts, and ideas for coordination with WTD on rate messages. This feedback will inform WTD's communications strategy development in Q1/Q2 2026. WTD hosted a virtual meeting local agency public information staff on 4/28/26 and shared a communications tool kit for the proposed 2027 sewer rate. WTD's Director also participated in an interview with Bellevue TV regarding utility rates.</p>



KING COUNTY
Signature Report

ATTACHMENT 3
1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Ordinance

Proposed No. 2026-0103.1

Sponsors

1 AN ORDINANCE relating to rates and charges for sewage
2 treatment and disposal; and amending Ordinance 12353,
3 Section 2, as amended, and K.C.C. 4A.670.100, Ordinance
4 18745, Section 2, as amended, and Ordinance 11398,
5 Section 1, as amended, and K.C.C. 28.84.055.

6 BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

7 SECTION 1. Ordinance 12353, Section 2, as amended, and K.C.C. 4A.670.100
8 are hereby amended to read as follows:

9 A. Having determined the monetary requirements for the disposal of sewage, the
10 council hereby adopts a ((2026)) 2027 sewer rate of ((~~sixty-two~~)) seventy dollars and
11 ((~~sixty-six~~)) sixty-five cents per residential customer equivalent per month. Once a sewer
12 rate ordinance becomes effective, the clerk of the council is directed to deliver a copy of
13 that ordinance to each agency having an agreement for sewage disposal with King County.

14 B. The King County council approves the application of Statement No. 62 of the
15 Governmental Accounting Standards Board (GASB-62) as it pertains to regulatory assets
16 and liabilities to treat pollution remediation obligations and RainWise Program
17 expenditures and strategic planning costs as regulatory assets, recovered ratably over the
18 life of the underlying financing, and to establish a rate stabilization reserve for the
19 purpose of leveling rates between years.

20 C. As required for GASB-62 application, amounts are to be placed in the rate
21 stabilization reserve from operating revenues and removed from the calculation of debt
22 service coverage. The reserve balance shall be an amount at least sufficient to maintain a
23 level sewer rate between ~~((2026))~~ 2027 and ~~((2027))~~ 2028, and shall be used solely for
24 the purposes of: maintaining the level sewer rate in ~~((2027))~~ 2028; and if additional
25 reserve balance is available, moderating future rate increases beyond ~~((2027))~~ 2028. The
26 estimated amount of the reserve, as shown in the financial forecast, Attachment A to
27 ~~((Ordinance 19942))~~ this ordinance, shall be revised in accordance with the 2026-2027
28 Biennial Budget Ordinance and financial plan. If the reserve needs to be reduced to meet
29 debt service coverage requirements for ~~((2025))~~ 2026, the county executive shall notify
30 the council of the change by providing an updated financial plan.

31 SECTION 2. Ordinance 18745, Section 2, as amended, is hereby amended to
32 read as follows:

33 Monetary requirements for the disposal of sewage as defined by contract with the
34 component sewer agencies for the fiscal year beginning January 1, ~~((2026))~~ 2027, and
35 ending December 31, ~~((2026))~~ 2027. The council hereby determines the monetary
36 requirements for the disposal of sewage as follows:

37 Administration, operating, maintenance repair and replacement (net of other
38 income): ~~(((\$123,844,438))~~ \$133,892,543.

39 Establishment and maintenance of necessary working capital reserves:
40 ~~(((\$107,549,086))~~ \$159,543,545.

41 Requirements of revenue bond resolutions (not included in above items and net of
42 interest income): ~~(((\$360,794,645))~~ \$381,765,400.

43 TOTAL: (~~(\$592,188,168)~~) \$675,201,489.

44 SECTION 3. Ordinance 11398, Section 1, as amended, and K.C.C. 28.84.055 are
45 hereby amended as follows:

46 A. The amount of the metropolitan sewage facility capacity charge adopted by
47 K.C.C. 28.84.050.O. that is charged monthly for fifteen years per residential customer or
48 residential customer equivalent shall be:

49 1. Seven dollars for sewer connections occurring between and including January
50 1, 1994, and December 31, 1997;

51 2. Ten dollars and fifty cents for sewer connections occurring between and
52 including January 1, 1998, and December 31, 2001;

53 3. Seventeen dollars and twenty cents for sewer connections occurring between
54 and including January 1, 2002, and December 31, 2002;

55 4. Seventeen dollars and sixty cents for sewer connections occurring between
56 and including January 1, 2003, and December 31, 2003;

57 5. Eighteen dollars for sewer connections occurring between and including
58 January 1, 2004, and December 31, 2004;

59 6. Thirty-four dollars and five cents for sewer connections occurring between
60 and including January 1, 2005, and December 31, 2006;

61 7. Forty-two dollars for sewer connections occurring between and including
62 January 1, 2007, and December 31, 2007;

63 8. Forty-six dollars and twenty-five cents for sewer connections occurring
64 between and including January 1, 2008, and December 31, 2008;

65 9. Forty-seven dollars and sixty-four cents for sewer connections occurring
66 between and including January 1, 2009, and December 31, 2009;

67 10. Forty-nine dollars and seven cents for sewer connections occurring between
68 and including January 1, 2010, and December 31, 2010;

69 11. Fifty dollars and forty-five cents for sewer connections occurring between
70 and including January 1, 2011, and December 31, 2011;

71 12. Fifty-one dollars and ninety-five cents for sewer connections occurring
72 between and including January 1, 2012, and December 31, 2012;

73 13. Fifty-three dollars and fifty cents for sewer connections occurring between
74 and including January 1, 2013, and December 31, 2013;

75 14. Fifty-five dollars and thirty-five cents for sewer connections occurring
76 between and including January 1, 2014, and December 31, 2014;

77 15. Fifty-seven dollars for sewer connections occurring between and including
78 January 1, 2015, and December 31, 2015;

79 16. Fifty-eight dollars and seventy cents for sewer connections occurring
80 between and including January 1, 2016, and December 31, 2016;

81 17. Sixty dollars and eighty cents for sewer connections occurring between and
82 including January 1, 2017, and December 31, 2017;

83 18. Sixty-two dollars and sixty cents for sewer connections occurring between
84 and including January 1, 2018, and December 31, 2018;

85 19. Sixty-four dollars and fifty cents for sewer connections occurring between
86 and including January 1, 2019, and December 31, 2019;

87 20. Sixty-six dollars and thirty-five cents for sewer connections occurring
88 between and including January 1, 2020, and December 31, 2020;

89 21. Sixty-eight dollars and thirty-four cents for sewer connections occurring
90 between and including January 1, 2021, and December 31, 2021;

91 22. Seventy dollars and thirty-nine cents for sewer connections occurring
92 between and including January 1, 2022, and December 31, 2022;

93 23. Seventy-two dollars and fifty cents for sewer connections occurring between
94 and including January 1, 2023, and December 31, 2023;

95 24. Seventy-four dollars and twenty-three cents for sewer connections occurring
96 between and including January 1, 2024, and December 31, 2024;

97 25. Seventy-six dollars and nine cents for sewer connections occurring between
98 and including January 1, 2025, and December 31, 2025; ~~((and))~~

99 26. Seventy-seven dollars and ninety-nine cents for sewer connections occurring
100 between and including January 1, 2026, and December 31, 2026~~((=))~~; and

101 27. Eighty-three dollars and ten cents for sewer connections occurring between
102 and including January 1, 2027, and December 31, 2027.

103 B.1. In accordance with adopted policy FP-15.3.d. in the Regional Wastewater
104 Services Plan, K.C.C. 28.86.160.C., it is the council's intent to base the capacity charge
105 upon the costs, customer growth and related financial assumptions used in the Regional
106 Wastewater Services Plan.

107 2. In accordance with adopted policy FP- 6 in the Regional Wastewater Services
108 Plan, K.C.C. 28.86.160.C., the council hereby approves the cash balance and reserves as

109 contained in the attached financial plan for ((2026)) 2027, which is Attachment A to
110 ((~~Ordinance 19942~~) this ordinance).

111 3. In accordance with adopted policy FP-15.3.c., King County shall pursue
112 changes in state legislation to enable the county to require payment of the capacity charge

113 in a single payment, while preserving the option for new ratepayers to finance the
114 capacity charge.

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Sarah Perry, Chair

ATTEST:

Melani Pedroza, Clerk of the Council

APPROVED this ____ day of _____, _____.

Girmay Zahilay, County Executive

Attachments: A. Wastewater Treatment Division Financial Plan

Wastewater Treatment Division
Attachment A - Financial Forecast
Actual
2025
Budget
2026
Operating Financial Forecast - 4611 (\$ '000)

Monthly Sewer Rate	\$58.28	\$62.66
Rate Increase	5.75%	7.50%
Residential Customer Equivalents (RCEs)	782,424	792,053
Revenue		
Sewer Rate ¹	\$ 546,926	\$ 595,561
Capacity Charge	104,386	104,147
Industrial Waste	9,975	10,025
Resource Recovery	9,837	8,184
Other Income	4,224	4,000
Investment Income	30,175	37,198
Use (Transfer to) Rate Stabilization Reserve	-	-
Total - Revenue	\$ 705,523	\$ 759,115
Expenditures & Transfers		
O&M Expenses	\$ (218,707)	\$ (249,295)
Existing Debt Service	(274,273)	(304,063)
New Debt Service	-	(11,051)
Debt Retirement/ Defeasance Use of Cash	(99,473)	-
Transfer to Voluntary Reserve	(20,550)	-
Minimum Operating Reserve Contribution	(2,050)	(2,544)
Total - Expenditures & Transfers	\$ (615,052)	\$ (566,953)
Net Cash Flow	\$ 90,471	\$ 192,162
Beginning Balance	\$ 90,004	\$ 8,766
Net Cash Flow	90,471	192,162
Policy Cash-Funded Capital (Transfer to Capital Fund)	(170,000)	(200,928)
Ending Balance ²	\$ 10,475	\$ -
Ending Reserve Balances		
Water Quality Operating Liquidity Reserve	\$ 21,871	\$ 24,929
Voluntary Reserve	\$ 103,723	\$ 103,723
Rate Stabilization Reserve Account	\$ 46,250	\$ 46,250
Debt Service Coverage - Parity Bonds (Senior Lien)	3.59x	3.27x
Debt Service Coverage - All-In Debt Service	1.77x	1.62x

¹Sewer rate revenue includes a billing adj. of \$270k

²Difference between 2025 ending balance and 2026 beginning balance driven by reconciliation of ca

Capital Funding Forecast - 3611 & 3612 (\$ '000)

Beginning Balance	\$ 218,149	\$ 528,905
WIFIA Proceeds	33,792	20,484
State Loan Proceeds	43,865	18,796
Variable Rate Debt Proceeds	-	16,954

Commercial Paper / Interim Financing	126,000	106,768
Retirement of Interim Financing	(42,300)	(41,072)
Net Bond Proceeds	399,180	-
Debt Reserve Contribution/(Requirement)	-	-
Grants, Settlements, and Other	2,817	-
Capital Expenditures	(428,999)	(603,174)
Ending Balance Before Transfers	\$ 352,505	\$ 47,661
Year-end Transfers from Operating Fund	170,000	200,928
Ending Balance ³	\$ 522,505	\$ 248,589
Ending Reserve Balances		
Capital Liquidity Reserve / Capital Liquidity Threshold	40,000	40,000
Emergency Capital Reserve	15,000	15,000
Revenue Bonds Reserve Account	-	-
State Revolving Fund Reserve Account	219	176

³Difference between 2025 ending balance and 2026 beginning balance driven by reconciliation of ca

Note: Bond covenants are written to allow that in any given year, use of the Rates Stabilization Reserve basis for calculating bond coverage. This allows WTD to use reserves to smooth rate increases and c

Unit Conversion

1,000

Check

TRUE

2027	2028	2029	2030	2031
Rate Proposal	Projected	Projected	Projected	Projected
2027	2028	2029	2030	2031

	\$70.65	\$79.66	\$89.82	\$101.28	\$112.68
	12.75%	12.75%	12.75%	12.75%	11.25%
	796,416	801,374	806,340	811,316	816,300
\$	675,201	\$ 766,049	\$ 869,106	\$ 986,041	\$ 1,103,768
	111,253	117,245	122,689	128,147	133,791
	10,076	10,127	10,179	10,231	10,283
	8,430	8,683	8,943	9,211	9,488
	4,013	4,026	4,039	4,053	4,067
	22,229	20,819	21,860	22,811	23,348
	-	-	-	-	-
\$	831,202	\$ 926,949	\$ 1,036,816	\$ 1,160,494	\$ 1,284,745
\$	(267,664)	\$ (283,528)	\$ (299,973)	\$ (317,417)	\$ (333,056)
	(306,539)	(279,271)	(289,773)	(308,606)	(309,115)
	(44,850)	(90,906)	(147,965)	(219,777)	(295,010)
	-	-	-	-	-
	-	-	-	-	-
	(1,837)	(1,586)	(1,644)	(1,744)	(1,564)
\$	(620,890)	\$ (655,293)	\$ (739,356)	\$ (847,545)	\$ (938,746)
\$	210,312	\$ 271,656	\$ 297,460	\$ 312,949	\$ 345,999
\$	-	\$ (0)	\$ -	\$ -	\$ -
	210,312	271,656	297,460	312,949	345,999
	(210,312)	(271,656)	(297,460)	(312,949)	(345,999)
\$	(0)	\$ -	\$ -	\$ -	\$ -
\$	26,766	\$ 28,353	\$ 29,997	\$ 31,742	\$ 33,306
\$	103,723	\$ 103,723	\$ 103,723	\$ 103,723	\$ 103,723
\$	46,250	\$ 46,250	\$ 46,250	\$ 46,250	\$ 46,250
	2.81x	2.94x	2.85x	2.41x	2.24x
	1.60x	1.74x	1.68x	1.60x	1.58x

ash and accrual, timing of transfers between funds

\$	248,589	\$ 210,312	\$ 271,656	\$ 297,460	\$ 312,949
	20,636	-	-	-	-
	29,141	24,650	-	-	-
	63,708	62,222	110,013	128,580	165,534

93,853	-	-	-	-
(97,048)	-	-	-	-
456,780	636,515	778,925	988,124	1,006,316
43	43	-	-	65
-	-	-	-	-
(815,701)	(933,742)	(1,160,595)	(1,414,163)	(1,484,865)
\$ -	\$ -	\$ -	\$ -	\$ -
210,312	271,656	297,460	312,949	345,999
\$ 210,312	\$ 271,656	\$ 297,460	\$ 312,949	\$ 345,999
40,000	40,000	40,000	40,000	40,000
15,000	15,000	15,000	15,000	15,000
-	-	-	-	-
133	133	133	68	-

ash and accrual, timing of transfers between funds

erve can be recognized as revenue eligible for inclusion in the bond coverage calculation. In years 1
otherwise manage rate levels without compromising the ability to meet annual bond coverage tar

	2032	2033	2034	2035	2036
	Projected 2032	Projected 2033	Projected 2034	Projected 2035	Projected 2036
	\$125.36	\$135.39	\$146.23	\$157.93	\$160.70
	11.25%	8.00%	8.00%	8.00%	1.75%
	821,293	826,296	831,307	836,327	841,356
\$	1,235,488	\$ 1,342,466	\$ 1,458,744	\$ 1,584,974	\$ 1,622,472
	138,655	142,676	146,327	151,548	160,035
	10,335	10,388	10,441	10,494	10,548
	9,772	10,065	10,367	10,678	10,999
	4,082	4,097	4,113	4,129	4,145
	24,439	26,404	25,809	27,264	29,667
	-	-	-	-	-
\$	1,422,771	\$ 1,536,096	\$ 1,655,800	\$ 1,789,087	\$ 1,837,865
\$	(349,475)	\$ (366,713)	\$ (384,811)	\$ (403,813)	\$ (423,765)
	(280,090)	(284,976)	(255,211)	(243,297)	(246,462)
	(388,214)	(498,590)	(588,791)	(650,974)	(664,059)
	-	-	-	-	-
	-	-	-	-	-
	(1,642)	(1,724)	(1,810)	(1,900)	(1,995)
\$	(1,019,420)	\$ (1,152,002)	\$ (1,230,623)	\$ (1,299,985)	\$ (1,336,281)
\$	403,351	\$ 384,094	\$ 425,178	\$ 489,102	\$ 501,584
\$	-	\$ 0	\$ 0	\$ 0	\$ 0
	403,351	384,094	425,178	489,102	501,584
	(403,351)	(384,094)	(425,178)	(489,102)	(501,584)
\$	0	\$ 0	\$ 0	\$ 0	\$ 0
\$	34,947	\$ 36,671	\$ 38,481	\$ 40,381	\$ 42,377
\$	103,723	\$ 103,723	\$ 103,723	\$ 103,723	\$ 103,723
\$	46,250	\$ 46,250	\$ 46,250	\$ 46,250	\$ 46,250
	2.20x	1.92x	1.85x	1.95x	1.97x
	1.61x	1.49x	1.51x	1.55x	1.55x
\$	345,999	\$ 403,351	\$ 384,094	\$ 425,178	\$ 489,102
	214,327	-	-	-	-
	-	-	-	-	-
	173,415	262,185	221,620	240,414	173,062

-	-	-	-	-
(182,601)	(63,800)	-	-	-
1,377,362	1,288,242	1,200,066	761,342	86,831
68	-	-	-	-
-	-	-	-	-
(1,928,571)	(1,889,978)	(1,805,781)	(1,426,934)	(748,996)
\$ -	\$ -	\$ -	\$ -	\$ -
403,351	384,094	425,178	489,102	501,584
\$ 403,351	\$ 384,094	\$ 425,178	\$ 489,102	\$ 501,584
40,000	40,000	40,000	40,000	40,000
15,000	15,000	15,000	15,000	15,000
-	-	-	-	-
-	-	-	-	-

that WTD contributes to this reserve, that portion of revenue is deducted from the revenue gets.

**Executive Girmay Zahilay**

Chinook Building, CNK-EX-0800
401 Fifth Avenue, Suite 800
Seattle, WA 98104-2391

April 23, 2026

The Honorable Sarah Perry
Chair, King County Council
Room 1200
COURTHOUSE

Dear Councilmember Perry:

This letter transmits a proposed Ordinance that would, if enacted, set the 2027 monthly wholesale sewer rate and capacity charge. The proposed Ordinance increases the monthly sewer rate by 12.75 percent, from \$62.66 to \$70.65, and increases the capacity charge by 6.55 percent, from \$77.99 to \$83.10. An enclosed technical memorandum provides detailed information on the revenues, expenditures, debt service, operations, and capital programs that inform the rate development process. The technical memorandum also responds to Ordinance 20023, Section 115, P4, by providing two additional rate options with one option that is two percentage points lower than the proposed rate.

The proposed rate for 2027 is the first in several currently forecasted annual sewer rate increases driven primarily by capital projects needed to meet regulatory requirements, upgrade aging infrastructure, and meet population growth capacity contract obligations. Sufficient revenue is required to continue achieving the Department of Natural Resources and Parks (DNRP) Wastewater Treatment Division (WTD) mission of protecting water quality and human health. Along with maintaining regulatory compliance, the proposed 2027 sewer rate funds the proactive replacement of high-priority critical assets to prevent failure and expansion in support of new homes and businesses. These investments would also underscore the WTD's continued commitment to achieving tangible results for water quality and the environment across Puget Sound.

For the coming rate development period, I have directed staff to work with our partners on affordability strategies which include enhancing efforts to contain capital and operational costs, and to identify best practices in cost containment in collaboration with national associations. In 2026, WTD initiated an independent third-party review of its capital program. The King County Auditor's Office is managing this work which will be underway soon. In addition, we will continue to utilize low-interest loans for WTD capital

projects through the Washington State Revolving Fund, Washington Public Works Trust Fund, and the federal Water Infrastructure Finance and Innovation Act to lessen the financial burden on ratepayers. Using low-interest loans continues the County's prudent financial approach, helps maintain high credit ratings, keeps interest rates low, and produces savings for ratepayers.

WTD has continued to improve transparency in the development of the sewer rate, its capital program, and around the complex decisions ahead to address affordability and maintaining a reliable system. I understand that two Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) representatives will attend select WTD capital portfolio management meetings this year to further inform MWPAAC on project prioritization decisions. WTD must continue to communicate the capital drivers for the sewer rate increases and engage with our local agency partners and collaborate on sharing information about increases with ratepayers. In addition, WTD has identified options for rate predictability and there will be more discussion with MWPAAC on this topic in summer 2026.

The 2027 sewer rate process builds on changes incorporated into the 2026 rate process, including a 20-year rate forecast. It also incorporates the modified Combined Sewer Overflow (CSO) Consent Decree schedule reflecting an extended 2037 completion date. While these changes are substantive, WTD will continue to work to further improve rate-setting processes and long-term planning approaches. I have directed staff to engage with local, state, and federal partners, including cities, sewer districts, and regulatory agencies, to identify necessary steps for an environmentally protective and financially sustainable rate path. I also invite the Council's continued partnership to work with the Sound Cities Association, MWPAAC, and Regional Water Quality Committee (RWQC) to build on initial steps taken at the November 2025 Regional Utility Rate Summit. We will also incorporate affordability into the planning process for the Regional Wastewater Services Plan Update, including developing metrics and evaluating innovative rate relief approaches for low-income customers.

From January to April 2026, WTD provided monthly rate briefings to MWPAAC. A copy of MWPAAC's letter on the proposed 2027 sewer rate is enclosed. WTD also briefed the RWQC on the proposed 2027 rate and forecast at its meetings in February, March, and April 2026, and provided requested rate briefings to the City of Pacific's Council in March and Seattle Public Utilities' Customer Review Panel in April. A rate briefing is also tentatively scheduled for the City of Bellevue Council on May 12, 2026.

In the last few years, WTD has improved transparency in the rate development process. New efforts will build on longstanding engagement with key local agencies, which will continue for the 2027 sewer rate process and beyond. I recognize the importance of earlier engagement on the rate as our regional partners must also plan for local rate increases to fund their systems. In that vein, we will be working collaboratively with our regional partners and the County Council to develop a multi-year rate option that would provide a longer timeline and further improved engagement and predictability in the rate development process.

The Honorable Sarah Perry
April 23, 2026
Page 3

Thank you for your consideration of this proposed Ordinance. This important legislation will help King County residents by continuing to protect water quality, support safe and reliable infrastructure, and provide a needed system for people and the economy to thrive.

If your staff have questions, please contact Kamuron Gurol, Wastewater Treatment Division Director, Department of Natural Resources and Parks, at 206-549-1190.

Sincerely,



for

Girmay Zahilay
King County Executive

Enclosure

cc: King County Councilmembers
 ATTN: Stephanie Cirkovich, Chief of Staff, King County Council
 Melani Hay, Clerk of the Council
Karan Gill, Deputy Executive, Office of the Executive
Jasmin Weaver, Chief of Staff, Office of the Executive
Sierra Howlett Browne, Director of Government Relations, Office of the Executive
Garrett Holbrook, Council Relations Manager, Office of the Executive
John Taylor, Director, Department Natural Resources and Parks
Kamuron Gurol, Director, Wastewater Treatment Division, DNRP



King County

**Metropolitan King County Council
Regional Water Quality Committee**

STAFF REPORT

Agenda Item:	9	Name:	Jenny Giambattista and Andy Micklow
Proposed No.:	2026-B0061	Date:	May 6, 2026

SUBJECT

Briefing on Proposed Motion 2026-0038, which would acknowledge receipt of the plan describing the proposed analysis to be completed for the policy questions identified in the RWSP Update.

SUMMARY

The Regional Wastewater Services Plan (RWSP) Update is a large planning project to update the RWSP, which was adopted by ordinance in 1999. The 2026-2027 budget includes an appropriation of an additional \$7.4 million for this project.

In 2025, the Regional Water Quality Committee (RWQC) adopted resolutions¹ in support of the scope and charter for the RWSP Update. At the request of the RWQC, both the scope and the charter include the same list of policy questions to be analyzed as part of the RWSP Update. To ensure the policy analysis is completed, the Council included a proviso² in the 2026-2027 Adopted Budget requesting that the Wastewater Treatment Division (WTD) develop a plan describing the proposed analysis for the policy questions identified in the RWSP Update. There is also an additional proviso³ restricting expenditures from the \$7.4 million appropriation for the RWSP Update until Council approves the motion required by the first proviso.

The plan transmitted by WTD describes a two-step analysis to be conducted over two years. Policy options for each question will be developed in Step 1, with cost information developed in Step 2. The proviso response details the timelines for the first group of policy questions in 2026, but notes that the schedule for 2027 will be planned in January 2027. The plan reports that the analyses of the major policy questions will intentionally guide and inform the development of RWSP policy options to be included in the Draft RWSP Update to be published in 2027.

¹ Resolution RWQC2025-01 and Resolution RWQC2025-02

² Ordinance 20023, Section 115, Proviso P1

³ Ordinance 20023, Section 132, Proviso P3

The transmitted plan generally meets the requirements of the proviso.

This motion and its attachments were transmitted on February 26, 2026, and was referred to the Transportation, Economy, and Environment (TrEE) Committee.

UPDATE: Proposed Motion 2026-0038 was briefed in RWQC on April 1, 2026. At the request of the Committee Chair, Council staff worked with WTD to review the list of policy memos that will be provided to RWQC to identify any opportunities to more efficiently address the policy questions included in the RWSP scope document. Staff identified policy questions which can be combined into a single memo and those questions which can be answered directly without including policy options. WTD intends to provide analysis for all the originally requested questions, with the exception of a question related to the capacity charge methodology since the Executive recently transmitted a proposed ordinance updating the methodology. The revised schedule of analysis is included in Attachment 3.

BACKGROUND

Regional Wastewater Services Plan Update. The Regional Wastewater Services Plan (RWSP) was adopted by Ordinance 13680 in November 1999 to ensure the continuation of high-quality wastewater treatment services through 2030. The RWSP outlines programs and projects through 2030 to increase wastewater system capacity and functionality, provides guidance on recovering and recycling beneficial resources from the wastewater treatment process, and provides direction on protecting and monitoring water quality and on meeting permit conditions. Many of the major projects outlined in the RWSP have been completed as the RWSP reaches the end of its intended planning period of 2030. The process to update the RWSP started in 2019 and was paused by WTD at the end of 2021 to consider the feedback it had received. WTD re-launched the planning effort in 2024 to update the RWSP.

As of November 2025, the Office of Performance, Strategy, and Budget reports the total estimated cost at completion for the RWSP Update is \$51.4 million. Total spending through December 2025 is \$24.7 million.

RWQC has been closely following the launch of the RWSP Update and has adopted resolutions in support of the RWSP's scope and charter.⁴ RWQC has expressed interest in addressing long-term policy questions for the regional wastewater system and included a set of policy questions in the scope and charter documents for analysis as part of the RWSP Update. Both the scope and charter have the same set of policy questions and are included in Table 1.

Table 1.
Major Policy Questions to be Analyzed in the RWSP Update

Challenges and Opportunities – Topics/Themes	Major Policy Questions to be Analyzed in RWSP Update
Regulatory Landscape	Should the County evaluate costs and plan for levels of treatment beyond current legal requirements?

⁴ Resolution RWQC2025-01 and Resolution RWQC2025-02

Challenges and Opportunities – Topics/Themes	Major Policy Questions to be Analyzed in RWSP Update
<p>CSO, nutrients, per- and polyfluoroalkyl substances (PFAS) and other contaminants of emerging concern (CECs), current and existing requirements, new and anticipated requirements, opportunities for larger regional partnerships to address water concerns, requirement to comply with future total maximum daily loads</p>	<p>How should the County anticipate, engage with, and plan for future nutrient permit requirements, regulations related to CECs such as PFAS, or other future regulatory changes?</p> <p>What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?</p> <p>How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?</p>
<p>Capacity Demands</p> <p>I/I, population growth, conveyance and treatment capacity demand, including on-site septic systems in urban areas</p>	<p>Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?</p> <p>To what extent should WTD prioritize use of existing facility sites vs. acquiring new property to accommodate future treatment needs (including capacity)?</p> <p>Should the region continue to provide a centralized approach for regional wastewater treatment, or should the region move towards a more decentralized approach?</p> <p>How should I/I be managed and how can costs be fairly apportioned? Should system capacity be expanded to account for increases in I/I? Should I/I policies change to support reducing the capacity needed for I/I?</p> <p>How should the conversion of on-site septic systems to sewers in the service area be managed and should WTD implement programs to encourage conversion within the service area?</p>
<p>Infrastructure Resiliency</p> <p>Asset management, maintenance, improvements, renewal, replacement, labor and supply chain disruptions, natural hazard resiliency</p>	<p>How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?</p> <p>What level of resiliency should WTD plan for regarding seismic and other natural hazards to avoid or minimize risks? What level of risk tolerance should WTD accept? How can these considerations be best informed by the long-term capital motion work in progress?</p> <p>What level of redundancy of critical systems should WTD have?</p>
<p>Equity and Social Justice</p> <p>Distributional equity, WTD role in safeguarding public health</p>	<p>What actions should WTD take to increase equity and social justice for the regional wastewater system?</p> <p>How will equity and social justice be interwoven in the update: community engagement, rate structure analysis, etc.?</p> <p>How should the regional wastewater system address</p>

Challenges and Opportunities – Topics/Themes	Major Policy Questions to be Analyzed in RWSP Update
	<p>environmental justice concerns as described in the 2021 Healthy Environment for All Act⁵, such as addressing the disproportionate environmental health impacts of vulnerable populations and overburdened communities?</p>
<p>Climate Change</p> <p>Mitigation – green building, eliminating/reducing fossil fuel use, energy and water efficiency, renewable energy, materials management, tree planting, etc. Adaptation – sea level rise, more extreme heat, increased storm intensities, wildfire smoke, increased river flooding, etc.</p>	<p>Should existing wastewater policy language (KCC 28.86) be revised to specifically call out planning for future climate conditions in addition to population growth and other environmental factors?</p> <p>How much should WTD reduce energy use and reduce greenhouse gas emissions?</p> <p>How should WTD prepare and adapt to climate impacts (e.g., precipitation/storm intensities, sea level rise, river flooding, etc.) in line with the Strategic Climate Action Plan? What level of climate impact risk tolerance should WTD plan for to avoid or minimize risks to the system?</p>
<p>Resource Recovery</p> <p>Recycled water, biosolids, energy capture</p>	<p>Energy production and heat recovery – Should WTD be expanding its efforts to capture energy and heat? If so, at what level of effort?</p> <p>Biosolids – Should WTD further expand its efforts to develop Class A biosolids? What changes are needed to biosolid recovery policies to get to Class A?</p> <p>Recycled water – Under what circumstances should the region expand the use of reclaimed water? Which uses (e.g., environmental benefits, groundwater recharge, industrial uses, irrigation) are most appropriate?</p> <p>How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?</p>
<p>Finance / Affordability</p> <p>Rate equity, fairness, and structure, capital financing and debt management, financial planning and revenue sufficiency</p>	<p>How will WTD measure affordability for contract agencies and ratepayers?</p> <p>Is there a better rate structure for the sewer rate? (Note: WTD has identified a work plan to further evaluate the residential customer equivalent conversion factor of 750 cubic feet per month.)</p> <p>Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood "one for all, all for one"), or consider alternative cost recovery rate structures to reflect other system impacts?</p>

⁵ RCW 70.A.02

Challenges and Opportunities – Topics/Themes	Major Policy Questions to be Analyzed in RWSP Update
	<p>Should WTD update the rate structure for the capacity charge to align with current industry standards? (Note: The capacity charge rate structure was updated in 2021. A capacity charge methodology study is in progress.)</p> <p>What other rate relief approaches should WTD implement to improve affordability for those who may struggle to pay their sewer bill?</p>
<p>Relationship to Contracts</p>	<p>Are major policy updates aligned with component agency contracts?</p> <p>How will WTD implement the RWSP Update consistent with direction and requirements expected of contract agencies?</p>

Budget actions. The 2026-2027 Adopted Budget includes a proviso⁶ requesting the Wastewater Treatment Division develop a plan describing the proposed analysis to be completed for the policy questions identified in the RWSP Update scope document, to be transmitted by March 1, 2026.

P1 PROVIDED THAT:

Of this appropriation, \$250,000 shall not be expended or encumbered until the executive transmits a plan describing the proposed analysis to be completed for the policy questions identified in the Regional Wastewater Services Plan Update scope document as adopted by regional water quality committee resolution 2025-01, and a motion acknowledging receipt of the plan, and motion acknowledging receipt of the plan is passed by the council. The motion should reference the subject matter, the proviso's ordinance, ordinance section, and proviso number in both the title and body of the motion.

A. The plan shall be developed with input from the regional water quality committee and describe how the policy questions identified in the Regional Water Services Plan Update Scope document as adopted by the regional water quality committee resolution 2025-01 will be analyzed, including but not limited to:

- 1. A framework for the analysis of the policy questions which identifies the topics that shall be addressed as part of policy analysis;*
- 2. The proposed format for reporting the analysis; specifying whether the analysis will be available as standalone reports presentations, or in other formats;*
- 3. For each policy question, how the policy analysis will inform the RWSP Update;*
- 4. Timelines for the analysis for each policy question;*
- 5. A problem statement corresponding to each policy question; and*
- 6. In instances where the analysis of a policy question is anticipated to occur in more than one section of the Regional Wastewater Services Plan Update,*

⁶ Ordinance 20023, Section 115, Proviso P1

the plan required by this proviso shall identify how the complete analysis for the policy question will be addressed.

B. The plan shall also include policy analysis for at least two policy questions from the RWSP scope document as adopted by the regional water quality committee resolution 2025-01. The analysis of these policy questions is intended to serve as a proof of concept for the level of analysis of the remaining policy questions.

C. The plan may also propose modifications to the list of policy questions identified in the Regional Water Services Plan scope document, and, if modifications are proposed, the topics in subsections A. and B. of this proviso shall be discussed in relation to the alternate proposal.

The executive should electronically file the plan and motion required by this proviso by March 1, 2026, with the clerk of the council, who shall retain an electronic copy and provide an electronic copy to all councilmembers, the council chief of staff, and the lead staff for the transportation, economy, and environment committee or its successor, and the lead staff for the regional water quality committee or its successor.

Additionally, the 2026-2027 Budget includes a proviso⁷ on the capital appropriation for the RWSP Update restricting expenditure of the appropriation until the Council passes the motion required by Proviso P1 listed above.

P3 PROVIDED FURTHER THAT:

Of the appropriation for capital project 1134066, Regional Wastewater Services Plan (RWSP) Update, \$7,382,000 shall not be expended or encumbered until the council passes the motion required by section 115, Proviso P1, of this ordinance.

ANALYSIS

The plan was transmitted on February 26, 2026. The transmitted report, which is included as Attachment A to Proposed Motion 2026-0038, generally addresses the issues required by the proviso, as described below.

A. The Plan shall be developed with input from the RWQC and describe how the policy questions identified in the RWSP Update Scope document as adopted by the RWQC Resolution 2025-01 will be analyzed, including but not limited to:

WTD briefed RWQC at the December 2025 and January 2026 committee meetings to gather input from RWQC on the policy framework. The transmitted plan does describe how the policy questions identified in the RWSP Update Scope document will be analyzed.

1. A framework for the analysis of the policy questions which identifies the topics that shall be identified as part of the policy analysis.

⁷ Ordinance 20023, Section 115, Proviso P3

The plan provides a framework for the analysis and identifies the topics to be addressed for each policy question. The initial list of topics was discussed with RWQC at the December 2025 RWQC meeting and is based on discussions with the committee in prior RWQC meetings. The plan reports that WTD will use a two-step approach to analyze the major policy questions.

Step 1 will include developing a memo addressing each of the following:

- a. Problem Statement
- b. Contextual and Baseline Information
 - i. What is known about the topic and current conditions
 - ii. Current policies in code, contract, or in practice
 - iii. The system "must-dos"
 - iv. Current and budgeted expenditures
 - v. Summary of science/data (if applicable)
- c. Example practices from other jurisdictions/industry
- d. Policy issues, challenges, and opportunities related to the policy question
- e. Range of policy options with associated actions and considerations (including qualitative description of costs)
- f. Interested and affected parties WTD will engage to gather input
- g. Rate structure considerations (where applicable)
- h. Relationship to contracts with local sewer agencies
- i. Equity and Social Justice (ESJ) impacts

As part of **Step 2**, WTD will develop planning-level cost estimates and an evaluation of the impacts of each option. The analysis conducted as part of Step 2 will be shared with RWQC on a rolling basis over 2026-2027, tentatively set to begin in October 2026. Step 2 will be incorporated into the Step 1 policy analysis memo after planning-level cost estimates and evaluations are completed.

2. The proposed format for reporting the analysis; specifying whether the analysis will be available as standalone reports presentations, or in other formats;

The plan specifies that the analysis will be provided as a policy memo along with PowerPoint slide decks for those specific analyses to be presented at the RWQC meetings. The plan anticipates seeking direction from RWQC on which policy questions will receive both a memo and a slide deck presentation.

3. For each policy question, how the policy analysis will inform the RWSP Update;

The plan specifies that WTD will ensure all policy issues associated with the major policy questions are included and addressed in the Draft RWSP Update. The analyses of the major policy questions will intentionally guide and specifically inform the development of RWSP policy options included in the Draft RWSP Update.

4. Timelines for the analysis for each policy question;

The analysis will cover two years. The proviso response details the timelines for the first group of policy questions in 2026, and provides tentative timelines for Step 2, but notes that the schedule for 2027 will be finalized in January 2027.

5. A problem statement corresponding to each policy question;

The plan does not include a problem statement for each policy question, but notes that one will be developed as the policy analysis is completed.

6. In instances where the analysis of a policy question is anticipated to occur in more than one section of the Regional Wastewater Services Plan Update, the plan required by this proviso shall identify how the complete analysis for the policy question will be addressed.

Some of the major policy questions need to be addressed through multiple topics in the RWSP Update. According to the plan, these questions will be evaluated holistically in the topic where they most naturally reside. However, for questions relevant to other topics, WTD will explicitly identify and explain the connection in the Step 1 analysis and will dedicate a section in the policy memo to address the relationship each question has with these other topics. Appendix B of the transmitted proviso plan identifies the questions that cover multiple topics and will be evaluated as described.

B. The plan shall also include policy analysis for at least two policy questions from the RWSP scope document as adopted by the regional water quality committee resolution 2025-01. The analysis of these policy questions is intended to serve as a proof of concept for the level of analysis of the remaining policy questions.

Two policy memos are included in the proviso response. Memo 1 focuses on the policy questions related to the Separated System Conveyance topic in the Regional Wastewater Services Plan Update. The policy questions analyzed in Memo 1 are:

- How should Infiltration/Inflow (I/I) be managed, and how can costs be fairly apportioned?
- Should system capacity be expanded to account for increases in I/I?
- Should I/I policies change to support reducing the capacity needed for I/I?

Memo 2 addresses the following policy question:

- Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?

C. The plan may also propose modifications to the list of policy questions identified in the Regional Water Services Plan scope document, and, if modifications are proposed, the topics in subsections A. and B. of this proviso shall be discussed in relation to the alternate proposal.

The list of policy questions in the RWSP scope document was developed prior to the proviso request to develop options for the questions, so the proviso allows WTD to propose modifications to the list of policy questions to ensure they are appropriate for the planned level of analysis. The plan does not propose changes to the questions, but it does recategorize some of the questions and suggests three additional questions listed in Table 2.

Grouping Questions. The questions included in the RWSP Update scope document were grouped into eight categories. Some of the questions are very similar and were intended as sub-questions to provide further clarification.

WTD's proposed approach regroups some policy questions into new groups, resulting in eleven rather than eight categories. Some categories in the RWSP Update Scope document have been changed to reflect the existing workgroups WTD established as part of the RWSP Update process. Generally, these categories provide greater specificity, for example, by addressing policy issues for the combined and separated systems in separate memos.

With the addition of WTD's three questions, there are now 32 questions. To avoid duplicative analysis and options, the plan proposes grouping related policy questions into memos for each broader topic. For questions that are very similar and discussed in the same memo, it may be duplicative to provide a separate listing of options and analysis for each question. In discussions with Council staff, WTD reports that it supports the need to reduce redundancy and will evaluate the questions further to see if there are opportunities to combine the analysis for similar questions.

**Table 2.
Proposed New Policy Questions**

Proposed New Policy Question	Rationale
What approach should WTD use to fund asset renewal and replacement projects?	This question guides analysis on the different tools available to fund asset renewal and replacement projects, as proposed by the Asset Management Steering Committee, in coordination with the RWSP Working Group.
How should WTD best upgrade the combined system to address regulatory requirements, regional water quality, and West Point operations? How can combined system costs be fairly apportioned?	These questions introduce discussion on the combined system and the associated regulatory requirements.
How should WTD maximize recovery of new resources? How should WTD prioritize and monetize environmental and other co-benefits when considering cost of recovering new resources?	These questions encompass the potential for WTD to expand into new resource recovery areas.

Issues for Consideration for RWQC. As the Committee reviews the proviso response, it may wish to consider the following issues:

- How Will RWQC's Feedback in Step 1 be Incorporated into the Step 2 Memo?*
 The proposed process includes opportunities for RWQC to provide comments during both Step 1 and Step 2. However, the plan does not specify how RWQC's specific comments will be tracked and addressed throughout the process. It should be noted that the proviso does not require WTD to report on how they will track and incorporate feedback. In response to Council staff questions, WTD requests that feedback on the Step 1 policy memos be received by/before the end of the month it was presented to RWQC and that all feedback be identified as 'member feedback' or 'staff feedback.' WTD will address feedback in the Step 2 part of the analysis. The Step 2 analysis will provide an updated and amended policy memo reflecting: (1) feedback received, (2) costing information for policy options included in the Step 1 memo and other viable policy options proposed in the feedback, and (3) evaluation of outcomes, impacts, and tradeoffs of the various policy options. WTD reports the Step 2 updated memo will include RWQC feedback in an appendix.
- Cost Information.* As previously discussed with RWQC, WTD proposes to provide cost information in Step 2 of the analysis, so limited cost information is provided in the proof-of-concept memos. Additionally, there is no information provided on the approach WTD will take to identify costs for each policy option and how the cost of options will be compared. For some policy issues, such as I&I, cost calculations depend upon various assumptions. For status quo options, WTD will need to decide whether actual costs should be used or projected costs in cases when existing policies are not fully implemented. Council staff asked WTD for additional information on the approach to costing and the division reports it will develop an approach once the project consultant begins work. Given the interest of members in costs, the committee may wish to ask WTD to report back their approach to costing prior to completing the cost analysis in order to ensure that any such analysis provides sufficient information to committee members.
- Timing of Stakeholder Engagement.* The proviso response notes that engagement with stakeholders for the policy questions in Issue 1 will occur as part of implementation planning. Council staff asked WTD for clarification on when implementation planning will occur during the process and whether it will inform option development as part of Step 1. WTD reports the division is developing an Engagement Plan for the RWSP Update; this will not be finalized until our RWSP consultant team officially starts in April. As such, WTD will be starting external engagement (beyond MWPAAC and RWQC) later this spring and it will run through Step 1 and Step 2 processes. WTD reports it is keen to gather input on policy options for the various RWSP topics/questions from a wide range of stakeholders and voices, as indicated in the memos.
- Consider Requesting Outcomes in Step 1.* WTD reports that it will describe anticipated impacts and outcomes of each option in Step 2 of the analysis. While specific quantitative outcomes may be difficult to identify now, identifying what will be measured could inform the options considered and how they are

evaluated. For example, for the I/I policy question, potential beneficial outcomes could include, but are not limited to, reduced I/I, reduced flow to the treatment plant, or a lower sewer rate. If those outcomes are not presented during Step 1, the Committee will not have the opportunity to evaluate whether it supports the outcomes.

- *Clarify Committee Expectations for Responding to Each Policy Question.* Based on Council staff's review of the proof-of-concept memos, the Committee may wish to consider whether the proof-of-concept memos are structured to ensure the information presented addresses the policy questions. Additionally, given that several questions are very similar and other policy questions may not require multiple options, the Committee may wish to request WTD staff work with committee staff to identify any questions which may not benefit from multiple options. Any such list could be shared with RWQC for consideration.

INVITED

- Darren Greve, Government Relations, Wastewater Treatment Division
- Janice Johnson, RWSP Project Manager, Wastewater Treatment Division

ATTACHMENTS

1. Proposed Motion 2026-0038 (and its attachments)
2. Transmittal Letter
3. Updated RWSP Schedule for Policy Analysis



KING COUNTY
Signature Report

ATTACHMENT 1
1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Motion

Proposed No. 2026-0038.1

Sponsors Balducci

1 A MOTION acknowledging receipt of a plan describing the
2 analysis to be completed for the policy questions identified
3 in the Regional Wastewater Services Plan Update scope
4 document as adopted by regional water quality committee
5 resolution 2025-01, prepared in accordance with the 2026-
6 2027 Budget Ordinance, Ordinance 20023, Section 115,
7 Proviso P1.

8 WHEREAS, the King County 2026-2027 Budget Ordinance, Ordinance 20023,
9 Section 115, Proviso P1 states that \$250,000 shall not be expended or encumbered until
10 the executive transmits a plan describing the proposed analysis to be completed for the
11 policy questions identified in the Regional Wastewater Services Plan Update scope
12 document as adopted by regional water quality committee resolution 2025-01, and a
13 motion acknowledging receipt of the plan, and motion acknowledging receipt of the plan
14 is passed by the council, and

15 WHEREAS, the executive has transmitted to the council the requested plan
16 entitled Analysis for Regional Wastewater Services Plan Policy Questions along with a
17 motion acknowledging the receipt thereof by March 1, 2026;

18 NOW, THEREFORE, BE IT MOVED by the Council of King County:

19 Receipt of the Analysis for Regional Wastewater Services Plan Policy Questions,
20 Attachment A to this motion, is hereby acknowledged.

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Sarah Perry, Chair

ATTEST:

Melani Pedroza, Clerk of the Council

APPROVED this ____ day of _____, ____.

Girmay Zahilay, County Executive

Attachments: A. Analysis for Regional Wastewater Services Plan Policy Questions, March, 2026

Analysis for Regional Wastewater Services Plan Policy Questions

March 1, 2026



King County

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I. Proviso Text

[Ordinance 20023](#), Sections 115 and 132, Department of Natural Resources and Parks, pp. 146, 183.¹

SECTION 115. WASTEWATER TREATMENT

P1 PROVIDED THAT:

Of this appropriation, \$250,000 shall not be expended or encumbered until the executive transmits a plan describing the proposed analysis to be completed for the policy questions identified in the Regional Wastewater Services Plan Update scope document as adopted by regional water quality committee resolution 2025-01, and a motion acknowledging receipt of the plan, and motion acknowledging receipt of the plan is passed by the council. The motion should reference the subject matter, the proviso's ordinance, ordinance section, and proviso number in both the title and body of the motion.

- A. The plan shall be developed with input from the regional water quality committee and describe how the policy questions identified in the Regional Water Services Plan Update Scope document as adopted by the regional water quality committee resolution 2025-01 will be analyzed, including but not limited to:
 1. A framework for the analysis of the policy questions which identifies the topics that shall be addressed as part of policy analysis;
 2. The proposed format for reporting the analysis; specifying whether the analysis will be available as standalone reports presentations, or in other formats;
 3. For each policy question, how the policy analysis will inform the RWSP Update;
 4. Timelines for the analysis for each policy question;
 5. A problem statement corresponding to each policy question; and
 6. In instances where the analysis of a policy question is anticipated to occur in more than one section of the Regional Wastewater Services Plan Update, the plan required by this proviso shall identify how the complete analysis for the policy question will be addressed.
- B. The plan shall also include policy analysis for at least two policy questions from the RWSP scope document as adopted by the regional water quality committee resolution 2025-01. The analysis of these policy questions is intended to serve as a proof of concept for the level of analysis of the remaining policy questions.
- C. The plan may also propose modifications to the list of policy questions identified in the Regional Water Services Plan scope document, and, if modifications are proposed, the topics in subsections A. and B. of this proviso shall be discussed in relation to the alternate proposal.

The executive should electronically file the plan and motion required by this proviso by March 1, 2026, with the clerk of the council, who shall retain an electronic copy and provide an electronic copy to all councilmembers, the council chief of staff, and the lead staff for the transportation, economy, and environment committee or its successor, and the lead staff for the regional water quality committee or its successor.

¹ [Link to Ordinance 20023](#)

SECTION 132. CAPITAL IMPROVEMENT PROGRAM

P3 PROVIDED FURTHER THAT:

Of the appropriation for capital project 1134066, Regional Wastewater Services Plan (RWSP) Update, \$7,382,000 shall not be expended or encumbered until the council passes the motion required by section 115, Proviso P1, of this ordinance.

II. Executive Summary

The Regional Wastewater Services Plan (RWSP) serves as King County’s comprehensive wastewater plan, providing policy and operational direction for capital improvements and future development of King County’s wastewater system across the service area. The RWSP was adopted in 1999 and planned through 2030, with the foundational Robinswood Agreement establishing core financing principles that guided capital project funding.² In 2024, King County’s Wastewater Treatment Division (WTD) began the effort to update the RWSP to prepare for the future and to plan for new and emerging challenges, a process called the RWSP Update.

The RWSP Update process began with the adoption of the RWSP Scoping Document in early 2025 by the Regional Water Quality Committee (RWQC), which outlines the overall approach and highlights 29 “Major Policy Questions” requiring analysis. Throughout 2025, WTD began the first phase of work for the update, which focused on current conditions and brainstorming early actions and policy options in response to the Major Policy Questions, setting the foundation for future planning.

WTD will prepare policy memos for each Major Policy Question requiring analysis; WTD will also prepare presentations summarizing the policy analyses for certain Major Policy Questions to be discussed at RWQC meetings. WTD will work with the RWQC Chair and RWQC staff to determine which policy analyses are most important to present and discuss during RWQC meetings. Policy memos and Major Policy Questions will be grouped into topics and brought to RWQC on a rolling basis. Questions that overlap with multiple topics will have multiple touchpoints and will be considered holistically near the end of each step in the process.

WTD will use a two-step approach to provide analyses of the 29 Major Policy Questions:

Step 1 will include:

- a. Problem Statement
- b. Contextual and Baseline Information
 - i. What is known about the topic and current conditions
 - ii. Current policies in code, contract, or in practice
 - iii. The system “must-dos”
 - iv. Current and budgeted expenditures
 - v. Summary of science/data (if applicable)
- c. Example practices from other jurisdictions/industry
- d. Policy issues, challenges and opportunities related to the policy question
- e. Range of policy options with associated actions and considerations (including qualitative description of costs)

² [“Robinswood Agreement” Letter](#)

- f. Interested and affected parties WTD will engage to gather input
- g. Rate structure considerations (if applicable)
- h. Relationship to contracts with local sewer agencies
- i. Equity and Social Justice (ESJ) impacts

Step 2 will include:

- j. Planning-level cost estimates
- k. Evaluation of outcomes: identify impacts and outcomes of each option

The responses to the Major Policy Questions will form the foundation of the Draft RWSP Update, which will contain a full suite of options to consider without recommendations, before the Executive-Proposed RWSP Update is put forward. The plan put together in this report will help ensure that King County fully considers and addresses each Major Policy Question, in addition to supplemental technical work, for a successful RWSP Update process.

III. Background

A. Department Overview

The Department of Natural Resources and Parks (DNRP) includes the Parks, Solid Waste, Wastewater Treatment, and Water and Land Resources divisions. The Wastewater Treatment Division (WTD) protects water quality and public health in the central Puget Sound region by providing high-quality and effective treatment to wastewater collected from 34 local sewer agencies in King, Pierce, and Snohomish counties.

WTD serves about two million people within a 424-square-mile service area, which includes most urban areas of King County and parts of south Snohomish County and northeast Pierce County. WTD seeks to protect public health and the environment by conveying, treating, and reclaiming wastewater and by-products; operating and maintaining wastewater facilities; and planning to meet future wastewater needs.

B. Historical Context

The Regional Wastewater Services Plan (RWSP) is King County's comprehensive plan for wastewater. RWSP policies provide direction for the operation and further development of the wastewater system, its capital improvement program, and, as necessary, the development of subsequent policies.³ The RWSP and its related components form King County's General Sewer Plan, which was approved by the Department of Ecology.

The current RWSP is a supplement to the original Comprehensive Water Pollution Abatement Plan, which was adopted in 1959 by the Metropolitan Council. The Municipality of Metropolitan Seattle (Metro) was formed by public vote in 1958 to address water quality concerns in Lake Washington and Metro later drafted the Comprehensive Water Pollution Abatement Plan. Until the formation of Metro, effluent was discharged into Lake Washington by 10 treatment plants operated by different sewage

³ RWSP policies are set forth in King County Code 28.86.010 and 28.86.040 through 28.86.150.

districts.⁴ This discharge led to poor water quality that was unsafe for fishing or swimming. After the formation of Metro to address these concerns as a region, the first comprehensive sewage plan was published.

The Comprehensive Water Pollution Abatement Plan was the region's first of its kind and led to the construction of new treatment plants at West Point, Renton (South Plant), Carkeek Park, and Richmond Beach, as well as new tunnels and pipelines that carried sewage to these new facilities. Many of the capital assets that were created during this time are still operational.

The plan proposed that a central agency be established for financing, constructing, operating, maintaining, and administering the proposed sewerage projects. It also covered a wide variety of topics, including increasing population, sewage overflow concerns, discharges of untreated sewage, and capacity concerns, among others.

In 1994, Metro and King County merged in response to a 1990 Federal District Court ruling.⁵ As a result, King County assumed the responsibility for treating wastewater from 34 jurisdictions and local sewage agencies. A few years before this, in 1991, Metro had begun planning efforts to update the Comprehensive Water Pollution Abatement Plan, which was adopted in 1999 as the RWSP, amending the original plan and codifying RWSP policies in King County Code.

The Robinswood Agreement was foundational to the approval of the RWSP by King County Council. In October 1998, the King County Executive and the Regional Water Quality Committee (RWQC) held a retreat at Robinswood House in Bellevue to discuss financing the implementation of the RWSP. This resulted in the creation of the Robinswood Agreement that guided the funding of RWSP capital projects. At this retreat, the core principles of "all for one and one for all" and "growth pays for growth" were established, forming the basis of the financial policies for the RWSP.

The RWSP's planning horizon covered capital plans and projects through 2030. WTD began planning efforts in 2019 to update the RWSP, then called the Clean Water Plan. In 2021, the Clean Water Plan process was paused to consider feedback and regulatory uncertainty. Planning restarted in 2024 as the Regional Wastewater Services Plan Update (RWSP Update).

C. Current Context

In January 2025, the RWQC adopted a resolution in support of the RWSP Update Scoping Document.⁶ This scoping document describes the overall approach that will be used and some of the major policy issues and questions that will be analyzed to update King County's RWSP. The document incorporates input and feedback from members of the RWQC and Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) on the scope of the RWSP Update.

⁴ Effluent is used water from homes, industries or stormwater that flows out from a treatment plant or system into the environment after undergoing treatment.

⁵ [Cunningham v. Municipality of Metropolitan Seattle, 751 F.Supp. 885 \(W.D. Wash. 1990\)](#)

⁶ [RWSP Update Scoping Document](#)

In February 2025, the RWQC adopted a resolution in support of the RWSP Update Charter.⁷ This Charter is similar to a Memorandum of Understanding and is an agreement representing the shared goals, roles and responsibilities, and agreed-upon process between WTD and MWPAAC for the RWSP Update. It describes the intent of the parties but does not create any legally binding obligations. The Charter resulted in the formation of an RWSP Working Group as a forum for MWPAAC and RWQC member staff to collaborate with WTD’s RWSP Update project team.

Throughout 2025, WTD began preliminary work on the RWSP Update. This preliminary work has been referred to as “Module 1,” with the primary goal of understanding current conditions of the regional system and initial brainstorming of alternatives for long-range planning. This was the first phase of RWSP Update planning work in a series of modules to be presented to the RWSP Working Group, MWPAAC, and RWQC. WTD began to develop presentations on current conditions and to brainstorm potential actions to respond to the 29 Major Policy Questions in the Scoping Document. The Major Policy Questions are the focus of the Proviso P1 in Ordinance 20023, and subsequently the focus of this report.

D. Report Methodology

This report was prepared by the comprehensive planning group at WTD, alongside members of the Government Relations Team within the Director’s Office at WTD. The two proof of concepts were prepared by subject matter experts in the Separated System Conveyance team within the planning group at WTD. The materials for the proof of concepts include previously completed work for the RWSP Working Group in 2025 and are supplemented by work completed to address the contents of the policy analyses specifically.

On December 3, 2025, RWQC provided input on the initial approach for this report. Further input from RWQC was received on January 7, 2026, on the timeline and schedule of the delivery of the policy analyses for the 29 Major Policy Questions. WTD received feedback from councilmembers that they preferred to receive policy analyses as a written document, or policy memo, and as a PowerPoint presentation used at the RWQC meeting. RWQC also confirmed that a two-step approach for each policy question and analysis is sufficient and that it is appropriate to group the policy questions by topic. RWQC suggested using the RWSP Working Group to help with the grouping and sorting of questions by topic.

IV. Report Requirements

A. Framework for Policy Question Analysis, including Identifying Topics Addressed

The Major Policy Questions are clustered by common topics, and WTD will schedule these groupings and sequence RWQC briefings to ensure a Draft RWSP Update is produced by 2027.

Information for the Major Policy Questions will be developed, and the questions will be analyzed, in consultation with the RWSP Working Group and MWPAAC, in the following two-step process:

⁷ [RWSP Update Charter](#)

Step 1:

- a. Problem Statement
- b. Contextual and Baseline Information
 - i. What is known about the topic and current conditions
 - ii. Current policies in policies in code, contract, or in practice
 - iii. The system “must-dos”
 - iv. Current and budgeted expenditures
 - v. Summary of science/data (if applicable)
- c. Example practices from other jurisdictions/industry
- d. Policy issues, challenges and opportunities related to the policy question
- e. Range of policy options with associated actions and considerations (including qualitative description of costs)
- f. Interested and affected parties WTD will engage to gather input
- g. Rate structure considerations (where applicable)
- h. Relationship to contracts with local sewer agencies
- i. Equity and Social Justice (ESJ) impacts

The analysis conducted as part of Step 1 will be brought to RWQC on a rolling basis over the course of 2026, beginning in March 2026. A detailed template for Step 1 is available in the attached Appendix A: Policy Memo Template. The template includes a short description of each section within Step 1, including estimated lengths and sources of information.

Analyses for ESJ Impacts and Relationship to Contracts policy questions will be integrated into each group of questions brought to RWQC.

Step 2:

- j. Planning-level cost estimates
- k. Evaluation of outcomes: identify impacts and outcomes of each option

The analysis conducted as part of Step 2 will be brought to RWQC on a rolling basis over the course of 2026-2027, tentatively set to begin in October 2026. Step 2 will be amended to the Step 1 policy analysis memo after planning-level cost estimates and evaluations are completed.

B. Proposed Reporting Format

WTD will use two different formats for reporting the analyses on all Major Policy Questions: a policy memo and a PowerPoint slide deck for those specific analyses to be presented at RWQC meetings.

WTD will prepare a policy memo using the template in Appendix A for the Major Policy Questions that is grouped and brought to RWQC.

WTD will prepare a PowerPoint for the policy question(s) brought to RWQC to be shared prior to the meeting. The PowerPoint slide deck will be consistent with the current WTD Visual Design Style Guide.

C. How Policy Analysis Will Inform RWSP Update for Each Question

WTD will ensure all policy issues associated with the Major Policy Questions are included and addressed in the Draft RWSP Update. The analyses of the Major Policy Questions will intentionally guide and specifically inform development of RWSP policy options included in the Draft RWSP Update. RWQC can use analyses to identify any additional policy options for further analysis, which WTD will include in the Draft RWSP Update. Policy Options that do not meet legal requirements will be identified and reviewed by legal counsel before being included in the Draft RWSP Update.

WTD will begin a three-step process with RWQC to evaluate and consider the policy analyses, and for RWQC to provide feedback to influence WTD's development of the Draft RWSP Update in the planning and development stages of the work:

Step 1: RWQC can share its initial and general preferences with WTD during and after Committee discussion on parts "a" to "i" of the policy analysis for a given policy question, particularly the proposed policy options.

Step 2: Upon completion of cost estimates for the policy options, WTD will provide follow-up analyses to include costs and evaluation of impacts and outcomes as parts "j" and "k" for all policy options, inclusive of those RWQC expressed desire to see evaluated. Equipped with this additional information, RWQC will have a second opportunity to identify its policy option preferences, and WTD will include those policy options in the Draft Plan.

Step 3: WTD will integrate RWQC's policy option preferences into development of a full range of policy options that will be included in the Draft RWSP Update for a State Environmental Policy Act (SEPA) process.⁸

The completed policy analyses will be used following the Draft Plan SEPA process for development of the Executive's Preferred Plan. The analyses may also be used in decision-making by RWQC members and King County Council members for the Council-adopted Plan following transmittal of the Executive's Preferred Plan to the County Council, which is scheduled for 2029.

A parallel effort outside the RWSP Update process will explore alternate regulatory strategies to achieve positive water quality outcomes. This process requires approval from the Washington State Department of Ecology and United States Environmental Protection Agency. If a change results from this effort, policy options and actions will be revised or added as appropriate.

D. Timelines for Analysis for Each Policy Question

The Major Policy Questions are grouped by category of capital investment as described in the RWSP Charter supported by RWQC via Resolution RWQC2025-02. The analyses of these questions will be brought to RWQC on a monthly cadence. See the attached Appendix B: Schedule for Policy Analyses for the planned schedule for 2026. This schedule includes groupings of policy questions and the order in which each grouping will be presented to RWQC in 2026. The schedule for 2027 will be planned in January 2027 in conjunction with RWQC.

⁸ SEPA stands for the Washington State Environmental Protection Act

E. Problem Statement Corresponding to Each Policy Question

Problem statements will be written for each Major Policy Question as the policy analyses are completed. These problem statements will help frame the answers or policy solutions that each policy question raises. The problem statements will help policymakers consider the adequacy of policy options in answering each policy question. For more information, see Section A. Framework for Policy Question Analysis, including Identifying Topics Addressed.

F. How Complete Analysis will be Addressed for Questions Falling under Multiple Sections of RWSP Update

Some of the Major Policy Questions need to be addressed through multiple topics in the RWSP Update. These questions will be evaluated holistically in the topic where they most naturally reside. However, for these questions that have relevance to other topics, WTD will explicitly identify and explain the connection in the Step 1 analysis of a related topic and will dedicate a section in the policy memo to address the relationship a given question has with these other topics.

For example, Questions 25 and 26 in Appendix B, having to do with sewer rate structure, will be holistically addressed in the Group #9 policy analyses focused on Finance. However, these two rate structure questions also have relevance to Question 1, related to Inflow and Infiltration (Group #1), Question 6, related to Asset Renewal and Replacement (Group #3), Question 15 related to the Combined System (Group #6), and Question 18, related to Treatment (Group #7). Therefore, in the policy analyses for these related questions, WTD will dedicate a section in each policy memo to address the rate structure questions through the lens of Inflow and Infiltration, Asset Renewal and Replacement, Combined System, and Treatment, respectively.

In Appendix B, the questions that cover multiple topics, which will be evaluated in the manner described above, are shown in italics.

G. Two “Proof of Concept” Policy Question Analyses

Two of the Major Policy Questions from the RWSP Scoping Document have been analyzed as part of this report. These policy memos serve as a “proof of concept” for the level of analysis of the remaining policy questions.

Proof of Concept 1

See attached Appendix C: Policy Memo Proof of Concept 1, which is a policy memo that addresses the policy question:

How should I/I be managed and how can costs be fairly apportioned? Should system capacity be expanded to account for increases in I/I? Should I/I policies change to support reducing the capacity needed for I/I?

Proof of Concept 2

See attached Appendix D: Policy Memo Proof of Concept 2, which is a policy memo that addresses the policy question:

Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?

H. Proposed Modifications to List of Policy Questions

WTD is proposing modifications to the Major Policy Questions identified in the RWSP Scoping Document in accordance with the proviso requirements. WTD does not propose modifications to the 29 Major Policy Questions outlined by the RWSP Scoping Document. However, WTD does propose adding three additional questions to cover important topics that were not fully captured by the existing questions.

Below are three additional policy questions that WTD proposes to be analyzed and discussed with RWQC.

Proposed New Policy Questions	Rationale
What approach should WTD use to fund asset renewal and replacement projects?	This question guides analysis on the different tools available to fund asset renewal and replacement projects, as proposed by the Asset Management Steering Committee, in coordination with the RWSP Working Group.
How should WTD best upgrade the combined system to address regulatory requirements, regional water quality, and West Point operations? How can combined system costs be fairly apportioned?	These questions introduce discussion on the combined system and the associated regulatory requirements.
How should WTD maximize recovery of new resources? How should WTD prioritize and monetize environmental and other co-benefits when considering cost of recovering new resources?	These questions encompass the potential for WTD to expand into new resource recovery areas.

Table A: Proposed Additions to Major Policy Questions

Appendix E: Major Policy Questions List shows the complete list of Major Policy Questions with proposed modifications included.

Given the large volume of policy memos WTD plans to deliver to RWQC (25 in total) and the time constraints placed upon RWQC members to evaluate all the policy memos, WTD will consult with the

Chair of RWQC if, and when, appropriate to consider prioritizing or deprioritizing certain policy memos listed in Appendix E for delivery to RWQC.

V. Conclusion and Next Steps

This report summarizes the plan to address the requirements of the Proviso. The plan will be implemented beginning in March 2026 until all policy analyses have been completed. Policy analyses for the Major Policy Question will be conducted in a two-step analysis, beginning with Step 1, which includes a problem statement, background context, policy options, and more, followed by Step 2, which includes an analysis of planning-level costs and outcomes. These questions will be grouped into categories and sequenced with RWQC throughout 2026 and 2027, leading to the production of a Draft RWSP Update, currently scheduled to be published in 2027. The Draft RWSP Update will present a full suite of policy options to consider before the Executive's Proposed RWSP Update is put forward, currently scheduled to occur in 2028.

VI. Appendices

- Appendix A: Policy Memo Template
- Appendix B: Schedule for Policy Analyses
- Appendix C: Policy Memo Proof of Concept 1
- Appendix D: Policy Memo Proof of Concept 2
- Appendix E: Major Policy Questions List

RWSP Update - [Topic]

A. Policy Question

This memo is focused on the policy questions related to the [Topic] topic of the Regional Wastewater Services Plan (RWSP) Update. The policy question[s] explored in this memo [is/are]:

- i. [Insert Policy Question(s)]

B. Problem Statement

[~100-200 words to summarize the current challenges identified by the policy question]

C. Contextual and Baseline Information

- i. **What is known about the topic and current conditions**

Subheading

[Information based on previously completed “101” materials for MWPAAC Engineering and Planning Subcommittee. Subheadings should break down into key themes or concepts, (e.g., *Separated Sewer Systems and Infiltration and Inflow in the Regional System*).]

- ii. **Current policies in policies in code, contract, or in practice**

[Insert King County policy reference number and/or source(s) into the table below. May also include policies from outside King County Code, including the County’s Comprehensive Plan, as needed.]

Relevant Policies in K.C.C.	Description
[Policy Number]	[Copy and paste from K.C.C. or other sources.]
[Policy Number]	[Copy and paste from K.C.C. or other sources.]

[For each Policy Number, include a brief summary (~50-100 words) and current implementation as paragraphs below the policy table.]

- iii. **The system “must-dos”**

[Describe any regulatory or legal requirements related to the question. E.g., sanitary sewer overflows, combined sewer overflows, NPDES permits, other permits, etc.]

iv. Current and budgeted expenditures

[Include a short introduction to the current and budgeted expenditures table, highlighting key information from the table. Include a table with project names and 2025-2035 cost estimates included in the CIP.]

v. Summary of science/data (if applicable)

[As needed, describe any science or data related to the policy question.]

D. Example Practices from Other Jurisdictions/Industry

Subheading

[~100-200 words per example. Highlight key tools, strategies, or programs as relevant to the policy question and proposed policy options or actions. Include where these examples are found.]

E. Policy Issues, Challenges, and Opportunities

[Use numbered list, with brief title and description (<100 words) for each policy issue, challenge or opportunity that may be related]

F. Range of policy options with associated actions and considerations (including qualitative description of costs)

[Include policy question again. Include high-level bullet preview of policy options. Include a summary table with the following format for each policy option related to the policy question. After the table, include a write-up for each policy option, including justification, considerations, and a qualitative description of costs.]

Summary of Policy Options

	Goal	Description	[Category] Actions	Examples
#1	[Goal of the policy option]	[Description of the policy option]	<ul style="list-style-type: none"> [List Relevant Actions] 	<ul style="list-style-type: none"> [~25-50 word example(s)]
#2			<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
Etc.			<ul style="list-style-type: none"> 	<ul style="list-style-type: none">

*Columns may be added or deleted for the topic, as appropriate

Policy Option #1 – [Description]

Justification

[A more detailed description of the policy option]

Considerations

[]

Policy Option #2 – [Description]

Justification

Considerations

[Etc.]

G. Interested and affected parties WTD will engage to gather input

[A sentence or short paragraph describing all groups that will be engaged to gather input]

H. Rate structure considerations (if applicable)

[Description of the potential relationship with these Policy Options and financial policy questions]

I. Relationship to contracts

According to the current sewer contracts, [Example text: WTD must accept all sewage and waste delivered for treatment and disposal from the component agencies]. The sewer contracts also state that the contracts may be modified from time to time through changes to King County Code.

[~100-200 words describing the potential different contract changes that would be required for each Policy Option]

J. Equity and Social Justice (ESJ) impacts

K. Planning-level cost estimates

This section will be added into the policy memo as the “Step 2” analysis later.

L. Evaluation of outcomes: identify impacts and outcomes of each option

This section will be added into the policy memo as the “Step 2” analysis later.

RWSP Update Schedule for Policy Analysis

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
<p><u>Group #1</u></p> <p>Separated System Conveyance</p> <p>Step #1: March 2026 Step #2: Nov 2026 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	1	1	How should I/I be managed and how can costs be fairly apportioned? Should system capacity be expanded to account for increases in I/I? Should I/I policies change to support reducing the capacity needed for I/I?	Separated System Conveyance (including infiltration/inflow)
		25	<i>Is there a better rate structure for the sewer rate?</i>	<i>Finance/Affordability</i>
		26	<i>Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood “one for all, all for one”), or consider alternative cost recovery rate structures to reflect other system impacts?</i>	<i>Finance/Affordability</i>
	2	2	Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?	Separated System Conveyance (including infiltration/inflow) <i>(see also: Treatment Group #7)</i>
	3	3	How should the conversion of on-site septic systems to sewers in the service area be managed and should WTD implement programs to encourage conversion within the service area?	Separated System Conveyance (including infiltration/inflow)

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
<p><u>Group #2</u></p> <p>Pollution (Source Control and Legacy)</p> <p>Step #1: April 2026 Step #2: Dec 2026 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	4	4	What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?	Pollution (Source Control and Legacy)
	5	5	How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?	Pollution (Source Control and Legacy) <i>(see also: Treatment Group 7 and Resource Recovery Group 8)</i>
<p><u>Group #3</u></p> <p>Asset Renewal and Replacement</p> <p>Step #1: May 2026 Step #2: Jan 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	6	6	How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?	Asset Renewal and Replacement
		7	What level of redundancy of critical systems should WTD have? What level of risk tolerance should WTD accept?	Asset Renewal and Replacement <i>(see also: Climate Impact Preparedness and Natural Hazard Resiliency Group 4)</i>
		8 (added question)	What approach should WTD use to fund Asset R&R projects?	Asset Renewal and Replacement <i>(see also: Finance/Affordability Group 9)</i>
		25	<i>Is there a better rate structure for the sewer rate?</i>	Finance

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
		26	<i>Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood “one for all, all for one”), or consider alternative cost recovery rate structures to reflect other system impacts?</i>	Finance
<p><u>Group #4</u></p> <p>Climate Impact Preparedness and Natural Hazard Resiliency</p> <p>Step #1: June 2026 Step #2: Feb 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	7	9	What level of resiliency should WTD plan for regarding seismic and other natural hazards to avoid or minimize risks? What level of risk tolerance should WTD accept? How can these considerations be best informed by the long-term capital motion work in progress?	Climate Impact Preparedness and Natural Hazard Resiliency
		7	<i>What level of redundancy of critical systems should WTD have?</i>	Climate Impact Preparedness and Natural Hazard Resiliency <i>(see also: Asset Renewal and Replacement Group 3)</i>
	8	10	Should existing wastewater policy language (KCC 28.86) be revised to specifically call out planning for future climate conditions in addition to population growth and other environmental factors?	Climate Impact Preparedness and Natural Hazard Resiliency
		11	How should WTD prepare and adapt to climate impacts (e.g., precipitation/storm intensities, sea level rise, river flooding, etc.) in line	Climate Impact Preparedness and Natural Hazard Resiliency

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
			with the Strategic Climate Action Plan? What level of climate impact risk tolerance should WTD plan for to avoid or minimize risks to the system?	
	9	12	How much should WTD reduce energy use and reduce greenhouse gas emissions?	Climate Impact Preparedness and Natural Hazard Resiliency
<p><u>Group #5</u></p> <p>Finance/Affordability</p> <p>July 2026</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	10	13	How will WTD measure customer affordability for contract agencies and ratepayers?	Finance/Affordability
	11	14	What other rate relief approaches should WTD implement to improve affordability for those who may struggle to pay their sewer bill?	Finance/Affordability
<p><u>Group #6</u></p> <p>Combined System Management</p> <p>Step #1: August 2026</p> <p>Step #2: March 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each</p>	12	15 (added question)	How should WTD best upgrade the combined system to address regulatory requirements, regional water quality, and West Point operations? How can combined system costs be fairly apportioned?	Combined System Management
		25	<i>Is there a better rate structure for the sewer rate?</i>	<i>Finance/Affordability</i>
		26	<i>Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood "one for all,</i>	<i>Finance/Affordability</i>

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
policy memo. See Group #10 and Group #11 for details.			<i>all for one”), or consider alternative cost recovery rate structures to reflect other system impacts?</i>	
<p><u>Group #7</u></p> <p>Treatment</p> <p>Step #1: September 2026 Step #2: April 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	13	16	Should the County evaluate costs and plan for levels of treatment beyond current legal requirements?	Treatment
		17	How should the County anticipate, engage with, and plan for future nutrient permit requirements, regulations related to CECs such as PFAS, or other future regulatory changes?	Treatment
		5	<i>How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?</i>	Treatment <i>(see also: Pollution and Resource Recovery Group 2)</i>
	14	2	<i>Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?</i>	Treatment <i>(see also: Separated System Conveyance Group 1)</i>
15	18	To what extent should WTD prioritize use of existing facility sites vs. acquiring new property to accommodate future treatment needs (including capacity)?	Treatment	

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
		25	<i>Is there a better rate structure for the sewer rate?</i>	Finance/Affordability
		26	<i>Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood “one for all, all for one”), or consider alternative cost recovery rate structures to reflect other system impacts?</i>	Finance/Affordability
	16	19	Should the region continue to provide a centralized approach for regional wastewater treatment, or should the region move towards a more decentralized approach?	Treatment
<p><u>Group #8</u></p> <p>Resource Recovery (Biosolids, Energy, Recycled Water)</p> <p>Step #1: October 2026 Step #2: May 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	17	20	Energy production and heat recovery – Should WTD be expanding its efforts to capture energy and heat? If so, at what level of effort?	Resource Recovery
		21	Biosolids – Should WTD further expand its efforts to develop Class A biosolids? What changes are needed to biosolid recovery policies to get to Class A?	Resource Recovery (Biosolids, Energy, Recycled Water)
	18	5	<i>How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?</i>	Resource Recovery <i>(see also: Pollution Group 2 and Treatment Group 7)</i>

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
	19	22	Recycled Water – Under what circumstances should the region expand the use of reclaimed water? Which uses (e.g., environmental benefits, groundwater recharge, industrial uses, irrigation) are most appropriate?	Resource Recovery
		5	<i>How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?</i>	Resource Recovery <i>(see also: Pollution Group 2 and Treatment 7)</i>
	20	23 (added question)	How should WTD maximize recovery of new resources? How should WTD prioritize and monetize environmental and other co-benefits when considering cost of recovering new resources?	Resource Recovery
<u>Group #9</u> Finance	21	24	Should WTD update the rate structure for the capacity charge to align with current industry standards? (Note: The capacity charge rate structure was updated in 2021. A capacity charge methodology study is in progress.)	Finance/Affordability

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
<p>Q4 2026: Full analysis of the rate structure policy questions 21, 22, 23 (both Capacity Charge and RCE) & March, May, Aug, Sep. 2026: WTD will begin to address the rate structure question sequentially where relevant as we move through Policy Question Groups 1, 3, 6, 7. This will allow RWQC members to see how the rate structure issue relates to various topics. Each relevant analysis would include a specific section dedicated to addressing “rate structure considerations” alongside the policy options.</p> <p>e.g. the policy memo 2 analysis will introduce and begin to address the rate structure question as it relates to the I/I issue.</p> <p>RWQC may choose to form a subcommittee focused on the rate structure question and/or WTD may propose a consultant-separate track for this discussion.</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	22	25	<p>Is there a better rate structure for the sewer rate? (Note: WTD has identified a work plan to further evaluate the residential customer equivalent conversion factor of 750 cubic feet per month)</p>	<p>Finance/Affordability <i>(see also: Separated System Group 1, Asset Renewal and Replacement Group 2, Combined System Management Group 6, and Treatment Group 7)</i></p>
	23	26	<p>Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood “one for all, all for one”), or consider alternative cost recovery rate structures to reflect other system impacts?</p>	<p>Finance/Affordability <i>(see also: Separated System, Asset Renewal and Replacement, Combined System Management, and Treatment)</i></p>

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
<p><u>Group #10</u></p> <p>Equity and Social Justice</p> <p>Analyses for these questions will be integrated into each of the analyses for Groups 1 through 9.</p> <p>May 2027: A comprehensive ESJ analysis for these questions across all topics/groups will be completed.</p>	24	27	What actions should WTD take to increase equity and social justice for the regional wastewater system?	Equity and Social Justice
		28	How will equity and social justice be interwoven in the update: community engagement, rate structure analysis, etc.?	Equity and Social Justice
		29	How should the regional wastewater system address environmental justice concerns as described in the 2021 Healthy Environmental for All Act, such as addressing the disproportionate environmental health impacts of vulnerable populations and overburdened communities?	Equity and Social Justice
<p><u>Group #11</u></p> <p>Relationship to Contracts</p> <p>Analyses for these questions will be integrated into each of the analyses for Groups 1 through 9.</p> <p>June 2027 tentative (following completion of step #2 for all Groups of questions)</p>	25	30	Are major policy updates aligned with component agency contracts?	Relationship to Contracts
		31	How will WTD implement the RWSP Update consistent with direction and requirements expected of contract agencies?	Relationship to Contracts

Appendix B: Schedule for Policy Analysis

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
Will be addressed across all 25 policy memos	NA	32	How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?	All topics

RWSP Update – Separated System Conveyance

Policy Memo #1

A. Policy Question

This memo is focused on the policy questions related to the Separated System Conveyance topic of the Regional Wastewater Services Plan (RWSP) Update. The policy questions analyzed in this memo are:

- i. How should Infiltration/Inflow (I/I) be managed and how can costs be fairly apportioned?
- ii. Should system capacity be expanded to account for increases in I/I?
- iii. Should I/I policies change to support reducing the capacity needed for I/I?

B. Problem Statement

I/I currently drives the need to increase the capacity of King County Wastewater Treatment Division's (WTD) separated system conveyance facilities. The majority of conveyance facilities have capacity to convey base flows and flow from future population growth, but require upgrades due to the amount of I/I entering the system during rain events. I/I makes up the majority of flow entering the separated system during wet weather events. Though it is impossible to remove all I/I, removing excessive I/I can significantly decrease the need for conveyance capacity capital upgrades. In the 2017 Conveyance System Improvement Plan, approximately \$1.7B (2016 dollars) in conveyance capacity upgrades were projected to be needed over the next 40 years, and one of the major drivers for these upgrades is increases in I/I. As conveyance facilities are upgraded with larger pipes and pumps, more I/I is also being conveyed to the treatment plants increasing the need for capacity upgrades at the treatment plants.

I/I is not distributed evenly. I/I levels vary throughout the region and by component agency based on numerous factors, including condition of existing infrastructure, groundwater levels, soil conditions, and other hydrologic factors. It is also estimated that up to 75% of I/I in the region originates from side sewers that connect private property residences and businesses to the separated sewer system. When WTD upgrades infrastructure due to I/I, agencies pay for projects equally through WTD's region-wide sewer rate, regardless of the amount of I/I the agency contributes to the regional separated system.

C. Contextual and Baseline Information

i. What is known about the topic and current conditions

Separated Sewer Systems

Separated sewer systems consist of sewers designed to convey sanitary sewage but not stormwater. In the urban landscape, the separated sewer system works in concert with separate stormwater collection systems to manage sanitary and wet weather flows, respectively. Separated sewer systems comprise an interconnected system of pipes, pump stations, and other infrastructure that convey wastewater from homes and businesses to local wastewater collection systems and then to the regional wastewater treatment facilities. Despite the intended separation between wastewater and stormwater, separated sewer systems are vulnerable to wet weather infiltration and inflow (I/I).

Typically, sewers built after the 1950s do not combine sanitary and stormwater into a single sewer system. WTD owns and maintains about 250 miles of separated sewer system conveyance, which represents about 65% of WTD's pipe system. Wastewater from homes and businesses within all the cities and sewer agencies within the WTD service area, except most of Seattle, is collected through around 5,900 miles of locally managed pipes, which then are connected to the regional separated system.

WTD's separated sewers convey flow primarily to South Treatment Plant and Brightwater Treatment Plant for treatment. West Point Treatment Plant treats flow primarily from combined sewers but also serves a portion of the separated sewer system in Kenmore, parts of Kirkland, Lake Forest Park, Shoreline, and parts of North Seattle.

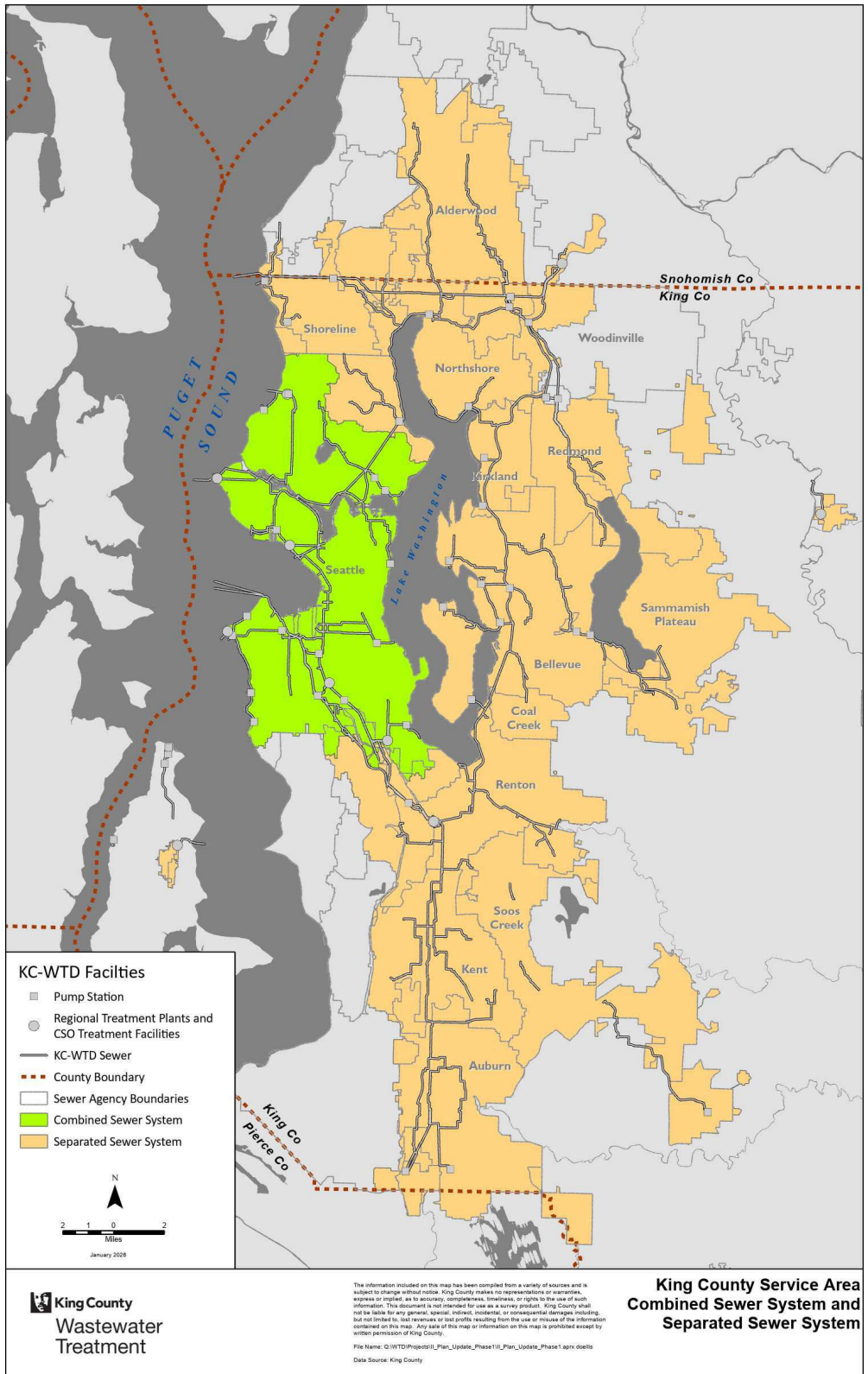


Figure 1. King County Service Area Combined and Separated Sewer Systems

Infiltration and Inflow in the Regional System

I/I is the unwanted entry of extraneous water into the sanitary sewer system. Infiltration occurs when groundwater seeps into sewer pipes through cracks, leaky pipe joints, root intrusion, and/or deteriorated maintenance holes. Inflow is stormwater that enters the sewer system through sump pumps, roof or foundation drains illegally connected to the sewer system, uncapped cleanouts, and/or faulty maintenance hole covers. Together, inflow and infiltration place a burden of additional flow on the regional separated system and treatment plants.

I/I in the regional system not only contributes heavily to sanitary sewer overflows (SSOs) but also drives most conveyance capacity and flow-based treatment needs. On average, as much as 75% of peak flows in the regional separated system are comprised of I/I and approximately 25% of the annual flow treated at Brightwater and South Plant is I/I. While I/I levels currently vary throughout the regional system, as infrastructure ages, I/I levels are expected to increase.

Based on flow monitoring conducted in the early 2000’s, where WTD deployed over 800 flow meters in both local and regional pipes, WTD estimates that up to 75% of I/I originates from private properties. Although a majority of I/I is believed to originate at private properties, I/I is diffuse and addressing only private properties is not expected to significantly reduce or eliminate I/I in the area as I/I can enter other parts of the system where defects or illicit connections have not yet been addressed.

ii. Current policies in code, contract, or in practice

King County Code (K.C.C. 28.86, Wastewater Treatment) guides WTD’s work in the separated conveyance system regarding I/I. The policies relevant to this memo are:

Relevant Policies in K.C.C.	Description
I/IP – 1	King County is committed to controlling I/I within its regional conveyance system and shall rehabilitate portions of its regional conveyance system to reduce I/I whenever the cost of rehabilitation is less than the costs of conveying and treating that flow or when rehabilitation provides significant environmental benefits to water quantity, water quality, stream flows, wetlands or habitat for species listed under the ESA.

<p>I/IP – 2</p>	<p>King County shall work cooperatively with component agencies to reduce I/I in local conveyance systems utilizing and evaluating I/I pilot rehabilitation projects, and developing draft local conveyance systems' design guidelines, procedures and policies, including inspection and enforcement standards. Evaluations of the pilot rehabilitation projects and a regional needs assessment of the conveyance system and assessments of I/I levels in each of the local sewer systems will form the basis for identifying and reporting on the options and the associated cost of removing I/I and preventing future increases. The executive shall submit to the council a report on the options, capital costs and environmental costs and benefits including but not limited to those related to water quality, groundwater inception, stream flows and wetlands, and habitat of species listed under the ESA. No later than December 31, 2005, utilizing the prior assessments and reports the executive shall recommend target levels for I/I reduction in local collection systems and propose long-term measures to meet the targets. These measures shall include, but not be limited to, establishing new local conveyance systems design standards, implementing an enforcement program, developing an incentive-based cost sharing program and establishing a surcharge program. The overall goal for peak I/I reduction in the service area should be thirty percent from the peak twenty-year level identified in the report. The county shall pay one hundred percent of the cost of the assessments and pilot projects.</p>
<p>I/IP – 3</p>	<p>King County shall consider an I/I surcharge, no later than June 30, 2006, on component agencies that do not meet the adopted target levels for I/I reduction in local collection systems. The I/I surcharge should be specifically designed to ensure the component agencies' compliance with the adopted target levels. King County shall pursue changes to component agency contracts if necessary or implement other strategies in order to levy an I/I surcharge</p>
<p>CP – 3 (2)</p>	<p>King County shall periodically evaluate population and employment growth assumptions and development pattern assumptions used to size conveyance facilities to allow for flexibility to convey future flows that may differ from previous estimates. The following activities shall take place to confirm assumptions and conveyance improvement needs:</p> <ol style="list-style-type: none"> 1. Field verification of wastewater flows and conveyance component conditions prior to implementation of regional conveyance capital projects that are intended to expand capacity of the system; and

	<p>2. Decennial flow monitoring to correspond with the Federal Census conducted every ten years.</p>
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I/I Policy 1 (I/IP-1) requires WTD to evaluate every conveyance capacity project to determine if I/I reduction would be more cost effective than the cost of conveying and treating the flow. Typically, a desktop analysis is sufficient to determine the cost effectiveness of I/I reduction. Through these analyses, WTD has found that conveyance upgrades are almost always less expensive to complete than I/I reduction. Sometimes projects require additional analysis to confirm the cost effectiveness of I/I reduction. The most recent I/I reduction analysis was completed for the Thornton Creek Trunk. The project included development of I/I reduction alternatives to address the conveyance capacity need. After extensive evaluation, it was determined that I/I reduction would be significantly more expensive for WTD to complete than upgrading the existing trunk line.

I/I Policy 2 (I/IP-2) was meant to support the development of the original I/I Control Program in the early 2000's. This policy requires WTD to:

- Work cooperatively with component agencies to complete I/I reduction pilot projects
- Develop voluntary draft local conveyance systems' design guidelines, procedures and policies, including inspection and enforcement standards
- Identify levels and sources of I/I in each local agency system through flow monitoring
- Develop a cost-benefit methodology to identify cost-effective I/I reduction projects
- Develop a recommended long-term I/I control plan

The work culminated in the 2005 Executive's recommended I/I Control Program Plan. The plan directed WTD to identify and complete demonstration scale projects to confirm the effectiveness of the I/I reduction techniques used in the I/I pilot projects on a larger scale. WTD identified the Skyway I/I Reduction project which was completed in early 2014. This project was the first attempt at completing I/I reduction in lieu of constructing a conveyance capacity capital project – the Bryn Mawr Storage Tank. The results of the Skyway I/I Reduction project showed that though there was a significant amount of flow reduction at the local level, there was considerably less flow reduction downstream in the regional system, and the Bryn Mawr Storage Tank project was subsequently not deferred.

I/I Policy 3 (I/IP-3) directed WTD to consider implementation of a surcharge, a monetary fine, for exceeding adopted levels of flow. The surcharge was considered as part of the development of the I/I Control Program's development but was ultimately not

implemented. The County and component agencies found that implementing a surcharge, as contemplated in the King County Code, would be costly to administer and would pose difficulties in verifying violations. Component agencies were also concerned that a surcharge would be pointless because WTD had agreed to pay for cost-effective I/I reduction. There were additional concerns regarding WTD taking a regulatory role that would expend ratepayer dollars on enforcement and monitoring activities. Instead, component agencies preferred to own the decision to complete I/I reduction based on their system needs.

Conveyance Policy 3 (2) (CP-3 (2)) requires WTD to conduct Decennial Flow Monitoring (DFM) alongside the United State (U.S.) Census. DFM consists of installing additional flow meters, to be used alongside the existing 130 permanent flow meters in the separated portions of the regional conveyance system, to provide a more comprehensive review of flow for conveyance improvement planning. DFM data is also used to identify levels of I/I in each model basin. The most recent DFM project took place between 2019 and 2022 and collected data to coincide with the 2020 U.S. Census.

iii. The system “must-dos”

WTD must meet Washington State requirements, which are derived from and expand upon U.S. Law and Code (Clean Water Act, Pub. L. 92-500; 33 U.S.C. § 1251 et seq.).

The Washington Administrative Code (173-220-020):

“No pollutants shall be discharged to any surface water of the state from a point source, except as authorized by an individual permit issued pursuant to this chapter or as authorized by a general permit issued pursuant to chapter 173-226 WAC.”

The separated sewer system must be built to convey all expected flows, to prevent sanitary sewer overflows (SSOs), which may occur due to improperly maintained or sized sewer collection systems. Due to WTD’s position as a wholesale provider of sewerage services, WTD must properly maintain and operate the regional system, while sizing its facilities large enough to accept base flow as well as I/I from component agencies to prevent SSOs.

WTD is not permitted for SSOs under the National Pollutant Discharge Elimination System (NPDES) permits issued by the Washington Department of Ecology. Even discharges that do not reach waters of the U.S. can be violations of the federal Clean Water Act permit requirements under some circumstances.

iv. Current and budgeted expenditures

In July 2025, WTD provided a list of conveyance capacity projects to the Regional Water Quality Committee (RWQC). 11 are related to conveyance capacity upgrades, totaling \$736M or approximately 6.5% of WTD’s total capital improvement program (CIP) between 2025 and 2035. The conveyance capacity projects and the costs included in the CIP include:

Project Name	2025-2035 Cost Estimates	
North Mercer Island and Enatai Interceptors Upgrade	\$	38,415,620
Richmond Beach PS Upgrade		28,789,079
Richmond Beach Edmonds Interceptor Parallel		10,513,782
Black Diamond Trunk Capacity Upgrade		164,391,988
Garrison Creek Interceptor Replacement, Realignment, and Diversion		14,173,165
Lake Hills and NW Lake Sammamish Interceptor Upgrade		152,451,573
Boeing Creek Trunk Replacement and Parallel		835,661
Coal Creek Siphon and Trunk Parallel		153,671,044
Medina Pump Station Upgrade		43,618,526
Sammamish Plateau Diversion (Phase 1)		112,165,420
Soos Creek Cascade Relief Interceptor No. 2 Upgrade		16,796,707
	\$	735,822,565

** The cost estimates described here are what were presented in July 2025 and may be updated as capital projects are advanced and further defined.

v. Summary of science/data

The figure below shows the peak I/I flow rate for each of the 181 model basins in the regional separated sewer system in WTD’s service area. This figure was developed using flow monitoring information from the 2010 Decennial Flow Monitoring effort. During development of the 2005 Executive’s Recommended I/I Control Program, Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) and WTD identified 3,500 GPAD (Gallons Per Acre Day) based on the peak 20-year hourly flow as an agreed-upon target limit that could be reached through I/I rehabilitation. Currently 108 out of 181 model basins exceed that limit.

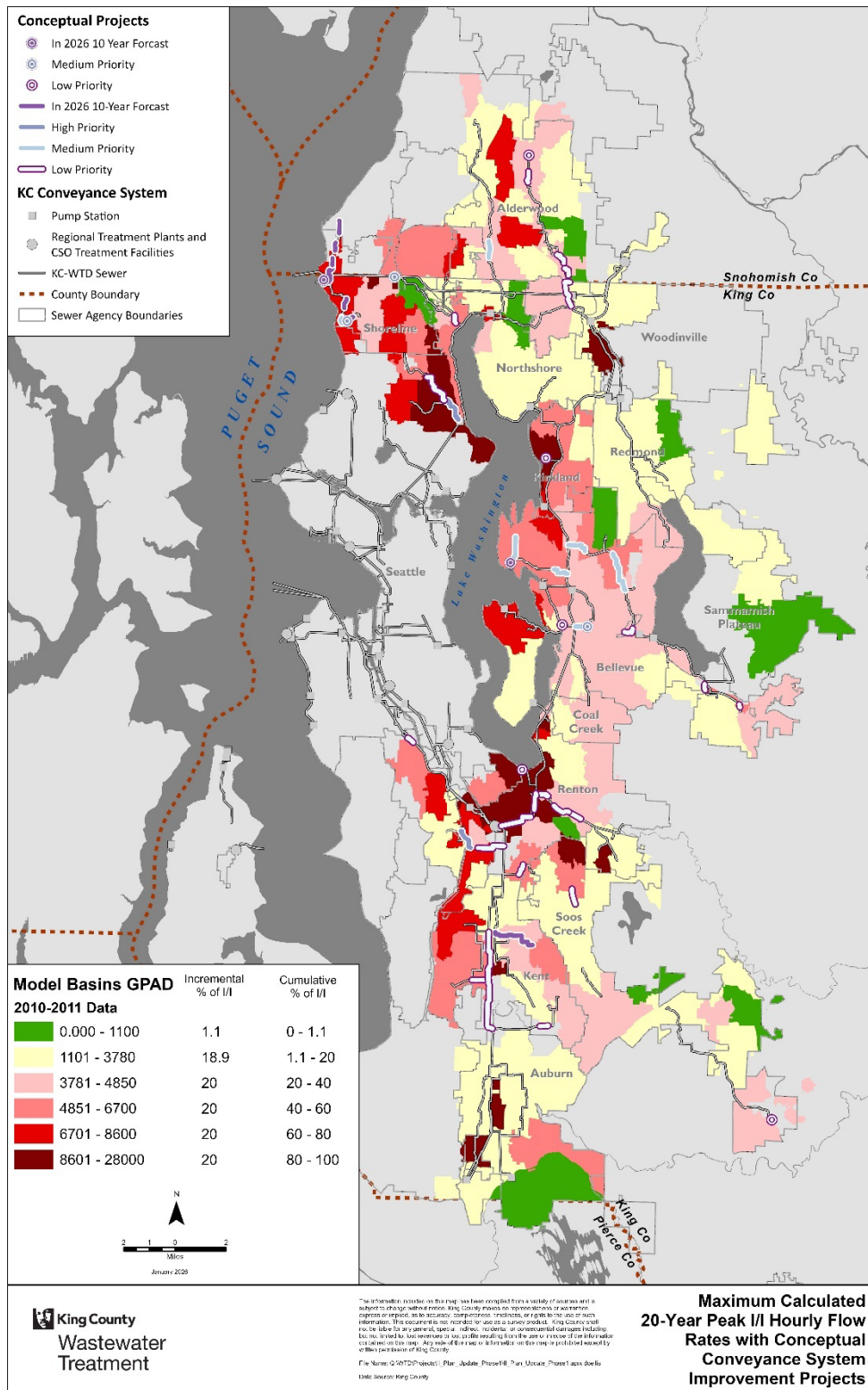


Figure 2. Inflow / Infiltration in WTD’s Separated System Service Area 181 Model Basins

D. Example Practices from Other Jurisdictions/Industry

On multiple occasions since the early 2000's, WTD has interviewed other regional sewerage agencies across the United States to investigate how the organizations are approaching I/I mitigation efforts, including the inspection and rehabilitation methods they are using, I/I reduction effectiveness, and the successes and challenges they have encountered. Some agencies conduct I/I mitigation work in their region due to regulatory actions, such as consent decrees, that require them to reduce I/I or prevent SSO's. Other agencies conduct I/I mitigation because it is more cost-effective than upgrading conveyance facilities.

Rehabilitation/Replacement of Sewer System Components

Many agencies focus on targeted or comprehensive rehabilitation or replacement of sewer system components, similar to WTD's work in Skyway. This work typically involves systematic rehabilitation, replacement, or upgrade of public and private sewer system components to reduce I/I. The approach can be targeted based on measured or predicted I/I rates, needed downstream infrastructure improvements, or other location-specific factors. This type of action is typically highly effective at reducing I/I in areas with high I/I severity, known defects, and appropriate stormwater conveyance system availability. Work is usually only completed when it is considered to be more cost effective than upgrading conveyance capacity. Some agencies who have used this approach to I/I mitigation include Clackamas County, Northeast Ohio Regional Sewer District, Hampton Roads Sanitation District, and Miami Dade County.

Private Side Sewer Inspection and/or Certification Programs

East Bay Municipal Utility District and Pinellas County are two agencies that have implemented a private side sewer inspection and certification program. This action includes systematic assessment and/or improvement of the condition of private side sewers, which can be a significant source of I/I, as is assumed in WTD's service area. Through inspection and/or certification, defects can be identified and repairs required. Side sewer inspection and certification can be required at the time of property sale or triggered when certain types of building permits are submitted (e.g., demolition, change to occupancy content, etc.). I/I reduction effectiveness can be difficult to quantify unless all properties in an area have been inspected and rehabilitated, but noticeable decreases in I/I are expected over time. East Bay Municipal Utility District has had success with this action in their service area.

Peak Flow Limitation Program

Other regional agencies use enforceable flow thresholds for local agencies to control peak I/I flows. Under this action, when peak flow rates exceed defined limits, agencies are required to initiate investigations, flow monitoring, or mitigation planning. This action may also impose a surcharge, restrict new connections, or invoke other governmental consequences. By establishing flow limits as triggers for action or accountability, this action creates strong incentives for I/I reduction and aligns wastewater planning with system capacity constraints. Under this action, a gradual reduction of peak I/I flows are anticipated over many years. Agencies that WTD has interviewed that have implemented a peak flow limitation program include Northeast Ohio Regional Sewer District, Miami Dade County, and Metropolitan Council Environmental Services (MCES).

MCES has a flow-based policy to compel component agency I/I control. MCES sets a peak flow limit by taking the 10-year average and applying standard peaking factors specific to each component agency to establish a threshold for peak hourly flow. When a component agency exceeds the peak flow, they receive notification from MCES. MCES currently charges component agencies \$461,000 per million gallon per day (mgd) of flow exceedance. Instead of paying the surcharge, component agencies are able to spend an equivalent amount on work to investigate and mitigate excess I/I sources. Component agencies are given four years to complete the work, but MCES allows for extensions, if needed. The component agencies are required to report on the status of work annually to MCES. Work is complete once all money from the surcharge has been expended or when the sources of I/I are found and mitigated.

E. Policy Issues, Challenges, and Opportunities Related to the Policy Question

Addressing I/I presents a set of unique challenges, as well as potential opportunities for the region.

1. WTD's authority as a wholesaler is limited

WTD lacks authority to mandate actions for private property owners. WTD's ability to compel I/I reduction work extends only to the component agencies that it serves. Cities have authority to mandate I/I reduction on private property where a significant portion of I/I originates from. Additionally, sewer districts that have contracts with WTD do not have the same legal authority as cities, limiting their ability to mandate I/I reduction.

2. Sources of I/I are diffuse

There is not a quick fix to removing I/I from the system because sources of I/I are diffuse and spread across the WTD service area. I/I reduction requires multiple approaches that rehabilitate both private side sewers and public sewer systems.

3. The benefits of I/I reduction are sometimes difficult to see downstream

The benefits of I/I rehabilitation work are most apparent close to where the work is performed in the local system. Benefits are sometimes more difficult to see downstream in the regional system, as evidenced from the Skyway Demonstration Project. As a regional provider at the downstream end of the sewer system, WTD accepts and ratepayers pay the costs of all I/I from local agencies and their customers. If the benefits of reductions in I/I are not seen at the regional level, then the cost-savings from I/I reduction work are not realized at the regional level as conveyance capacity will still need to be expanded.

4. Effectively reducing I/I may benefit the treatment plants as well as the conveyance system

Reducing influent flow through I&I control could positively benefit WTD's ability to meet future treatment needs, including nitrogen management, by reducing flow capacity-driven sizing of treatment improvements. It could also provide operational cost savings associated with running treatment processes at lower flows. Reducing flow capacity-driven improvements could contribute to the ability of WTD to meet forecasted population growth within the footprint of our existing treatment plants, which may be constrained due to nitrogen reduction-related requirements further into the future.

F. Range of Policy Options with Associated Actions and Considerations (including qualitative description of costs)

The policy options presented below describe potential choices and Separated System Actions that could be implemented to address the following policy questions:

- How should I/I be managed and how can costs be fairly apportioned?
- Should system capacity be expanded to account for increases in I/I?
- Should I/I policies change to support reducing the capacity needed for I/I?

The policy options include:

- Maintaining the current policies, including expanding conveyance and treatment capacity and removing I/I when cost-effective

- Amend or add new policies to either focus on incentivizing I/I reduction in areas of greatest I/I, or implementing flow limits systemwide and administering penalties if flow limits are exceeded due to I/I

Summary of Policy Options

	Goal	Description	Separated System Actions	Cost Burden
#1	<p>Expand conveyance and treatment capacity to accommodate I/I and remove I/I when cost effective</p>	<p>Maintain current I/I policies and continue to accept all component agency flows and complete I/I reduction when the cost of rehabilitation is less than the cost of constructing a project to convey and treat the flow on a project-by-project basis</p>	<p>Capacity Management – WTD conducts I/I reduction when cost-effective; component agencies conduct I/I reduction according to internal policies and procedures</p> <p>Flow Monitoring – Conduct extensive regional flow monitoring every decade to correspond with the U.S. Census to supplement permanent flow monitoring</p>	<p>The region will pay for conveyance and treatment capacity projects to accept I/I unless it is cost-effective to remove</p> <p>The region will benefit from having expanded conveyance and treatment capacity in the regional separated system</p> <p>Component agencies contributing excessive I/I will disproportionately benefit by having the region pay to accept excessive I/I that is contributed from their systems</p>

	Goal	Description	Separated System Actions	Cost Burden
#2	Incentivize I/I reduction in areas of high I/I to defer conveyance capacity projects and potentially reduce treatment capacity needs	Provide financial support to component agencies and private property owners to reduce I/I in areas with high I/I	<p>Capacity Management – Targeted regional I/I reduction strategies addressing areas of high I/I to defer the need for capacity upgrades.</p> <p>Flow Monitoring – Expanded permanent flow monitoring throughout the separated system to quantify levels of I/I in the local agencies’ systems.</p>	<p>The region will pay for I/I reduction in areas of high I/I.</p> <p>The region will benefit from the cost-savings of I/I reduction when conveyance capacity projects are deferred.</p> <p>Component agencies and communities in areas with high I/I will benefit disproportionately from having I/I reduction subsidized.</p>
#3	Maximize I/I reduction system-wide to eliminate conveyance and treatment capacity projects	Implement I/I limits on component agencies system-wide and enforce penalties if limits are exceeded	<p>Capacity Management – Service area wide required I/I reduction to eliminate need for capacity upgrades and reduce costs to convey and treat flows</p> <p>Flow Monitoring – Expanded permanent flow monitoring throughout the separated system to quantify levels of I/I in the local agencies systems.</p>	<p>Component agencies contributing I/I will pay for the cost of I/I and/or the cost of I/I reduction</p> <p>The region will benefit from the elimination of the need for conveyance and treatment capacity projects due to I/I</p>

Policy Option #1 – Maintain current I/I policies and continue to accept all component agency flows and complete I/I reduction when the cost of rehabilitation is less than the cost of constructing a project to convey and treat the flow on a project-by-project basis

Justification

This policy option would maintain the current I/I policies with WTD continuing to accept all component agency flows as described in the current sewer contracts. This policy option would also allow component agencies to prioritize and conduct I/I reduction on their systems when it makes sense based on their capital portfolio priorities.

Considerations

The continued implementation of these actions could result in no I/I reduction being completed at the regional or local level, as I/I reduction has not proven to be less expensive than the cost of constructing a project to convey and treat I/I using the current cost-benefit ratio. The cost-benefit ratio would need to be updated to be more comprehensive of cost-savings for I/I reduction to be deemed cheaper than constructing a capital project. Additionally, if component agencies are left with the choice to complete I/I reduction on their systems, component agencies would be less incentivized to complete I/I reduction as WTD is required to accept all component agency flows as part of the sewer contracts.

WTD would continue implementation of ongoing permanent flow monitoring as well as expanded regional flow monitoring concurrent with the U.S. Census to identify conveyance capacity needs in the separated sewer system.

This cost would be borne by the region and the benefits of expanded treatment and conveyance capacity in the system would be experienced by the region, but the agencies who contribute excessive I/I would benefit disproportionately as they could defer I/I rehabilitation on their systems.

Policy Option #1 would have lower near-term costs compared to Policy Options #2 and #3 as WTD and the component agencies would need to invest in I/I reduction only when it is cost-effective. But Policy Option #1 would have higher long-term costs as I/I is the most significant contributor of conveyance capacity needs and not addressing it would require the region to continue to build conveyance capacity projects to accommodate I/I into the future.

Policy Option #2 – Provide financial support to component agencies and private property owners to reduce I/I in areas with high I/I

Justification

This policy option would amend the current I/I policies to allow WTD to provide financial support to certain component agencies and private property owners to complete I/I reduction in areas with high levels of I/I. This policy option would incentivize component agency rehabilitation of local infrastructure to reduce I/I and incentivize private property owners to rehabilitate their side sewers, where a large portion of I/I enters the system by off-setting some or all the costs of rehabilitation. This policy option would reduce the amount of peak wet weather flow entering the regional sewer system and offer component agencies or private property owners the opportunity to improve the local public or private sewer system at lower or no cost. If enough flow is removed, then conveyance capacity projects could be deferred.

This policy option in action could include:

- Matching grants for I/I rehabilitation projects that component agencies could apply for
- Side sewer inspection rebate program
- Low-interest loan program for private property owners to get their side sewers inspected or repaired

Considerations

This policy option would provide regional funds to component agencies and private property owners in areas with high I/I, and the cost of I/I reduction would be borne by the region, as opposed to being borne by the agencies who are contributing the I/I. Conversely, areas with high levels of I/I are generally areas with lower average income, older systems, areas with higher groundwater tables, or are located in lower lying areas near bodies of water making their systems more vulnerable to I/I. These conditions present an equity opportunity, as this policy option could help more socially vulnerable communities improve their systems, as well as acknowledging conditions that the component agencies serving those communities do not have control over, such as geographical conditions.

Additionally, to implement this policy option, a net benefit must be demonstrated when providing funds to component agencies or private citizens. Analysis must demonstrate that funding I/I reduction would defer a capacity capital project or reduce operation and

maintenance needs that are equal or greater to the cost of the reduction. Any funds distributed through this policy option would need to be evaluated on a case-by-case basis.

WTD would need to implement enhanced ongoing permanent flow monitoring and continue with expanded regional flow monitoring concurrent with the U.S. Census to identify and confirm conveyance capacity needs and areas with high levels of I/I.

The costs would be borne by the region. The benefit of deferring conveyance capacity capital projects and reducing treatment capacity needs also would be experienced by the region. Agencies who are contributing excessive I/I would benefit disproportionately, as they would also have I/I rehabilitation subsidized by the region.

In the near-term Policy Option #2 would cost more than Policy Option #1 but would likely realize cost-savings long-term as Option #2 would defer capacity projects as excessive I/I is removed.

Policy Option #3 – Implement I/I limits on component agencies systemwide and enforce penalties if limits are exceeded

Justification

This policy option in action would set peak I/I limits from component agencies to reduce the amount of peak wet weather flow entering the regional sewer system. This policy option compels I/I reduction by administering penalties to component agencies who contribute flows that exceed the limit. It could also enforce penalties on component agencies that do not complete required I/I reduction work. If enough flow is removed, then conveyance and treatment capacity projects could be eliminated. This policy option in action could look like:

- A surcharge fee that is calculated based on the amount of flow exceeded
- Requirements to develop an I/I reduction plan for agencies that exceed limits

Considerations

This policy option would require I/I reduction by administering penalties on component agencies contributing excessive flow to the regional system. Flow monitoring in the past has shown that areas with high I/I are generally areas that have lower average income and older systems and this policy could impose excessive financial burden on those agencies and their ratepayers. Supplemental programs could be implemented to mitigate this, such as offering component agencies who serve more socially vulnerable communities a “grace period” to reduce the amount of flow they are contributing before administering surcharge fees. Component agencies can also be offered the option to invest the dollar amount of the

fine that is administered into rehabilitation of their systems and submit a report of what rehabilitation was implemented, instead of paying the amount of the fine to WTD.

Policy Option #3 would create significant costs to launch the program. A considerable amount of resources would need to be dedicated to increase permanent flow monitoring, research and identify flow targets, and validate any flow exceedances before penalties could be administered.

The costs would be borne by component agencies contributing excessive I/I to the regional system, as they would be required to either pay fines or invest in rehabilitating their sewer systems. The region would benefit from the elimination of the need for conveyance and treatment capacity projects due to I/I.

Policy Option #3 would likely be the more expensive to implement both in the near-term and the long-term compared to Policy Option #2. Option #3 would require more resources to launch a program that involves enforcing fines or surcharges on component agencies, and there would be more scrutiny on the flow monitoring required to enforce penalties.

Relative to Option #2, Policy Option #3 would have higher long-term costs as managing an enforcement program would be more resource intensive than managing an incentive program. Relative to Option #1, Policy Option #3 would likely cost less in the long-term as capacity projects would be eliminated due to removal of excessive I/I.

G. Interested and Affected Parties WTD will Engage to Gather Input

MWPAAC and the component agencies that WTD provides sewerage services to are the primary audiences that need to be engaged on the I/I policy options. Additional engagement with tribes, community based organizations (CBOs), and environmental non-governmental organizations (NGOs) may be conducted during implementation planning.

H. Rate Structure Considerations (if applicable)

All three of the forementioned policy options could have potential impacts to WTD's overall rate structure. The 1999 'Robinswood' agreement focused on a regional 'all for one and one for all' approach where all member jurisdictions would contribute equally to dealing with I/I, and a uniform rate structure would be in place throughout WTD's service area. Policy Options #1 and #2 both maintain this approach, with WTD providing financial support for upstream projects that reduce the overall cost of I/I to WTD. Any financial benefits or costs to WTD would thus be shared proportionately throughout the service area.

Policy Option #3, which could create an I/I surcharge rate class, would be a departure from this previous approach. WTD currently has only one customer class outside of the general sewer rate (high-strength dischargers), who pay the marginal operating cost of treating high-strength wastewater. If WTD were to implement a surcharge for I/I and apply the revenue to existing and planned obligations, the general sewer rate would be lower than it otherwise would be. This situation would result in Local Sewer Agencies (LSAs) with a high I/I flow paying more, and LSAs with low I/I flow paying less. Any I/I surcharge would need to be calculated in accordance with cost-of-service principles and is unlikely to substantially reduce the general sewer rate.

However, I/I is not the only cost driver within WTD's service area that is concentrated within a specific geographic zone. Because the combined conveyance system (roughly approximate to the City of Seattle) is designed to convey stormwater, it would not be charged through a potential I/I surcharge. However, it is possible that an I/I surcharge would need to be paired with a CSO surcharge that assesses all or some of the impacts of the Combined Sewer Overflow program on LSAs within the combined system area. Any detailed discussion of moving away from the Robinswood agreement's 'all for one and one for all' approach will likely not be constrained to only an I/I surcharge.

There are also potential impacts to the general sewer rate structure. If surcharges were implemented, the general sewer rate would need to recover less revenue than it otherwise would. WTD's general sewer rate currently consists of a uniform rate structure, where all single-family residences (SFR) are assumed to equal one Residential Capacity Equivalent (RCE). Non-SFR customers are measured based on flow, and a conversion factor of 750 cubic feet per month is equal to one RCE. There is evidence that a lower conversion factor would be more appropriate and reflect real world conditions. WTD has identified a work plan to evaluate the conversion factor, in line with Financial Policy 15.4, "*King County shall periodically review the appropriateness of this factor to ensure that all accounts pay their fair share of the cost of the wastewater system...*".

Any I/I based surcharge would likely be flow-based, which could have 'knock-on' effects in terms of measuring the number of flow-based RCEs in each LSA. In addition, I/I based surcharges would be more variable than WTD's existing rate structure and likely result in greater fluctuation in month-to-month revenues. If WTD were to adopt a more variable rate structure, some financial policies may need to be reexamined as well.

I. Relationship to contracts

According to the current sewer contracts, WTD must accept all sewage and waste delivered for treatment and disposal from the component agencies. The sewer contracts

also state that the contracts may be modified from time to time through changes to King County Code.

Policy Option #1 would not pose a change to the sewer contracts, as WTD would continue to accept flow from the component agencies as detailed in the contracts, and complete I/I reduction when cost effective. Implementing a flow limit, as with Policy Option #3, would require an update to the sewer contracts, or an update to King County Code. Modifying the sewer contracts presents unique challenges as there are two sets of expiration dates for the contracts - 25 contracts run through July 2036 and nine contracts run through July 2056.

Providing incentivizes, such as grants and loans for I/I reduction as with Policy Option #2 is allowed as long as a net benefit to the regional system can be demonstrated according to the Attorney General's Opinion 2009 No.5, and does not directly conflict with language in the sewer contracts.

J. Equity and Social Justice (ESJ) impacts (if applicable)

The policy options described have the potential to have positive or adverse ESJ impacts if selected. Generally, portions of the WTD service area that have the highest levels of I/I also have higher Social Vulnerability Index (SVI) scores.

SVI is a metric used by the Center for Disease Control (CDC) that assesses each census tract's vulnerability to disasters and public health threats. Many of those factors overlap with equity considerations, such as poverty, age, disability, and housing. SVI scores are assigned from 0 (least vulnerable) up to 1.0 (most vulnerable). Areas in the WTD service area that have a peak I/I rate of 3,500 GPAD or more have an average SVI score of 0.43 compared to the WTD Service Area average of 0.38 and the King County average of 0.40.

Policy Option #1 proposes the least amount of I/I reduction across the region, and the costs of constructing treatment and conveyance capacity projects in lieu of conducting I/I reduction are distributed across the service area through the sewer rate. Socially vulnerable populations across the region will continue to experience a higher sewer rate to pay for the construction of capacity projects to accept the increased I/I.

Policy Option #2 could provide opportunities for positive ESJ impacts. Ratepayers who live in high I/I areas would have opportunities to participate in programs to get their side sewers inspected for low or no cost. Additional programs could be implemented to increase the amount that the ratepayers may be eligible for if they are low-income.

In contrast, Policy Option #3 compels I/I reduction through penalties and could have adverse ESJ impacts on socially vulnerable populations – especially if the costs of the I/I

reduction or the penalties from contributing excessive flows are passed down from the component agencies to the ratepayers. If the policy includes programs that directly impact ratepayers like a private side sewer inspection program, then additional programs could be delivered in unison to mitigate the adverse ESJ impacts, such as exemptions, subsidies, or grants for low-income ratepayers.

K. Planning-level cost estimates

This section will be added into the policy memo as the “Step 2” analysis later.

L. Evaluation of outcomes: identify impacts and outcomes of each option

This section will be added into the policy memo as the “Step 2” analysis later.

RWSP Update - Separated System Conveyance

Policy Memo #2

A. Policy Question

This memo is focused on policy questions related to the Separated System Conveyance topic of the Regional Wastewater Services Plan (RWSP) Update. The policy question analyzed in this memo is:

- i. Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?

For the purposes of this memo, this capacity question is analyzed through the lens of separated system conveyance, particularly focusing on project sizing and project timing. This capacity-related question will also be analyzed in a policy memo dedicated to treatment capacity scheduled for completion in September 2026.

B. Problem Statement

King County's Wastewater Treatment Division (WTD) uses a set of planning assumptions to estimate the need for infrastructure expansion to meet future conveyance capacity needs. The need for increased capacity is due to population growth (i.e., a need for more pipe reaches and greater pipe volume) and an increase in infiltration and inflow (I/I) that results both from expansion of the system (more pipe surface area that can harbor leaks or illicit connections) and degradation of existing pipes. Over a 50-year planning horizon, most of the volume expansion needed in a planned capacity improvement is due to increasing levels of I/I.

After assessing capacity needs, conveyance infrastructure improvements are then sized conservatively to ensure that new infrastructure can support capacity well into the future. Due to capital funding constraints, these improvements are often installed just before the old structure reaches full capacity.

Building infrastructure to meet larger—and perhaps unnecessary—capacity requirements is more costly than building smaller infrastructure. Similarly, installing capacity improvements before they are needed ties up capital that could be used for other improvements. However, building undersized infrastructure risks needing additional capacity upgrades more quickly, while delaying a project until its need is imminent could precipitate construction cost risks.

C. Contextual and Baseline Information

ii. What is known about the topic and current conditions

WTD's Separated Sewer System

Typically, sewers built after the 1950s do not combine sanitary and stormwater flows into a single sewer system. In the urban landscape, the separated sewer system works in concert with distinct stormwater collection systems to manage sanitary and wet weather flows, respectively. Separated sewer systems comprise an interconnected system of pipes, pump stations, and other infrastructure that convey wastewater from homes and businesses to local wastewater collection systems and then to the regional wastewater treatment facilities.

WTD owns and maintains about 250 miles of separated sewer system conveyance, which represents about 65% of WTD's pipe system. Wastewater from homes and businesses within all the cities and sewer agencies within the WTD service area, except most of Seattle, is collected through around 5,900 miles of locally managed pipes, which then are connected to the regional separated system.

WTD's Separated Sewer Planning Process

WTD plans for capacity upgrades to the separated sewer system through updates to the Conveyance System Improvement (CSI) Plan. Each decade, with the start coinciding with U.S. Census years, WTD undertakes an extensive Decennial Flow Monitoring effort to document flows throughout its conveyance system. This large decennial flow monitoring effort temporarily augments a system of permanent flow monitors that WTD continuously maintains. This flow data and a set of planning assumptions are used to model future flows in each segment of conveyance. The planning assumptions include estimates of population growth, water usage, and expected infiltration and inflow (I/I) across the planning horizon. Increases in I/I are the largest contribution to increasing conveyance capacity needs.

Through this process, WTD can determine which segments of conveyance have inadequate capacity to manage future flows. Once these conveyance capacity needs are identified, WTD then develops conceptual projects to meet future capacity needs. Current practice for how this process is implemented is described below.

iii. Current policies in code, contract, or in practice

King County Code (K.C.C. 28.86, Wastewater Treatment) guides WTD's work in the separated conveyance system. The policies relevant to this memo are:

Relevant Policies in K.C.C.	Description
CP-1(1)	The twenty-year peak flow storm shall be used as the design standard.
CP-2	King County shall construct the necessary wastewater conveyance facilities to convey wastewater from component agencies to the treatment plants.
CP-3	King County shall periodically evaluate population and employment growth assumptions.

Current Practice—Developing Capacity Improvement Projects

The process used to develop capacity improvement projects first determines whether conveyance facilities can convey a 20-year peak flow without surcharging (filling and backing up through the pipe) under current conditions. Pipes that surcharge are at risk of overflowing. Facilities that can convey this estimated peak flow are assigned a level of service (LOS) of greater than 20. Facilities that cannot convey a peak flow are assigned a LOS of less than 20; for example, a LOS below 5 means there is a one-in-five chance that surcharging will occur in any given year.

Conceptual projects to increase capacity are then developed for infrastructure with a LOS of less than 20. These conceptual projects are sized to accommodate the 20-year peak flow projected for 50 years from the year of the last major flow monitoring effort; these peak flows include both increased flow due to projected PSRC population growth and increased I/I. For example, in the 2017 CSI report, based on flow monitoring that began in 2010, the 20-year peak flow expected in 2060 was used as the basis for sizing new pipe.

Although the project planning process begins for all conveyance needs once they are identified as being below a 20-year LOS, the conceptual projects are not advanced through WTD's project development pipeline until later. Capacity improvements are generally implemented when the capacity-limited infrastructure reaches a 2-year LOS.

Current Practice—Estimating Population Growth

WTD currently updates population and employment growth assumptions every decade using Puget Sound Regional Council (PSRC) forecasts, which correspond with decadal

updates to the U.S. Census. These PSRC forecasts are aggregated from the parcel level to match WTD's service area. PSRC does not extend its forecasts to the time horizon that WTD considers for conveyance planning, so WTD's planning and modeling teams extend the PSRC data using simple extrapolation methods.

iv. The system “must-dos”

WTD must meet Washington State requirements, which are derived from and expand upon U.S. Law and Code (Clean Water Act, Pub. L. 92-500; 33 U.S.C. § 1251 et seq.). WTD must also abide by the growth management policies of Washington State by providing services to the local urban growth area, and WTD must account for projected population growth in its General Sewer Plan.

Essentially, the separated sewer system must not be underbuilt for the projected population growth. The system must be built to convey all expected flows from the population, with no sanitary sewer overflows (SSOs). Even overflows that do not reach waters of the U.S. can be violations of the federal Clean Water Act permit requirements under some circumstances. WTD's National Pollutant Discharge Elimination System (NPDES) permits, issued by the Department of Ecology, do not allow for SSOs in the separated conveyance system.

The Revised Code of Washington (RCW 36.70A.110) states:

“(2) Based upon the growth management population projection made for the county by the office of financial management, the county and each city within the county shall include areas and densities sufficient to permit the urban growth that is projected to occur in the county or city for the succeeding twenty-year period [...] As part of this planning process, each city within the county must include areas sufficient to accommodate the broad range of needs and uses that will accompany the projected urban growth including, as appropriate, medical, governmental, institutional, commercial, service, retail and other nonresidential uses.”

The Washington Administrative Code (WAC 173-240-050) states:

“(3) The general sewer plan shall include the following information [...]

(e) The population trend as indicated by available records, and the estimated future population for the stated design period.”

v. Current and budgeted expenditures

In July 2025, WTD provided a list of conveyance capacity projects to the Regional Water Committee (RWQC). 11 projects are related to conveyance capacity upgrades, totaling \$736M or approximately 6.5% of WTD’s total Capital Improvement Plan (CIP) between 2025 and 2035. The conveyance capacity projects and the costs included in the CIP include:

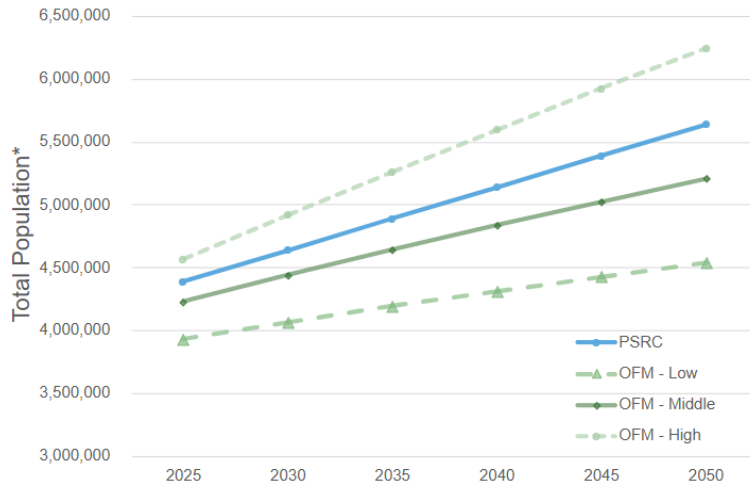
Project Name	2025-2035 Cost Estimates
North Mercer Island and Enatai Interceptors Upgrade	\$ 38,415,620
Richmond Beach PS Upgrade	28,789,079
Richmond Beach Edmonds Interceptor Parallel	10,513,782
Black Diamond Trunk Capacity Upgrade	164,391,988
Garrison Creek Interceptor Replacement, Realignment, and Diversion	14,173,165
Lake Hills and NW Lake Sammamish Interceptor Upgrade	152,451,573
Boeing Creek Trunk Replacement and Parallel	835,661
Coal Creek Siphon and Trunk Parallel	153,671,044
Medina Pump Station Upgrade	43,618,526
Sammamish Plateau Diversion (Phase 1)	112,165,420
Soos Creek Cascade Relief Interceptor No. 2 Upgrade	16,796,707
	\$ 735,822,565

** The cost estimates shown above were presented to RWQC in July 2025 and may be updated as capital projects are advanced and further defined.

vi. Summary of science/data (if applicable)

Population Growth

The Washington Office of Financial Management (OFM) provides ranges of possible population growth scenarios for Washington counties, from low to high. The PSRC forecast through 2050, included in the graph below, falls within this range. Note that WTD’s service area is not the entirety of these three counties; this data is provided to show consistency across agencies that issue the raw data WTD uses to develop service-area estimates.



*Based on total population for King, Pierce, and Snohomish Counties

Sanitary Sewer Overflows

WTD’s system modeling strategy focuses on surcharging (the backing-up of flow within a pipe) rather than SSOs because (1) surcharging is much easier to predict and detect, and (2) surcharging is a more conservative standard. Surcharging is a necessary precondition to overflow, but pipes that surcharge do not necessarily overflow.

Understanding WTD’s experience with SSOs can provide context for the region’s risk tolerance in relation to determining how large and how quickly conveyance capacity projects are constructed.

Sanitary sewer overflows are relatively rare across WTD’s system. SSOs attributable to capacity limitations tend to be concentrated in specific problematic locations.

Between 2019-2024, WTD experienced six SSOs that can be attributed to capacity limitations. Three were at Medina pump station. Some improvements to the Medina pump station have since been made, and further improvement projects for the Medina conveyance and the Medina pump station are in the CIP.

Over the same time period, WTD experienced another 26 SSOs that were attributed to asset or operational failure or another non-capacity-related cause.

D. Example Practices from Other Jurisdictions/Industry

Wastewater utilities across the country use different standards for designing for future capacity. Following King County Code, WTD designs conveyance capacity to a 20-year peak flow standard, using a 50-year planning horizon.

This 20-year peak flow standard is a conservative standard nationwide. For example, East Bay Municipal Utilities District, which provides sewage treatment services for the communities east of San Francisco Bay in California, uses a 5-year design storm standard that accounts for elevated groundwater.

E. Policy Issues, Challenges, and Opportunities

There are a few challenges to consider when considering population growth as it relates to conveyance system capacity.

1. Population growth is a relatively small component of projected future flows.

Infiltration and inflow (I/I) are much larger factors in sizing new conveyance facilities. Because the planning process to determine conveyance size and improvement installation timing accounts for total flows, including both population changes and I/I, the policy question here overlaps with policy questions for I/I. That is, risks and opportunities associated with project sizing and timing could be impacted by policy decisions to reduce I/I.

2. WTD accepts all flows sent to the regional system from its component agencies, and component agencies are required to provide sewer services within the Urban Growth Area. WTD cannot refuse to accept these flows.

F. Range of policy options with associated actions and considerations (including qualitative description of costs)

The policy options presented below describe potential choices and Separated System Actions that could be implemented to address the policy question:

- How aggressively beyond legal requirements should WTD expand capacity to account for future population growth?

WTD expects the need for increased sewer conveyance capacity to extend well into the future. Most of this conveyance capacity need is driven by increasing I/I; options for reducing that need are provided in a separate policy memo dedicated to the I/I topic. Given increasing capacity needs and the mandated prevention of SSOs, several policy options to answer this question include:

1. Maintain current policies and practice
2. Take a less aggressive approach to expanding conveyance capacity by reducing pipe sizing design standard and applying a less conservative guideline for identifying new capacity needs.

3. Take a more aggressive approach to expanding conveyance capacity by installing planned capacity improvement projects more quickly.

Summary of Policy Options

	Goal	Description	Separated System Actions
#1	Maintain current policies and practice in conveyance capacity planning for population growth	Continue to identify needs and develop conceptual projects based on the 20-year design standard but take on risk in implementation timelines to allow for flexibility in capital allocation.	Develop conceptual projects when conveyance capacity falls below a 20-year LOS; prioritize installation when conveyance capacity is at or below a 2-year LOS. Design conveyance capacity improvements to accommodate 20-year peak flows at the 50-year time horizon.
#2	Take a less aggressive approach to conveyance capacity planning due to population growth	Reduce short-term construction costs by reducing pipe sizing design standard and applying a less conservative guideline for identifying new capacity needs.	Identify needs and develop conceptual projects when conveyance capacity falls below a 5-year LOS (depending on chosen I/I Policy Options); prioritize installation when conveyance capacity is at or below a 2-year LOS. Design conveyance capacity improvements to accommodate 5-year peak flows at the 50-year time horizon.
#3	Take a more aggressive approach to conveyance capacity planning due to population growth	Better protect against risk of SSO by installing planned capacity improvement projects more quickly.	Develop conceptual projects when conveyance capacity falls below a 20-year LOS; prioritize installation when conveyance capacity is at or below a 5-year LOS.

Policy Option #1 – Maintain current policies and practice in conveyance capacity planning for population growth.

Justification

This policy option would maintain the current approach to managing separated system conveyance capacity due to population growth. It maintains a conservative design standard but allows WTD more flexibility in allocating the capital budget to different projects as needed.

Considerations

This policy option would result in the continued implementation of current practice, meaning that sizing requirements for the separated conveyance system would not change, and WTD would implement projects as capital funding is available but before severe risk of SSO. In practice, this means that projects are sized conservatively, but that their installation is deprioritized for other system-wide capital needs that are driven by more stringent regulatory requirements.

Policy Option #2 – Take a less aggressive approach to conveyance capacity planning due to population growth.

A less aggressive approach would reduce the design standard specified in King County Code to be less than the 20-year peak flow at the planning horizon. By choosing a reduced design standard, such as a 5-year peak flow instead of a 20-year peak flow, WTD would design slightly smaller conveyance projects. Note that the design standard would still be applied to the extent of the 50-year planning time horizon; e.g., the estimated 5-year peak flow in 2070 based on flow monitoring from 2020.

Justification

The current 20-year peak flow design standard is very conservative compared to other design standards used by other utilities nationally. Lowering the standard would decrease the number of conveyance capacity projects included within the 50-year planning horizon of the Conveyance System Improvement Plan (as WTD would only plan upgrades for sections of conveyance that are at the 5-year design capacity).

Considerations

In the short term, with Option #2 conveyance capacity projects would require fewer resources overall since there would be fewer capacity projects in the 50-year planning

horizon. Those projects constructed would have smaller pipe sizes and, thus, often be less expensive to build. So, in the short term, individual conveyance projects and the overall cost of all conveyance capacity projects under Option #2 may be less costly than Option #1. Note though, that the majority of the costs of major conveyance projects are not in the size of pipes, but in other construction costs.

Long-term, by using a reduced design standard, WTD may need to construct conveyance capacity projects more frequently, as the full capacity of the pipe could be reached more quickly. More conveyance capacity projects more frequently could result in higher total costs for conveyance capacity over the longer term.

Determining capacity needs in the planning process as pipe capacity falls below a 5-year LOS rather than a 20-year LOS would have the effect of postponing projects from the CIP, potentially allowing for more flexibility in capital allocations across the agency.

Additionally, when pipes are built to a 5-year design standard, larger storms would result in a higher risk of SSOs, due to less volume in the pipe to accommodate large amounts of I/I.

Overlap with I/I Policy Options:

If more aggressive approaches to reducing I/I are chosen as part of this update to the Regional Wastewater Services Plan (see Policy Memo #1), potential conveyance capacity needs would still need to be identified well in advance to have enough time for an I/I reduction project to reduce or eliminate the need for a capacity improvement. Identifying projects according to the 5-year standard suggested here would not provide enough time; however, a 20-year standard could still be used to identify needs and develop projects, while the design standard is set at 5 years.

Policy Option #3 – Take a more aggressive approach to conveyance capacity planning due to population growth.

A more aggressive approach to conveyance capacity would prioritize installing capacity improvement projects more rapidly, when a 5-year LOS is reached rather than a 2-year LOS.

Justification

By prioritizing capacity improvements at a 5-year LOS, WTD could better protect against risk of SSO.

Considerations

Earlier construction of conveyance capacity projects may result in projects from other categories of WTD's capital program being deferred. This could result in further exacerbating the backlog of WTD capital projects that would need to be built in the near term to reach compliance. Compared to Options #1 and #2, this would result in more spending on capacity improvement upgrades in the separated system in the short-term.

G. Interested and affected parties WTD will engage to gather input

WTD's component agencies and MWPAAC are the primary audiences that need to be engaged on separated sewer capacity population growth policy options.

H. Rate structure considerations (if applicable)

There are no known rate structure considerations for this policy question.

I. Relationship to contracts

There are no known contract implications for this policy question.

J. Equity and Social Justice (ESJ) impacts

Based on the definition of equity and social justice in the King County Equity and Social Justice Plan 2016-2022, there are no known equity and social justice impacts for this question.

K. Planning-level cost estimates

This section will be added into the policy memo as the "Step 2" analysis later.

L. Evaluation of outcomes: identify impacts and outcomes of each option

This section will be added into the policy memo as the "Step 2" analysis later.

Policy Questions for the RWSP Update

Below are 32 policy questions to be analyzed as part of the RWSP Update process. 29 policy questions were identified in the RWSP Update Scoping Document. WTD is proposing to add three new questions (question 8, 15, and 23), which are italicized below, to address additional topics or areas that WTD wants to analyze for policy implications.

1. Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?
2. How should I/I be managed and how can costs be fairly apportioned? Should system capacity be expanded to account for increases in I/I? Should I/I policies change to support reducing the capacity needed for I/I?
3. How should the conversion of on-site septic systems to sewers in the service area be managed and should WTD implement programs to encourage conversion within the service area?
4. What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?
5. How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?
6. How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?
7. What level of redundancy of critical systems should WTD have? What level of risk tolerance should WTD accept?
8. *What approach should WTD use to fund Asset R&R projects?*
9. What level of resiliency should WTD plan for regarding seismic and other natural hazards to avoid or minimize risks? What level of risk tolerance should WTD accept? How can these considerations be best informed by the long-term capital motion work in progress?
10. Should existing wastewater policy language (KCC 28.86) be revised to specifically call out planning for future climate conditions in addition to population growth and other environmental factors?
11. How should WTD prepare and adapt to climate impacts (e.g., precipitation/storm intensities, sea level rise, river flooding, etc.) in line with the Strategic Climate Action Plan? What level of climate impact risk tolerance should WTD plan for to avoid or minimize risks to the system?
12. How much should WTD reduce energy use and reduce greenhouse gas emissions?
13. How will WTD measure customer affordability for contract agencies and ratepayers?

14. What other rate relief approaches should WTD implement to improve affordability for those who may struggle to pay their sewer bill?
15. *How should WTD best upgrade the combined system to address regulatory requirements, regional water quality, and West Point operations? How can combined system costs be fairly apportioned?*
16. Should the County evaluate costs and plan for levels of treatment beyond current legal requirements?
17. How should the County anticipate, engage with, and plan for future nutrient permit requirements, regulations related to CECs such as PFAS, or other future regulatory changes?
18. To what extent should WTD prioritize use of existing facility sites vs. acquiring new property to accommodate future treatment needs (including capacity)?
19. Should the region continue to provide a centralized approach for regional wastewater treatment, or should the region move towards a more decentralized approach?
20. Energy production and heat recovery – Should WTD be expanding its efforts to capture energy and heat? If so, at what level of effort?
21. Biosolids – Should WTD further expand its efforts to develop Class A biosolids? What changes are needed to biosolid recovery policies to get to Class A?
22. Recycled water – Under what circumstances should the region expand the use of reclaimed water? Which uses (e.g., environmental benefits, groundwater recharge, industrial uses, irrigation) are most appropriate?
23. *How should WTD maximize recovery of new resources? How should WTD prioritize and monetize environmental and other co-benefits when considering cost of recovering new resources?*
24. Should WTD update the rate structure for the capacity charge to align with current industry standards? (Note: The capacity charge rate structure was updated in 2021. A capacity charge methodology study is in progress.)
25. Is there a better rate structure for the sewer rate? (Note: WTD has identified a work plan to further evaluate the residential customer equivalent conversion factor of 750 cubic feet per month.)
26. Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood “one for all, all for one”), or consider alternative cost recovery rate structures to reflect other system impacts?
27. What actions should WTD take to increase equity and social justice for the regional wastewater system?
28. How will equity and social justice be interwoven in the update: community engagement, rate structure analysis, etc.?

29. How should the regional wastewater system address environmental justice concerns as described in the 2021 Healthy Environmental for All Act, such as addressing the disproportionate environmental health impacts of vulnerable populations and overburdened communities?
30. Are major policy updates aligned with component agency contracts?
31. How will WTD implement the RWSP Update consistent with direction and requirements expected of contract agencies?
32. How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?



King County

Girmay Zahilay

King County Executive

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February 25, 2026

The Honorable Sarah Perry
Chair, King County Council
Room 1200
C O U R T H O U S E

Dear Councilmember Perry

This letter transmits a report and proposed Motion as called for in Ordinance 20023 outlining how the King County Wastewater Treatment Division (WTD) plans to analyze policy questions identified during the Regional Wastewater Services Plan (RWSP) Update. The policy question analysis will be shared with the Regional Water Quality Committee (RWQC) as they discuss the RWSP Update.

The RWSP serves as King County's comprehensive wastewater plan, providing policy and operational direction for capital improvements and future development of King County's wastewater system. The RWSP Update process began with the adoption of the RWSP Scoping Document in early 2025 by the RWQC, which includes 29 major policy questions that will require analysis. This report explains how WTD will share its analysis and includes two examples in Appendices C and D, as well as appendices showing the policy memo template, schedule, and list of major policy questions.

The completed policy analyses will form the foundation of the Draft RWSP Update, currently scheduled to be published in 2027, that will precede the development of the Executive's Preferred Plan scheduled to occur in 2028. The analyses may also be used in decision-making by RWQC members and King County Council members following transmittal of the Executive's Preferred Plan to the County Council, which is scheduled for 2029.

Thank you for your consideration of this report and proposed motion. The policy analysis highlighted in this report will help the RWSP Update that will guide the County's stewardship of the regional wastewater system for years to come.

The Honorable Sarah Perry

February 25, 2026

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If your staff have questions, please contact Kamuron Gurol, Director, Department of Natural Resources and Parks Wastewater Treatment Division, at 206-549-1190.

Sincerely,



for

Girmay Zahilay

King County Executive

Enclosure

cc: King County Councilmembers

ATTN: Stephanie Cirkovich, Chief of Staff, King County Council

Melani Hay, Clerk of the Council

Karan Gill, Deputy Executive, Office of the Executive

Jasmin Weaver, Chief of Staff, Office of the Executive

Sierra Howlett-Brown, Policy Director, Office of the Executive

Garrett Holbrook, Council Relations Director, Office of the Executive

John Taylor, Director, Department Natural Resources and Parks (DNRP)

Kamuron Gurol, Director, Wastewater Treatment Division, DNRP

Updated RWSP Schedule for Policy Analysis

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be provided?
<p><u>Group #1</u> (Memos 1 & 2)</p> <p>Separated System Conveyance</p> <p>Step #1: March 2026 Step #2: Nov 2026 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	1	<p>How should I/I be managed and how can costs be fairly apportioned? Should system capacity be expanded to account for increases in I/I? Should I/I policies change to support reducing the capacity needed for I/I?</p> <p><i>(Cost apportionment will also be addressed in Group 9 Rate Structure Memo)</i></p> <p>Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand [conveyance] capacity to account for future population growth?</p>	<p>Options Provided</p> <p>Response will be provided without options in Step 2</p>
	2	<p>How should the conversion of on-site septic systems to sewers in the service area be managed and should WTD implement programs to encourage conversion within the service area?</p>	Options Provided

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be provided?
<p><u>Group #2</u> (Memo 3)</p> <p>Pollution (Source Control and Legacy)</p> <p>Step #1: April 2026 Step #2: Dec 2026 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	<p>3</p>	<p>What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?</p>	<p>Options Provided</p>
<p><u>Group #3</u> (Memo 4)</p> <p>Asset Renewal and Replacement</p> <p>Step #1: May 2026 Step #2: Jan 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	<p>4</p>	<p>How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?</p> <p>What level of redundancy of critical systems should WTD have? What level of risk tolerance should WTD accept?</p> <p>What approach should WTD use to fund Asset R&R projects?</p> <p><i>Redundancy is discussed in memos 4 and 5.</i></p>	<p>Options Provided</p> <p>Options Provided</p> <p>Options Provided</p>

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be provided?
<p><u>Group #4</u> (Memos 5, 6, 7)</p> <p>Climate Impact Preparedness and Natural Hazard Resiliency</p> <p>Step #1: June 2026 Step #2: Feb 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	5	<p>What level of resiliency should WTD plan for regarding seismic and other natural hazards to avoid or minimize risks? What level of risk tolerance should WTD accept? How can these considerations be best informed by the long-term capital motion work in progress?</p> <p><i>Redundancy is discussed in memo 4 and 5.</i></p>	Options will be provided
	6	<p>Should existing wastewater policy language (KCC 28.86) be revised to specifically call out planning for future climate conditions in addition to population growth and other environmental factors?</p> <p>How should WTD prepare and adapt to climate impacts (e.g., precipitation/storm intensities, sea level rise, river flooding, etc.) in line with the Strategic Climate Action Plan? What level of climate impact risk tolerance should WTD plan for to avoid or minimize risks to the system?</p>	<p>Response will be provided without options</p> <p>Options will be provided</p>
	7	<p>How much should WTD reduce energy use and reduce greenhouse gas emissions?</p>	Options will be provided

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be provided?
<p><u>Group #5</u> (Memo 8)</p> <p>Finance/Affordability</p> <p>July 2026</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	<p>8</p>	<p>How will WTD measure customer affordability for contract agencies and ratepayers?</p> <p>What other rate relief approaches should WTD implement to improve affordability for those who may struggle to pay their sewer bill?</p>	<p>Response will provide the range of industry used metrics and WTD's recommended metrics</p> <p>Options will be Provided</p>
<p><u>Group #6</u> (Memo 9)</p> <p>Combined System Management</p> <p>Step #1: August 2026 Step #2: March 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	<p>9</p>	<p>How should WTD best upgrade the combined system to address regulatory requirements, regional water quality, and West Point operations? How can combined system costs be fairly apportioned?</p> <p><i>(cost apportionment will also be addressed in Group 9 Rate Structure Memo)</i></p>	<p>Options will be provided</p>

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be provided?
<p><u>Group #7</u> (Memos 10,11,12)</p> <p>Treatment Levels</p> <p>Step #1: September 2026 Step #2: April 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	10	<p>Should the County evaluate costs and plan for levels of treatment beyond current legal requirements?</p> <p>How should the County anticipate, engage with, and plan for future nutrient permit requirements, regulations related to CECs such as PFAS, or other future regulatory changes?</p>	<p>Options will be provided</p> <p>Response will be provided without options</p>
	11	<p>Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand [treatment plant] capacity to account for future population growth?</p> <p>To what extent should WTD prioritize use of existing facility sites vs. acquiring new property to accommodate future treatment needs (including capacity)?</p>	<p>Response will be provided without options (similar to I/I memo)</p> <p>Options will be provided</p>
	12	Should the region continue to provide a centralized approach for regional wastewater treatment, or should the region move towards a more decentralized approach?	Response will be provided without options

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be Provided
<p><u>Group #8</u> (Memos 13,14,15,16)</p> <p>Resource Recovery (Energy, Biosolids, Recycled Water, New Sources)</p> <p>Step #1: October 2026 Step #2: May 2027 (tentative)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice policy questions will be addressed as part of each policy memo. See Group #10 and Group #11 for details.</p>	13	<p>Energy production and heat recovery – Should WTD be expanding its efforts to capture energy and heat? If so, at what level of effort?</p>	Options will be provided
	14	<p>Biosolids – Should WTD further expand its efforts to develop Class A biosolids? What changes are needed to biosolid recovery policies to get to Class A?</p> <p>How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?</p>	Options will be provided
	15	<p>Recycled Water – Under what circumstances should the region expand the use of reclaimed water? Which uses (e.g., environmental benefits, groundwater recharge, industrial uses, irrigation) are most appropriate?</p> <p>How can WTD best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?</p>	Options will be provided
	16	<p>How should WTD maximize recovery of new resources? How should WTD prioritize and monetize environmental and other co-benefits when considering cost of recovering new resources?</p>	Options will be provided

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be Provided
<p><u>Group #9</u> (Memo 17)</p> <p>Finance/Affordability</p> <p>Q4 2026: Full analysis of the rate structure policy question 18</p> <p>Also in March, May, Aug, Sep. 2026: WTD will begin to address the rate structure question sequentially where relevant as we move through Policy Question Groups 1, 3, 6, 7. This will allow RWQC members to see how the rate structure issue relates to various topics. Each relevant analysis would include a specific section dedicated to addressing “rate structure considerations”</p> <p>e.g. the policy memo 2 analysis will introduce and begin to address the rate structure question as it relates to the I/I issue.</p> <p>RWQC may choose to form a subcommittee focused on the rate structure question and/or WTD may propose a consultant-separate track for this discussion.</p> <p>Elements that relate to the Relationship to Contracts and ESJ policy questions will be addressed as part of each policy memo.</p>		<p>Should WTD update the rate structure for the capacity charge to align with current industry standards? (Note: The capacity charge rate structure was updated in 2021. A capacity charge methodology study is in progress.)</p>	<p>WTD proposed a new capacity charge methodology (see ordinance 2026-0066). In Rate Structure memo #17 WTD will address issues related to the capacity charge.</p>
	17	<p>Is there a better rate structure for the sewer rate? (Note: WTD has identified a work plan to further evaluate the residential customer equivalent conversion factor of 750 cubic feet per month)</p> <p>Will WTD maintain a single uniform sewer rate per residential customer equivalent (Robinswood “one for all, all for one”), or consider alternative cost recovery rate structures to reflect other system impacts?</p>	<p>Options will be provided</p> <p>Options will be provided</p>

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Questions from Scoping Document	Will Options be Provided
<p><u>Group #10</u> (Memo 18)</p> <p>Equity and Social Justice</p> <p>Analyses for these questions will be integrated into each of the analyses for Groups 1 through 9.</p> <p>May 2027: A comprehensive ESJ analysis for these questions across all topics/groups will be completed.</p>	18	<p>How will equity and social justice be interwoven in the update: community engagement, rate structure analysis, etc.?</p> <p>What actions should WTD take to increase equity and social justice for the regional wastewater system?</p> <p>How should the regional wastewater system address environmental justice concerns as described in the 2021 Healthy Environmental for All Act, such as addressing the disproportionate environmental health impacts of vulnerable populations and overburdened communities?</p>	<p>Response will be provided without options</p> <p>Options will be provided (this memo will identify options with high equity impact that were described in earlier memos)</p>
<p><u>Group #11</u> (Memo 19)</p> <p>Relationship to Contracts</p> <p>Analyses for these questions will be integrated into each of the analyses for Groups 1 through 9.</p> <p>June 2027 tentative (following completion of step #2 for all Groups of questions)</p>	19	<p>Are major policy updates aligned with component agency contracts?</p> <p>How will WTD implement the RWSP Update consistent with direction and requirements expected of contract agencies?</p>	Response will be provided without options
Will be addressed across all 25 policy memos	NA	How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?	All topics

Regional Wastewater Services Plan (RWSP) Update: Asset Renewal and Replacement (R&R) Policy Questions & Options

Presented to the Regional Water Quality Committee

May 6, 2026

Policy Analysis Schedule

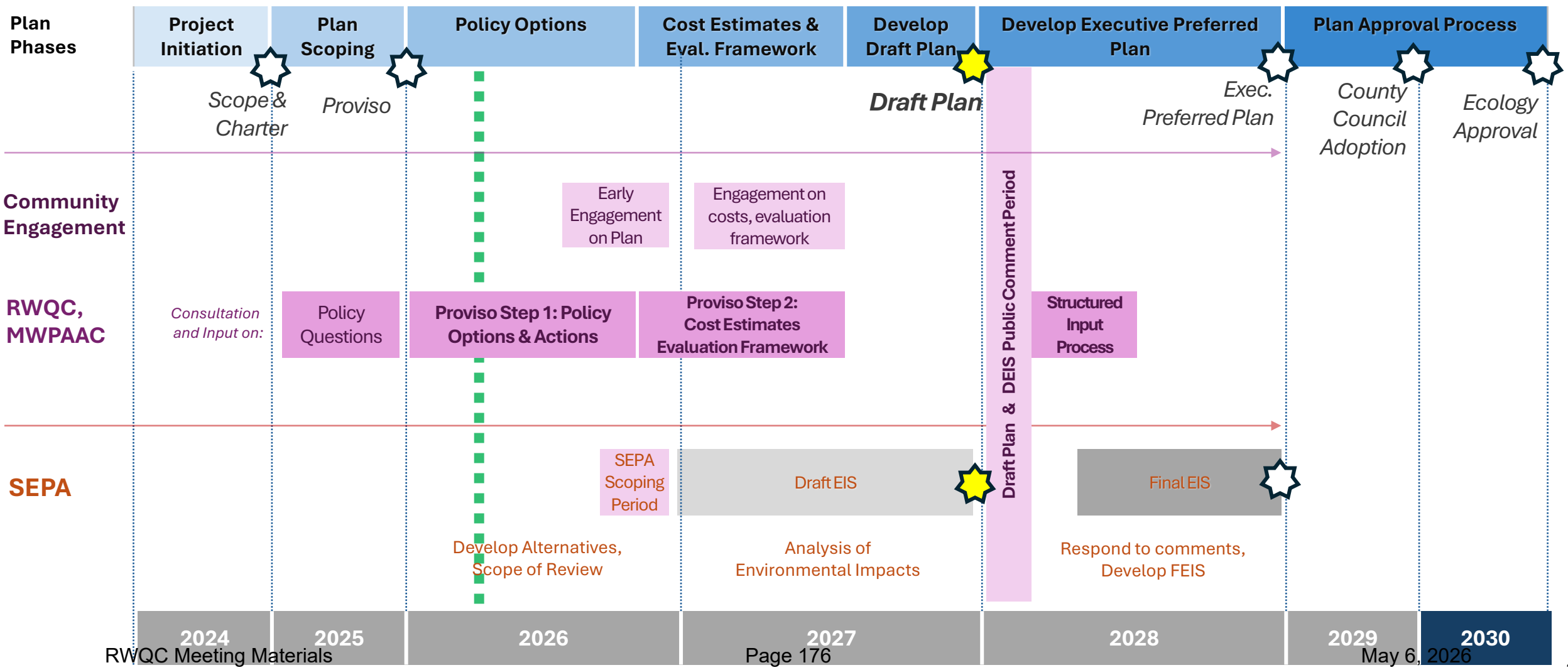
11 “Groups” of Policy Analyses with policy options for RWQC:

March	Group #1: Separated System Conveyance
April	Group #2: Pollution Source Control & Legacy Pollution
May	Group #3: Asset Renewal & Replacement
June	Group #4: Climate Impact Preparedness & Natural Hazard Resiliency
July	Group #5: Affordability Metrics & Rate Relief Approaches
August	Group #6: Combined System Management
September	Group #7: Treatment
October	Group #8: Resource Recovery
Nov / Dec	Group #9: Finance/Rate Structure
Throughout	Group #10: Equity & Social Justice
Throughout	Group #11: Relationship to Contracts

RWSP Update Timeline (tentative, as of April 2026)

☆ = Milestone

WE ARE HERE





Failure of 50-year-old Ravenna Trunk Sewer located in Seattle's Ravenna neighborhood.

Chasm on Ravenna Boulevard grew to 175 feet wide, 200 feet long, and 50 feet deep.

Shortly after midnight, 65,000 cubic yards of sand, bricks, and timbers flow a quarter of a mile through the six-foot tunnel.

Sewer cave-in, 16th Ave NE and Ravenna Blvd, 15 Nov 1957
Courtesy Seattle Municipal Archives (56017)



Why Is Asset R&R Important?

- **Assets get old, become unreliable, and wear out**
- **We need to plan ahead to replace critical assets before they become unreliable**
- **How the Asset R&R program is managed is key to the sustainability of the regional wastewater system**

Purpose

Provide policy options to address Asset Renewal and Replacement (Asset R&R) policy questions:



- 1. How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?**
2. What level of redundancy of critical systems should WTD have?
3. What level of risk tolerance should WTD accept?
- 4. What approach should WTD use to fund Asset R&R projects?**

Asset R&R: Bottom Line Up Front

Context:

- 15,000 “critical assets” (highest **consequence** of failure)
 - 7% (1,100) have **high likelihood of failure** in near-term due to condition or age
- 36 miles of “critical” pipe
 - 15% (5.6 miles) identified as **high likelihood of failure** in near-term
- Large and growing backlog (\$2.2 billion)
- Reactive approach, eBay

Core issues:

- Optimizing value of the regional infrastructure to sustain it over the long term
- Push-pull between funding for Regulatory obligations and funding for Asset R&R
 - Result: delay / deprioritization of Asset R&R
 - Band-aids on aging infrastructure
 - What happens when eBay goes away ?

Asset R&R: Bottom Line Up Front

Future Policy Choices – distilled into 4 components:

1. Timing – *how quickly do we modernize ?*

- a. eBay & bandaids
- b. 30 years
- c. 15 years



Risk tolerance / Rate increase Tradeoffs

2. Annual \$ Amount – *determine annual Asset R&R funding level to achieve chosen timing*

3. Protect Asset R&R Annual Funding

- a. Put “fence” around annual Asset R&R funds (financial policy in code or administrative)

4. Prioritize Asset R&R projects in Capital Program

- a. Adopt policy to prioritize Asset R&R projects based on data-informed risk and protects them from the impingement of other capital demands and drivers.

Asset R&R: relationship to other RWSP topics

- 1. Finance & Rate Setting** – Asset R&R is a large but predictable capital cost driver. Coordinating Asset R&R with rates, cash funding strategy, and debt strategy can help avoid rate spikes. Buying down the Asset R&R backlog with near-term cash funding avoids deferring these expenses to future generations.
- 2. Conveyance system** (*separated & combined*) – Asset R&R is foundational to a reliable system of pipes. Also, pump station and wet weather treatment facilities must operate autonomously, on short notice, when called on.
- 3. Equity & Social Justice** (*underserved populations & intergenerational equity*)
Asset R&R allows WTD to address historical inequities by prioritizing renewals in frontline communities, reducing spill risks in vulnerable areas, improving air/noise/odor conditions, and supporting intergenerational equity by avoiding costly deferred maintenance.

Asset R&R: relationship to other RWSP topics

- 4. Natural hazard resiliency** – Asset R&R actions continually improve seismic resilience, flood protection, power reliability, and equipment reliability, resulting in higher likelihood of uninterrupted service in an emergency.
- 5. Climate adaptation** – Asset R&R provides regular system modernization through climate-informed design standards. This modernization continually improves the system’s capability to handle intense storms, heat, and sea-level rise, adapting the system as time progresses.
- 6. Treatment planning** – Asset R&R underpins day-to-day treatment reliability; it converts planning forecasts into routine, sequenced capital work that avoids emergency treatment process workarounds.

Problem Statement – Asset R&R

- WTD has more than 15,000 critical assets which, if they fail, will result in serious consequences for system operation. 7% of these (1,100) have a high likelihood of failure in the near-term.
- Current policies do not address funding levels for asset renewal and replacement – these projects compete for funding within the entire capital portfolio.
- As a result, WTD typically doesn't replace assets until they are beyond their useful lives.
- This is a reactive process that increases risk.

What policies will best sustain and optimize asset renewal and replacement?



American Society of Civil Engineers – 2025 Report Card

ASCE publishes its National infrastructure report card every 4 years; most recent in 2025

2025 Infrastructure Report Card

“Our nation’s infrastructure is aging, underperforming, and needing sustained care and action.”

Wastewater infrastructure once again received a “D+” grade

- Same grade as in 2017 and 2021 reports
- But improved from the 2009/2013 report card grades of “D-” and “D”



Hanford Regulator Gate

WTD's Vertical Assets

(Plants, facilities and pump stations)

- **53,026 registered assets; over 15,000 are critical (serious consequences if they fail); 1,100 identified as highly likely to fail**
- **Average age by facility:**
 - South Plant: 21 years
 - West Point: 17 years
 - East Offsite: 16 years
 - West Offsite: 16 years
 - Brightwater: 13 years
- **Average expected useful life of all vertical assets is 24 years**

Secondary sedimentation tank
#5 RAS discharge piping

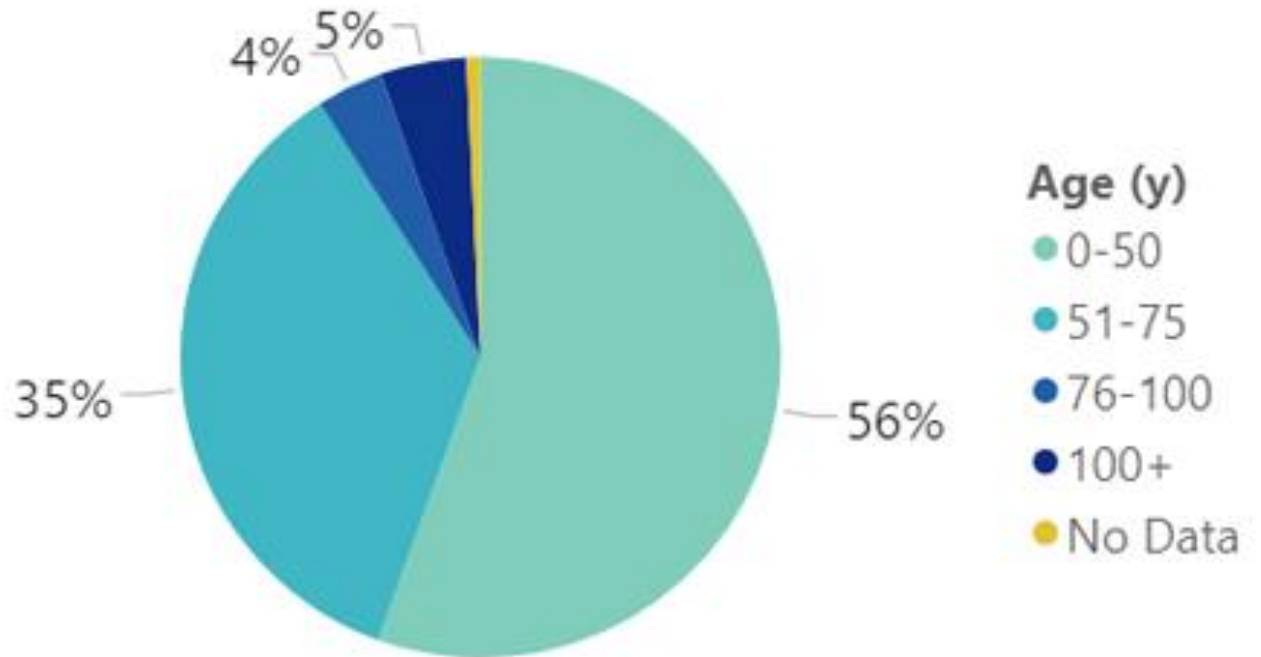


Horizontal Assets

(Pressure and Gravity Pipes, Maintenance Structures)

Conveyance Pipe by Age Range

Age (y)	Percentage	Length (mi)
0-50	56%	220
51-75	35%	141
76-100	4%	14
100+	5%	18
No Data	1%	3



Horizontal Assets

(Pressure and Gravity Pipes, Maintenance Structures)

- **383 miles of conveyance pipe**
 - Of these, 45 miles are rated as “critical”
 - About 10% (4.4 miles) of these critical pipes have been identified as highly likely to fail
- **System average age: 50 years**
- **Expected lifespan of pipe segments varies from 40 to 80 years**
 - System-wide estimated average remaining useful life is 20 years



Does WTD Have a Backlog of Asset R&R Projects?

Yes

- **Backlog:** known, unfunded and undelivered ***critical*** facilities that are past their useful lives and which may fail at any time (high-risk assets).
- As of November 2025, there were 75 large Asset R&R projects awaiting funding, with an estimate at completion \$2.2 billion (2026 dollars).
- This underestimates the backlog. Many critical assets past the end of their useful lives still not yet included in requested projects.



Matthews Park Pump #1

Current Policies in Code

- **WWSP-9:** To ensure the region's multibillion-dollar investment in wastewater facilities, an asset management program shall be established that provides for appropriate ongoing maintenance and repair of equipment and facilities. The wastewater maintenance budget, staffing levels and priorities shall be developed to reflect the long-term useful life of wastewater facilities as identified by the asset management program.
- **WWSP-10:** The asset management program shall establish a wastewater facilities assets management plan, updated annually, establishing replacement of worn, inefficient and/or depreciated capital assets to ensure continued reliability of the wastewater infrastructure.

How much should WTD invest annually in Asset R&R?

- **This important question needs additional analysis and will be addressed in the Step 2 work of the RWSP process.**
- **Over the past 10 years, WTD has been investing about \$90 million/year into Asset R&R (ramped up to \$164 million in 2025).**
- **There are indicators this is not enough.**

Forecasted Asset R&R Expenditures

From the 2027 Sewer Rate Forecast:

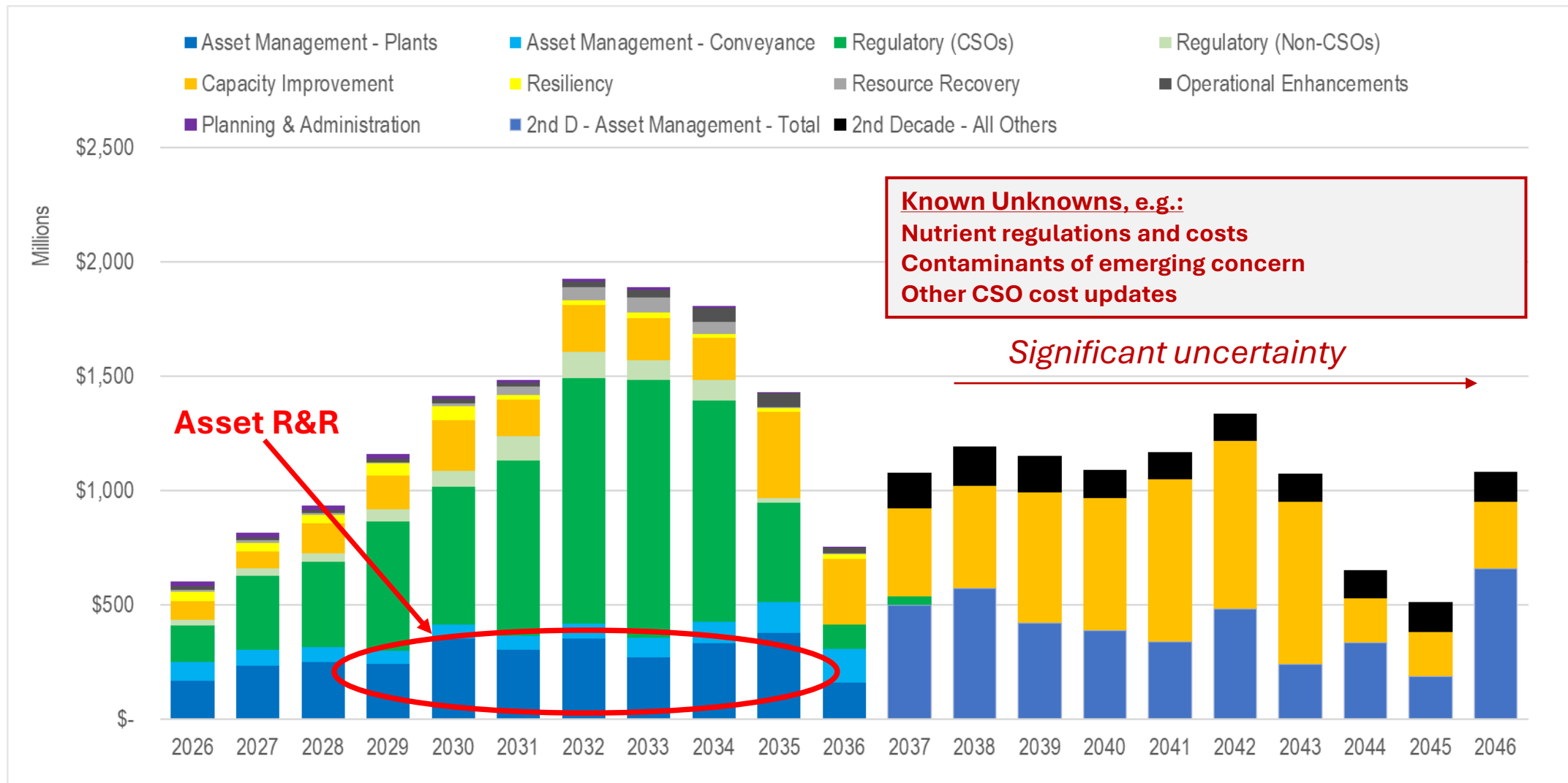
Asset R&R is **28%** of WTD's first decade rate forecast ('26-'36)

- As of November 2025, **57** large Asset R&R projects in design/construction
- Estimate at completion **\$2.8 billion**

Long-term 20 year ('26-'46) forecast: \$8.1 billion (much uncertainty)



20-Year Capital Forecast



Asset R&R Policy Options – Proactive vs. Reactive

How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?

Policy Options:

- a. **Delay asset renewal and replacement beyond the assets' useful lives until risk is deemed unacceptable.**
- b. **Gradually shift (over next 30 years) from reactive to proactive approach for critical Asset R&R.**
- c. **Quickly transition (over next 10-15 years) to proactive approach for Asset R&R so all critical assets are refurbished or replaced prior to failure.**

Asset R&R Policy Options – Funding – Phase 1

What approach should WTD use to fund Asset R&R projects?

Phase 1: Adopt a cash-funding approach in the sewer rate model that more closely aligns with *true* Asset R&R spending needs.

Policy Options:

- a. Ensure **minimum required** funding for Asset R&R critical assets through **status quo** approach.
- b. Ensure **adequate funding** for asset R&R through transparent and efficient means, with potential **future higher spending** levels.
- c. Ensure adequate funding for asset R&R through transparent and efficient means with potentially **significantly higher future spending** levels.

Asset R&R Policy Options – Funding – Phase 2

What approach should WTD use to fund Asset R&R projects?

Phase 2: Adopt a financial policy that preserves cash funding for Asset R&R vs other portfolio categories.

Policy Options:

- a. Prioritize **flexibility** and **rate management**.
- b. Prioritize **intergenerational equity** while allowing for **some moderate flexibility** and opportunity to manage rates.
- c. Prioritize **intergenerational equity**.

Asset R&R Policy Options – Funding – Phase 3

What approach should WTD use to fund Asset R&R projects?

Phase 3: Adopt a capital portfolio policy that prioritizes Asset R&R projects based on risk and protects them from the impingement of other portfolio categories and drivers.

Asset R&R: Bottom Line Recap

Future Policy Choices – distilled into 4 components:

1. Timing – *how quickly do we modernize ?*

- a. eBay & bandaids
- b. 30 years
- c. 15 years



Risk tolerance / Rate increase tradeoffs

2. Annual \$ Amount – *determine annual Asset R&R funding level to achieve chosen timing*

3. Protect Asset R&R Annual Funding

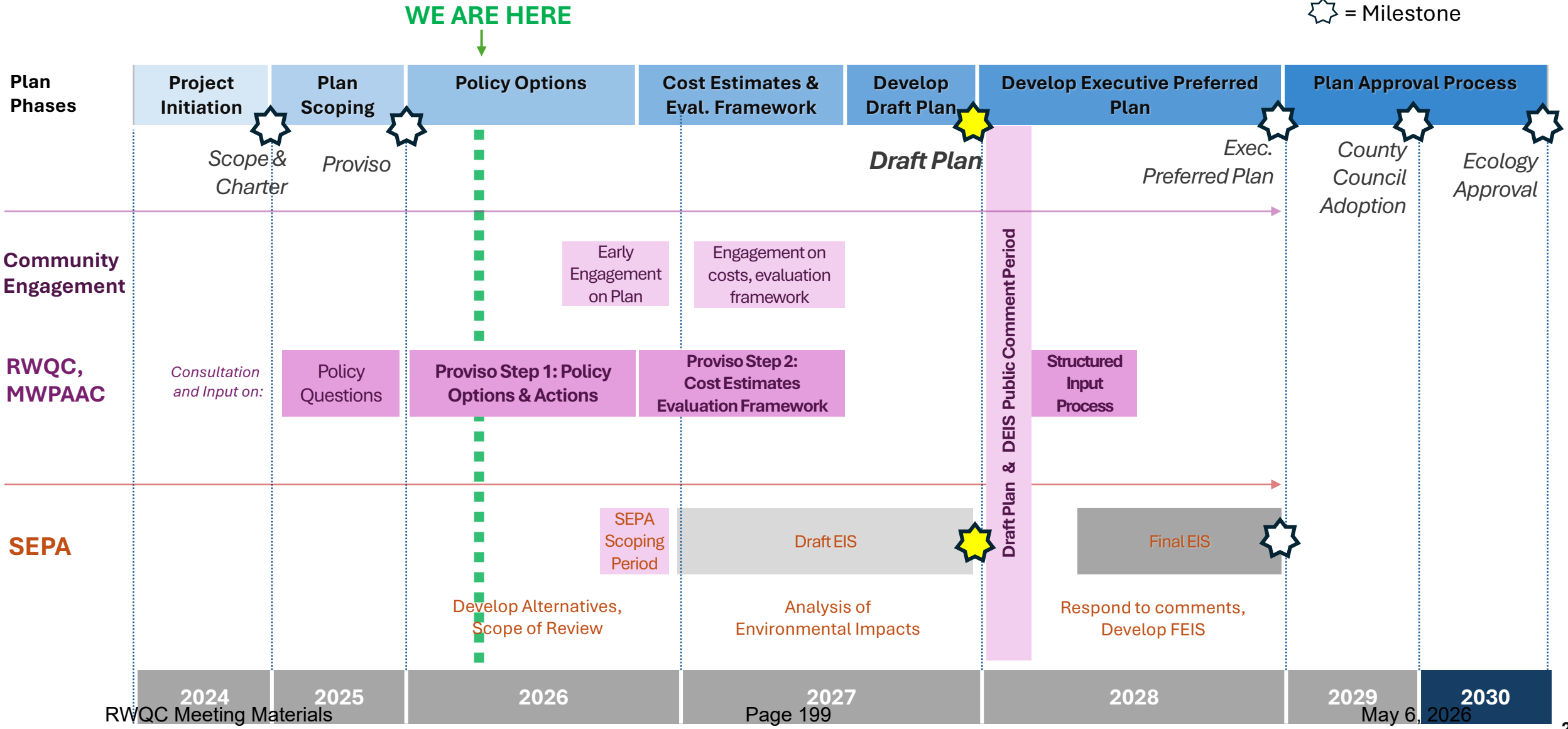
- a. Put “fence” around annual Asset R&R funds (financial policy in code or administrative)

4. Prioritize Asset R&R projects in Capital Program

- a. Adopt policy to prioritize Asset R&R projects based on data-informed risk and protects them from the impingement of other capital demands and drivers.

RWSP Update Timeline (tentative, as of April 2026)

☆ = Milestone



Questions:

1. Is this the right level of detail - Too much? Too little?
2. Questions on contextual / baseline information?
3. Questions on range of policy options?
4. Are there additional or modified policy options we should consider?





Wastewater Treatment Division

Executive Summary

RWSP Update – Policy Memo #6: Asset Renewal and Replacement (Asset R&R)

This executive summary provides a synopsis of the policy questions, problem statement, issues and challenges, and the options developed for the Asset R&R topic of the Regional Wastewater Services Plan (RWSP).

Policy Questions

1. How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?
2. What level of redundancy of critical systems should WTD have?
3. What level of risk tolerance should WTD accept?
4. What approach should WTD use to fund Asset R&R projects?

Problem Statement

WTD has identified more than 15,000 assets as “critical,” which means failure will result in serious consequences. At least 7% (1,100) of critical assets located in plants and pump stations have a high likelihood of near-term failure. Forty-five miles of WTD’s 383 miles of conveyance pipe are also identified as critical, and approximately 10% (4.4 miles) of this critical pipe is identified as highly likely to fail. It is important to renew or replace critical assets before they become likely to fail. Asset R&R projects compete for capital funding within WTD’s entire capital portfolio. Budget requests are ultimately influenced by overall funding limits, regulatory requirements, and competing project priorities, which delay some Asset R&R projects moving forward. The result is that many of WTD’s assets and facilities stay in service beyond their normal end of life, successfully kept in operation through increased maintenance and repair efforts. Because of these circumstances, WTD is largely reactive in managing its Asset R&R program. This increases operational risk as older assets are kept in service beyond their expected useful lives.

Policy Issues, Challenges, and Opportunities

Sewer rate increases over the next decade are driven by large regulatory projects. The expense of these regulatory projects is a concern, and overall cost pressures could pull money away from the Asset R&R program, even though assets will continue to wear out just the same as they always do. Efficiently managing Asset R&R projects is thus essential to

minimize the high costs of reacting to failures and address how a large project backlog can cause future rate spikes.

Policy Options

To summarize the policy options at a high level, decision makers will confront choices across four fundamental variables: 1) timing, 2) annual Asset R&R funding level, 3) protection of Asset R&R funds, and 4) prioritization of Asset R&R projects within WTD's capital program.

In regards to timing, policy makers will need to decide how quickly WTD modernizes – i.e. should it continue in its current reactive mode, delaying asset replacement and buying spare parts, if available, for its old and discontinued assets; or should WTD transition quickly over the next 10-15 years to a more proactive mode for its critical assets, or do so more gradually over the next 30 years. These choices offer unique risk tolerances and rate impact tradeoffs.

Once the timing decision is made, the annual level of Asset R&R funding will need to be addressed, and these funds will need a “fence” around them to ensure funds are only used for Asset R&R projects. Finally, to ensure that critical Asset R&R projects are completed, a policy should be adopted that prioritizes these projects based on data-informed risk and protects them from delay and impingement from other capital demands.

More detail for the policy options that answer the questions are described below.

Policy question #1: How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?

- a. Delay asset renewal and replacement beyond the assets' useful lives until risk is deemed unacceptable.
 - *Outcome:* Increasing risk; the backlog of Asset R&R projects past their optimal renewal or replacement timing will steadily increase.
- b. Gradually (over next 30 years) shift from reactive to proactive approach for critical Asset R&R.
 - *Outcome:* Decreased systemic risk over time; gradual reduction in the Asset R&R backlog (backlog reduced 50% after 15 years, no backlog after 30 years)
- c. Quickly transition (over next 15 years) to proactive approach for Asset R&R so all critical assets are refurbished or replaced prior to failure.
 - *Outcome:* Decreased systemic risk. No Backlog after 15 years.

Policy question #2: What level of redundancy of critical systems should WTD have?

- a. Minimal / moderate level of redundancy - implement redundancy only where needed to maintain permit compliance.

- *Outcome*: Higher risk; System redundancy is increased upon clear indication redundancy is insufficient.
- b. Increased level of redundancy - systematically prioritize and add redundant capacity for many/most critical functions to significantly reduce risk.
 - *Outcome*: Reduced risk; improved system availability, reliability and resiliency; reduced overflows.

Policy question #3: What level of risk tolerance should WTD accept?

- a. Higher risk tolerance - Implement Asset R&R projects based on mix of best professional judgment and whether failure has occurred or is imminent.
- b. Lower risk tolerance - Use comprehensive data-driven risk analysis to identify optimal timing for each Asset R&R project.

Policy question #4: What approach should WTD use to fund Asset R&R projects?

Addressing the fourth question will require a three-phase process, with some phases having multiple policy options. All three phases should be treated collectively as a package. The policy options within these phases would be administrative, or internal WTD policies, rather than actual code-level changes.

Phase 1: Adopt a cash-funding approach in the sewer rate model that more closely aligns with true Asset R&R spending needs. Options include:

- a. Ensure minimum required funding for Asset R&R critical assets through status quo approach.
- b. Ensure adequate funding for asset R&R through transparent and efficient means, with potential future higher spending levels.
- c. Ensure adequate funding for asset R&R through transparent and efficient means with potentially significantly higher future spending levels.

Phase 2: Adopt a financial policy that preserves cash funding for Asset R&R vs. other portfolio categories. Options include:

- a. Prioritize flexibility and rate management.
- b. Prioritize intergenerational equity while allowing for some moderate flexibility and opportunity to manage rates.
- c. Prioritize intergenerational equity.

Phase 3: Adopt a portfolio policy that prioritizes Asset R&R projects based on risk and protects them from the impingement of other portfolio categories and drivers.

Tradeoffs and measurable outcomes for each of these policy options are described in the associated tables starting on page 17 of the document. Cost estimates and a complete evaluation of impacts and outcomes for the policy options will be provided in the Step #2 analysis in early 2027.

Asset R&R Relationship to other RWSP Topics

Asset R&R is a foundational part of the RWSP Update and is essential for sustaining the regional wastewater system into the future. As such, it intersects with many RWSP topics as described below.

Natural hazard resiliency: Asset R&R investments strengthen seismic resilience, flood protection, power reliability, and equipment reliability, increasing the likelihood that service can continue during an emergency.

Climate adaptation: Asset R&R provides regular system modernization through climate-informed design standards. This modernization continually improves the system's capability to handle intense storms, heat, and sea-level rise, adapting the system as time progresses.

Treatment planning: Asset R&R supports day-to-day treatment reliability by converting planning forecasts into routine, sequenced capital work that avoids emergency treatment process workarounds.

Conveyance system (separated & combined): Asset R&R is foundational to a reliable system of pipes. Also, pump station and wet weather treatment facilities must operate autonomously, on short notice, when called on.

Finance & Rate Setting: Asset R&R is a large but predictable capital cost driver. Coordinating Asset R&R with rates, cash funding strategy, and debt strategy can help avoid rate spikes. Buying down the Asset R&R backlog with near-term cash funding avoids deferring these expenses to future generations.

Equity & Social Justice (underserved populations & intergenerational equity): Asset R&R policies will allow WTD to address historical inequities by prioritizing renewals in frontline communities, reducing spill risks in vulnerable areas, improving air/noise/odor conditions, and supporting intergenerational equity by avoiding costly deferred maintenance.

RWSP Update – Asset Renewal and Replacement

Policy Memo #6

A. Policy Questions

This memo is focused on policy questions related to the Asset Renewal and Replacement (Asset R&R) topic of the Regional Wastewater Services Plan (RWSP) Update. The policy questions analyzed in this memo are as follows:

1. How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?
2. What level of redundancy of critical systems should WTD have?
3. What level of risk tolerance should WTD accept?
4. What approach should WTD use to fund Asset R&R projects?

Policy questions #2 and #3 are combined in the RWSP Scoping Document, but they are answered separately in this memo.

B. Problem Statement

Buildings, structures, equipment, piping, and electrical and mechanical devices become less reliable with age, depending on the severity of the operating environment. Cleaning wastewater is hard on assets, even assets specifically designed for that purpose. Wastewater assets deteriorate at different rates depending on usage, maintenance access, maintenance performed, and other factors like corrosion and erosion. Wastewater utilities want equipment and facilities to operate safely for as long as possible. Knowing that assets eventually need to be refurbished or replaced, it is important to predict the Asset R&R timing as accurately as possible.

Adequately maintaining wastewater infrastructure is a challenge for most wastewater service providers throughout the United States. Every four years, the American Society of Civil Engineers (ASCE) publishes an “infrastructure report card” and assigns a letter grade to 18 infrastructure categories. For the 3rd consecutive report, wastewater infrastructure nationwide was assigned a grade of “D+.” This is a slight improvement from the low of “D-” in 2005. The ASCE report is an indication of the difficulties wastewater utilities throughout the nation face in renewing and replacing aging infrastructure, including King County Wastewater Treatment Division (WTD).¹

¹ American Society of Civil Engineers: A Comprehensive Assessment of America’s Infrastructure; 2025 Report Card, p. 221.

WTD has identified more than 15,000 “critical” assets which, if they fail, will result in serious consequences for system operation.² At least 7% (1,100) of critical assets located in plants and pump stations have a high likelihood of near-term failure. Forty-five miles of WTD’s 383 miles of total pipe are also identified as critical, and approximately 10% (4.4 miles) of this critical pipe is identified as highly likely to fail.³

Managing assets to obtain maximum value through appropriate maintenance and timely replacement is the desired outcome of an effective asset management program. The challenge is to obtain the maximum useful life from critical assets by maintaining them appropriately and replacing them before they fail.

Within WTD, Asset R&R projects compete for capital funding within the entire capital portfolio. This may result in Asset R&R projects being delayed beyond their expected end of life. Asset R&R projects are not guaranteed funding – there is currently no WTD policy statement that unilaterally or absolutely guarantees funding for Asset R&R projects. While the criteria for ranking projects within the asset management capital investment category include outdated technology consideration, asset condition, and organizational impacts, this does not guarantee placement within the final capital improvement program given other constraints and requirements. Budget requests are ultimately influenced by overall funding limits, staff capacity, regulatory requirements, and competing project priorities, which may delay some Asset R&R projects moving forward.

As a result, WTD is largely reactive in managing its assets – that is, assets are typically not replaced until they are past their design life and are being kept in service through constant repair efforts. This increases operational risk and maintenance expense as older assets are kept in operation. Asset R&R projects that should move forward often don’t because of general budget pressures, or other capital projects receiving a higher priority.

Managing risk, including redundancy, is an important best practice to enable utilities to achieve the highest overall value from their assets. Determining the amount of risk an asset-intensive organization such as WTD is willing to accept should be an intentional, data-driven decision.⁴ As a practical matter, the amount of acceptable risk is often heavily influenced by the cost associated with reducing risk. WTD does not currently have an adopted risk matrix to define what risk is acceptable, making risk reduction more

² From ISO 55000: “. . . asset having the potential to significantly impact the achievement of an organization’s objectives.” Within wastewater utilities, critical assets are those assets that, if they fail, threaten the ability of the utility to function properly, and potentially cause permit violations, public health and safety concerns, environmental degradation, or employee safety concerns.

³ From data contained in WTD’s maintenance management system database, extracted from HDR Asset R&R Long Range Forecast Tool, April 2026.

⁴ ISO 55001:2024 (en) p. 13.

subjective and complicating efforts to achieve an appropriate level of service at the lowest lifecycle cost.

Related to risk, providing redundancy is expensive and is an exercise in optimization by balancing the cost and need for redundancy. Ideally, system components would be sized to handle modeled flows and processes, operate without incident when required, and no redundancy would be needed. As a practical matter, some critical asset systems are so important that redundancy is expected. Currently, WTD does not have a redundancy policy.

C. Contextual and Baseline Information

i. What is known about the topic and current conditions

What is Asset R&R?

Asset R&R, in the context of this document and the RWSP is a category of capital investment within WTD's CIP portfolio. This category encompasses the renewal and replacement of WTD's assets that have reached the end of their useful lives. Asset R&R projects include a wide range of assets (e.g., all the facilities and equipment in the three regional wastewater treatment plants, as well as the offsite pump stations and the two small treatment plants at Vashon Island and Carnation). Asset R&R also includes conveyance system facilities and almost 400 miles of pressure and gravity lines.⁵ Renewing or replacing critical assets at the point where they have achieved their maximum value to the organization is a key tenet of asset management and essential to maintaining the safe, reliable, and efficient operation of the regional wastewater system.

Level of Service

Defined levels of service are foundational to a wastewater utility because these definitions set service expectations, which in turn guide Asset R&R decisions. WTD's defined levels of service are outlined in its 2018 Strategic Asset Management Plan:

- Operate WTD's infrastructure to meet all County, state, and federal policies and regulations to protect public health and the environment
- Optimize WTD's infrastructure and operational resiliency to meet present and future demands as defined by King County Policies

⁵ Memorandum, WTD Portfolio Management, Asset Management – Plants, Category Package, September 2024 and Memorandum, WTD Portfolio Management, Asset Management – Conveyance, Category Package, September 2024.

- Maintain financial strategies that meet organizational priorities and manage operational risks in a cost-effective manner
- Provide equitable service to customers 24 hour/day; seven days a week
- Continually develop and maintain a highly trained, safe, and diverse workforce
- Equitably operate, manage, and maintain WTD infrastructure to minimize near neighbor impacts
- Leverage resource recovery to enhance sustainability and generate revenue

WTD's Assets

As of February 2026, WTD's asset database showed 65,455 registered, active assets. Of these, 55,373 were classified as "vertical" assets (assets located within treatment plants, pump stations or off-site facilities), and 10,082 were classified as "horizontal" assets (pressure and gravity pipe segments, maintenance holes, conveyance structures).⁶

About 27 percent of WTD's vertical assets are rated as "critical" (criticality rating of 4 or 5), meaning that if these assets fail, serious consequences involving safety, environmental degradation, or system operation are likely. This is somewhat higher than the industry standard of 20 percent. Managing asset renewal and replacement is focused on the critical assets because they need to be replaced prior to failure to maintain the minimum level of service expected. System-wide, minimum expected service levels include meeting regulatory requirements, and zero untreated or partially treated sewer spills.

Current State of WTD's Assets

For Asset R&R, age is an attribute that heavily influences the likelihood of failure. For vertical assets, the average age by facility program is as follows:⁷

- South Plant, 21 years
- West Point, 17 years
- East Offsite, 16 years
- West Offsite, 16 years
- Brightwater, 13 years

The average expected useful life of all registered vertical assets is 24 years.⁸ At least 7% (1,100) of the 15,000 critical vertical assets have a high likelihood of near-term failure. WTD

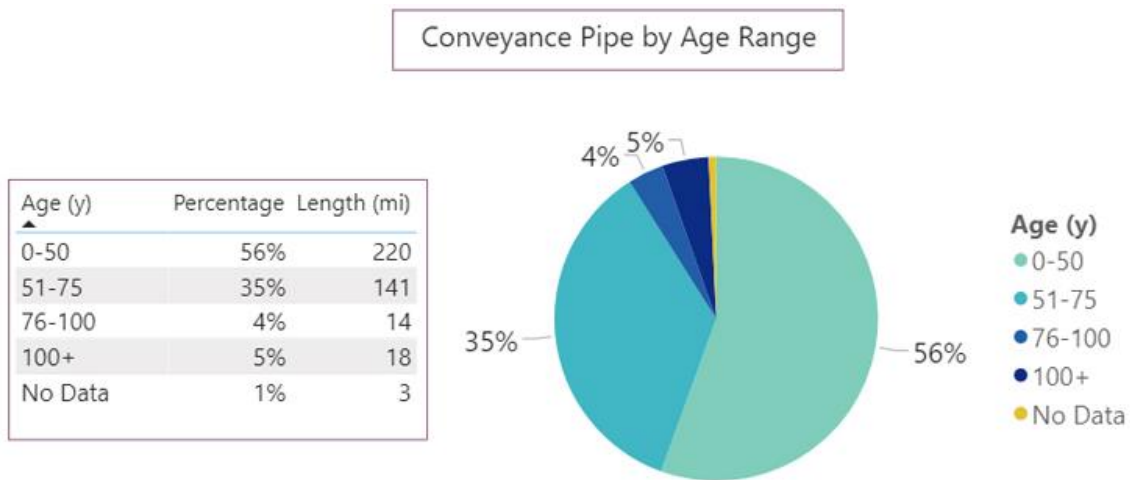
⁶ Information extracted from WTD's asset management database 2/25/2026.

⁷ Information extracted from WTD's asset management database 3/6/2026.

⁸ From WTD's Maximo asset management database, 3/12/2026.

recently undertook an asset condition assessment effort, which will be incorporated into its enterprise asset management system in 2027.

For horizontal assets, WTD maintains a sewer collection and transmission system composed of 383 miles of conveyance pipe (4,742 segments), ranging in diameter from 12 inches to 204 inches. Of these, 45 miles (564 segments) are considered critical due to factors including population density, distance to a water course, distance to a wetland, and the volume of sewage flow. Of the 45 miles of critical segments, 4.4 miles (42 segments) have been identified as highly likely to fail at any time.⁹ Additional condition assessment for WTD’s sewer collection and transmission system is ongoing.¹⁰ For these pipe assets, the graphic below summarizes age, with over half of conveyance pipes falling between 0-50 years and 44% over 50 years old:¹¹



The average age of WTD’s horizontal assets is approximately 50 years.¹² The expected useful life of WTD’s horizontal assets varies between 40 and 80 years, although it is not uncommon for pipes to remain in serviceable condition for longer than expected. An ongoing (but not yet completed) condition assessment effort, based on 1,257 segments, estimates the average system remaining useful life at 20 years.¹³

To inform Asset R&R project selection in the decades to come, WTD is currently undertaking a significant upgrade to its enterprise asset management system software. Initially, this new software will utilize data generated from a baseline condition assessment

⁹ Draft Linear Asset Renewal and Replacement Forecasting Tool, HDR, April 2026.

¹⁰ Ibid.

¹¹ Information extracted from WTD’s asset management database 7/23/2025.

¹² Draft Linear Asset Renewal and Replacement Forecasting Tool, HDR, April 2026.

¹³ Draft Linear Asset Renewal and Replacement Forecasting Tool, HDR, April 2026. See “assessed lifespan” column.

of critical assets.¹⁴ Later, condition information and other asset attribute information will be entered into the system as maintenance is performed by operations and maintenance (O&M) staff. Further in the future, critical assets will be retrofitted with sensors to collect information on asset condition and feed that information into the enterprise asset management system. As this asset condition and maintenance database becomes more robust, the system will gradually help O&M staff, engineers, and planners better predict remaining useful life, optimize maintenance intervals, and will result in increasingly more precise forecasting for the Asset R&R project portfolio going forward.

Characteristics of WTD's Asset Renewal and Replacement Capital Program

Renewing and replacing assets is a continuous process, from pre-design efforts, through design, contracting, construction, commissioning, and closeout. The scope of Asset R&R projects varies widely. The time needed to complete an Asset R&R project can vary from just a few weeks for small projects involving a single asset, to a decade or longer for large projects involving multiple assets or systems.

WTD has a backlog of identified Asset R&R projects. The Asset R&R backlog is composed of those known, unfunded and undelivered critical facilities or individual assets known to be past their useful lives and which may fail at any time (high-risk assets). Projects to address these aged facilities and individual assets are requested, scoped, validated¹⁵ and eventually prioritized high enough for funding. WTD tracks every validated Asset R&R project that is awaiting funding so that the projects can be prioritized within the broader capital program. Most unfunded Asset R&R projects are requested because the assets involved have exceeded their useful lives and their condition, performance or risk exceed acceptable thresholds. As of November 2025, there were 75 large Asset R&R projects awaiting funding, with an estimate at completion in 2026 dollars of \$2.2 billion, resulting in an average estimate at completion of \$29.3 million.¹⁶ In addition, WTD has six dedicated programs for smaller asset replacement projects, with about \$80 million/year forecasted

¹⁴ From ISO 55000: critical asset: asset having the potential to significantly impact the achievement of an organization's objectives.

Note 1 to entry: Assets can be safety-critical, environment-critical or performance-critical and can relate to legal, regulatory or statutory requirements.

Note 2 to entry: Critical assets can refer to those assets necessary to provide services to critical customers.

Note 3 to entry: Asset systems can be distinguished as being critical in a similar manner to individual assets

From WTD's Strategic Asset Management Plan, 2018: Critical assets: assets for which the financial -, business-, or service-level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower acceptable risk threshold for action than non-critical assets.

¹⁵ In this context, "validated" means that the project has undergone a formal review process by subject matter experts and accepted into WTD's portfolio of future Asset R&R projects.

¹⁶ WTD's Prism portfolio management database: Asset Management-Plants and Asset Management-Conveyance. 3/13/2026.

over the next 10 years. These programs currently have 135 projects in active delivery, and 236 planned projects.¹⁷

ii. Current policies in code, contract, or in practice

King County Code (K.C.C. 28.86, Wastewater Treatment) guides asset renewal and replacement and levels of service expected from the regional wastewater conveyance and treatment system. The Wastewater Services policies specific to Asset R&R are:

Relevant Policies in K.C.C.	Wastewater Services Policy (WWSP)
28.86.110 WWSP-9	To ensure the region’s multibillion-dollar investment in wastewater facilities, an asset management program shall be established that provides for appropriate ongoing maintenance and repair of equipment and facilities. The wastewater maintenance budget, staffing levels and priorities shall be developed to reflect the long-term useful life of wastewater facilities as identified by the asset management program.
28.86.110 WWSP-10	The asset management program shall establish a wastewater facilities assets management plan, updated annually, establishing replacement of worn, inefficient and/or depreciated capital assets to ensure continued reliability of the wastewater infrastructure.

The Wastewater Services policies related to Levels of Service are:

Relevant Policies in K.C.C.	Wastewater Services Policy (WWSP)
28.86.110 WWSP-1	King County shall provide wastewater services to fulfill the contractual commitments to its component agency customers in a manner that promotes environmental stewardship, recognizes the value of wastewater in the regional water resource system and reflects a wise use of public funds.
28.86.110 WWSP-6, 7, 8,11	<u>WWSP-6</u> : King County shall operate and maintain its facilities to protect public health and the environment, comply with regulations and improve services in a fiscally responsible manner.

¹⁷ Ibid.

	<p><u>WWSP-7</u>: King County shall plan, design and construct wastewater facilities in accordance with standards established by regulatory agencies and manuals of practice for engineering.</p> <p><u>WWSP-8</u>: King County shall construct, operate and maintain facilities to prevent raw sewage overflows and to contain overflows in the combined collection system. In the event of a raw sewage overflow, the county shall initiate a rapid and coordinated response including notification of public health agencies, the media, the public and the affected jurisdiction. Preserving public health and water quality shall be the highest priority, to be implemented by immediately initiating repairs or constructing temporary diversion systems that return flow back to the wastewater system.</p> <p><u>WWSP-11</u>: King County shall design, construct, operate and maintain its facilities to meet or exceed regulatory requirements for air, water and solids emissions as well as to ensure worker, public and system safety.</p>
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Current Practice: Identification and Prioritization of Asset R&R Capital Projects

Most new Asset R&R projects are identified by O&M staff and Conveyance Inspection staff. WTD’s O&M staff are most familiar with the condition and performance of facilities and equipment and are most likely to recognize when an asset is failing and in need of replacement. Some asset R&R projects are identified by capital delivery project managers or planners and represent critical assets perceived to be at high risk of failure. Asset R&R may also be conducted as a “fortunate opportunity” in conjunction with other capital projects initiated for other reasons, or by other jurisdictions.

The current methodology to determine when an asset is at the end of its life is from the objective information contained in the asset database and through input from subject matter experts. The future methodology for scheduling Asset R&R projects is expected to increasingly rely more on objective information produced by WTD’s enterprise asset management system, a software program that tracks asset information and predicts asset performance. As the new enterprise asset management system accumulates more asset information, it will have the ability to predict the remaining useful life of an asset as well as the maintenance regimen to optimize its value during its life.

Like all categories of capital improvements, Asset R&R projects adhere to an extensive governance process involving WTD senior leadership to ensure projects are essential, timely, appropriately scoped, and properly resourced. Formal decision gates, overseen by

a Board structure, ensure every stage of every capital project and consultant selection is briefed, understood, and given the go-ahead (or not) at every stage of the project. This process also ensures wide, in-depth knowledge of WTD capital projects among WTD leadership and subject matter experts.

iii. The system “must-dos”

WTD must meet its federal, state and local regulatory requirements, including firm pump capacity¹⁸, and provide the level of sewer service expected by its member agencies. As such, keeping critical assets reliable is essential to meeting federal, state, and local regulatory requirements and to continue providing the essential service of cleaning wastewater.

iv. Planned and budgeted expenditures

As part of the 2027 Sewer Rate adoption process, WTD presented a 20-year forecast of its Capital Improvement Program that included about \$8.1 billion of investments in capital projects to address asset renewal and replacement needs.¹⁹ The first decade of this forecast consists of both active and planned capital projects ranging in status from active construction to long-range identified concepts. Asset R&R is 28% of WTD’s first decade forecast (\$2.8 B). The second decade of the forecast is determined by a long-range model that leverages accounting data and assumptions regarding remaining useful life to forecast a portfolio-level annual spend. Because of the varying level of definition between active capital projects, planned capital projects, and long-range model assumptions, the Capital Improvement Plan annual forecast contains significant uncertainty, particularly beyond the 6-year forecast window that WTD daylights as part of its biennial budget proposal process.

Below is a list of currently active and appropriated WTD asset renewal and replacement capital projects as of the 2026/2027 biennial budget adoption by King County council in November 2025. Projects planned to begin in 2028 and beyond are not included in this list and their relative timing is subject to change based on WTD’s evaluated priorities at the time of subsequent sewer rate and budget proposal forecasts. It should also be noted that there are likely assets in WTD’s backlog that are not addressed by currently planned or active capital projects, and improvements in tools and processes are underway to improve WTDs comprehensive identification and prioritization of asset renewal and replacement needs as described above.

¹⁸ Firm capacity is the pumping capacity of the facility with the largest pump out of service.

¹⁹ Presentation to the King County Regional Water Quality Committee (RWQC), “2027 Sewer Rate Proposal,” slide 21. RWQC packet page 203.

**WTD Active and Appropriated Asset Renewal and Replacement Capital Projects/Programs
(as of the Adopted 2026/27 Biennium Budget)**

Asset R&R - Conveyance

Cathodic Protection Program
Conveyance System H2S Corrosion Rehabilitation
Coordinate with WSDOT on I-405N
Division Wide Force Main Inspection Access Program
ESI Section 8 Rehabilitation
Interbay Force Main & Odor Control
Lake Hills Boulevard Siphon Replacement
Lake Hills Interceptor Rehabilitation Phase II
M Street Trunk Rehabilitation
Murray Forcemain Rehabilitation
Odor / Corrosion Control
Pipeline Replacement
South Interceptor Rehabilitation
SPC Yarrow Bay PS Overflow Pipe Rehabilitation
SPO Eastgate Interceptor Rehabilitation Phase IV

Asset R&R - Plants

Biosolids Agricultural Equipment
Biosolids Forestry Equipment
Biosolids Site Development
Biosolids Transportation
Brightwater Neuros NX-300 Blower Replacement
Brightwater Operations Center Roof & HVAC Replacement
Chinook Research Vessel Replacement
Division Wide Offsite Level Controls and Communication Upgrade
Division Wide VFD Replacement Program
Division-Wide UPS Replacement Program
Electrical / I&C
Environmental Lab LIMS Upgrade
Hidden Lake PS Raw Sewage Pump Replacement
HVAC Replacements and Refurbishments
Jameson/Arcweld Buildings Replacement
Environmental Laboratory Capital Asset Management Program
Lakeland Hills Install Generator
Lakeland Hills PS Facility Replacement
Matthews Park PS Odor Control Replacement
Mechanical Upgrade & Replacement
Medina PS MCC & Generator Replacement
Offsite Standby Generator Retrofit with Load Bank Connections
Ovation Evergreen Control Systems Lifecycle Management Program

PIMS Replacement
 Richmond Beach PS MCC and Switchboard Replacement
 Roof Replacements for WTD Facilities
 Small Generator Replacement at Various Offsite Stations
 South Plant Barscreen Upgrade
 South Plant Chemical ORT System and Dewatering Carbon Scrubber Improvements
 South Plant Electrical Improvements
 South Plant Influent Gates & Actuators Replacement
 South Plant Raw Sewage Pump #3 Replacement
 SP Biogas and Heat Systems Improvements
 SP DAFT Tank Rehabilitation
 STP RAS Pods 1-4 Piping and Component Replacement
 Structures / Site Improvement
 West Point Electrical Improvements
 West Point EPS Isolation Gate Rehabilitation
 West Point IPS / EPS Pump Refurbishment Program
 WPTP Critical Gate Refurbishment Program
 WPTP Grit Classifier Replacement
 WPTP Instrument & Service Air Replacement
 WPTP LSG Piping Replacement
 WPTP Oxygen Generation System Refurbishment
 WPTP PE and RAS Pipe Restoration/Replacement
 WTD CMMS Upgrade
 WTD Ovation Control Systems Upgrades
 WTD Roofing Program 2024-2028

v. Summary of science/data

Asset Management as a Best Practice

Determining the optimal time to replace aging assets is essential for efficient operation of the regional wastewater collection and treatment system. A substantial body of asset management best practice has developed over several decades and now includes well-accepted principles and guidance in continually improving asset management programs.²⁰

WTD has an established asset management program and continually strives to improve. In 2018, WTD’s program was evaluated by an outside expert and received a maturity rating of 2.2, indicating a “developing” asset management program. In 2025, another maturity assessment was conducted, resulting in a rating of 2.5, indicating the program is maturing

²⁰ See ISO 55000 series publications; The International Infrastructure Management Manual; The Institute of Asset Management publications; numerous others.

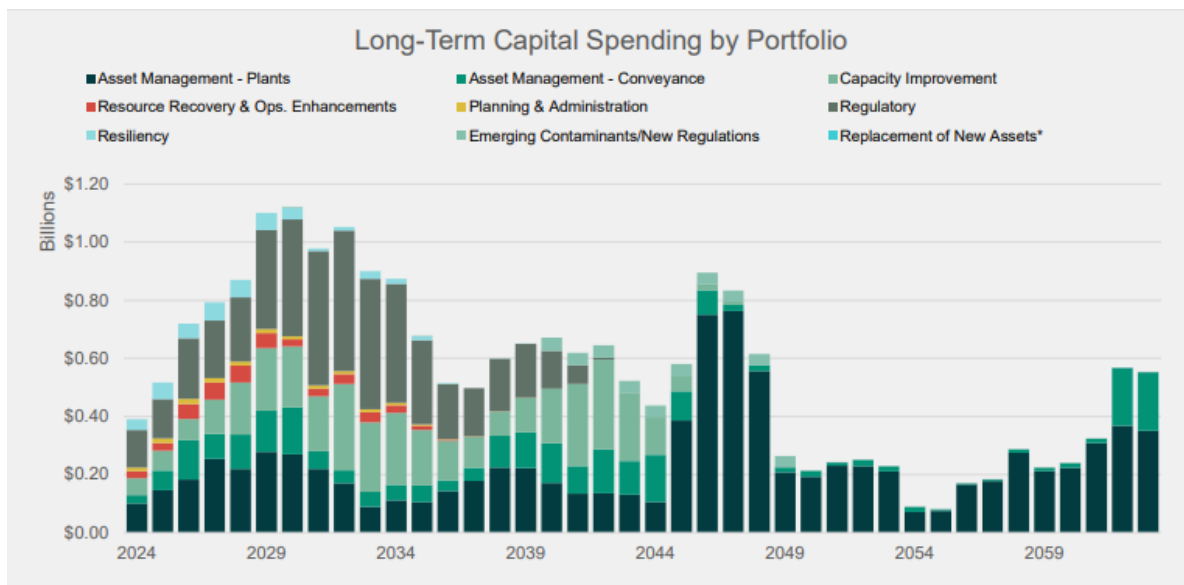
toward “competent” in accordance with the standards developed by the Institute of Asset Management.

Asset Renewal and Replacement Forecasting

WTD recently completed a long-term financial and sewer rate forecasting tool.²¹ This tool was prepared to satisfy the requirements of King County Council Motion 16449 and was developed to forecast the long-term costs of its capital improvement needs, including asset renewal and replacement needs. The tool uses a spreadsheet model with various inputs including customer account information; operating and maintenance (O&M) costs across WTD; existing long-term debt obligations; planned capital improvement program (CIP) needs, and other miscellaneous system revenues. More specifically for Asset R&R, the Tool functions using three main inputs: the current CIP, the capital forecast used in the sewer rate model developed and maintained by WTD staff, and the register (accounting records) of assets currently in service.

To meet the requirements of Motion 16449, the long-term financial forecasting model can be modified to produce financial forecasts of up to 75 years; however, the report notes that “a forecast of this duration should not be used for any activity other than macro analyses and big-picture evaluations of future needs.”²²

The first 40 years of the projection are shown below:²³



²¹ Raftelis/Conсор “Long-Term Financial & Sewer Rate Forecast Executive Summary,” Final Report August 2026. Briefing presented to the Regional Water Quality Committee September 3rd, 2025.

²² Raftelis/Conсор “Long-Term Financial & Sewer Rate Forecast Executive Summary,” Final Report August 2026. Briefing presented to the Regional Water Quality Committee September 3rd, 2025, p. 10.

²³ Ibid.

Supplementing this Raftelis forecasting tool, a complementary modeling effort is underway, using a different methodology, based on WTD’s detailed asset inventory and condition information. This effort by HDR is currently under review. When complete, the model will provide a second basis for long range Asset R&R projections.

Over the past 10 years, WTD has likely underinvested in Asset R&R – over that time, spending has averaged about \$90 million/year in 2025 dollars (although in 2025, the investment rose to \$164 million). Looking forward, WTD’s estimated Asset R&R spend, based on a combination of identified and modeled potential project costs that have been prioritized for funding availability and resource capacity, is about \$385 million/year.²⁴ The “right level” of Asset R&R investment will be studied further in Step 2 of the RWSP planning process.

D. Example Practices from Other Jurisdictions/Industry

WTD peer agencies were identified in the Raftelis/Conсор capital program forecasting body of work:

- Massachusetts Water Resource Authority
- Milwaukee Metropolitan Sewerage District
- Los Angeles County Sanitation Districts
- Philadelphia Water Department

Each of these peer agencies manage their asset renewal and replacement programs through different processes.

The Massachusetts Water Resources Authority (MWRA) operates both a water and wastewater system and is a wholesale water and wastewater service provider, similar to WTD. MWRA serves 61 communities with a combined population of 2.6 million. MWRA operates the second largest wastewater treatment facility in the nation, designed to treat 1.2 billion gallons per day, significantly more than WTD. A 2002 estimate of the total value of MWRA assets was \$10.25 billion.²⁵ MWRA prioritizes its Asset R&R projects similarly to WTD.²⁶ Its Wastewater System Master Plan, completed in 2018, identifies approximately

²⁴ Presentation to the King County Regional Water Quality Committee (RWQC), “2027 Sewer Rate Proposal,” slide 21. RWQC packet page 203.

²⁵ Ibid. See also, Massachusetts Water Resources Authority: Wastewater System Master Plan, December 1, 2018, p. 6-1.

²⁶ Ibid. See also, MWRA Board of Directors Report on Key Indicators of MWRA Performance First Quarter FY2026

\$1.1 billion in Asset R&R needs between 2024 and 2038.²⁷ This is less than WTD, even though MWRA's system is larger than WTD. The agency has an active asset management program and has been using IBM Maximo™ as its computerized maintenance management system since before 2018.²⁸ WTD converted to this same asset maintenance management system in 2025.

The Milwaukee Metropolitan Sewerage District (MMSD) provides sewer and flood management services for 29 municipalities and over 1.1 million people in the greater Milwaukee area, covering 423 square miles.²⁹ Inflows average 105 million gallons per day (about half of WTD's average inflows). MMSD prioritizes its Asset R&R projects similarly to WTD.³⁰ MMSD's long range Asset R&R program (2025-2050) identifies 46 major projects or programs, estimated to cost \$1.457 billion.³¹

The Los Angeles County Sanitation Districts (LACSD) is composed of 24 independent special districts and provides sanitation, wastewater, and electrical generation services to 5.5 million people in Los Angeles County. The districts cover a land surface area of 850 square miles and include 78 cities, as well as unincorporated areas.³² This is about twice the size of WTD. LACSD has a projected 2023-2024 capital improvement program of \$331 million and an O&M budget of \$403 million, also about twice as large as WTD.³³ The Sanitation Districts also utilize a computerized maintenance management system for all maintenance tasks. Similar to WTD, LACSD planned to replace its current maintenance management system with the Maximo™ Application Suite.³⁴

The Philadelphia Water Department (PWD) provides wastewater collection and treatment for Philadelphia and adjacent areas, consisting of approximately 2.5 million residents, similar to WTD. In addition, PWD also provides water to Philadelphia's 1.6 million residents, as well as stormwater management.³⁵ Similar to WTD, a major focus of the Department is its combined sewer system, and it is operating under an EPA consent decree to reduce combined sewer overflows.³⁶ The sewer system includes three major

²⁷ Massachusetts Water Resources Authority: Wastewater System Master Plan, December 1, 2018, p. 4

²⁸ Massachusetts Water Resources Authority: Wastewater System Master Plan, December 1, 2018, p. 6-12.

²⁹ Black and Veatch: Milwaukee Metropolitan Sewerage District 2050 Facilities Plan - Amendment May 2025, p. vii.

³⁰ Black and Veatch: Milwaukee Metropolitan Sewerage District 2050 Facilities Plan - Amendment May 2025, p. 70.

³¹ Milwaukee Metropolitan Sewerage District, May 2025 Amendment to the 2050 Facilities Plan, Appendix D, Table 3

³² Los Angeles County Sanitation Districts, 2024 Annual Report, p. 5.

³³ Ibid, p. 23.

³⁴ Ibid, p. 10.

³⁵ Philadelphia Water Department Fiscal Year 2026 Budget Testimony, April 2, 2025.

³⁶ [CSO Long Term Control Plan – Philadelphia Water Department](#)

treatment plants which together treat approximately 470 million gallons of wastewater per day, more than double WTD's average.³⁷ The Department projects its capital program out six years, and is projecting a six-year wastewater Asset R&R budget of \$2.64 billion for 2026 to 2031.³⁸

WTD also uses Orange County Sanitation as a peer agency (OC San); OC San owns and operates wastewater collection system and treatment infrastructure. It serves 2.6 million people with a collection system including 380 miles of regional sewer pipelines, 15 pump stations and two sewer treatment plants, with an average daily wastewater flow of 184 million gallons.³⁹ OC San values its facilities at \$15 billion.⁴⁰ Its 10-year capital improvement program totals \$3.5 billion, of which \$498 million is earmarked for Asset R&R, although a good portion of the remaining capital investments appear to meet WTD's definition of Asset R&R.⁴¹

E. Policy Issues, Challenges, and Opportunities

Significant projected sewer rate increases over the next decade are driven, in part, by large regulatory projects which must be completed by 2037. Not only is the expense of these large regulatory projects a concern, there is also a concern that overall cost pressures will pull money away from the Asset R&R program, which will make the program even more reactive (rather than proactive), resulting in higher Asset R&R expenses in the future. Pushing Asset R&R projects further into the future results in those projects becoming more expensive over time. Prioritizing Asset R&R projects is thus an important component of moderating sewer rate increases by preventing inflationary cost growth.

Managing the regional wastewater system is asset intensive. WTD is currently transitioning to a more data-driven approach which includes migrating to a new enterprise asset management system (EAMS) (IBM Maximo™) to better inform long term asset renewal and replacement timing and costs. The updated EAMS tool will support WTD's ability to optimize life cycle expenses, demonstrating to MWPAAC member agencies that ratepayer investments are providing the maximum value possible while also ensuring the system is sustainable in the long run.

³⁷ Waterandwastewater.com, "Philadelphia Wastewater Treatment Plant," September 10, 2025.

³⁸ City of Philadelphia Six-Year Capital Program For Fiscal Years 2026-2031; 2026 Approved Capital Program and Budget, pp. 246; 251. Estimated assuming wastewater totals are 50% of combined utilities line item on p. 251.

³⁹ Orange County Sanitation District: Asset Management Plan 2025, p. ES-1.

⁴⁰ Orange County Sanitation District Capital Improvement Program Annual Report 24/25, p. 12.

⁴¹ Ibid, p. 42.

F. Range of policy options with associated actions and considerations

The policy options presented below describe potential choices and Asset Renewal and Replacement actions that could be implemented to address the following policy questions. Each policy question will be considered in turn.

1. How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?
2. What level of redundancy of critical systems should WTD have?
3. What level of risk tolerance should WTD accept?
4. What approach should WTD use to fund Asset R&R projects?

Asset Renewal and Replacement Policy Question #1: How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?

Policy Option	Goal	Description	Asset R&R Actions	Outcomes/Examples	Tradeoffs
Option #1	<p>Delay asset renewal and replacement beyond the assets' useful lives until risk is deemed unacceptable.</p> <p>High risk tolerance</p>	<p>Primarily implement Asset R&R projects after failure occurs or when failure is imminent.</p>	<p>Critical Assets – Maintain a backlog⁴² of critical assets that are past their projected end of useful life by continuing to focus on refurbishing or replacing assets after failure or when failure is imminent while also proactively refurbishing or replacing some critical assets nearing end of life.</p> <p>Non-Critical Assets – Renew or replace non-critical assets only after asset failure unless part of a larger capital project.</p>	<p>The backlog of Asset R&R projects past their optimal renewal or replacement timing will steadily increase.</p> <p>Risk will steadily increase.</p> <p>Unscheduled maintenance will increase, resulting in higher operating expenses.</p> <p>Less programmatic renewal/ replacement will occur (for example: roof replacements, variable frequency drive replacements, programmable logic controller replacements), losing efficiencies as replacement decisions focus on individual assets.</p>	<p>Deferred expenses today will result in higher costs in the future.</p> <p>Lower impact on rates in the near term but higher systemic risk.</p> <p>As noted in the definition 'Critical Assets' are: 'those assets that, if they fail, threaten the ability of the utility to function properly, and potentially cause permit violations, public health and safety concerns, environmental degradation, or employee safety concerns.' This option chooses to wait for failure or imminent failure to renew. This option chooses a high likelihood of these events.</p>
Option #2	<p>Gradually shift (over 30 years) from reactive to proactive approach for critical Asset R&R.</p> <p>Medium/lower risk tolerance</p>	<p>Increasingly implement Asset R&R projects before failure occurs while continuing to address some assets after failure or when failure is imminent.</p> <p>Shift Asset R&R focus over the planning period (30 years) to fully fund each new year's annual Asset R&R requirement, while gradually reducing the existing Asset R&R backlog.</p>	<p>Increase the number of critical Asset R&R projects implemented annually so that by the end of the RWSP planning horizon (2060) there is no backlog of critical assets needing refurbishing or replacing that are past their projected end of useful life.</p> <p>Increasingly transition to more data-driven decision-making, utilizing technology and better condition assessment.</p> <p>Take advantage of opportunities in adjacent projects or right of way projects to replace non-critical assets.</p>	<p><u>Measurable outcomes:</u></p> <p>Gradual reduction in the Asset R&R backlog. Backlog reduced by 50% after 15 years and no backlog after 30 years.</p> <p>Gradually decreased systemic risk over time.</p> <p>Increasingly data-driven decision-making, including condition assessment and predictive maintenance recommendations, supplemented with and checked by front line expert staff will enable more optimal asset renewal or replacement decisions and improve system reliability.</p>	<p>Additional funding above the current baseline will be necessary to implement this policy option. See question #4.</p> <p>This option makes intentional strides toward sustainable operations, service continuity, and cost effective management of infrastructure, while recognizing the investment need and stretching that investment over time to smooth impacts to customers.</p>

⁴² The Asset R&R backlog in this context is composed of those critical facilities or individual assets known to be past their useful lives and which may fail at any time.

Policy Option	Goal	Description	Asset R&R Actions	Outcomes/Examples	Tradeoffs
<p>Option #3</p>	<p>Quickly transition (over next 10-15 years) to a proactive approach for Asset R&R so all critical assets are refurbished or replaced prior to failure.</p> <p>Low/lowest risk tolerance</p>	<p>Consistently implement, within next 10 years, Asset R&R projects for critical assets <i>before</i> failure becomes likely.</p> <p>While transitioning to a proactive approach, simultaneously reduce the existing Asset R&R backlog, Asset R&R “must do” projects are identified, prioritized, funded, and completed before risk thresholds are exceeded.</p> <p>WTD resources are reserved for “must do” Asset R&R projects.</p>	<p>Substantially increase the number of critical Asset R&R projects implemented annually so that by 2040 there is no backlog of critical assets needing refurbishing or replacing that are past their projected or adjusted end of useful life.</p> <p>After 2040, continue to implement critical Asset R&R prior to end of useful life.</p> <p>Provide increased resources and services – scoping, design, construction, commissioning – in the near term to reduce the backlog of R&R projects.</p> <p>Develop and continually improve an Asset R&R project forecast that assigns projects to specific program years for a 75-year planning horizon.</p> <p>Create a portfolio category for Asset R&R projects that are nearing end of life but have not yet failed – Proactive R&R.</p>	<p><u>Measurable outcomes:</u></p> <p>No Backlog after 15 years. Decreased systemic risk.</p> <p>Asset R&R projects are assigned a specific year for renewal/replacement based on remaining useful life projections and condition assessments,</p> <p>Large Asset R&R projects are scheduled many years in advance and commissioned in accordance with their assigned renewal/replacement timing.</p> <p>After transition, WTD’s critical assets will reliably provide the level of service necessary to maintain acceptable levels of risk.</p> <p>Asset R&R critical projects do not need to compete for funding; instead, funding is projected years in advance and provided when needed.</p>	<p>An immediate transition to a proactive Asset R&R represents a significant policy shift. This transition will require additional staff time and money in the near term. This will add expense above the status quo.</p> <p>These near term expenses will not be recouped directly, but will lead to more efficient and optimal management of WTD assets in the long term.</p> <p>Significant additional funding above the current baseline will be necessary to implement this policy option.</p>

Asset Renewal and Replacement Policy Question #2: What level of redundancy of critical systems should WTD have?

Policy Option	Goal	Description	Asset R&R Actions	Outcomes/Examples	Tradeoffs
Option #1	Minimal / moderate level of redundancy for limited set of critical facilities. Higher risk.	Focus redundancy on investments essential to powering a <u>limited set</u> of critical facilities and/or responding to peak system flows. Implement redundancy only where needed to maintain Department of Ecology requirements and permit compliance.	Redundancy actions focus on: a. Providing power backups at pump stations. b. Adding reserve pumping capacity to meet peak flows. c. Adding communication so that unmanned critical facilities can still be monitored and controlled from the main plants if one communication mode is lost.	Systems continue to be designed considering peak flow projections and the associated statistical analysis of return intervals. <u>Measurable outcomes:</u> System redundancy is increased upon clear indication redundancy is insufficient (Example: West Point Power Quality project).	Higher risk Lower impact on sewer rates.
Option #2	Increased level of redundancy across many/most critical facilities. Reduced risk, improved reliability and resiliency.	Systematically prioritize and add redundant capacity for <u>many/most</u> critical functions (essential to power critical facilities and/or respond to peak flows) to significantly reduce risk. Additionally, pursue redundancy where renewal and replacement projects present the opportunity.	In conjunction with the development of an enterprise risk management framework: a. Evaluate horizontal and vertical asset systems and add redundant capacity based on maintenance requirements and the value of reduced risk. b. When developing the scope of Asset R&R projects, look for opportunities to add redundancy. Adding redundancy as part of a larger project can be less expensive than adding redundancy as a smaller project later.	Reduced risk from unexpected equipment failures or statistical outlier flows. <u>Measurable outcomes:</u> 1. Reduced overflows/spills 2. Reduced hours on individual pumps/motors 3. Ability to exceed pump station's firm capacity in statistically rare events 4. Reduction in after-hours emergency callouts 5. Higher overall system availability	Increased level of redundancy will significantly lower risk, but will be more expensive and have a greater impact of sewer rates (adds both capital and O&M expense). The benefit will be improved system reliability, safety, and reduced risk.

Asset Renewal and Replacement Policy Question #3: What level of risk tolerance should WTD accept?

The answer to this question is linked to the options in questions #1 (proactive/reactive) and #2 (level of redundancy) described above. For example, a low risk tolerance is linked with a quick transition to a proactive approach to Asset R&R coupled with increased level of redundancy across most critical facilities; a high risk tolerance is linked with delaying asset renewal and replacement beyond the assets' useful lives coupled with minimal redundancy across a limited set of critical facilities. In addition to these considerations, when evaluating the optimal level of risk it is important to consider the two options described below.

Policy Option	Goal	Description	Asset R&R Actions	Outcomes/Examples	Tradeoffs
Option #1	Higher risk tolerance	<p>Rely on existing practices and professional judgment to manage asset risk.</p> <p>Consider risk (with the goal of reducing risk) as Asset R&R projects are scoped and implemented.</p>	<p>Implement projects based on mix of best professional judgment and whether failure has occurred or is imminent.</p>	<p>Significant information gaps about the risks posed by critical assets will continue to exist, resulting in unknown/high levels of risk.</p> <p>Critical asset condition information insufficient to drive objective renewal/replacement decisions.</p> <p>No systematic approach for managing risk is implemented.</p>	<p>Higher risk tolerance.</p> <p>Modernization to more data-driven risk practice is underway, however this option could result in lack of confidence from member agencies.</p> <p>This option requires no new resources.</p>
Option #2	<p>Lower risk tolerance</p> <p>Optimize Asset R&R based on real-time data</p>	<p>Use comprehensive data-driven risk analysis to identify optimal timing for each Asset R&R project.</p> <p>Consider multiple risk factors (such as external, regulatory, political, social and financial) in addition to cost when determining risks and assessing when to implement Asset R&R projects.</p>	<p>Define and adopt a comprehensive approach for managing risk.</p> <p>Critical assets retrofitted to provide real-time condition information. This condition information is continually updated.</p> <p>Deliver critical asset refurbishment or replacement before the year risk is projected to exceed tolerance.</p>	<p>Minimized failure of critical assets to the maximum extent possible.</p> <p>Renewal/replacement timing for critical assets is based on data generated by the assets themselves.</p> <p>Enterprise asset management software predicts appropriate maintenance intervals, including major maintenance/renewal timing.</p>	<p>Lower risk tolerance; optimized Asset R&R based on real-time data.</p> <p>Additional resources needed, however additional resources are not expected to be substantial in relation to the benefit achieved.</p>

Asset Renewal and Replacement Policy Question #4: What approach should WTD use to fund Asset R&R projects?

As a reminder of the problem definition inherent to this question, high risk Asset R&R projects are not guaranteed funding. Asset R&R projects compete for capital funding within WTD’s entire capital portfolio. This often results in Asset R&R projects being delayed beyond their expected end of life. Currently there is no policy statement ensuring Asset R&R projects are funded.

The goal of any modification to funding approach would be to more closely align available cash funding, and subsequent spending of that cash on Asset R&R, with an actual data-informed asset replacement forecast based on risk.

Current cash funding approach has been sufficient given **current spending levels**, but current spending levels are **insufficient** and are not effectively addressing asset risk or the backlog of Asset R&R projects. There are multiple reasons for this historic underspending of needs, including the lack of a protection mechanism for Asset R&R projects, overall optimization of the capital portfolio, and other resource constraints. If WTD changes its prioritization policy and prioritizes Asset R&R spending (therefore increasing asset R&R spending levels), the current cash funding approach may not be sufficient. Policy options must recognize that future Asset R&R spending levels (optimized for risk, replacement cycles, etc.) will likely be higher and require a higher amount of cash funding directly generated by the sewer rate. Long-term, a reactive Asset R&R funding policy where assets are utilized until failure would also likely not result in lower sewer rates as assets are required to be replaced on an emergency basis.

WTD’s annual renewal and replacement spending over the past 10 years:

WTD Cash Funding vs R&R (\$'000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	10-Year Total
Annual R&R ("Asset Management") Spending	63,856	41,144	52,323	73,857	50,369	46,965	62,252	94,629	100,582	163,827	749,805
Annual Cash Funding from Revenues	82,631	74,533	108,733	137,751	88,342	143,101	166,800	186,000	207,070	189,944	1,384,905
Cash Funding as % of R&R Spending	129%	181%	208%	187%	175%	305%	268%	197%	206%	116%	185%
O&M Expenditures	138,698	142,263	139,585	143,835	154,513	138,166	158,816	191,217	191,678	218,707	1,617,478
Debt Service Expenditures	235,437	238,688	246,227	248,024	243,507	243,611	234,191	240,136	242,499	274,273	2,446,593
Capital Expenditures	149,150	192,197	231,197	212,206	196,073	205,420	258,618	361,117	312,597	428,999	2,547,574
Asset R&R as % of Total Spending	12%	7%	8%	12%	8%	8%	10%	12%	13%	18%	11%

Addressing the fourth question will require a three-phase process, with some phases having multiple policy options. All three phases should be treated collectively as a package, as individually they will not guarantee the desired goal stated above. The policy options within these phases could be administrative, or internal WTD policies, rather than actual code-level changes.

Phase 1: Adopt a cash-funding approach in the sewer rate model that more closely aligns with true Asset R&R spending needs.

Phase 2: Adopt a financial policy that preserves cash funding for Asset R&R vs other portfolio categories.

Phase 3: Adopt a portfolio policy that prioritizes Asset R&R projects based on risk and protects them from the impingement of other portfolio categories and drivers.

Asset Renewal and Replacement Policy Question #4: What approach should WTD use to fund Asset R&R projects?

Phase #1: Adopt a cash-funding approach in the sewer rate model that more closely aligns with true Asset R&R spending needs.

Phase #1 Administrative Policy Options:

Policy Option	Goal	Description	Asset R&R Actions	Outcomes/Examples	Tradeoffs
Option #1	Ensure minimum required funding for Asset R&R critical assets through status quo approach.	Status Quo: Use original cost depreciation to determine the amount of Asset R&R cash funding to collect through rates.	Provide monetary resources to fund the Asset R&R capital program based on original cost depreciation regardless of identified R&R requirements. Use a mix of cash-flow and bond sales to fund Asset R&R projects.	Asset R&R funds are available but <i>may</i> not be sufficient to meet all Asset R&R needs if future spending levels are significantly higher than current levels.	May require a higher debt burden for WTD relative to other options and potentially does not recover sufficient rate funds for cash-funding all Asset R&R projects, depending on annual spending levels.
Option #2	Ensure adequate funding for asset R&R through transparent and efficient means, with potential future higher spending levels.	Interim Approach: Use annual Asset R&R spending OR original cost depreciation , whichever is higher, to determine the amount of Asset R&R cash funding to collect through rates.	Cash fund Asset R&R based on annual R&R spending or depreciation, whichever is higher.	Asset R&R funds are available and <i>may be</i> closer than Option #1 to meeting all Asset R&R needs.	'Middle-path' between options #1 and #3, potentially higher sewer rates than option #1, but not necessarily providing the desired level of funding (still undetermined).
Option #3	Ensure adequate funding for asset R&R through transparent and efficient means with potentially significantly higher future spending levels.	Optimum Approach: Use replacement cost depreciation to determine the amount of Asset R&R cash funding to collect through rates.	Cash fund Asset R&R based on replacement cost depreciation.	Asset R&R funds are available and match the true need.	Sewer rates are likely higher than for options #1 and #2.

Phase #1: Adopt a cash-funding approach in the sewer rate model that more closely aligns with true Asset R&R spending needs.

Considerations

There are multiple approaches to determining the amount of cash funding that a utility uses for its capital program. WTD's current approach is tied to original cost depreciation, which represents an annualized amount of spending on existing assets. However, it does not take capital cost inflation into account over time or prioritize funding asset repair and replacement projects over other capital needs.

While it represents a common industry approach, alternative approaches aim to address these deficiencies, such as cash funding based on actual projected Asset R&R spending, or inflating the original cost depreciation to replacement cost depreciation to cash fund the amount it would take to replace assets in year of expenditure dollars. In practice, both of these approaches are likely to result in higher immediate sewer rates than the status quo approach.

Asset Renewal and Replacement Policy Question #4: What approach should WTD use to fund Asset R&R projects?

Phase #2: Adopt a financial policy that preserves cash funding for Asset R&R vs other portfolio categories.

Phase #2 Administrative Policy Options:

Policy Option	Goal	Description	Asset R&R Actions	Outcomes/Examples	Tradeoffs
Option #1	Prioritize flexibility and rate management.	Asset R&R is cash funded. Cash over and above Asset R&R spending is used to offset spending in the entire capital portfolio – reducing WTD’s overall debt burden.	<ul style="list-style-type: none"> Revenues are reinvested in the system every year without the need to put them aside in a reserve and “wait” for Asset R&R projects. 	<p>Status quo</p> <p>This approach reduces the amount of debt issued in that year and effectively puts the money to a better use—the avoided interest rates in 30-year bonds are higher than the returns on investments from cash in a reserve.</p>	No guarantee that cash funding is used to fund Asset R&R projects.
Option #2	Prioritize intergenerational equity while allowing for some moderate flexibility and opportunity to manage rates.	Maintain Asset R&R funding (in a reserve) based on long-term spending forecast (based on risk/replacement cycle as described in related policy). Excess cash over and above that forecast does not have to be held in the reserve and can be used to decrease debt issuance costs or other upcoming capacity needs.	<ul style="list-style-type: none"> Revenues collected via the monthly sewer rate are deposited in an Asset R&R reserve. A long-term forecast for Asset R&R spending is created and maintained. The reserve balance is maintained based on that long-term forecast. Cash over and above Asset R&R spending plus long-term forecast may be used to decrease debt issuance for other capital needs. 	Cash remaining in the reserve earns a very modest amount in interest, and any excess cash can be used to avoid interest rates on bonds or other forms of debt. Short-term rate increases could still result depending on timing and rollout of implementation but could be better moderated long-term and allow for some flexibility in WTD financial management.	Could result in higher sewer rates if less cash funding is available for non-Asset R&R projects (along with higher Asset R&R spending than previous).
Option #3	Prioritize intergenerational equity.	Excess cash above Asset R&R spending goes into a reserve (and is not used for non-Asset R&R projects).	<ul style="list-style-type: none"> Revenues collected via the monthly sewer rate are deposited in an asset R&R reserve. Cash over and above asset R&R spending in a given year remains in the reserve. 	Cash remaining in the reserve earns a very modest amount in interest, but debt service costs likely increase. Short-term rate increases could result depending on the timing and rollout of implementation in conjunction with other needs. Interested parties have a high level of transparency into Asset R&R funding availability.	Could result in higher sewer rate if less cash funding is available for non-Asset R&R projects. Less flexibility in managing short-term rate increases (‘smoothing’).

Phase #2: Adopt a financial policy that preserves cash funding for Asset R&R vs other portfolio categories

Considerations

An Asset R&R Reserve is not the only mechanism to maintain adequate funding for R&R projects. In large utilities with ongoing capital programs, revenues can be reinvested in the system every year without the need to put them aside in a reserve and “wait” for asset R&R projects. This approach reduces the amount of debt issued in that year and effectively puts the money to a better use as the avoided interest rates in 30-year bonds are higher than the returns on investments from cash in a reserve.

While in practice, excess cash being used to fund other portfolio categories in place of issuing debt saves WTD more money than interest on a reserve would earn (see above explanation), this could potentially obfuscate (future, theoretical) challenges with cash funding levels or Asset R&R being deprioritized.

An Asset R&R funding policy cannot be separated from intergenerational equity, the concept that the users who benefit from the system over time should pay a proportionate charge to the costs of the system over time. Most assets will be replaced several decades after they have been originally installed and provide benefits to WTD for that asset’s entire life cycle. Because the replacement of assets does not generally expand the capacity of performance of the system, it is generally considered that they should be paid for immediately, rather than financed through debt. Debt financing of replacement projects penalizes future ratepayers for maintenance of the existing system. Debt financing of capital projects should conceptually be limited to projects that either expand the system capacity or enhance the system’s function (for example, by treating wastewater to a higher standard than previously). However, this results in higher rates in the immediate term to avoid penalizing future ratepayers.

Phase #3: Adopt a portfolio policy that prioritizes Asset R&R projects based on risk and protects them from the impingement of other portfolio categories and drivers.

Justification

The first two Asset R&R financial policy phases should be paired with a portfolio prioritization policy to be effectual. This policy should ensure that Asset R&R spending levels are based on replacement cycles/risk/etc. and cannot be deprioritized due to other spending needs such as major regulatory projects or set by percentages of portfolio based on pairwise comparison etc.

Considerations

This policy can only be fully realized with sufficient cash funding (as a result of phases 1 and 2 above) over an extended period of time.

If this policy is enacted but other spending levels (based on large regulatory projects or otherwise) must stay the same it could require the issuance of more debt, at least in certain time periods, at a higher cost than cash (along with higher cash needs), which could trigger rate increases. This can be transitioned into slowly/over-time to reduce rate burden.

Portfolio mechanisms can be designed to follow the asset management risk tolerance threshold or how this would dictate what projects happen when. The Asset R&R share of portfolio is determined by risk threshold – i.e. all projects above said threshold are funded.

This policy change does not have a suite of choices. While wording could vary, an internal administrative policy (not in code) would in all forms create the same outcome – **Asset R&R share of portfolio is determined by risk threshold – all projects above said threshold are funded.**

G. Interested and affected parties WTD will engage to gather input

WTD's component agencies and MWPAAC are the primary audiences that need to be engaged on Asset Renewal and Replacement policy options.

H. Rate structure considerations (if applicable)

There are no known rate structure considerations beyond the discussion in this policy memo.

I. Relationship to contracts

There are no known contract implications for this policy question.

J. Equity and Social Justice (ESJ) impacts

Based on the definition of equity and social justice in the King County Equity and Social Justice Plan 2016-2022, there are equity considerations related to formulating Asset R&R funding policies. Effective Asset R&R funding policies will allow WTD to address historical inequities by prioritizing renewals in frontline communities, reducing spill risks in vulnerable areas, improving air/noise/odor conditions, and supporting intergenerational equity by avoiding costly deferred maintenance, as outlined in question #4 above.

K. Planning Level Cost Estimates

This section will be added into the policy memo as the "Step 2" analysis later.

L. Evaluation of outcomes: identify impacts and outcomes of each option

This section will be added into the policy memo as the "Step 2" analysis later.

RWQC Work Program for 2026 May 6, 2026

The suggested agenda topics are based on the latest information available and are subject to change based on the availability of presenters and committee priorities. This work program will stay marked as “draft” to reflect that the committee will adjust the schedule throughout the year to accommodate any necessary changes.

RWSP Policy Analysis and RWQC

WTD is currently working on a multi-year plan to update the Regional Wastewater Services Plan. On January 16, 2025, the King County Council adopted the RWSP Update scope document to guide the update process. The scope document identifies policy questions to be analyzed as part of the RWSP Update. RWQC will have the opportunity to review the policy analysis both before and after the Draft RWSP is released.

Pre-Draft RWSP Update. Beginning in March 2026, the Wastewater Treatment Division (WTD) plans to present the initial analysis of selected policy questions from the RWSP Update scope document. WTD refers to this stage of the analysis for these policy questions as Step 1. Related policy questions will be grouped together. The intent of the initial Step 1 briefings is for members to receive information on each policy question and identify any gaps in the information or options presented by WTD. WTD’s initial analysis of the policy questions will provide a framework for the committee for future discussions on these policy questions. WTD expects the options presented at these initial briefings and any additional RWQC-identified options to be included in the Draft RWSP Update. WTD will accept feedback and suggestions on each group of policy questions during the month the analysis is presented to RWQC.

Beginning in Q4 2026 and continuing through Q3 2027, WTD intends to present cost information to RWQC on a rolling basis for the options related to each policy question. WTD refers to this cost information as Step 2. With this cost information, RWQC will have the opportunity to revisit any options it requested for analysis for inclusion in the DRAFT RWSP Update . All requested analysis and cost information for the policy questions is anticipated to be completed by Q3 2027.

After the DRAFT RWSP Update released. The Draft RWSP Update is scheduled for completion at the end of 2027. and RWQC will have another opportunity at this time to make comments to the Executive on the Draft RWSP Update The Executive will then develop the final Proposed Plan and transmit it to Council by the end of 2028 for Council adoption in 2029, at which time RWQC will have the opportunity to review and amend the plan.

MONTHLY MEETING SCHEDULE

January 7, 2026

- ✓ Regional Wastewater Services Plan Update: Update on RWSP Policy Analysis as Required by Proviso. This briefing will present the proposed schedule and grouping of policy questions.
- ✓ 2026 RWQC Work Program.

February 4, 2026

- ✓ An Overview of Water Quality in Puget Sound. Presentation by the Water and Land Resources Division, DNRP (40 minutes).
- ✓ Wastewater Treatment Division's Preliminary 2027 Sewer Rate and Capacity Charge, Including Rate Options (60 minutes).

March 4, 2026

- ✓ Proviso Response and Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 1: Separated System Conveyance (future conveyance capacity of the system, including Inflow and Infiltration and population growth.) (60 minutes)
- ✓ WTD's 2027 Sewer Rate and Capacity Charge Recommendations and Options (35 minutes).
- ✓ WTD Initial Presentation Prior to Ordinance Transmittal on Proposed Capacity Charge Code Changes (5 minutes).

March 26, 2026 9-11 am. Optional Site to South Plant to tour capital projects and compost pilot. This is not a RWQC meeting.

April 1, 2026

- ✓ Proviso Response and Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 2: Source Control and Legacy Pollution (55 minutes).
- ✓ WTD's 2027 Sewer Rate and Capacity Charge Recommendations and Options (Consider letter to Executive.) (20 minutes).
- ✓ If transmitted and time available, Proposed Capacity Charge Code Changes. (20 minutes)

May 6, 2026

- Executive's Proposed 2027 Sewer Rate and Capacity Charge (35 minutes).
- Proviso Response on RWSP Policy Questions. (10 minutes)
- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 3: Asset Renewal and Replacement (40 minutes).
- Proposed Ordinance 2026-0066. Capacity Charge Code Changes. (20 minutes)

June 3, 2026

- Proposed Ordinance on Capacity Charge Code Changes (15 minutes).
- Regional Wastewater Services Plan Update: Policy Questions Initial Analysis Group 4: Climate Impact and Natural Disaster Resiliency (50 minutes).
- Executive's Proposed 2027 Sewer Rate and Capacity Charge (If comment letter to King County Council is requested, approve.) (30 minutes).
- Capital Project Cost Update per proviso (Written).

July 1, 2026

- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 5: Finance/Affordability (60 minutes).
- Regional Wastewater Services Plan Vision Final Vision (15 minutes).
- Regional Stormwater Solutions (30 minutes).
- Capital Project Cost Update per proviso (Written).

August 5, 2026 (This is considered a special meeting due to Council Recess)

- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 6: Combined System Management. (Combined Sewer Overflow policies) (70 minutes).

September 3, 2026

- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 7: Level of Treatment (50 minutes).
- Briefing by Edward Cebon, WTD Financial Planning Review. Tentative, pending speaker confirmation. (40 minutes)
- Capital Project Cost Update per proviso (Written).

September Optional Site Visit to Brightwater. Date TDB.**October 1, 2026**

- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 8: Resource Recovery (60 minutes).
- Proviso Response Implementation Plan for Expanding Eligibility Requirements for WTD's Payment Plan Program. Transmittal Due April 3, 2026. (15 minutes).
- Update on Puget Sound Nutrient Issue (30 minutes).

November 5, 2026

- Regional Wastewater Services Plan Update ---Costing Information on Group 1: Separated System Conveyance (future conveyance capacity of the system, including Inflow and Infiltration and population growth) (45 minutes).
- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 9: Rate structure/Robinswood questions (45 minutes)

DRAFT

December 3, 2026

- Regional Wastewater Services Plan Update ---Costing Information on Group 2: Source Control and Legacy Pollution (60 minutes).
- Capital Project Cost Update per proviso (Written).
- PFAS Annual Update (20 minutes).

Note for RWSP Update—Policy Analysis. Remaining costing information for Policy Questions Groups #3-9 will provided in Q1 and Q2 in 2027.

Monthly Written Report on Status Update for Motion 16900:

Committee requests monthly status report include status update on key tasks in Motion 16900, (WTD's sewer rate and capital work plan to improve engagement, transparency, and accountability) including:

- Develop and implement a process for MWPAAC and RWQC (as requested) to review a limited number of large capital projects selected by MWPAAC that substantively affect the rate.
- Develop public engagement strategy for rate payers in coordination with local contract agencies to explain why wholesale WTD rates are increasing and provide opportunities for public engagement.
- Independent consultant to review WTD's capital program.
- Evaluate regulatory requirements.
- Significant changes in capital project costs.
- Options for multi-year rate predictability.