



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, April 1, 2026

Hybrid Meeting

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 kcccomitt@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

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

3. Approval of Minutes

March 4, 2026 meeting **p. 4**

Chair's Report

MWPAAC Report

Wastewater Treatment Division Report



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Briefing

4. [Briefing No. 2026-B0045](#) **p. 7**
 Proviso Response and Regional Wastewater Services Plan Update Policy Questions Initial Analysis
 Group 2: Source Control and Legacy Pollution

Darren Greve, Government Relations, Wastewater Treatment Division
Janice Johnson, RWSP Project Manager, Wastewater Treatment Division
Erika Kinno, Environmental Programs Supervisor, Wastewater Treatment Division
Debra Williston, Water Quality Program Manager, Wastewater Treatment Division

5. [Briefing No. 2026-B0046](#) **p. 148**
 Wastewater Treatment Division's 2027 Sewer Rate and Capacity Charge Recommendations and Options

Caitlyn Hall, Interim Chief Financial Officer, Wastewater Treatment Division

6. [Briefing No. 2026-B0034](#) **p. 188**
 Briefing on Pending Ordinance Related to Proposed Capacity Charge Code Changes

Luke Slaughterbeck, Senior Financial Analyst, Wastewater Treatment Division
Sharman Herrin, Government Relations, Wastewater Treatment Division

7. [Briefing No. 2026-B0002](#) **p. 222**
 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, March 4, 2026

Hybrid Meeting

DRAFT MINUTES

1. **Call to Order**

Chair Balducci called the meeting to order at 3:02 p.m.

2. **Roll Call**

Present: 12 - Balducci, Clarke, Dunn, Hamilton, Lewis, Moore, McClellan, Rossman,
Warren, Amer, Stuart and Hooshangi

Excused: 3 - Hollingsworth, Mork and Lin

3. **Approval of Minutes**

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

4. **Chair's Report**

Chair Balducci welcomed Seattle City Councilmember Lin to the committee, noted
upcoming WTD tours, and provided an overview of meeting topics.

5. MWPAAC Report

John McClellan, MWPAAC Chair, noted that the MWPAAC schedules and agendas are posted on their web site, and commented on the Executive Board's ongoing work to compose their rate letter.

6. Wastewater Treatment Division Report

Kamuron Gurol, Director, Wastewater Treatment Division, commented on the sewer rate and forecast process, items that impact the outcomes, and efforts to reduce costs. He noted that they anticipate the RWQC, MWPAAC and individual partner agencies may send comment letters to the executive for consideration in the formulation of the rate recommendation; and also provided comments regarding challenges being faced - consultant selection, public messaging with partner agencies, options for better rate predictability, and a benchmarking initiative; and concluded with staffing and tour updates.

Briefing**7. [Briefing No. 2026-B0032](#)**

Regional Wastewater Services Plan Update: Proviso Response and Initial Analysis of Policy Questions Related to Separated System Conveyance

Jenny Giambattista, Council staff, provided introductory comments. Darren Greve, Government Relations Administrator, Wastewater Treatment Division (WTD); Johnson Nguyen, Senior Planner, WTD; and Luke Slaughterbeck, Senior Financial Analyst, WTD; briefed the committee and answered questions from the members.

This matter was Presented

8. [Briefing No. 2026-B0033](#)

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

Kamuron Gurol, Director, WTD, provided introductory comments. Caitlyn Hall, Interim Chief Financial Officer, WTD, briefed the committee.

This matter was Presented

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

Briefing on Pending Ordinance Related to Proposed Capacity Charge Code Changes

Luke Slaughterbeck, Senior Financial Analyst, WTD

This matter was Deferred

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

Discussion of 2026 Regional Water Quality Committee Work Program

Chair Balducci commented on changes to the 2026 work plan. Commissioner Warren proposed that a metrics and policy presentation be added.

This matter was Deferred

Other Business

There was no further business to come before the committee.

Adjournment

The meeting was adjourned at 5:00 p.m.

Approved this _____ day of _____

Clerk's Signature



King County

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

STAFF REPORT

Agenda Item:	4	Name:	Jenny Giambattista and Andy Micklow
Proposed No.:	2026-B0045	Date:	April 1, 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 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.

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 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	Should the County evaluate costs and plan for levels of treatment beyond current legal requirements? 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? What upstream or source control actions should the region undertake to prevent contaminants and reduce costs? How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?
Capacity Demands	Given the uncertainties in future growth rates reported by

⁴ Resolution RWQC2025-01 and Resolution RWQC2025-02

Challenges and Opportunities – Topics/Themes	Major Policy Questions to be Analyzed in RWSP Update
<p>I/I, population growth, conveyance and treatment capacity demand, including on-site septic systems in urban areas</p>	<p>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 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,</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</p>

⁵ RCW 70.A.02

Challenges and Opportunities – Topics/Themes	Major Policy Questions to be Analyzed in RWSP Update
<p>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>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> <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>

Challenges and Opportunities – Topics/Themes	Major Policy Questions to be Analyzed in RWSP Update
	How will WTD implement the RWSP Update consistent with direction and requirements expected of contract agencies?

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, 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

⁶ Ordinance 20023, Section 115, Proviso P1

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.

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

⁷ Ordinance 20023, Section 115, Proviso P3

- 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



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 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 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
	18	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)
		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.

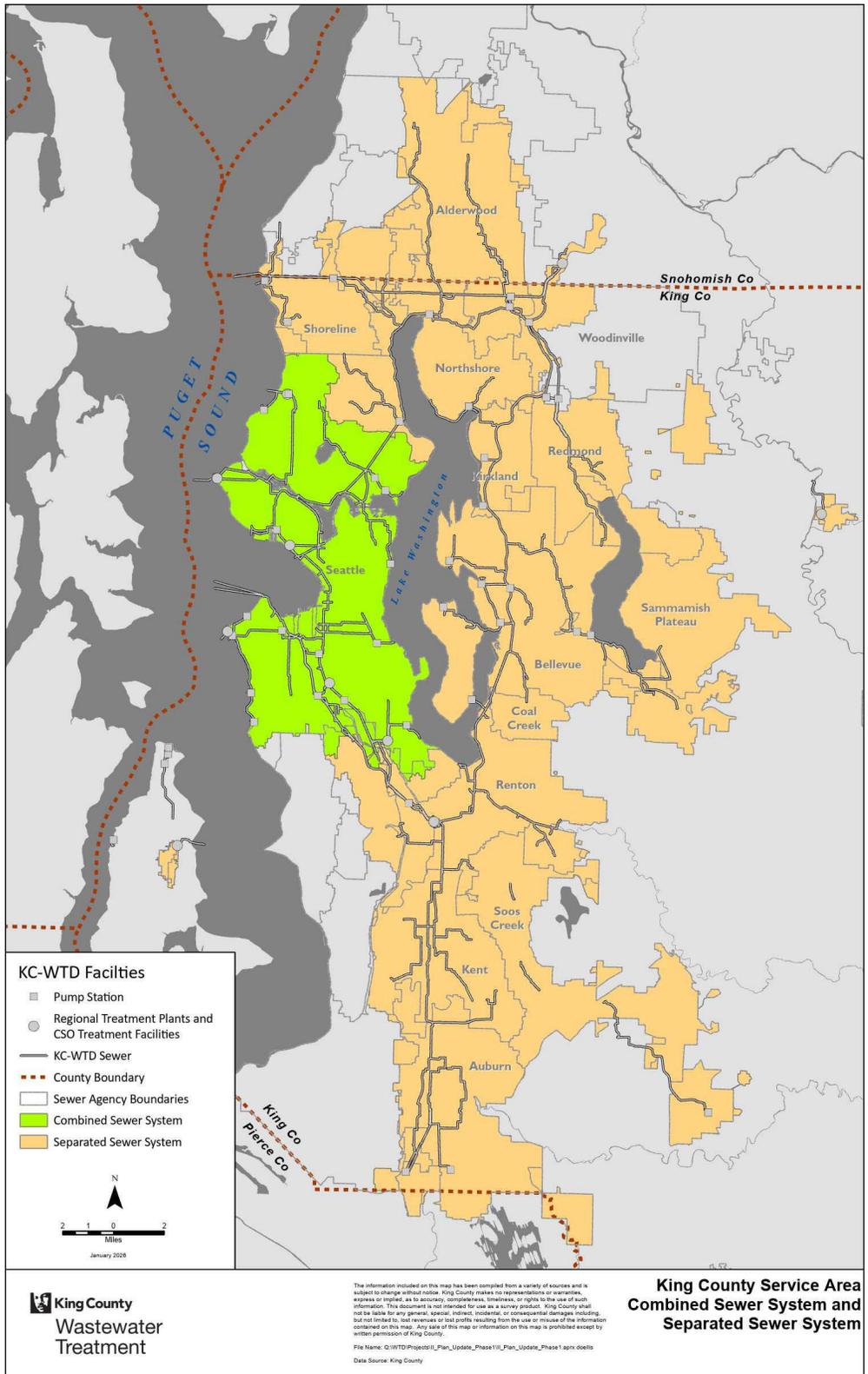


Figure 1. King County Service Area Combined and Separated Sewer Systems

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

	2. Decennial flow monitoring to correspond with the Federal Census conducted every ten years.
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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.

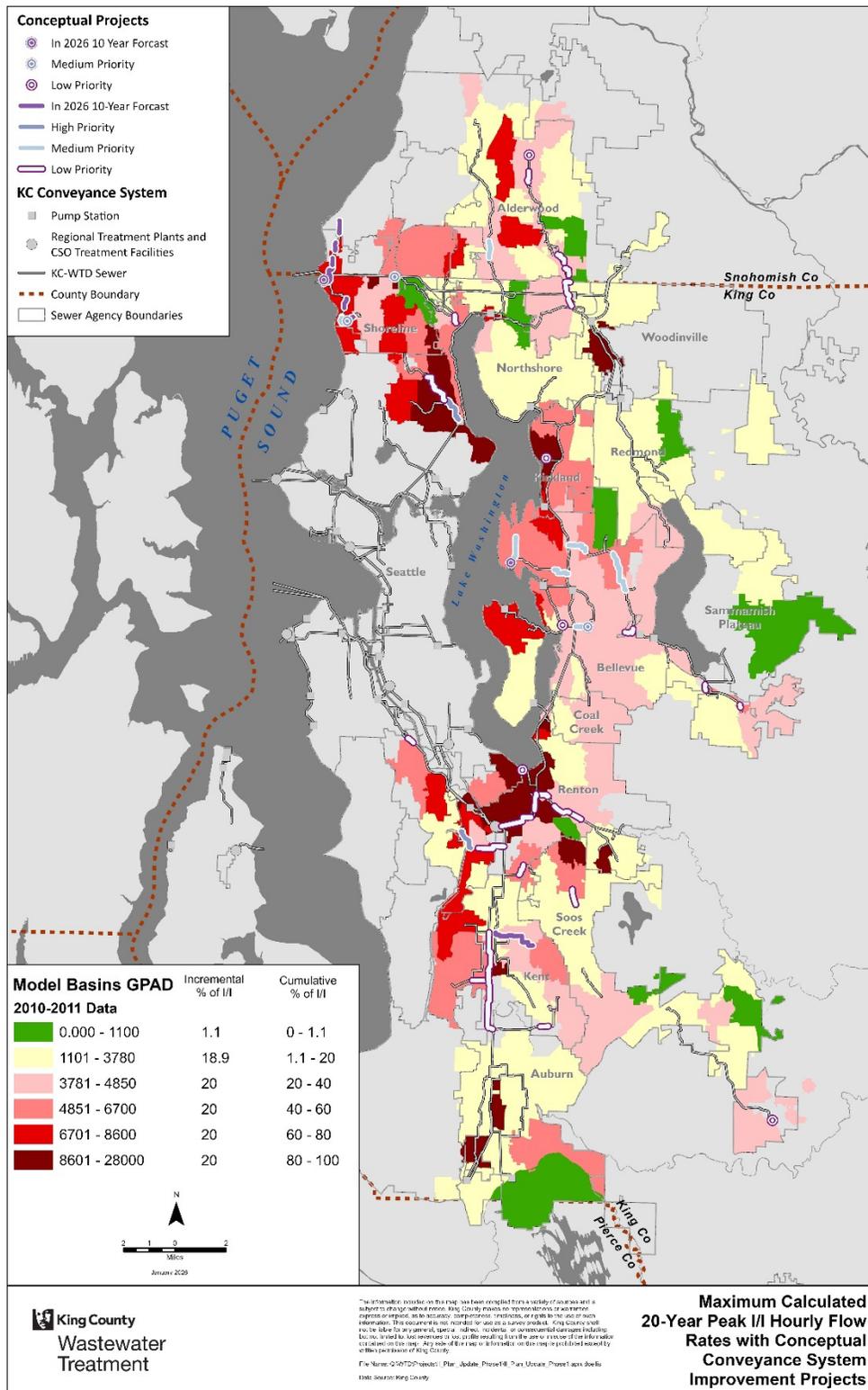


Figure 2. Inflow / Infiltration in WTD’s Separated System Service Area 181 Model Basins

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:

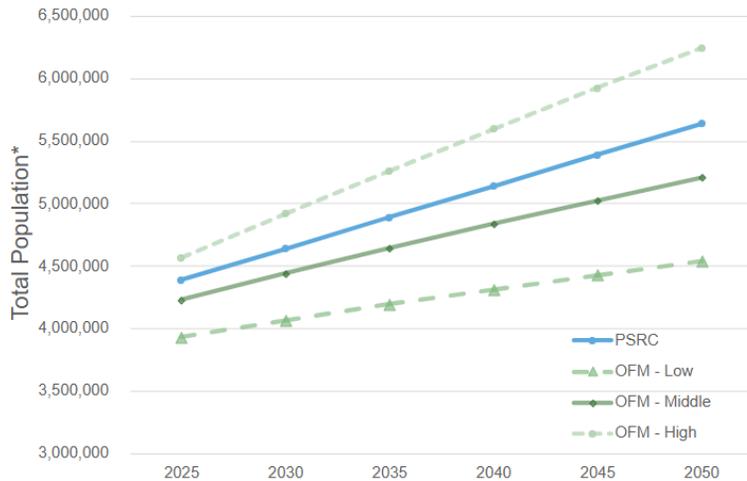
Project Name	2025-2035 Cost Estimates
North Mercer Island and Enatai Interceptors Upgrade	\$ 38,415,620
Richmond Beach PS Upgrade	28,789,079
Richmond Beach Edmonds Interceptor Parallel	10,513,782
Black Diamond Trunk Capacity Upgrade	164,391,988
Garrison Creek Interceptor Replacement, Realignment, and 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

Wastewater Treatment Division**Executive Summary****RWSP Update – Policy Memo #4/#5 Pollution (Source Control and Legacy)**

This executive summary provides a synopsis of the policy questions, problem statement, challenges, and the policy options developed for the questions associated with the Pollution (Source Control and Legacy) topic of the Regional Wastewater Services Plan (RWSP) Update.

Policy Questions

- i. What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?
- ii. How can the Wastewater Treatment Division (WTD) best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?
- iii. How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?

Problem Statement

Pollutants that enter the regional wastewater system have the potential to be in effluent that is discharged into water bodies and accumulate in sediment and marine life and to enter products recovered by WTD, like recycled water or biosolids. Ongoing sources of pollutants entering the regional wastewater system may pose a risk to worker safety at the treatment plants, public health, and the environment. Pollutants, particularly those that are persistent and costly to remove at treatment plants, are best prevented or reduced at the source prior to entering the regional wastewater system using source control strategies.

Legacy pollution is a result of historic practices and discharges that have led to water quality impairments and resulting sediment contamination. Sediment contamination associated with WTD Combined Sewer Overflow (CSO) discharges needs to be addressed through cleanups and source control.

Policy Issues, Challenges, and Opportunities

Challenges and opportunities inherent to address source control and legacy pollution are as follows:

- Cost considerations for pollution prevention
- The County has limited authority or influence over production and use of toxic persistent contaminants
- Legacy pollution cleanup methods and timelines
- Limited funding sources to pay for cleaning up legacy pollution
- Addressing pollution entering the regional wastewater system through education programs
- Addressing concerns that recycled wastewater products are contaminated

Policy Options

Policy options to address the pollution questions fall under three general topical areas: Source Control, Education, and Legacy Pollution.

Source Control (includes Industrial Waste, Facilities and Procurement, and Upstream Sources): Eliminating, reducing, or mitigating harmful levels of toxic contaminants *before entering* the regional wastewater system.

Industrial Waste

1. Maintain current policies for Industrial Waste.
2. Improve methods to identify more industrial users and encourage additional best management practices (BMPs).
3. Encourage reduction of non-regulated CECs from industrial users.

Facilities and Procurement, Upstream Sources

1. Maintain existing purchasing and source control policies and requirements.
2. Apply additional resources and incentives to reduce, mitigate and eliminate harmful levels of contaminants from existing sources.
3. Lead and partner with others to maximize the reduction, mitigation, and elimination of harmful levels of contaminants from existing sources.

Education: Increasing individual awareness of toxic persistent contaminants in products.

1. Maintain existing programs to educate public about pollutants.
2. Broaden engagement programs and use different tools and tactics to educate more individuals about pollutants.
3. Lead and partner with others to maximize educational reach about pollutants.

Legacy Pollution: Remediating harmful levels of toxic contaminants *in or from* the regional wastewater system. Source control is an integral part of legacy pollution cleanup to ensure sediments are not re-contaminated.

1. Maintain current Sediment Management policies by implementing the Sediment Management Plan (slow pace).
2. Use lessons learned to improve process, accelerate new sediment cleanups, and remove known and identified pollution from the conveyance system.
3. Apply new and creative approaches for faster sediment cleanups.

RWSP Update – Pollution (Source Control and Legacy)

Policy Memo #4/#5

A. Policy Question

This memo focuses on the policy questions related to the Pollution (Source Control and Legacy) topic of the Regional Wastewater Services Plan (RWSP) Update. The policy questions analyzed in this memo are as follows:

- i. What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?
- ii. How can the Wastewater Treatment Division (WTD) best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?
- iii. How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?

In the RWSP Update Budget Proviso Report, Appendix B, WTD indicated there would be two memos (Policy Memo #4 and Policy Memo #5) for the Pollution policy questions. Because of the overlap in background information and context for both memos, the policy questions are combined into this one memo.

B. Problem Statement

Historic practices and discharges led to water quality impairments and resulting sediment contamination. Water quality has improved greatly through passage of the Clean Water Act in 1972. However, water and sediment quality are still impaired in some receiving waterbodies.

Pollutants entering the regional wastewater system may pose a risk to worker safety at the treatment plants, public health, and the environment. Many contaminants, such as Poly Chlorinated Biphenyls (PCBs), mercury, per- and polyfluoralkyl substances (PFAS), pharmaceuticals, and hazardous household products, are persistent and costly to remove at treatment plants. Therefore, it is more cost effective and beneficial to human and environmental health to prevent them at the source before the contaminants reach the regional wastewater system.

Pollutants that enter the regional wastewater system have the potential to be in effluent that is discharged into water bodies and accumulate in sediment and marine life.

Pollutants also have the potential to enter products recovered by WTD, like recycled water

or biosolids, which may pose risks as those products are used. It is less costly to WTD and rate payers to prevent pollutants from entering the regional wastewater system than removing them at treatment plants.

C. Contextual and Baseline Information

i. What is known about the topic and current conditions

Source Control

Source control is the process of finding or identifying sources of contamination, then stopping or reducing them before they reach waterways through untreated Combined Sewer Overflow (CSO) discharges and wastewater treatment facilities. Source control also reduces contaminants in WTD products (e.g., biosolids, recycled water).

In both the combined and separated sewer systems, source control is implemented through the King County Industrial Waste Program (KCIW). The KCIW program conducts the following activities to protect the wastewater system, environment and workers:

- Issues permits to industrial users to discharge industrial wastewater to the sanitary sewer which can include pretreatment and discharge limits;
- Inspects industrial users regularly, investigates industrial user instance of non-compliance, conducts regular compliance and surcharge sampling, reviews engineering documents and reports, develops local discharge limits, and issues enforcement actions to bring industrial users into compliance

In the combined system, additional source control activities are conducted to help prevent contaminants found in stormwater from entering the sewer system. The National Pollutant Discharge Elimination System (NPDES) Permit for the West Point Treatment Plant, which includes the County's CSO discharges, follows the guidance from the U.S. Environmental Protection Agency (EPA) Nine Minimum CSO Controls. Control Item # 7 requires pollution prevention programs focused on reducing the impact of CSOs on receiving waters. An element of this is to control sources of pollutants in stormwater runoff that enters the combined system. WTD has several programs that help with source control in the combined system:

- RainWise (rebate program for installation of rain gardens and cisterns)
- Waterworks Grants (grant program that funds projects to improve water quality)
- Education and Engagement (education on best practices and safer alternatives)
- KCIW (program that regulates commercial and industrial customers discharging to WTD's system)

- Hazardous Waste Management Program (technical assistance to businesses on proper handling, storage, and disposal)
- Sediment Management and Cleanup (source control to prevent recontamination of cleanups)
- Coordination with Seattle Public Utilities (stormwater prevention best management practices)

Legacy Pollution

Historic practices and discharges led to water quality impairments and resulting sediment contamination, which is called legacy pollution. Water quality has improved greatly through passage of the Clean Water Act in 1972 and implementation of associated NPDES permits, building of regional wastewater treatment facilities, implementation of the KCIW Program, along with education and engagement activities. Even with these efforts, water and sediment quality is still impaired in some receiving waterbodies. WTD is working on sediment cleanups associated with WTD’s discharges to address sediment impairments, and source controls and treatment to address water impairments.

Cleanups remove the legacy pollution that impairs those portions of waterbodies. Source control is an integral part of sediment cleanup, including tracing pollution sources, inspecting industrial discharges, line cleaning, and many other activities to ensure sediments are not re-contaminated.

WTD is addressing sediment contamination near County CSO outfalls through a Sediment Management Plan. The plan was developed in the late 1990s and adopted as part of the 1999 RWSP. The plan was updated in 2018 to reflect data from more recent studies.

WTD has completed sediment cleanups at Denny Way and Pier 53-55 in Elliott Bay. WTD has also completed sediment cleanups at Duwamish Diagonal Storm Drain/CSO and Norfolk Storm Drain/CSO in the Lower Duwamish Waterway. WTD has other sediment cleanups in process as outlined in the Sediment Management Plan including the Lower Duwamish Waterway and Harbor Island (East Waterway) Superfund sites.

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

All current policies and practices related to pollution implement the County’s inherited responsibilities under RCW 35.58.200 - the water pollution abatement responsibilities under the legislation that Metro was created under. In particular, those responsibilities include:

- Plan provisions for water quality improvement - subsection (1), and
- To fully participate in federal and state programs under the federal water pollution control act – subsection (7).

The federal code outlines activities essential for effectively participating in federal and state programs aimed at improving water quality and preventing pollution including federal programs which aim to prevent, reduce, or eliminate pollution entering receiving waters.

The policies relevant to this memo are described in the table below. Most policies are in King County Code Chapter 28.86 Wastewater Treatment, except for those regarding Industrial Waste, which are included in King County Code Chapter 28.84 Water Pollution Abatement.

Relevant Policies in King County Code	Description
WQPP-6	King County shall implement and maintain water quality, monitoring, evaluating and reporting programs to support the national pollutant discharge elimination system for wastewater and other permit applications, and ensure permit compliance.
CSO-4	Consistent with its legal authority, if King County constructs new projects that would separate stormwater from its combined system that result in separated stormwater discharges to waterways, the county shall coordinate with the city of Seattle in the city's municipal stormwater National Pollutant Discharge Elimination System permit (MS4) process as appropriate.
CSO-5	King County's wastewater conveyance and treatment facilities shall not be designed to intercept, collect and treat new sources of stormwater. However, King County may evaluate benefits and impacts to the county system from accepting stormwater from the city of Seattle that is not currently in the combined system and shall consider factors including, but not limited to existing capacity, benefits and costs to ratepayers and the regional system, operational impacts, payment to county for value of the use of available capacity and for the costs of conveyance and treatment of new sources of stormwater and compliance with state and federal regulations and commitments.
CSO-6	In accordance with King County's industrial waste rules and regulations, including K.C.C. 28.84.050.K.1 and 28.84.060, the county shall accept contaminated stormwater runoff from industrial sources and shall establish a fee to capture the cost of transporting and treating this stormwater. Specific authorization for such discharge is required.

Relevant Policies in King County Code	Description
CSO-9	King County shall implement its long-range sediment management strategy to address its portion of responsibility for contaminated sediment locations associated with county CSOs and other facilities and properties. Where applicable, the county shall implement and cost share sediment remediation activities in partnership with other public and private parties, including the county's current agreement with the Lower Duwamish Waterway Group, the Department of Ecology and the Environmental Protection Agency, under the federal Comprehensive Environmental Response, Compensation and Liability Act
EMP-1	King County shall work with affected communities to develop mitigation measures for environmental impacts created by the construction, operation, maintenance, expansion or replacement of regional wastewater facilities. These mitigation measures shall: <ol style="list-style-type: none"> 1. Address the adverse environmental impacts caused by the project; 2. Address the adverse environmental impacts identified in the county's environmental documents; and 3. Be reasonable in terms of cost and magnitude as measured against severity and duration of impact.
BP 1	King County shall strive to achieve beneficial use of wastewater solids. A beneficial use can be any use that proves to be environmentally safe, economically sound and utilizes the advantageous qualities of the material.
BP-6	King County shall strive to produce the highest quality biosolids economically and practically achievable and shall continue efforts to reduce trace metals in biosolids consistent with 40 C.F.R. Part 503 pollutant concentration levels (exceptional quality) for individual metals. The county shall continue to provide class B biosolids and also to explore technologies that may enable the county to generate class A biosolids cost-effectively or because they have better marketability. Future decisions about technology, transportation and distribution shall be based on marketability of biosolids products.
WRP-1	King County shall actively pursue the use of reclaimed water while protecting the public health and safety and the environment. The county shall facilitate the development of a water reuse program to help meet the goals of the county to preserve water supplies within the region and to ensure that any reclaimed water reintroduced into the environment will protect the water quality of the receiving water body and the aquatic environment.

Relevant Policies in King County Code	Description
King County Council Motion 16434	King County seeks to identify, prioritize, reduce, and control sources, exposures, and risk from per- and polyfluoroalkyl substances ("PFAS") and contaminants of concern to people and the environment in King County.
King County Code 28.84.060 Industrial waste rules and regulations	Establishes a program regulating Industrial Waste

Water Quality Protection Policy 6 (WQPP-6) and Combined Sewer Overflow Control Policies 4, 5, and 6 (CSOCP-4, CSOCP5, and CSOCP-6) address source control activities in the regional system. Most WTD source control activities address pollution sources in both the combined and separated conveyance areas. WTD conducts additional source control activities specific to the combined sewer area including:

- Projects that will reduce overflows or control CSOs
- Implementing stormwater NPDES permit at County-owned facilities
- Stormwater pollution prevention programs
- Identifying and tracing sources of pollution, line cleaning (operation and maintenance (O&M))
- RainWise program

Combined Sewer Overflow Control Policy 9 (CSOCP-9) and Environmental Mitigation Policy 1 (EMP-1) address sediment contamination. WTD is addressing sediment contamination near County CSO outfalls through the Sediment Management Plan. Cleanups remove the legacy pollution that impairs those portions of waterbodies. Source control is an integral part of sediment cleanup.

Biosolids Policies 1 and 6 (BP-1 BP-6), Water Reuse Policy 1 (WRP-1), Environmental Mitigation Policy 1 (EMP-1), and Motion 16434 describe the current policies on resource recovery and how the County manages PFAS and other contaminants. WTD provides education to the public on several topics related to wastewater treatment and contaminants. WTD supports pollution prevention (source control) programs and promotes existing safe product certifications. WTD purchases products and materials that reduce environmental and human health impacts. WTD advocates for policies that would

mandate full disclosure of toxic contaminants or ban certain contaminants (e.g., PFAS) in products.

King County Code Chapter 28.84.060 establishes a program to regulate industrial waste. KCIW protects the wastewater system, environment, and workers by regulating commercial and industrial customers discharging into the regional wastewater system.

iii. The system “must-dos”

Industrial Waste (Delegated Pretreatment Program)

WTD’s NPDES permits have a pretreatment section that requires the County (through the Industrial Waste Program) to implement the delegated industrial waste pretreatment program in accordance with King County Code 28.84.060. The pretreatment section has multiple detailed requirements for KCIW to implement including Section 307 (b) and (c) of the federal Clean Water Act and its implementing regulations - the General Pretreatment Regulations under 40 CFR 403. The pretreatment sections in the NPDES permits have other specific tasks such as conducting industrial user surveys, local limits evaluations, sampling and monitoring requirements, annual pretreatment reports to Ecology, etc.

King County Sustainable Purchasing Executive Policy regarding Contaminants of Emerging Concern (CECs)

King County's Sustainable Purchasing Policy provides a framework for reducing environmental and health impacts through purchasing decisions. By implementing the policy's provisions related to CECs, the County can reduce pollutant loading to the wastewater system from County operations and facilities and demonstrate leadership in pollution prevention. Procurement decisions affect thousands of products used across County facilities, making this a scalable source control action. Success requires ongoing training for staff to maintain awareness of CEC issues and product alternatives. Implementation may result in higher upfront costs for some products, though lifecycle costs may be lower. Product availability and suitable alternatives vary by product category. Suitable alternatives (non-regrettable substitutions) may also be difficult to determine for some contaminants/products.

Sediment Management Plan and Superfund

State and federal laws require cleanup when sediment contamination poses unacceptable risk to human health or the environment. WTD has identified sites that require cleanup through its Sediment Management Plan program and requirements under its NPDES permit.

The EPA placed the Lower Duwamish Waterway on its Superfund list in 2001. That launched a formal process to clean up contaminated sediments throughout the Lower Duwamish Waterway. In 2014, EPA released its Record of Decision directing cleanup actions and offering plans for source control and long-term monitoring in the Lower Duwamish Waterway. WTD is working with Lower Duwamish Waterway Group partners to implement cleanup actions.

The East Waterway of the Duwamish River is also part of a superfund site; it is an operable unit of the Harbor Island Superfund Site. WTD along with the City of Seattle and Port of Seattle formed the East Waterway Group in 2006 to address sediment contamination in the East Waterway. In 2024, EPA released its Interim Record of Decision directing cleanup actions in the East Waterway. WTD and its partners are working to implement remedial design for the cleanup actions.

EPA Nine Minimum CSO Controls (Control # 7)

There is a requirement in the West Point Treatment Plant NPDES permit that requires a pollution prevention program focused on reducing the impact of CSOs on receiving waters. An element of this is to control sources of pollutants in stormwater runoff that enter the combined system.

iv. Current and budgeted expenditures (Capital)

As part of the 2026 Sewer Rate adoption process, WTD presented a 20-year forecast of its Capital Improvement program that included sediment management capital projects. The first decade of this forecast consists of both active and planned capital projects ranging in status from active construction to long-range identified concept. 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 (CIP) annual forecast contains significant uncertainty, particularly beyond the 6-year forecast window that WTD daylights as part of its biennial budget proposal process.

Below are the two currently active and appropriated WTD pollution capital projects as of the 2026/2027 biennial budget adoption by King County Council in November 2025.

- Sediment Management Plan (including the East Waterway Operable Unit of Harbor Island Superfund) - \$88,600,000

- Lower Duwamish Waterway Superfund - \$141,500,000

Note that these costs may be updated as capital projects are advanced and further defined.

Costs for source control activities including KCIW, education, etc. are minor projects in the CIP and thus not included in the list, or they are funded through the operating budget.

v. Summary of science/data

Source Control and Priority Pollutants

Washington Department of Ecology conducts water quality assessments to categorize water bodies as clean or polluted. Polluted water bodies are prioritized for cleanup to restore water quality. The list of polluted water is referred to as the state's 303(d) list under the federal Clean Water Act. Some waters where County CSOs discharge, along with stormwater from local jurisdictions and private entities, are listed as impaired under the 303(d) list. Depending on the location, the impairments include contaminants such as PCBs, polycyclic aromatic hydrocarbons, and mercury. The listings and the data to support the listing are found at [Water Quality Atlas - Map](#).

Sampling of solids and wastewater for contaminants in the combined sewer system have been conducted. The following reports present these data:

- [Duwamish River Basin Combined Sewer Overflow Data Report for Samples Collected from September 2007 to January 2010-King County 2011](#)
- Chelan, Hanford, Lander, King and Kingdome CSO Wastewater Data Summary-King County 2023 (available upon request)
- Chelan, Hanford, Lander, King and Kingdome CSO Solids Data Summary-King County 2023 (available upon request)

Implementing the County's CSO Control Program is a key source control action for the combined sewer system. The County is legally required to control all its CSO outfalls. A "controlled" CSO outfall can overflow no more than one time each year based on a long-term average, according to the Washington State standard. More information on the CSO Control Program can be found at the [CSO Control Program webpage here](#).

Source Control and PFAS

From October 2023 to August 2024, the King County Department of Natural Resources and Parks collected monthly samples of wastewater and biosolids from WTD's three regional

wastewater treatment plants and leachate¹ from the Cedar Hills Regional Landfill to test for 40 types of PFAS compounds.

The results from the [12-month study](#) found PFAS was present in King County's waste systems at levels similar to other municipal waste systems. This is likely coming from diffuse sources, namely from the everyday products that people in WTD's service area use and send down drains, toilets, and put in the trash which ends up in landfill leachate.

Legacy Pollution

Figure 1 below shows groups of known and potential sediment cleanup sites that are identified in the Sediment Management Plan that are in process or still need to be addressed.

¹ Leachate is water that has percolated through a solid and leached out some of the constituents



Figure 1: Combined Sewer Overflow (CSO) Locations & Sediment Management Plan

There are approximately 383 miles of sewer lines in WTD's system. Solids build up in places and require removal for the system to function properly. In some areas, legacy pollution has contaminated these solids that can settle in combined sewer system conveyance lines. These solid deposits can be remobilized within the conveyance system during moderate to heavy rainfall events to CSOs or treatment plants. The line cleaning program removes these deposits to maintain function but also removes legacy pollution that can be released to receiving waters.

D. Example Practices from Other Jurisdictions/Industry

Pollution prevention

The City of Seattle's program to keep pollution from entering the Lower Duwamish Waterway is one example of a pollution prevention program and an important element of the watershed-wide source control efforts by other jurisdictions and part of municipal and general industrial stormwater permits from the state Department of Ecology. The City of Seattle's program includes elements such as source tracing, business inspections, and storm line and right of way catch basin cleaning, and public education and outreach.

The City of Tacoma is also investing in pollution prevention and restoration efforts including:

- Thea Foss and Wheeler-Osgood waterways cleanup
- Annual storm line and right of way catch basin cleaning
- Regular business and construction inspections
- Pollution source tracing
- Public education and outreach

Many state agencies and municipalities across the United States have undertaken efforts to characterize PFAS in their waste streams and recovered products. Several of these agencies are also taking an active role in public outreach and education surrounding PFAS source control. Two examples include:

Michigan's Department of Environment, Great Lakes, and Energy—the state agency responsible for protecting environment and public health—has been proactive in sampling for PFAS, pursuing source control, and providing public education. This website details their efforts: [Regulated wastewater](#)

Madison, Wisconsin's Metropolitan Sewerage District has been proactive in sampling for PFAS and providing public outreach on this topic for several years. The Madison PFAS Initiative is detailed at this website: [Home - Madison Sewer District PFAS Initiative](#).

E. Policy Issues, Challenges, and Opportunities

1. Cost considerations for pollution prevention

The costs of near-term investments should be weighed against future avoided costs and potential co-benefits. The risk of contamination and environmental degradation should also be compared to the associated costs of cleanup liability and restoration. Upfront source control spending on pretreatment, monitoring, and education can reduce spending on additional treatment needs, extend infrastructure life, increase public confidence in resource recovery products, and environmental damage liabilities. Step 2 (sections K and L) of this memo and analysis will evaluate the near-term and future avoided costs for the various policy options described below.

2. The County has limited authority or influence over production and use of toxic persistent contaminants

The best way to prevent toxic persistent contaminants from entering our waterways and regional wastewater system is by reducing or banning the production of these contaminants. Industry can play an important role in this.

3. Legacy pollution cleanup methods and timelines

Addressing legacy pollution is required as described in the sections above. However, as more sediment cleanups are performed, there are opportunities to enhance and improve the process to achieve improved water/sediment quality and more quickly reduce water body impairments.

4. Limited funding sources for cleaning up legacy pollution

Parties responsible for pollution should help pay for legacy cleanup projects in polluted waterways. Industry can improve their own property cleanups and source control to prevent additional contaminants from entering the wastewater system. Competitive state grants are available for up to 50% of public costs of remediating contaminated sites including sediment, but funding of grants is limited.

5. Addressing pollution to the regional wastewater system through education programs

One of the best ways to prevent pollution from entering our waterways and the regional wastewater system is by preventing pollution at the source. Individuals, businesses, and industries all have important roles in pollution prevention. Education on best practice and safer alternatives have been demonstrated to be extremely effective. Current programs by KCIW, King County Hazardous Waste Management, and state and NPDES stormwater requirements are effective when fully implemented.

6. Addressing concerns that recycled products are contaminated

Preventing harmful levels of pollutants from reaching the wastewater system can lower the risk of pollutants in biosolids and recycled water. Continued research and monitoring are needed to ensure that recycled products are safe for their intended use.

F. Range of policy options with associated actions and considerations

The policy options presented below describe potential choices and pollution-related actions that would be implemented to address the following policy questions:

- What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?
- How can the Wastewater Treatment Division (WTD) best support environmental benefits while instituting safeguards to protect against environmental risks of contamination? How should cost considerations be weighed?
- How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?

The remainder of this memo describes policy options according to the following three topical areas:

- **Source Control** - Eliminating, reducing, or mitigating harmful levels of toxic contaminants and nutrients *before entering* the regional wastewater system;
- **Education** - Increasing individual awareness of toxic persistent contaminants in products.
- **Legacy Pollution** - Remediating harmful levels of toxic contaminants *in or from* the regional wastewater system. Source control is an integral part of legacy pollution cleanup to ensure sediments are not re-contaminated.

Summary of Policy Options – Source Control (Industrial Waste)

	Goal	Description	Pollution Actions
#1	Manage and reduce contaminants from industrial sources using current methods	Maintain current policies for Industrial Waste	<ul style="list-style-type: none"> Implement current requirements for industrial waste under King County Code (KCC), NPDES (National Pollutant Discharge Elimination System), and 40.CFR.403 (General Pretreatment Regulations for Existing and New Sources of Pollution in U.S. Code)
#2	Manage and reduce more contaminants from industrial sources	Improve methods to identify more industrial users	<ul style="list-style-type: none"> In addition to traditional industrial user surveying methods, use alternative or new ways of conducting surveys to identify potential unpermitted significant industrial users (SIUs).
#3	Lower CECs to our regional wastewater system	Encourage reduction of non-regulated CECs from industrial users	<ul style="list-style-type: none"> Survey industrial users for additional non-regulated CECs and suggest voluntary best management practices (BMPs).

Summary of Policy Options – Source Control (Facilities and Procurement, Upstream Sources)

	Goal	Description	Pollution Actions
#1	Reduce harmful levels of contaminants from existing sources	Maintain existing purchasing and source control policies and requirements	<ul style="list-style-type: none"> • Facilities and Procurement – Implement King County Sustainable Purchasing Executive Policy regarding CECs. • Facilities and Procurement – Conduct operations and maintenance at WTD facilities to prevent unexpected releases of pollutants due to equipment failures. • Upstream Sources – Advocate for policies that would mandate full disclosure of toxic contaminants in all consumer and non-consumer product labeling, and limit or ban toxic persistent contaminant (e.g. PFAS) use in products.
#2	Reduce, mitigate, and eliminate harmful levels of contaminants from existing sources	Apply additional resources and incentivizes to reduce, mitigate, and eliminate harmful levels of contaminants from existing sources	<ul style="list-style-type: none"> • Facilities and Procurement – Inventory specialists will work across WTD facilities and King County Divisions to ensure coordination of sustainable purchasing. • Facilities and Procurement – Proactively remove or encapsulate building materials with high PCB levels in WTD-owned facilities. • Upstream Sources – Use incentives or buybacks for residential or business source control for products containing toxic persistent contaminants, such as replacements, buybacks of Teflon pans, etc. • Upstream Sources – Dedicating additional resources and priority to advocacy for bans on toxic persistent

	Goal	Description	Pollution Actions
			contaminants (e.g., PFAS) across categories of goods: household products, industrial materials, transportation/automotive products, and building materials.
#3	Create and/or expand partnerships to address contaminants	Lead and partner with others to maximize the reduction, mitigation, and elimination of harmful levels of contaminants from existing sources	<ul style="list-style-type: none"> • Facilities and Procurement – Lead regional coalition of wastewater and stormwater utilities to jointly develop procurement standards to avoid products containing CECs, develop pre-qualified vendor lists, and leverage collective buying power for safer alternatives. • Facilities and Procurement – Work with other King County departments to improve and coordinate source control across county-owned non-wastewater facilities that are known to have high levels of contaminants or nutrients, such as landfills, and PCB in building materials. • Upstream Sources – Build and lead a regional coalition of governments, non-profits, and businesses to advocate for broad policies that would mandate full disclosure of toxic contaminants in all consumer and non-consumer product labeling, and limit or ban toxic persistent contaminant (e.g., PFAS) use in products.

Summary of Policy Options – Education

	Goal	Description	Pollution Actions
#1	Educate individuals so they can take responsible action	Maintain existing programs to educate public about pollutants	<ul style="list-style-type: none"> Continued support of education and engagement around various pollutants/CECs, as well as continued support for WTD Education Programs WaterWorks Grants (funding education & engagement efforts); Rainwise (workshops); and Hazardous Waste (Take back meds program, curriculum, K-12 programs). Promote existing safe product certifications.
#2	Educate more individuals so they can take responsible action	Broaden engagement programs and use different tools/tactics to educate more individuals about pollutants	<ul style="list-style-type: none"> Initiate internal education campaign and external social marketing campaign to educate public about avoiding/reducing various pollutants/CECs in daily life and purchasing. Promote and/or endorse existing and/or new product rating systems and AI-based tools that help the public to avoid products containing toxic persistent contaminants.
#3	Maximize educational impact so individuals can take responsible action	Lead and partner with others to maximize educational reach about pollutants	<ul style="list-style-type: none"> Establish WTD as a regional leader for consistent water quality and pollution prevention education through an expanded social marketing campaign effort in partnership with regional agencies, non-profits, CBO's, businesses and retailers. Develop new incentive programs where possible.

Summary of Policy Options – Legacy Pollution

	Goal	Description	Pollution Actions
#1	Meet regulatory requirements to conduct sediment cleanup and source control activities at the current slow pace	Maintain current policies by implementing the Sediment Management Plan	<ul style="list-style-type: none"> • Sediment Management – Implement current Sediment Management Plan • Line Cleaning – Continue current sewer conveyance maintenance cleaning frequency that prioritizes based on O&M needs but has the benefit of removing legacy pollution deposits • Source Control - Implement a pollution prevention program in the combined system to comply with the current West Point NPDES permit Nine Minimum Controls (Control #7).
#2	Implement process improvements to improve water/sediment quality more quickly	Apply lessons learned to improve processes, accelerate new sediment cleanups , and remove known and identified pollution from conveyance system	<ul style="list-style-type: none"> • Sediment Management – Advocate to Ecology for process improvements to accelerate new sediment cleanups led by WTD • Line Cleaning – Expand targeted structure and line cleaning in County-owned infrastructure to combat known and identified legacy pollution deposits • Source Control - Partner with local sewer districts to conduct additional business inspections to aid in stormwater pollution prevention, enhancing source control within the combined system.
#3	Faster improvements to water/sediment quality	Apply new and creative approaches for sediment cleanups	<ul style="list-style-type: none"> • Sediment Management – Implement and lead multi-party sediment cleanups without other Potentially Responsible Parties (PRPs) and

	Goal	Description	Pollution Actions
	through alternative approaches		<p>pursue cost recovery after completing cleanup actions</p> <ul style="list-style-type: none"> • Sediment Management – Apply Enhanced Natural Recovery cleanup to all WTD CSO associated contaminated sediment areas and promote development of bioremediation of bio-accumulative organics to treat those areas in the future • Line Cleaning – Partner with local sewer agencies to remove all legacy pollution deposits in sewer conveyance systems by surveying entire system and cleaning all needed structures and pipes of accumulated sediment (including both County-owned and locally-owned infrastructure)

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

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

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 these policy questions.

J. Equity and Social Justice (ESJ) impacts

The policy options relating to legacy pollution have the potential to have ESJ impacts if selected. Some portions of the WTD service area that have sediment cleanup sites, like superfund sites, 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.

The SVI scores for King County indicate that there are at risk communities along the shores of the Duwamish River, particularly those near the Lower Duwamish Waterway and the East Waterway Operable Unit of Harbor Island Superfund Sites. Proximity to superfund sites has been linked to higher rates of lung diseases² and even lower life expectancy.³

Local tribes, like the Muckleshoot, are historically reliant on the Duwamish River for access to salmon, and legacy pollution is one of multiple factors that affect fish

² Stephens, C., Kim, Y. I., Ramachandran, R., Baskin, M. L., Antony, V., & Bae, S. (2022). Disparities in Healthcare Utilization: Superfund Site vs. Neighboring Comparison Site. *International journal of environmental research and public health*, 19(15), 9271. <https://doi.org/10.3390/ijerph19159271>

³ Kiaghadi, A., Rifai, H.S. & Dawson, C.N. (2021). The presence of Superfund sites as a determinant of life expectancy in the United States. *Nat Commun* 12, 1947. <https://doi.org/10.1038/s41467-021-22249-2>

consumption advisories. A diverse group of over 20 ethnic communities, including Asian, Pacific Islander, Hispanic, and Somali immigrants, also fish in the Duwamish River for subsistence and cultural reasons. WTD is currently working under EPA oversight on the sediment cleanups in the Duwamish River, partnering with the Port of Seattle, the City of Seattle, and Boeing to fund the projects.

Legacy Pollution Policy Options #2 and #3 propose to accelerate new sediment cleanups and remove known and identified pollution. This could provide opportunities for positive ESJ impacts as socially vulnerable populations benefit from harmful pollutants being cleaned from their local waterways.

Many of the source control actions reduce contaminant releases to the sewer system by businesses and individuals instead of building infrastructure, which can have ESJ impacts. Source control policies, such as bans and extended producer responsibility, that reduce contaminants in products, have potential for positive ESJ impacts in reducing overall exposure of vulnerable communities to contaminants.

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.

Appendix A: Policy Options Justifications and Considerations

Policy Options – Source Control (Industrial Waste)

Policy Option #1 – Maintain current policies for Industrial Waste

Justification

KCIW is a delegated pretreatment program with a mandate to implement all local, state, and federal rules and regulations to reduce and/or eliminate pollutant discharge from industries into Publicly Owned Treatment Works (POTWs). This mandate is a part of WTD's NPDES permits and thus for WTD to remain compliant with its NPDES permits and for the protection of WTD's assets from harmful industrial wastes, KCIW must continue to regulate industrial dischargers.

Considerations

The program received its delegation from EPA in 1981, before the state was delegated NPDES permitting authority in 1986 and has been successfully protecting KC's assets and beneficial use products. The nature of the work KCIW is doing has been evolving due to CECs and there are now more smaller dischargers than traditional major platers and other categorical users. KCIW is also doing more permitting and oversight of biotechnology and high-tech companies, which pose relatively minor risk to the system, but the regulations are newer and evolving.

Policy Option #2 – Improve methods to identify more industrial users

Justification

KCIW will use the best information technology available to find significant industrial users. KCIW could seek a vendor-developed technology or app to use to survey.

Considerations

KCIW has a longer-term goal of having Investigators be responsible for actively seeking out significant industrial users via an on-going program.

Policy Option #3 – Encourage reduction of non-regulated CECs from industrial users

Justification

Identifying sources of non-regulated CECs that might be regulated in the future and promote voluntary actions to reduce their release would result in benefits to the regional wastewater system.

Considerations

This option could involve work with fire stations, local sewer agencies, and other business organizations. This option would likely require increased staffing levels.

Some CECs may fall under the purview of the existing Local Hazardous Waste Management Program and can be handled via product substitution and proper disposal techniques.

Policy Options – Source Control (Facilities and Procurement, Upstream Sources)

Policy Option #1 – Maintain existing purchasing and source control policies and requirements

Justification

King County's Sustainable Purchasing Policy provides a framework for reducing environmental and health impacts through purchasing decisions. Procurement decisions affect thousands of products used across County facilities, making this a scalable source control action.

Routine operations and maintenance activities ensure WTD facilities do not become sources of pollution to the wastewater or stormwater systems. Equipment failures that lead to unexpected overflow events or bypasses can result in releases of untreated wastewater and stormwater. Preventive maintenance reduces the likelihood of such releases, protecting water quality and avoiding potential regulatory violations and cleanup costs.

Mandatory disclosure helps consumers make informed purchasing decisions and avoid products with toxic persistent contaminants, reducing these substances from entering wastewater systems and improving human health outcomes. Extended producer responsibility policies hold producers accountable for the entire lifecycle of their products, particularly disposal and recycling. WTD currently participates in advocacy efforts when opportunities arise, such as commenting on proposed state regulations and coordinating with County legislative staff on relevant bills. Product labeling, use restrictions, and extended producer responsibility are most effectively implemented at state or federal levels where they can create consistent requirements for manufacturers and protect public health broadly.

Considerations

Sustainable purchasing success requires ongoing training for staff to maintain awareness of CEC issues and product alternatives. Implementation may result in higher upfront costs for some products, though lifecycle costs may be lower. Product availability and suitable

alternatives vary by product category. Suitable alternatives (non-regrettable substitutions) may also be difficult to determine for some contaminants/products.

Maintenance activities address equipment function but do not address upstream source control or line cleaning (addressed in the Legacy Pollution options). Pollution prevention benefits are incidental to the primary O&M objectives rather than a targeted outcome.

King County lacks direct regulatory authority over product manufacturing and labeling, and producer responsibility, but we do have the resources and authority already in place to advocate for changes at the state and federal level. The County typically responds to opportunities rather than proactively driving policy agendas. This requires continued coordination with other jurisdictions and stakeholder groups to build support. Other lobbying efforts may take higher priority. Some product categories may lack suitable alternatives currently, making bans challenging.

Policy Option #2 –Apply additional resources and incentivizes to reduce harmful levels of contaminants from existing sources

Justification

Coordinating sustainable purchasing across County Divisions leverages existing inventory specialist expertise to ensure consistent application of CEC-related purchasing criteria. Cross-program coordination would identify commonly purchased products containing CEC and consolidate research on safer alternatives.

PCBs are toxic chemicals that were commonly used from 1929 to 1979 for numerous industrial activities and in some household products and building materials. PCBs were widely used in hydraulic oils, electrical transformers, electrical equipment, caulk and oil-based paint. Although the manufacturing of PCBs was banned in the United States in 1979, they continue to be found in the environment and products still in use that were manufactured prior to the ban. PCBs are the primary reason local urban waterways have Washington State Department of Health seafood consumption advisories to limit consumption of locally caught fish and shellfish. In certain age and style of buildings, PCBs are found in building materials such as caulk and paint. Removing or encapsulating these sources of PCBs would be an effective means to keep this source of PCBs from entering the combined sewer system or local waterbodies via stormwater.

Incentive and buyback programs provide a direct mechanism to remove existing sources of contamination from the service area. Many households and businesses currently possess products containing PFAS and other toxic persistent contaminants that enter wastewater and stormwater. Financial incentives can overcome the barrier of replacement costs and

encourage participation. Incentive and buyback programs would increase public awareness about harmful products.

Expanding and prioritizing advocacy accelerates policy changes that eliminate toxic persistent contaminants at their source by building on current advocacy efforts. It also accelerates policy changes that would hold producers accountable for the entire lifecycle of their products, particularly disposal and recycling. This is a cost-effective long-term strategy compared to treatment but would require more resource investment to build on current advocacy efforts. Recent momentum for PFAS restrictions at state and federal levels creates a timely opportunity for increased impact. Expanding and prioritizing advocacy addresses contaminants that cannot be treated based on current treatment plant processes before discharge (shifting to prevention rather than treatment).

Considerations

Coordinating sustainable purchasing across County Divisions requires dedicated staff time and potentially expanded training. Coordination across divisions requires buy-in from leadership and procurement staff. Product alternatives may not exist for all applications or may have higher costs.

To remove or encapsulate building materials with high PCB levels in WTD-owned facilities, WTD would need to conduct an inventory assessment to identify facilities likely to contain PCBs in building materials. Removal of such materials is subject to regulatory oversight by EPA under the Toxic Substances Control Act. This can result in more lengthy and costly processes. If PCB-containing materials can be successfully encapsulated in place, until such time the facility receives a more comprehensive upgrade, this could be a faster and more cost-effective approach to controlling PCB sources in building materials. Handling and disposal of demolition waste is managed under a different and simpler regulatory process.

Incentive and buyback program costs could be substantial depending on participation rates and types of products included. These programs would require significant outreach to achieve meaningful participation. Replacement products must be readily available and affordable. Disposal of collected buyback products could be difficult. These programs could overlap with existing Hazardous Waste Management Program services, requiring coordination. Targeting the program geographically to the combined sewer service area could maximize CSO-related benefits but may create equity concerns.

Expanding and prioritizing advocacy requires more resource investment and staff time. Success depends on political will and priorities at state and federal levels, which are outside WTD's control. Must coordinate to align with County's overall advocacy agenda.

Benefits would accrue over long timeframes (5-20+ years) as bans are implemented and products cycle out of use, and producers take responsibility for end of life of their products.

Policy Option #3 –Lead and partner with others to maximize the reduction, mitigation and elimination of harmful levels of contaminants from existing sources

Justification

Leading a regional coalition to develop procurement standards extends sustainable purchasing beyond King County to create regional impact. A coalition of utilities would develop consistent procurement standards, reducing the burden on individual agencies to research products and vet vendors. Pre-qualified vendor lists would simplify purchasing decisions and signal market demand for safer products. Collective buying power could negotiate better pricing for alternatives that may currently cost more than conventional products. Regional coordination also sends a stronger market signal to manufacturers, potentially accelerating development of CEC-free products for the utility sector.

A coordinated, County-wide approach to improve and coordinate source control across the County would address contamination more comprehensively than WTD acting alone, maximizing pollution reduction benefits, and ensuring consistent standards across all County operations.

Building and leading a regional coalition to advocate for broad policies on extended producer responsibility, labeling and bans would amplify advocacy impact beyond what WTD can achieve alone, creating a unified voice representing millions of residents and diverse stakeholders. Regional coordination can pool technical expertise, share advocacy costs, and demonstrate broad-based support that is more compelling to state and federal policymakers. Businesses included in the coalition can provide industry perspectives and demonstrate feasibility of alternatives. This comprehensive approach addresses the full life cycle of toxic persistent contaminants entering the wastewater service areas throughout the region. Taking a leadership role in convening this coalition positions King County as a regional leader on source control and can accelerate policy changes that reduce the need for costly treatment or cleanups.

Considerations

Leading a regional coalition to develop procurement standards requires significant investment to convene and coordinate multiple utilities with different procurement systems, priorities, and governance structures. Coalition development and standard-setting could take several years to develop. Pre-qualified vendor lists can be difficult to develop under current legal and administrative frameworks across levels of government.

A coordinated, County-wide approach to improve source control requires establishing cross-departmental “action teams” and cost-sharing agreements. Different departments have different budgets, priorities, and capital planning cycles. Industrial waste rules and regulations sometimes may make collaborative approaches - between WTD and SWD, for example - limited in scope. Identifying and prioritizing facilities requires significant assessment work. This may require investment in onsite treatment technology research, such as treatment at the landfill facility for leachate and other wastewaters to meet federal, state, and local pretreatment requirements and standards. Collaboration among County agencies would be bound within the framework of existing regulatory requirements.

As with procurement, convening and maintaining a regional coalition requires substantial staff time for coordination, facilitation, and communication. Different jurisdictions may have varying priorities, technical capacities, and political constraints that complicate consensus-building. King County would likely need to provide staff support and contribute to funding for coalition activities. Coalition effectiveness depends on sustained participation over many years.

Policy Options – Education

Policy Option #1 – Maintain existing programs to educate public about pollutants

Justification

Maintaining support of existing education programs is important for engaging communities and stakeholders on issues related to contaminants in wastewater and stormwater. Existing WTD education efforts include facility tours, K-12 field trips, classroom programs, curriculum, resources, community programs, adult workshops, and more. As the science on CECs evolves, these established programs can adapt to address emerging concerns while leveraging existing community relationships and trust.

Choices that individual community members make to buy or use some products over others can translate to successful source control outcomes while also improving human and environmental health.

Considerations

Established programs have data and metrics for tracking success that are not necessarily tied to source control outcomes. It can be difficult to quantify reduction in pollutant loading to wastewater treatment plant systems as a result of education and grant programs. Continuation of current WTD education programs and support from WTD for programs in other divisions assumes long-term funding stability for staff/staff time.

Tracking outcomes can be challenging as there is no way to determine how many people change their purchasing decisions based on safe product certifications.

Policy Option #2 – Broaden engagement programs and use different tools/tactics to educate more individuals about pollutants

Justification

Implementing a County-wide education program related to reducing contaminant exposures would result in improved employee health and wellness as well as reduce pollutant loading from thousands of households across the service area. Employees can serve as ambassadors for source control in their communities, multiplying the impact of external campaigns. Internal buy-in also ensures organizational purchasing decisions are aligned with pollution prevention policies and goals. A comprehensive social marketing campaign could significantly shift public product purchasing behavior at a greater scale, reaching a larger audience and leading to reduced contaminants entering the wastewater stream, and improved health outcomes for communities and the environment. Particularly for products/purchasing, this preventive source control approach is more cost-effective than end-of-pipe treatment.

AI-based tools could provide real-time, personalized guidance for consumers. This would make it easier for the public to avoid products containing harmful chemicals. If those products are not purchased and used by consumers, this can help reduce the amount of those chemicals from entering the wastewater treatment system without having to invest extensive staff time and resources in education and outreach programs.

Considerations

County Employee training could be incorporated into new employee orientation – internal education is likely to be easier to implement and track than external education. Significant staff time needed for trainers and trainees to keep up to date on latest developments for CECs and their sources of exposure. Campaign messaging could be tailored to address different communities within King County and should be available in multiple languages. Success metrics should be established upfront. Will likely require additional staff or staff time for those who have expertise in social media marketing, and messaging will change over time as new products/CECs come on the market or are discovered to be harmful. This strategic enhancement would require sustained multi-year funding to accurately assess effectiveness compared to other education and outreach initiatives. For some types of products, there may not be a better alternative, or people may not have the funds to replace existing products.

Some AI-based tools already exist and are being considered by other programs (Public Health is exploring Clearya). Tool reliability, accuracy, and safety/privacy should be verified before endorsement. There may be accessibility concerns for non-English speakers and those without smartphones. Cost to consumers to pay subscriptions for (or for King County to host) one of these tools could be a limiting factor, largely unknown at this point.

Policy Option #3 – Lead and partner with others to maximize educational reach about pollutants

Justification

A regional partnership would create unified public messaging for source control actions. Partnering with businesses and retailers brings education to the point of purchase, where consumer decisions are made. Adding incentive programs addresses a key limitation of education-only approaches by providing financial motivation to change behavior. This comprehensive approach could shift purchasing patterns at a scale that meaningfully reduces contaminant loading to wastewater and combined sewer systems regionwide.

Considerations

Establishing regional leadership requires significant investment in staff, coordination, and sustained funding beyond current levels. This would require negotiating agreements with multiple partners, each with different priorities and capacities. Incentive program design requires careful consideration of funding sources and equity. Long-term sustainability depends on demonstrating value to partners and securing ongoing funding.

Policy Options – Legacy Pollution

Policy Option #1 – Maintain current Sediment Management policies by implementing the Sediment Management Plan (slow pace)

Justification

Adopted as part of the RWSP in 1999 to clean up sediment contamination near CSOs. State and federal law require cleanup when contamination poses unacceptable risk to human health or the environment.

The current approach to line cleaning as an O&M action is largely to address blockages and, in some cases, clean lines and facilities due to pollution source tracing that identified high levels of contaminants in the conveyance lines.

Implementing a pollution prevention program in the combined system is a West Point Treatment Plant NPDES permit requirement.

Considerations

WTD has identified sites that require cleanup through this program and requirements under its NPDES permit. More than half of these sites have been cleaned up or are in process. The State will eventually require WTD to conduct the cleanups. The Sediment Management Plan allows WTD control over the timing of these efforts to provide flexibility on when to incur costs and pursue contributions from other responsible parties. Competitive state grants are available for up to 50% of public costs but funding of grants is limited.

The current line cleaning program is limited by available equipment and staff.

Source control in the combined system is supported by the KCIW program, County's Hazardous Waste Management Program, RainWise, education and engagement as well as pollution prevention activities such as best management practices such as street sweeping conducted by City of Seattle, and spill prevention programs.

Policy Option #2 – *Use lessons learned to improve process, accelerate new sediment cleanups, and remove known and identified pollution from conveyance system*

Justification

Current cleanups are increasingly taking longer to complete and are exacerbated by recent Ecology (State of Washington, Department of Ecology) staffing issues (e.g., turnover in staff leading to vacancies, insufficient staff due to budget constraints). Advocacy for improvements in process to reduce time to conduct and reduce Ecology staff commitments could shorten time for achieving environmental improvements and reduce Ecology workload.

Expanding the line cleaning program to clean more areas each year and address more lines identified with harmful levels of contamination would combat known and identified legacy pollution deposits.

Business inspections are needed throughout the combined sewer service area to promote and ensure stormwater pollution prevention best management practices are being implemented. Those inspections also check that required stormwater infrastructure is being maintained and potential pollution generating materials are properly stored. Prevention of contaminants including CECs from entering the combined sewer system would prevent more pollutants from reaching the environment from CSOs or incomplete breakdown during treatment.

Considerations

Ecology's regulatory process for many sites can be slow and overly complex. Site cleanups adjacent to the Lower Duwamish Waterway can often take over 10 years to go from the start of the agreed order, the remedial investigation and feasibility study, and finally a cleanup action plan. Most sediment cleanups are now relatively predictable and could be moved through the process quickly without compromising results. If effective, such changes would hasten completion of the Sediment Management Plan and significantly reduce costs.

Expanding line cleaning would require more equipment and staffing. Line cleaning and business inspections would lower concentrations of both legacy contaminants and CECs in our recovered products, protecting their markets, and in discharges to receiving waters, improving water quality. Keeping contaminants from getting into our conveyance system or from reaching treatment plants is more cost-effective than end-of-pipe treatment

WTD could incur costs for conducting business inspections for stormwater pollution prevention in the combined sewer areas not currently being conducted by local jurisdictions that collect the surface water drainage fees for that area. Source control focuses on preventing pollution from entering the stormwater runoff that enters the combined system in the first place, which can be more efficient and less expensive than enhancing treatment to remove more pollutants.

Policy Option #3 – Apply new and creative approaches for faster sediment cleanups

Justification

Waiting for completion of often lengthy legal process to settle responsibility for historical contamination at a site delays cleanups, adding years of human health and environmental health risks. Having WTD act proactively and recover other responsible party cost shares later would result in cleanups occurring sooner, expanding cleanup footprints, and avoiding more years of health risks.

Sediment cleanups often take a decade, with complex sites taking more than two decades. During this time, the adverse environmental effects continue. In addition, conventional cleanups using dredging resuspends a certain amount of contamination, which can create more environmental damage. By taking more benign interim action to stop adverse environmental effects and waiting for advancement of in-situ bioremediation developments to complete the cleanup in the future, cleanup can move forward with lower environmental consequences.

Proactively planning to clean all conveyance lines with contaminated deposits within a set timeframe would remove all legacy pollution in the system. Over the years, sediment has

accumulated in various parts of the sanitary sewer system in amounts that wouldn't otherwise be targeted for conveyance maintenance needs. But older deposits, particularly in industrial and commercial areas of combined system, are routinely higher in contaminants. These sediment deposits can be remobilized within conveyance system during moderate to heavy rainfall events and release contamination to the receiving water.

Considerations

If WTD acts prior to the official legal process, WTD runs the risk of not being able to share the cost burden with PRPs. Waiting for legal process also has risks, as companies that are PRPs may go bankrupt in the meantime. Competitive state grants are available for up to 50% of public costs, which could reduce County's upfront costs, making it easier for WTD to begin cleaning up while waiting for the legal process for PRP cost sharing. Although there is a limited amount of grant funding available each grant cycle.

The timeframe to complete a cleanup starts once the regulators take their first formal action – and many sites sit for years before the regulators take that step. WTD can take voluntary action without going through the formal cleanup process – which won't resolve liability but stops environmental impacts from continuing. In addition, more benign treatments have less disruption to the existing ecosystem, meaning actions have lower environmental effects. But relying on bioremediation advances at some point in the future to achieve final cleanup goals.

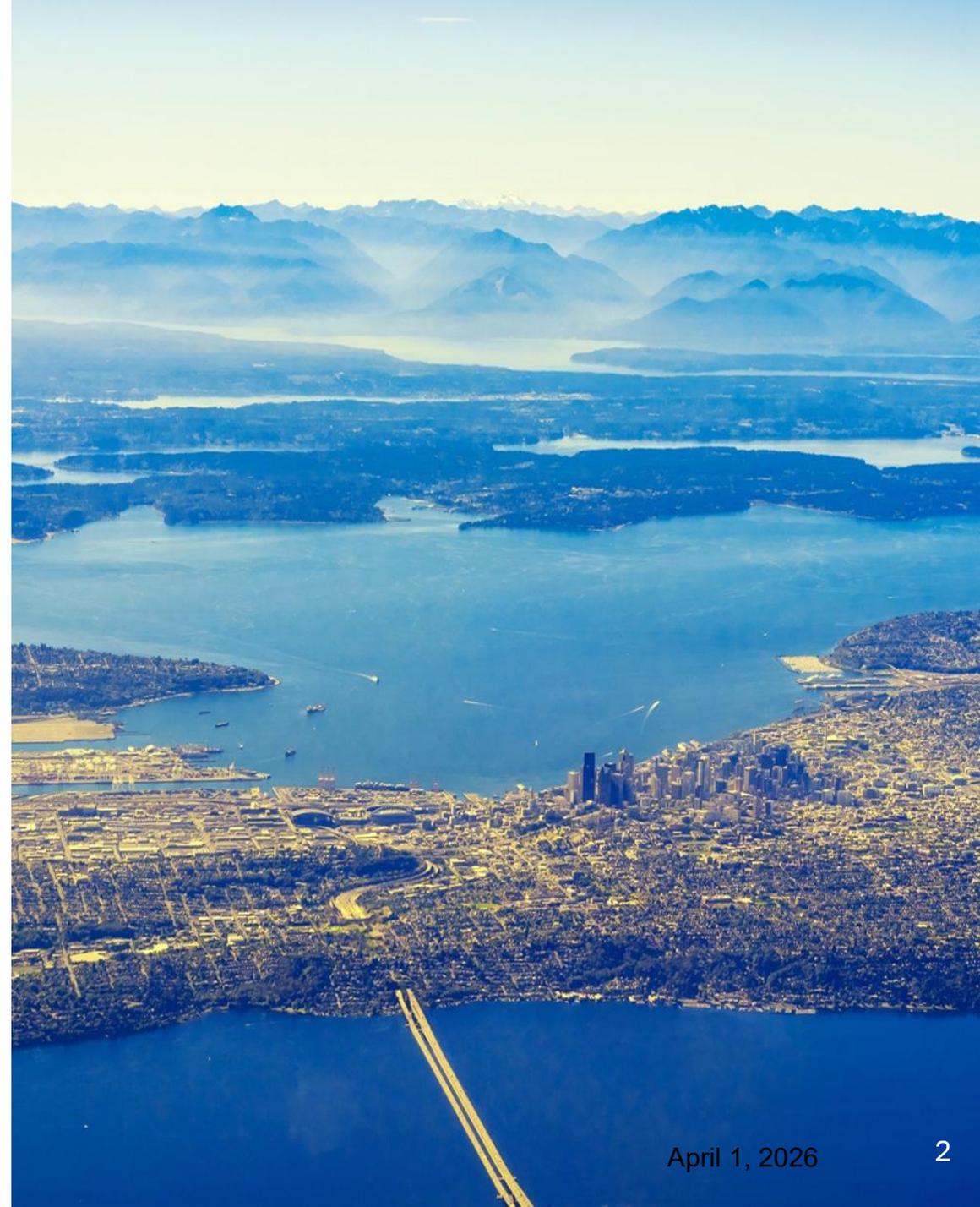
When performing line cleaning, upstream local lines need to be cleaned first, or they could re-contaminate County lines after they have been cleaned. King County could incur costs if cleaning local sewer lines that are typically the responsibility of local sewer agencies. It would take many years to both survey the entire conveyance system to identify lines with solids containing harmful levels of contaminants and then to remove these solids from them. If moderate to high levels of toxic contaminants are present and the source(s) is not controlled, the solids in the line will become contaminated again. Note, sanitary lines are already cleaned when needed to maintain adequate conveyance (e.g., when there is a buildup of fats, oils and grease [referred to as FOG] and other solid material).

Regional Wastewater Services Plan (RWSP) Update Pollution Policy Questions & Analyses

Presented to the Regional Water Quality Committee
April 1, 2026

Purpose

- No decisions today
- Context and background for policy questions related to the **Pollution topic of the RWSP**
- Share range of policy options to answer the questions
- Gather feedback from RWQC
- Any policy options we missed that you want evaluated ?

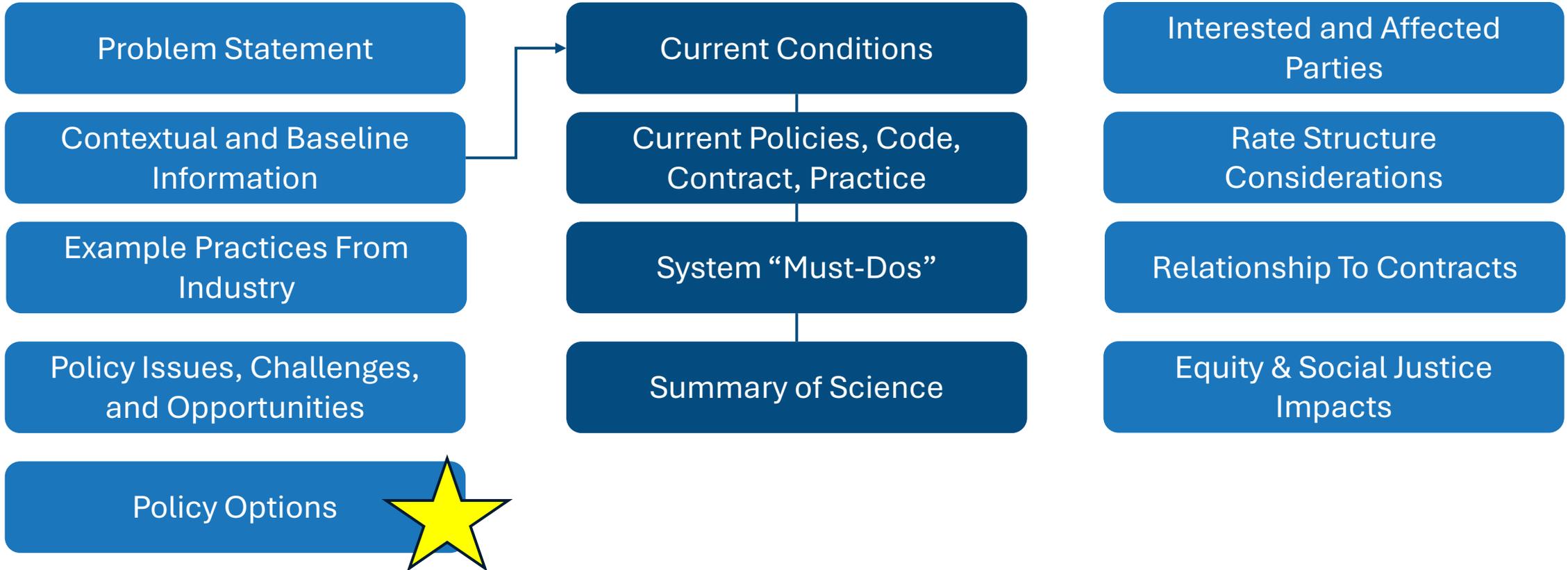


RWSP Update Schedule for Policy Analysis

Timeline (RWQC Discussion)	Policy Memo Number	Major Policy Question Number	Major Policy Questions from Scoping Document	Major Policy Question Topic
<p>Group #2</p> <p>Pollution (Source Control and Legacy)</p> <p>Step #1: April 2026 Step #2: December 2026 (<i>tentative</i>)</p> <p>Elements that relate to the Relationship to Contracts and Equity and Social Justice will be addressed as part of each policy memo.</p>	4/5	4	<p>What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?</p>	Source Control (and Legacy Pollution)
		5	<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>	Source Control
		32	<p>How should WTD efforts support the water quality of Puget Sound and applicable inland waterways?</p>	Legacy Pollution

Policy Memo Contents

Step #1 - Today

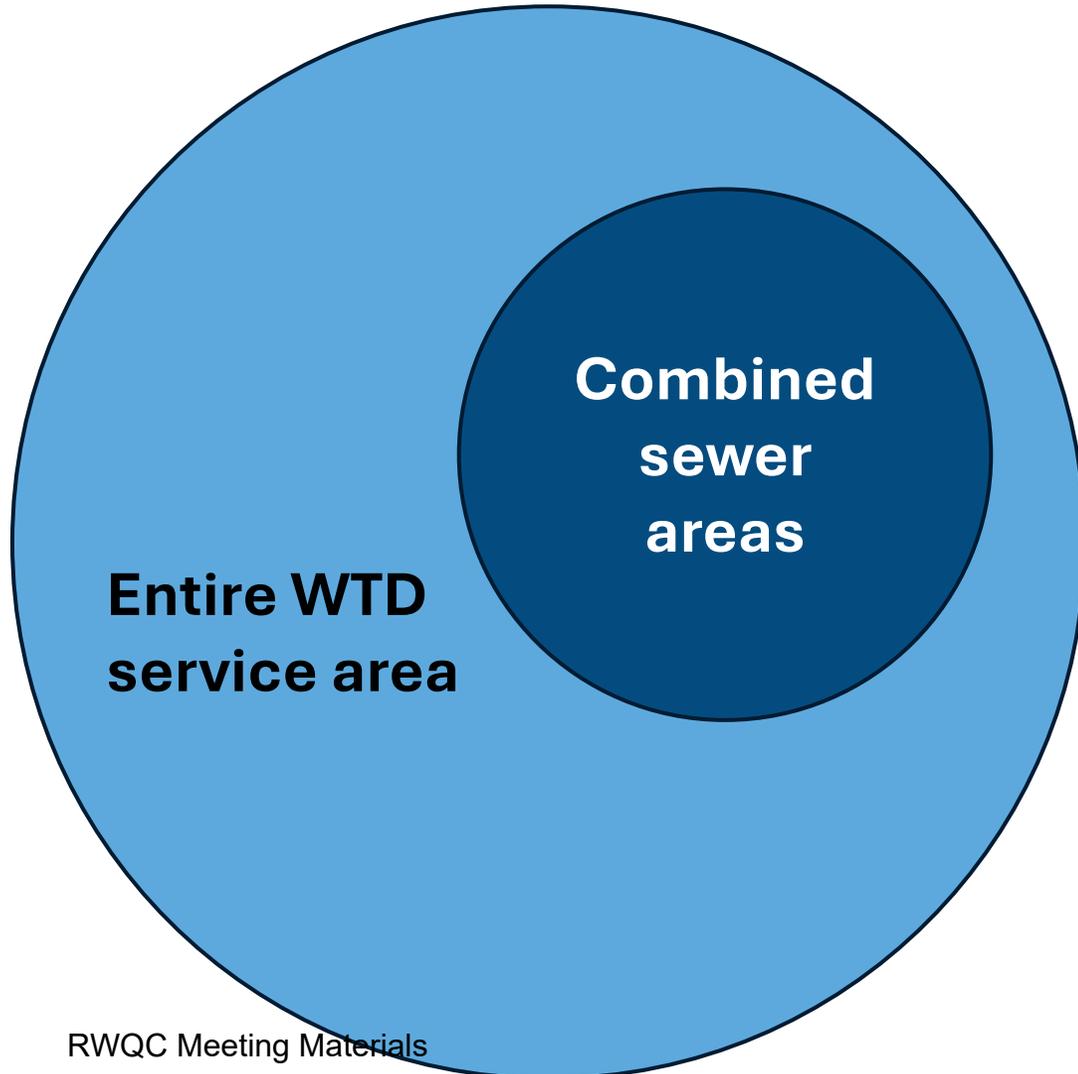


Problem Statement – Source Control

- Toxic, persistent contaminants entering the wastewater system pose a risk to humans and the environment
- End up in WTD recovery products and the environment
- High removal costs + treatment technology limitations
- County has limited authority or influence over production and use of toxic persistent contaminants



About Source Control Activities



- Many source control activities are systemwide
 - KC Industrial Waste
 - NPDES Permits
 - Operations and maintenance
 - Waterworks Grants
 - Hazardous Waste Management
 - Education and engagement
- Additional activities apply in combined sewer areas
 - Projects to reduce overflows or control CSOs
 - Stormwater pollution prevention programs
 - RainWise program

Policy issues, challenges and opportunities

- Addressing pollution in the regional wastewater system
 - Pollution comes from residential, commercial and industrial sources
 - Education can be extremely effective
- Recycled product contamination
 - Research and monitoring needed to ensure that recycled products are safe for their intended uses
- Cost considerations
 - Upfront spending on pretreatment, monitoring, and education can reduce costly end-of-pipe spending on large-scale treatment

Range of Policy Options – Source Control (Industrial Waste)

Focusing on eliminating, reducing, or mitigating harmful levels of toxic contaminants and nutrients ***before entering*** the system

Policy Option #1

Maintain current policies for Industrial Waste

Policy Option #2

Improve methods to identify more industrial users

Policy Option #3

Encourage reduction of non-regulated CECs from industrial users

Policy Options – Source Control

(Industrial Waste)

	Goal	Description	Pollution Actions
#1	Manage and reduce contaminants from industrial sources using current methods	Maintain current policies for Industrial Waste	Implement current requirements for industrial waste under King County Code (KCC), NPDES (National Pollutant Discharge Elimination System), and 40.CFR.403 (General Pretreatment Regulations for Existing and New Sources of Pollution in U.S. Code)
#2	Manage and reduce more contaminants from industrial sources	Improve methods to identify more industrial users	In addition to traditional industrial user surveying methods, use alternative or new ways of conducting surveys and identifying any potential unpermitted significant industrial users (SIUs).
#3	Lower CECs to our regional wastewater system	Encourage reduction of non-regulated CECs from industrial users	Survey industrial users for additional non-regulated CECs and suggest voluntary best management practices (BMPs).

Range of Policy Options – Source Control

(Facilities and Procurement, Upstream Sources)

Focusing on eliminating, reducing, or mitigating harmful levels of toxic contaminants and nutrients ***before entering*** the system

Policy Option #1

Maintain existing purchasing and source control policies and requirements

Policy Option #2

Apply additional resources and incentives to reduce, mitigate, and eliminate harmful levels of contaminants from existing sources

Policy Option #3

Lead and partner with others to maximize reduction, mitigation, and elimination of harmful levels of contaminants from existing sources

Policy Options - Source Control

(Facilities and Procurement, Upstream Sources)

	Goal	Description	Pollution Actions
#1	Reduce harmful levels of contaminants from existing sources	Maintain existing purchasing and source control policies and requirements	<p>Facilities and Procurement – Implement King County Sustainable Purchasing Executive Policy regarding CECs.</p> <p>Facilities and Procurement – Conduct operations and maintenance at WTD facilities to prevent unexpected releases of pollutants due to equipment failures.</p> <p>Upstream Sources – Advocate for policies that would mandate full disclosure of toxic contaminants in all consumer and non-consumer product labeling, and limit or ban toxic persistent contaminant (e.g. PFAS) use in products.</p>

Policy Options - Source Control

(Facilities and Procurement, Upstream Sources)

	Goal	Description	Pollution Actions
#2	Reduce, mitigate, and eliminate harmful levels of contaminants from existing sources	Apply additional resources and incentives to reduce, mitigate and eliminate harmful levels of contaminants from existing sources	<p>Facilities and Procurement – Inventory specialists will work across WTD facilities and King County Divisions to ensure coordination of sustainable purchasing.</p> <p>Facilities and Procurement – Proactively remove or encapsulate building materials with high PCB levels in WTD-owned facilities.</p> <p>Upstream Sources – Use incentives or buybacks for residential or business source control for products containing toxic persistent contaminants, such as replacements, buybacks of Teflon pans, etc.</p> <p>Upstream Sources – Dedicating additional resources and priority to advocacy for bans on toxic persistent contaminants (e.g., PFAS) across categories of goods: household products, industrial materials, transportation/automotive products, and building materials.</p>

Policy Options - Source Control

(Facilities and Procurement, Upstream Sources)

	Goal	Description	Pollution Actions
#3	Create and/or expand partnerships to address contaminants	Lead and partner with others to maximize the reduction, mitigation, and elimination of harmful levels of contaminants from existing sources	<p>Facilities and Procurement – Lead regional coalition of wastewater and stormwater utilities to jointly develop procurement standards to avoid products containing CECs, develop pre-qualified vendor lists, and leverage collective buying power for safer alternatives.</p> <p>Facilities and Procurement – Work with other King County departments to improve and coordinate source control across county-owned non-wastewater facilities that are known to have high levels of contaminants or nutrients, such as landfills, and PCB in building materials.</p> <p>Upstream Sources – Build and lead a regional coalition of governments, non-profits, and businesses to advocate for broad policies that would mandate full disclosure of toxic contaminants in all consumer and non-consumer product labeling, and limit or ban toxic persistent contaminant (e.g., PFAS) use in products.</p>

Range of Policy Options – Education

Increasing **individual awareness** of toxic persistent contaminants

Policy Option #1

Maintain existing programs to educate public about pollutants

Policy Option #2

Broaden engagement programs and use different tools/tactics to educate more individuals about pollutants

Policy Option #3

Lead and partner with others to maximize educational reach about pollutants

Policy Options - Education

	Goal	Description	Pollution Actions
#1	Educate individuals so they can take responsible action	Maintain existing programs to educate public about pollutants	<ul style="list-style-type: none"> Continued support of education and engagement around various pollutants/CECs, as well as continued support for WTD Education Programs WaterWorks Grants (funding education & engagement efforts); Rainwise (workshops); and Hazardous Waste (Take back meds program, curriculum, K-12 programs). Promote existing safe product certifications.
#2	Educate more individuals so they can take responsible action	Broaden engagement programs and use different tools/tactics to educate more individuals about pollutants	<ul style="list-style-type: none"> Initiate internal education campaign and external social marketing campaign to educate public about avoiding/reducing various pollutants/CECs in daily life and purchasing. Promote and/or endorse existing and/or new product rating systems and AI-based tools that help the public to avoid products containing toxic persistent contaminants.
#3	Maximize educational impact so individuals can take responsible action	Lead and Partner with others to maximize educational reach about pollutants	<ul style="list-style-type: none"> Establish WTD as a regional leader for consistent water quality and pollution prevention education through an expanded social marketing campaign effort in partnership with regional agencies, non-profits, CBO's, businesses and retailers. Develop new incentive programs where possible.

Problem Statement – Legacy Pollution

- Historic practices and discharges led to water quality impairments and sediment contamination
- Despite water quality improvements related to passage of the Clean Water Act (1972), water and sediments are still impaired in some receiving waterbodies
- Cleanups are slow and costly

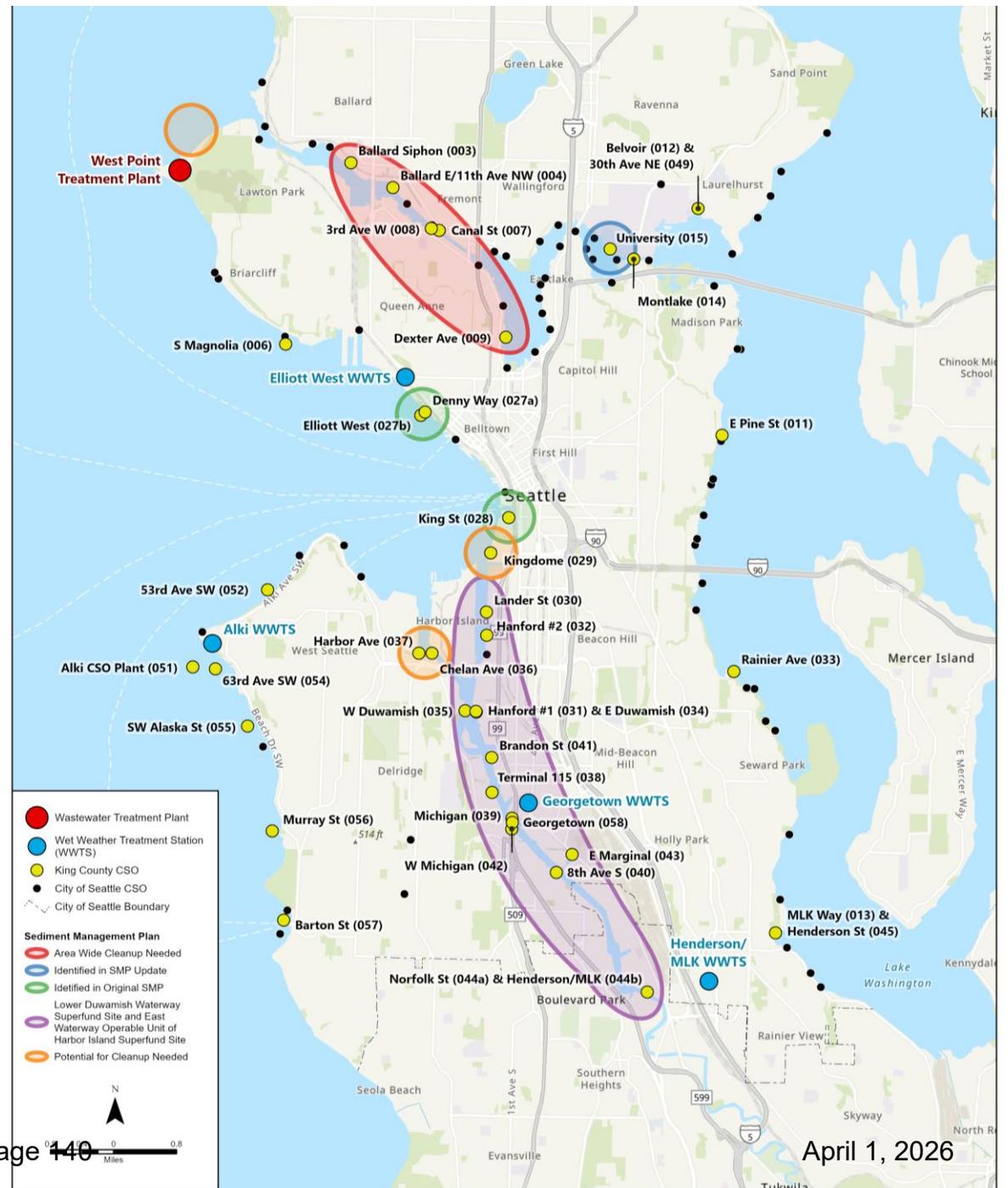


Legacy Pollution Activities

- Completed cleanups:
 - Elliott Bay
 - Denny Way
 - Pier 53-55
 - Lower Duwamish Waterway
 - Duwamish Diagonal Storm Drain/CSO
 - Norfolk Storm Drain/CSO



Known and Likely Cleanup Sites



Current and budgeted Capital expenditures

The two active and appropriated Pollution capital projects as of the Council adopted 2026/27 biennial budget:

- Sediment Management Plan (including the East Waterway Operable Unit of Harbor Island Superfund)
 - **\$88,600,000**
- Lower Duwamish Waterway Superfund
 - **\$141,500,000**

Note that these costs may be updated as capital projects are advanced and further defined.

Policy issues, challenges and opportunities

- Enhancing, expediting, or improving sediment cleanup process
 - To achieve improved water/sediment quality and reduce water body impairments faster
- Identifying funding sources
 - Parties/entities responsible
 - Grants (limited)



Range of Policy Options – Legacy Pollution

Focusing on remediating harmful levels of toxic contaminants *in or from* the system.
Includes source control activities.

Policy Option #1

Maintain current policies by implementing the Sediment Management Plan

Policy Option #2

Use lessons learned to improve processes, accelerate new sediment cleanups, and remove known and identified pollution from conveyance system

Policy Option #3

Apply new and creative approaches for faster sediment cleanups

Policy Option #1 – Legacy Pollution

	Goal	Description	Pollution Actions
#1	<p>Meet regulatory requirements to conduct sediment cleanup and source control activities at current slow pace</p>	<p>Maintain current policies by implementing the Sediment Management Plan</p>	<p>Sediment Management – Implement current Sediment Management Plan</p> <p>Line Cleaning – Continue current sewer conveyance maintenance cleaning frequency that prioritizes based on O&M needs but has the benefit of removing legacy pollution deposits</p> <p>Source Control – Implement a pollution prevention program in the combined system to comply with the current West Point NPDES permit Nine Minimum Controls (Control #7).</p>

Policy Option #2 – Legacy Pollution

	Goal	Description	Pollution Actions
#2	Implement process improvements to improve water/sediment quality more quickly	Use lessons learned to improve processes, accelerate new sediment cleanups, and remove known and identified pollution from conveyance system	<p>Sediment Management – Advocate to Ecology for process improvements to accelerate new sediment cleanups led by WTD</p> <p>Line Cleaning – Expand targeted structure and line cleaning in County-owned infrastructure to combat known and identified legacy pollution deposits</p> <p>Source Control – Partner with local sewer districts to conduct additional business inspections to aid in stormwater pollution prevention, enhancing source control within the combined system.</p>

Policy Option #3 – Legacy Pollution

	Goal	Description	Pollution Actions
#3	Faster improvements to water/sediment quality through alternative approaches	Apply new and creative approaches for sediment cleanups	<p>Sediment Management – Implement and lead multi-party sediment cleanups without other Potentially Responsible Parties (PRPs) and pursue cost recovery after completing cleanup actions</p> <p>Sediment Management – Apply Enhanced Natural Recovery cleanup to all WTD CSO associated contaminated sediment areas and promote development of bioremediation of bio-accumulative organics to treat those areas in the future</p> <p>Line Cleaning – Partner with local sewer agencies to remove all legacy pollution deposits in sewer conveyance systems by surveying entire system and cleaning all needed structures and pipes of accumulated sediment (including both County-owned and locally-owned infrastructure)</p>

Q & A



King County | Wastewater Treatment

2027 Sewer Rate Proposal

Regional Water Quality Committee

March 4, 2026

Agenda

- Calendar
- Assumptions and challenges for 2027
- WTD's Recommended Rate
- Rate Forecast and Financial Analysis
- Affordability Efforts
- Summary and Next Steps

2027 Sewer Rate Process Calendar

Agency	Date	Briefing
Executive Budget Office	1/29/2026	2027 WTD Preliminary Sewer Rate Proposal
RWQC	2/4/2026	2027 WTD Preliminary Sewer Rate Proposal
MWPAAC R&F	2/5/2026	2027 WTD Preliminary Sewer Rate Proposal
MWPAAC Gen	2/25/2026	2027 WTD Preliminary Sewer Rate Proposal
E-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 Gen	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
MWPAAC R&F	4/3/2026	Discuss potential letter to KC Council
KC Council	4/24/2026	Executive transmits 2027 Rate Proposal to Council
MWPAAC Gen	4/23/2026	Action on potential letter to KC Council
RWQC	5/6/2026	Briefing Only
Budget and Fiscal Mgmt Committee	5/28/2026	Discussion Only
RWQC	6/4/2026	Briefing Only
Budget and Fiscal Mgmt Committee	6/11/2026	Possible Action
KC Council	6/17/2026	Consideration/Possible Adoption
KC Council	6/24/2026	Consideration/Possible Adoption (backup date)
Approval Required by:	7/1/2026	

Challenges

- Operational cost increases
 - Chemicals, electricity and labor
- Convergence of challenges in capital program
 - Big three drivers – regulatory, asset management and capacity
 - Higher construction costs
 - Concurrent deadlines, stacking problem
- Lower risk projects already deferred to reduce rate increases
- Compounding effect from multiple double-digit increases is the main impact to customer affordability

Bottom Line Up Front

- Draft WTD rate proposal and forecast prioritizes regulatory compliance, limits rate increase forecast through 2034
- Alternative scenarios that shift project timing have modest value
 - Deferred asset renewal/replacement and capacity projects - adds risk of failure, risk of compliance or both
- Beyond just a ‘when’ question
 - Combined Sewer Overflow (CSO) consent decree, National Pollutant Discharge Elimination System (NPDES) permit, anticipated nutrient regulations
 - Requires successful negotiations, process may take some time
- WTD continuing to undertake variety of cost management efforts

2027 Rate Scenario Development

- Operating expenditure assumptions for 2027 are consistent with the 2026 adopted rate and associated forecast; outyear assumptions for inflation and growth also remain the same.
- Budget proviso requires two additional scenarios to complement the Executive's 2027 rate proposal.
 - One scenario must be at least 2% less than the official Executive proposal. Executive Work Plan also requires another scenario and associated tradeoffs. Scenarios presented are illustrative. Executive has not yet proposed an official rate.
- Inflation and schedule risk adjustment assumptions in the Capital Improvement Program (CIP) remain constant. Since last year, WTD is using schedule risk adjustment to more accurately reflect capital expenditures.
- Scenarios assume WTD will maintain strong financial policies to minimize cost of debt.

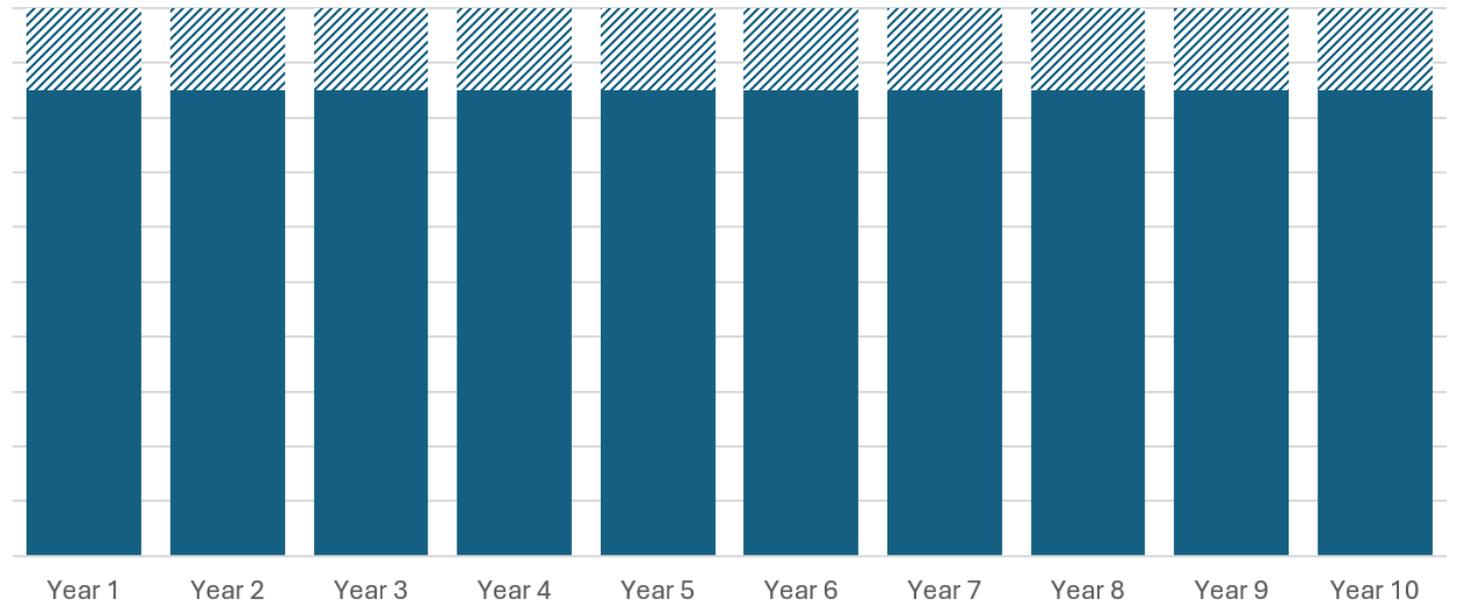
Assumptions for 2027 – Schedule Risk Adjustment vs Accomplishment Rate

Prior to the 2026 rate process (in 2025), WTD utilized an 85% accomplishment rate on the capital forecast input to the sewer rate model to attempt to reflect the tendency to overestimate capital expenditures in a given year.

Accomplishment Rate 15% “Haircut”, 10-year forecast

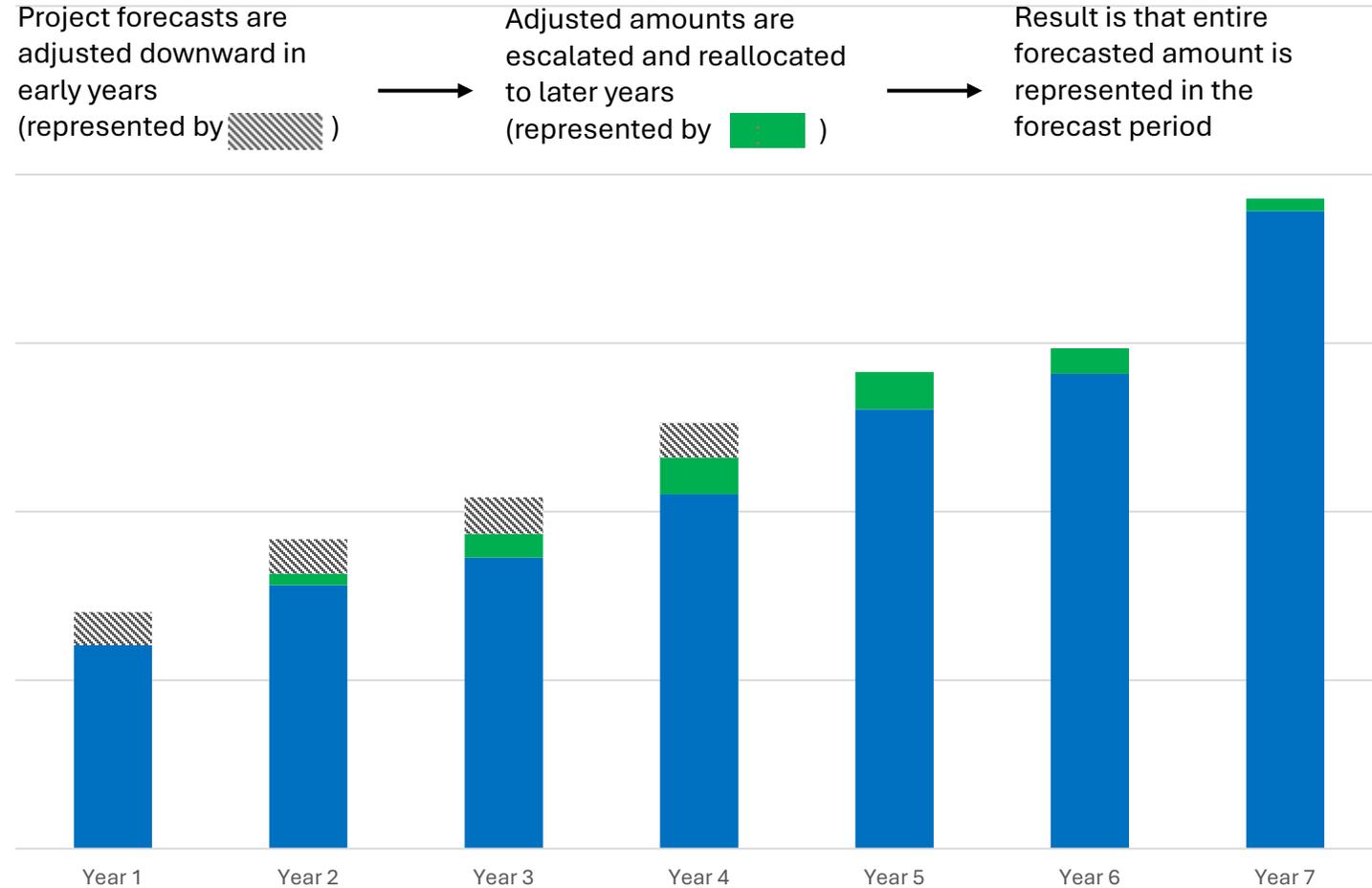
Project forecasts are adjusted downward in all years (represented by )

Result is that adjusted amount is removed from forecast period



Assumptions for 2027 – Schedule Risk Adjustment vs Accomplishment Rate

Since 2026, WTD has shifted to using a 20% schedule risk adjustment factor on non-regulatory projects to more accurately reflect the fact that capital projects tend to spend all of their budget, they just tend to spend it in later years than initial forecasts.



Capital Scenarios Summary

□ = Minimal impact on risk ⚠ = Moderate impact on risk ❌ = Substantial impact on risk

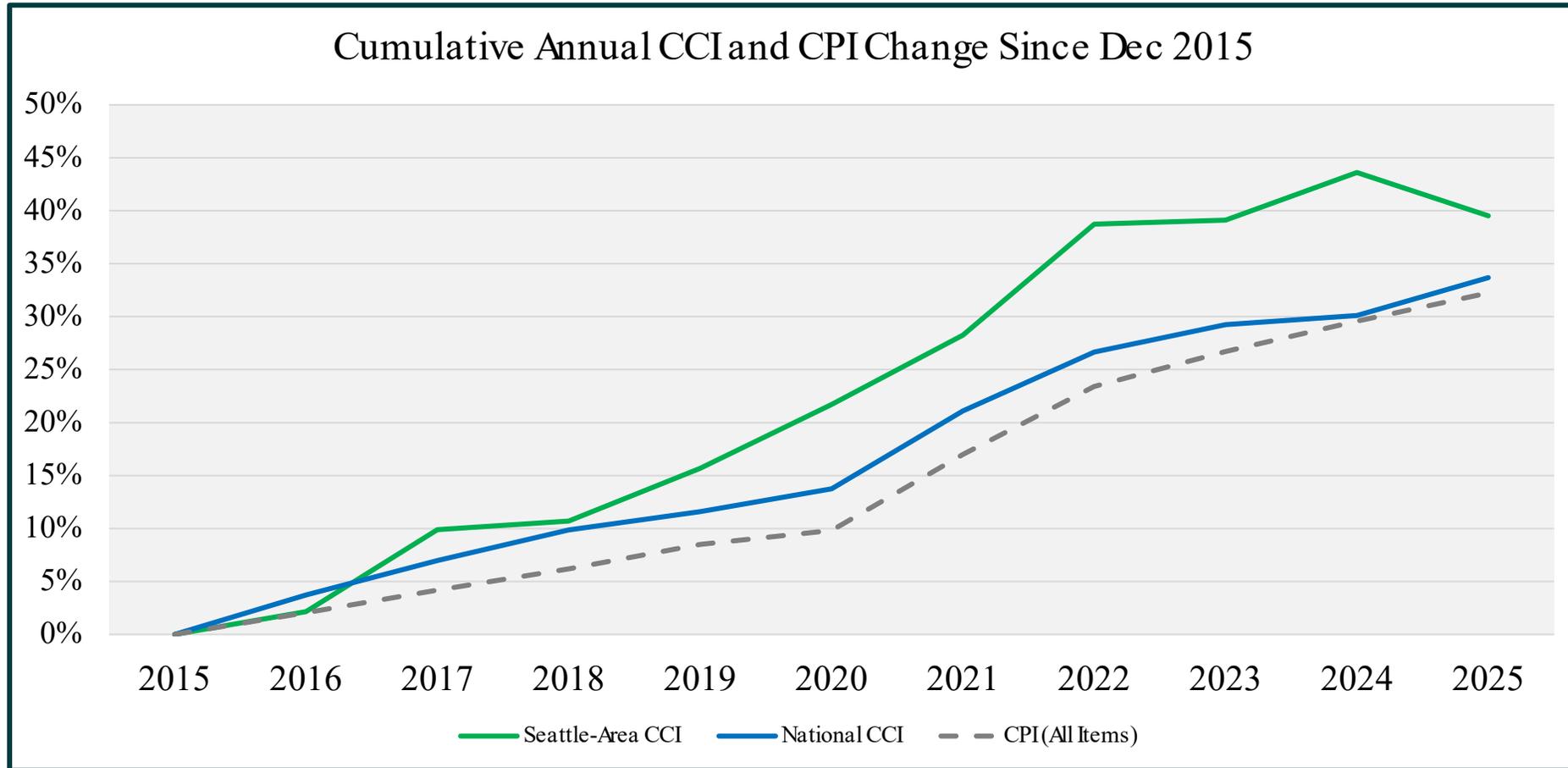
Scenario	10 yr Total CIP (2026-2036)	Change from WTD Proposed	Rate Increases			Asset Reliability and Safety Risk	System Capacity Risk	Regulatory Compliance Risk
			2027	2028	2029			
Draft WTD Proposal (2026 Rate Timing + Current Project Forecasts)	\$14.2 B	\$0 B	12.75%	12.75%	12.75%	⚠	⚠	□
Council Request (2% below Previous 2027 Rate Forecast)	\$12.8 B	-\$1.4 B	10.75%	10.75%	10.75%	□	□	✓
Theoretical Regulatory Deadline Extension (Spreading Out Regulatory Projects)	\$12.4 B	-\$1.8 B	9.75%	9.75%	9.75%	⚠	⚠	□

**The draft WTD proposal is very similar to the forecast projected at the time of the 2026 rate adoption but starts to differ significantly towards the end of the 6-year period.*

Major Changes in Current State from 2026 Adopted Sewer Rate Forecast

Project/Program	2026-2036 Impact	
Minor Asset Management Programs	+ \$490M	Annual forecasts increased as part of 2026/2027 Budget Submittal decisioning
Sammamish Plateau Diversion	+ \$460M	Prelim Gate 2 estimate in Oct 2025
Elliott West WWTS	+ \$320M	Gate 3 approved June 2025
East Ship Canal CSO Program	+ \$270M	ROM estimate for combined alternative
South Magnolia Supplemental Compliance Project	+ \$235M	Identified in options analysis
South Plant Electrical Improvements	+ \$170M	Charter approved July 2025
Lake Hills Trunk/NW Sammamish Interceptor Upgrade	+ \$110M	Revised 90% estimate reflected in May 2025 forecast save
Brightwater Aeration Basin No. 4	+ \$85M	Revised conceptual estimate from Treatment Planning Program

Seattle area construction costs have outpaced inflation



Source for Seattle-area and national CCI: Engineering News-Record

Source for CPI (All Items): Federal Reserve Bank of St. Louis

Capital Efficiency and Transparency Measures

- **Facility programs:** Dedicated facility-based delivery teams; reduces learning curve and provides increased coordination with O&M
- **Procurement Improvements:** Programmatic contracts to reduce procurement volume; expanded contractor outreach to increase competition; dashboards to identify and resolve bottlenecks
- **Real-Time Project Information:** Continuously improving project information system (PRISM) combining nightly accounting data with team reporting for real-time status, schedule, and cost visibility
- **Cost Estimating:** Formulation program for early conceptual estimates; standardized Basis of Estimate documentation; continue to build in-house estimating capability
- **Responsiveness and Transparency:** Long range capital forecast; clearer rate communication; increased engagement with MWPAAC

WTD Proposed Capital Portfolio Assumptions

1. Regulatory (50% of 1st Decade Forecast)

- Prioritize meeting known regulatory requirements: CSO Consent Decree, Lower Duwamish, West Point Treatment Plant NPDES permit
- Funds nutrient reduction evaluation and near-term optimization strategies, but not large-scale nitrogen reduction
- Does not fund any other potential regulation (PFAS, other CECs, etc.)

2. Asset Management Conveyance and Plants (27% of 1st Decade Forecast)

- Addresses the highest risk asset renewal and replacement needs – major asset, poor condition, larger scale cost (>\$5M)
- Includes funding (about \$80M per year) to address small scale asset replacements that do not require major system overhauls

WTD Proposed Capital Portfolio Assumptions

3. Capacity (15% of First Decade Forecast)

- Prioritizes capacity projects (conveyance system and treatment plants) that are driven by population growth
- Deprioritizes conveyance system projects due to inflow and infiltration in first decade, shifts those to second decade forecast

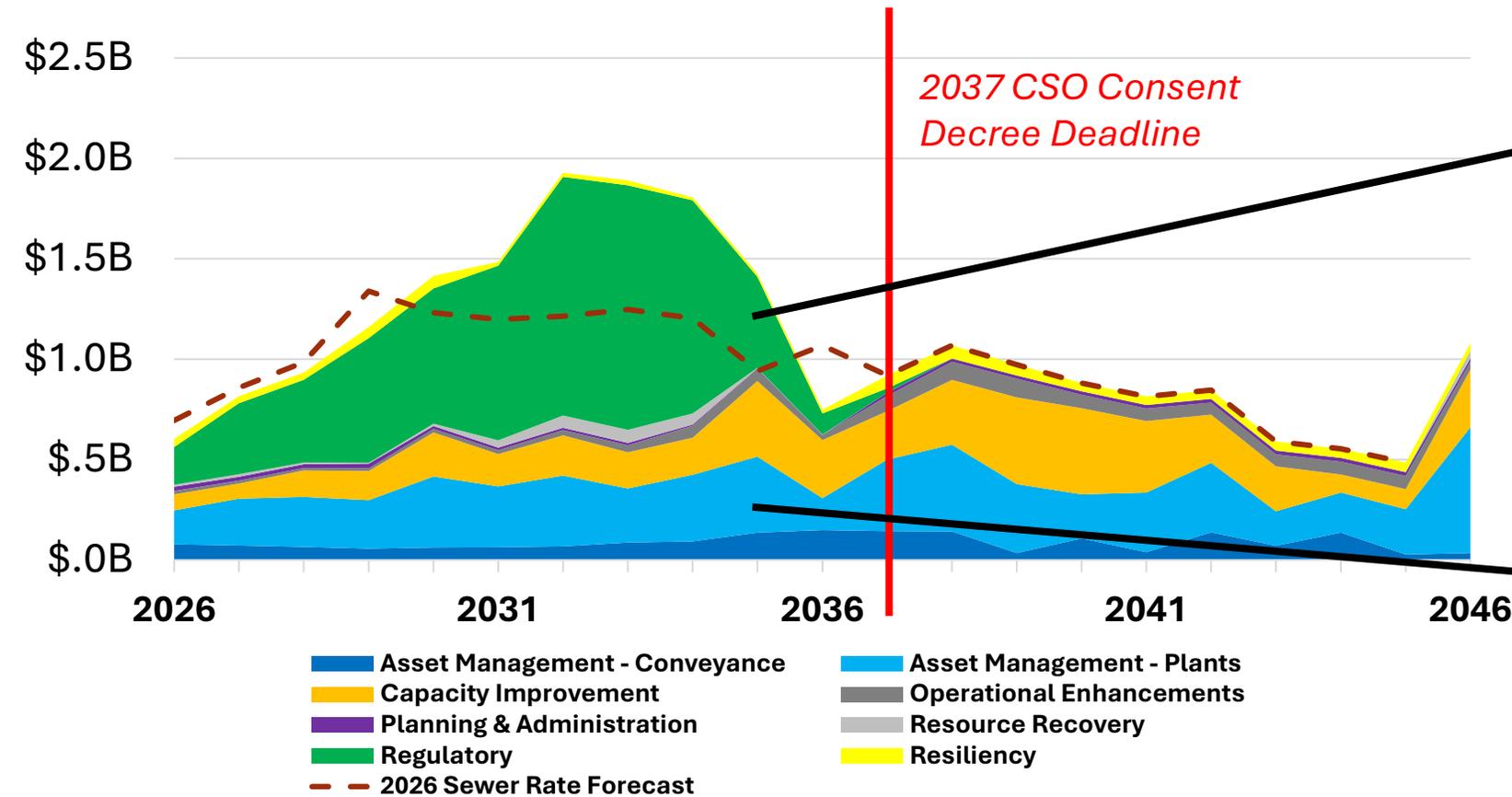
4. All Other Portfolio Categories (e.g., Resource Recovery, Op Enhancements, etc.) (8% of First Decade Forecast)

- Prioritizes system planning (RWSP Update, Conveyance System Improvements, Treatment Planning, Climate Adaptation Planning, etc.)
- Prioritizes cost-efficient investments to meet climate action goals in the near-term
- Defers investment in seismic resiliency to the second half of the 1st decade and beyond
- Does not invest in projects to address climate resiliency of existing system

Regulatory required investment is a key rate driver

Current State Capital Forecast

By Portfolio Category



2037 CSO Consent Decree Deadline



Regulatory projects – and the state and federal requirements that drive them – are the **largest driver** of the current sewer rate increases. **Changing this** requires modification of regulatory and consent decree requirements.



Asset management projects represent **minimal opportunity** to modify the rate and the **greatest risk** if deferred. Risks include overflows, sinkholes, equipment damage, permit violations, and life safety hazards.

Deferred investment in aging assets increases risk of catastrophic failures

Example: Unaddressed corrosion will cause pipeline failure resulting in sinkholes and raw sewage overflows



South Interceptor (Renton, located under I-405)



Heathfield Force Main (Bellevue)

Future Implications

- Some equipment and piping across the system are operating beyond useful life.
- Further deferral increases the risk of sudden failures, with significant consequences.
- Impacts to safety, human health, water quality, and higher response cost.

WTD's Recommended Rate

Draft **WTD Proposal** prioritizes regulatory compliance, needed asset renewal and replacement, and addresses capacity needs

Benefits:

This capital forecast positions WTD to meet regulatory deadlines, proactively replace some of the most critical assets prior to failure, and avoid building moratoria driven by insufficient capacity.

Implications & Risks:

⚠️ Asset Reliability and Safety, System Capacity, and Financial Risk

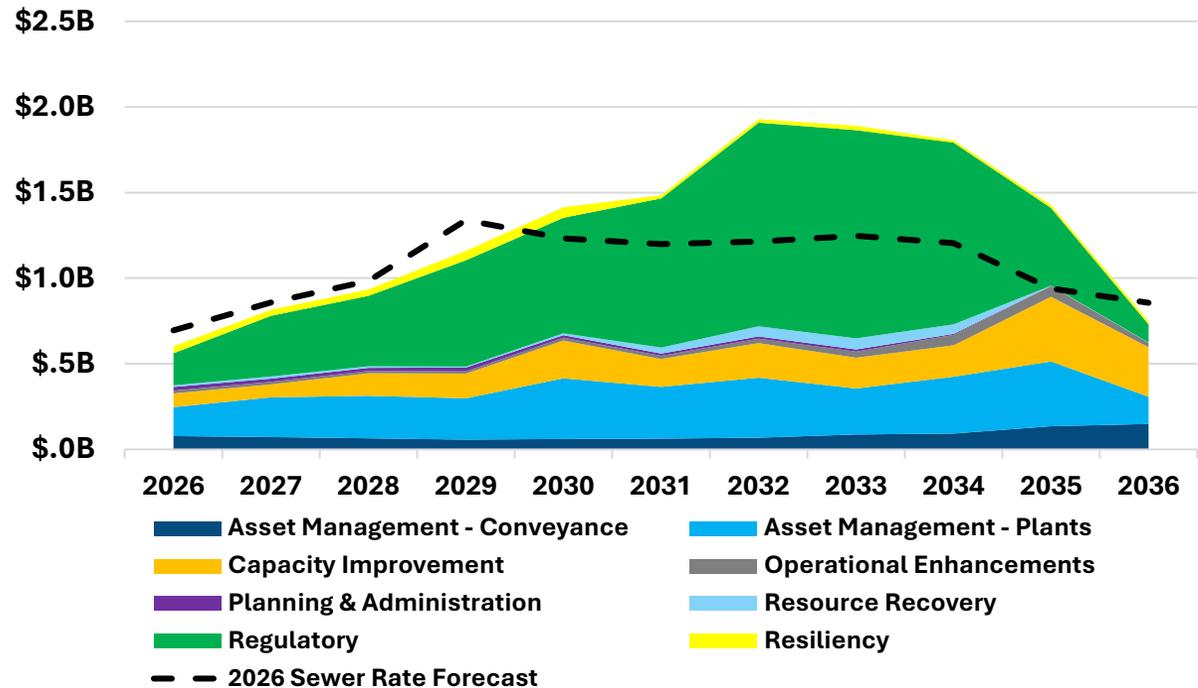
- Still defers some AM projects identified as being in poor to very poor condition. Risks include overflows, sinkholes, equipment damage, permit violations, and life safety hazards.
- Defers I/I driven capacity projects with low levels of service, risks include sewer overflows
- Deferrals affecting asset remaining useful life and condition also poses risk to credit ratings

✅ Regulatory Compliance Risk

- Includes significant investments (50% of 10-year CIP) to meet regulatory milestones

Current State Capital Forecast*

By Portfolio Category



Rate Impacts – WTD’s Recommended Rate

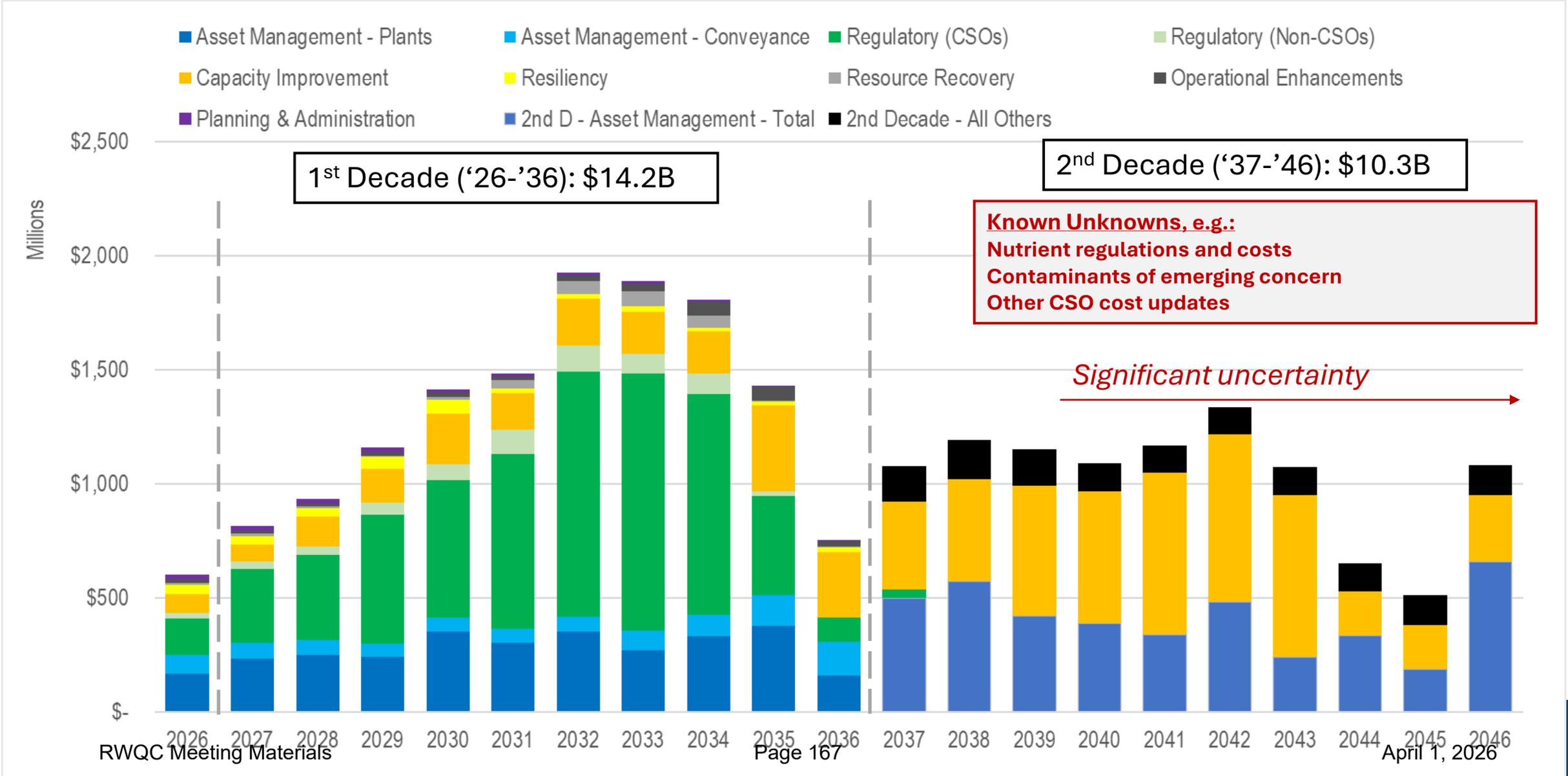
2026 Rate Forecast:

	Adopted										
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Rate Increase %	7.50%	12.75%	12.75%	13.50%	13.50%	13.50%	7.25%	7.25%	2.00%	2.00%	2.00%
Monthly Sewer Rate	\$62.66	\$70.65	\$79.66	\$90.42	\$102.63	\$116.49	\$124.94	\$134.00	\$136.68	\$139.42	\$142.21
Rate Increase \$	\$4.38	\$7.99	\$9.01	\$10.76	\$12.21	\$13.86	\$8.45	\$9.06	\$2.68	\$2.74	\$2.79
All-In Debt Service Coverage	1.48x	1.47x	1.57x	1.50x	1.47x	1.57x	1.59x	1.57x	1.55x	1.53x	1.44x
		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Rate Increase %		4.50%	4.50%	4.50%	1.75%	1.75%	1.75%	0.50%	0.50%	0.50%	
Monthly Sewer Rate		\$148.61	\$155.30	\$162.29	\$165.14	\$168.03	\$170.98	\$171.84	\$172.70	\$173.57	
Rate Increase \$		\$6.40	\$6.69	\$6.99	\$2.85	\$2.89	\$2.95	\$0.86	\$0.86	\$0.87	
All-In Debt Service Coverage		1.55x	1.66x	1.78x	1.83x	1.88x	1.93x	1.95x	1.96x	1.98x	

2027 WTD’s Recommended Rate Forecast:

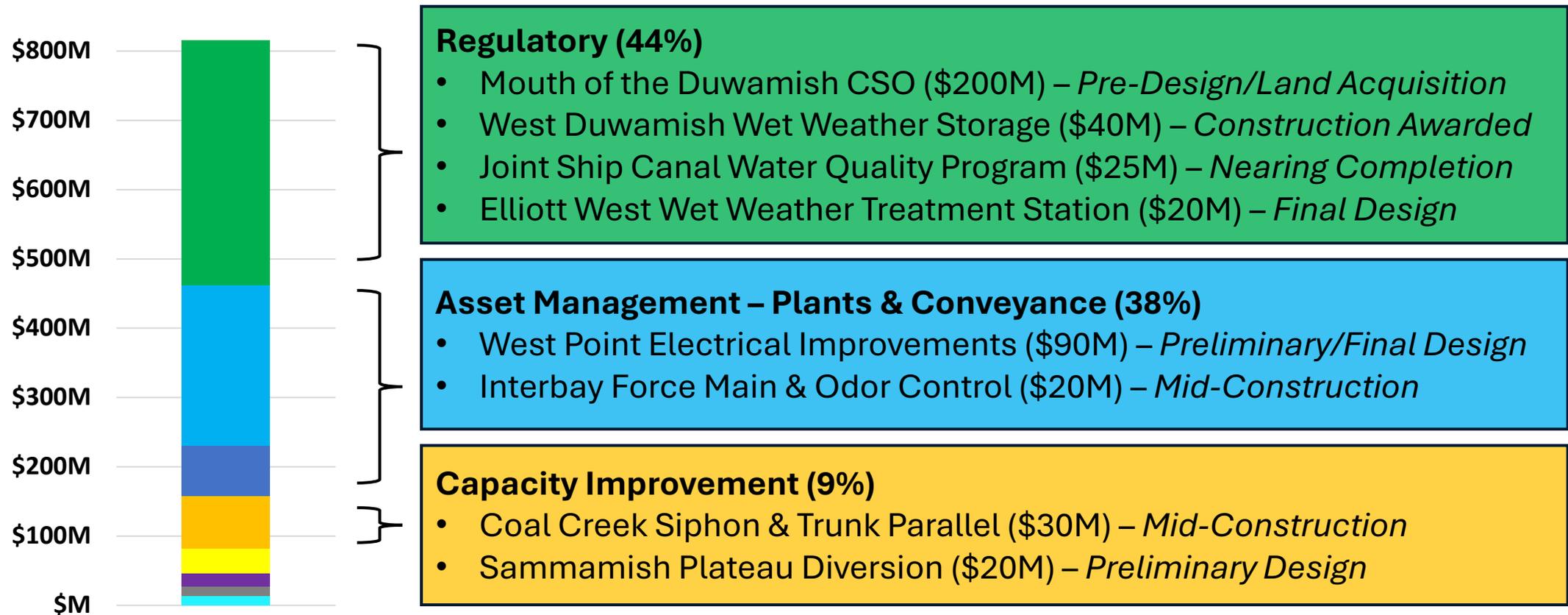
	Adopted	Proposed									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Rate Increase %	7.50%	12.75%	12.75%	12.75%	12.75%	11.25%	11.25%	8.00%	8.00%	8.00%	1.75%
Monthly Sewer Rate	\$62.66	\$70.65	\$79.66	\$89.82	\$101.28	\$112.68	\$125.36	\$135.39	\$146.23	\$157.93	\$160.70
Rate Increase \$	\$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

20-Year WTD's Recommended Rate Capital Forecast by Portfolio Category

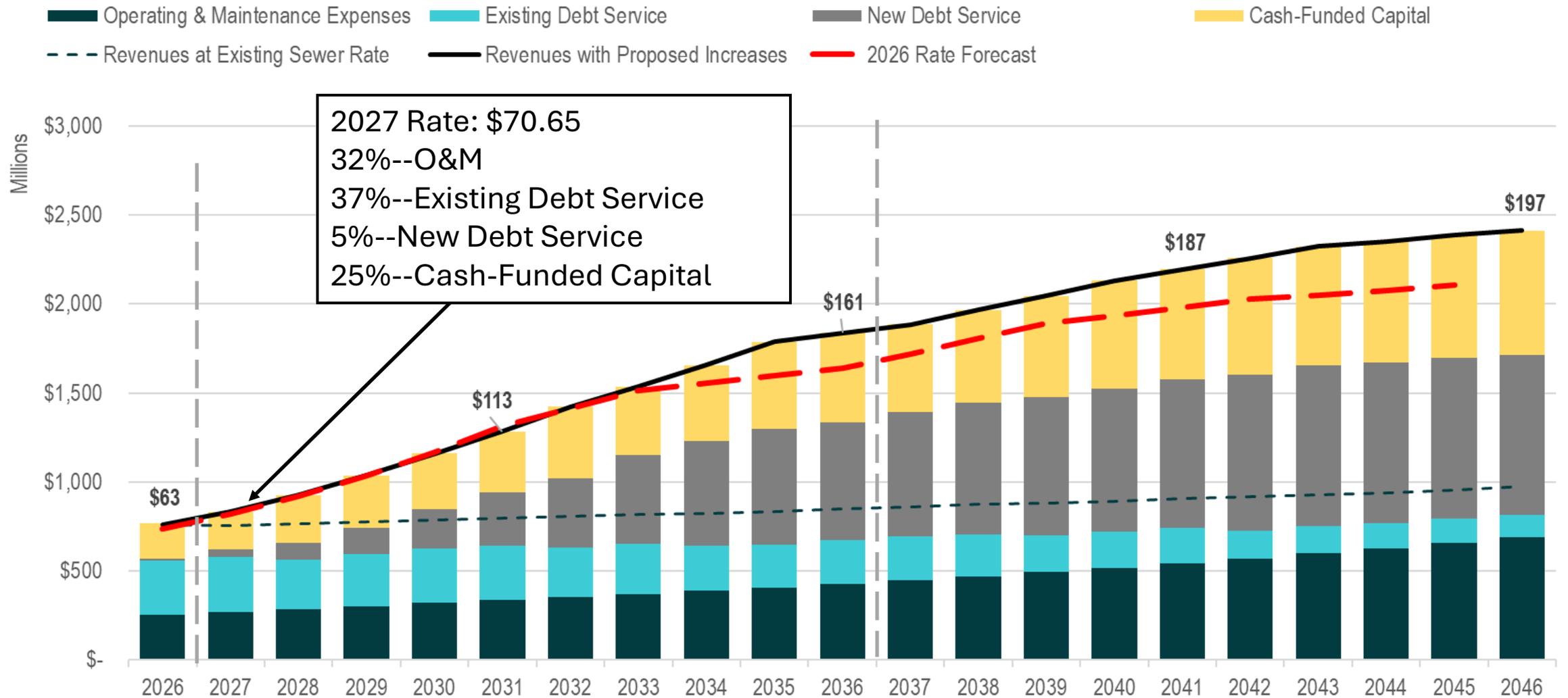


Breakdown of forecasted \$815M of capital spend in 2027

Capital Projects with Largest Forecasted 2027 Spend by Portfolio



Revenue Requirement



Alternative Scenarios

Council Request scenario accepts higher additional risk of asset failure and some financial risk, would shift costs out

Benefits:

Offers lower near-term rate increase relative to the Draft WTD Proposal

Implications & Risks:

❌ Asset Reliability and Safety Risk + System Capacity Risk

- Requires deferral of approximately \$1.4B of planned investment out of the first decade
- Deferrals in this scenario would impact asset replacement and capacity projects resulting in increased likelihood of detrimental impacts such as overflows, sinkholes, equipment damage, permit violations, and life-safety risks

✅ Regulatory Compliance Risk

- Meets existing regulatory milestones (uncertainty remains around future nutrient requirements in operating permits)

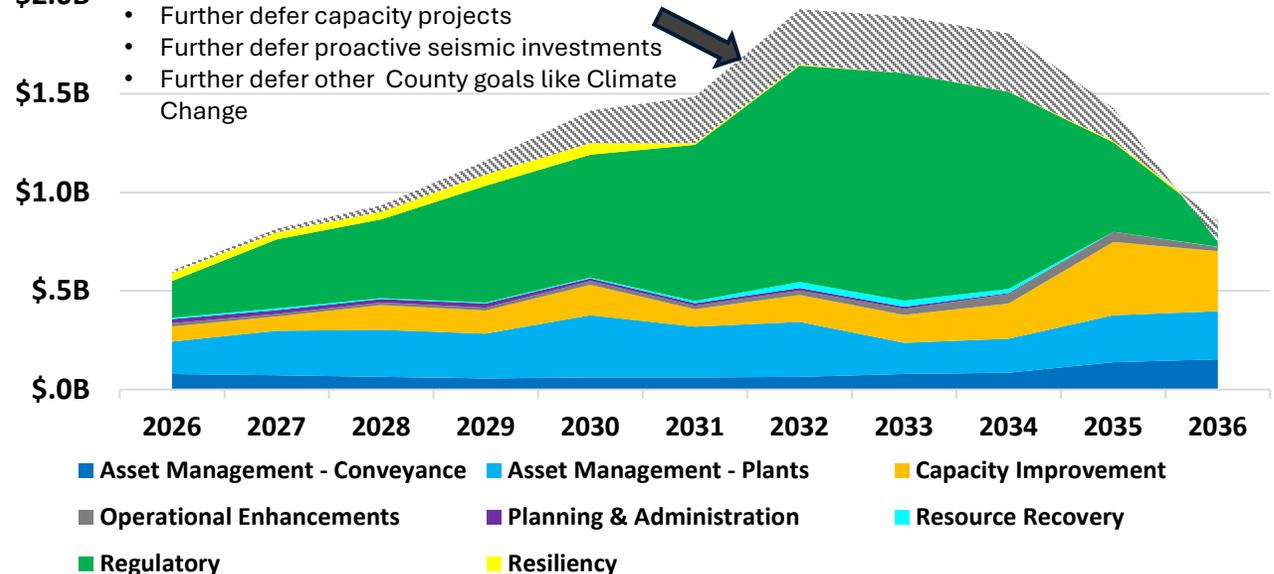
⚠️ Financial Risk

- Future Borrowing: introduces additional risk of rating downgrades and higher cost of borrowing

Forecast Balancing to 10.75% Rate Increase

Assumptions to balance to ceiling:

- Keep CSO and other near term regulatory investments on current timeline
- Defer Nutrient Reduction Optimization
- Further defer high risk Asset R&R projects
- Further defer capacity projects
- Further defer proactive seismic investments
- Further defer other County goals like Climate Change



Rate Impacts – Council Request

2026 Rate Forecast:

	Adopted										
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Rate Increase %	7.50%	12.75%	12.75%	13.50%	13.50%	13.50%	7.25%	7.25%	2.00%	2.00%	2.00%
Monthly Sewer Rate	\$62.66	\$70.65	\$79.66	\$90.42	\$102.63	\$116.49	\$124.94	\$134.00	\$136.68	\$139.42	\$142.21
Rate Increase \$	\$4.38	\$7.99	\$9.01	\$10.76	\$12.21	\$13.86	\$8.45	\$9.06	\$2.68	\$2.74	\$2.79
All-In Debt Service Coverage	1.48x	1.47x	1.57x	1.50x	1.47x	1.57x	1.59x	1.57x	1.55x	1.53x	1.44x

		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Rate Increase %		4.50%	4.50%	4.50%	1.75%	1.75%	1.75%	0.50%	0.50%	0.50%	
Monthly Sewer Rate		\$148.61	\$155.30	\$162.29	\$165.14	\$168.03	\$170.98	\$171.84	\$172.70	\$173.57	
Rate Increase \$		\$6.40	\$6.69	\$6.99	\$2.85	\$2.89	\$2.95	\$0.86	\$0.86	\$0.87	
All-In Debt Service Coverage		1.55x	1.66x	1.78x	1.83x	1.88x	1.93x	1.95x	1.96x	1.98x	

2027 Council Request Rate Forecast:

	Adopted	Proposed									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Rate Increase %	7.50%	10.75%	10.75%	10.75%	12.75%	12.75%	10.00%	10.00%	5.75%	5.75%	1.25%
Monthly Sewer Rate	\$62.66	\$69.40	\$76.87	\$85.14	\$96.00	\$108.24	\$119.07	\$130.98	\$138.52	\$146.49	\$148.33
Rate Increase \$	\$4.38	\$6.74	\$7.47	\$8.27	\$10.86	\$12.24	\$10.83	\$11.91	\$7.54	\$7.97	\$1.84
All-In Debt Service Coverage	1.62x	1.58x	1.68x	1.60x	1.54x	1.57x	1.62x	1.56x	1.57x	1.59x	1.56x

		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Rate Increase %		1.25%	5.25%	5.25%	5.25%	3.25%	3.25%	3.25%	1.50%	1.50%	1.00%
Monthly Sewer Rate		\$150.19	\$158.08	\$166.38	\$175.12	\$180.82	\$186.70	\$192.77	\$195.67	\$198.61	\$200.60
Rate Increase \$		\$1.86	\$7.89	\$8.30	\$8.74	\$5.70	\$5.88	\$6.07	\$2.90	\$2.94	\$1.99
All-In Debt Service Coverage		1.51x	1.54x	1.59x	1.60x	1.59x	1.63x	1.64x	1.66x	1.68x	1.68x

Theoretical Regulatory Deadline Extension

Disclaimer

- Regulatory deadline extension scenario is *illustrative only*
- Successful negotiations with state and federal regulators would be needed to implement a scenario like the Regulatory deadline extension
- Potential penalties for violating consent decree include:
 - increased future borrowing costs
 - civil contempt sanctions
 - injunctive relief
 - criminal contempt proceedings
- WTD has not yet determined order/timing of projects that would best fit environmental quality and financial sustainability

Theoretical Regulatory Deadline Extension adds compliance and financial risk, assumes successful renegotiation of regulatory requirements

Benefits:

Offers lower near-term rate increase relative to the Draft WTD Proposal

Implications & Risks:

⚠️ Asset Reliability and Safety Risk & System Capacity Risk

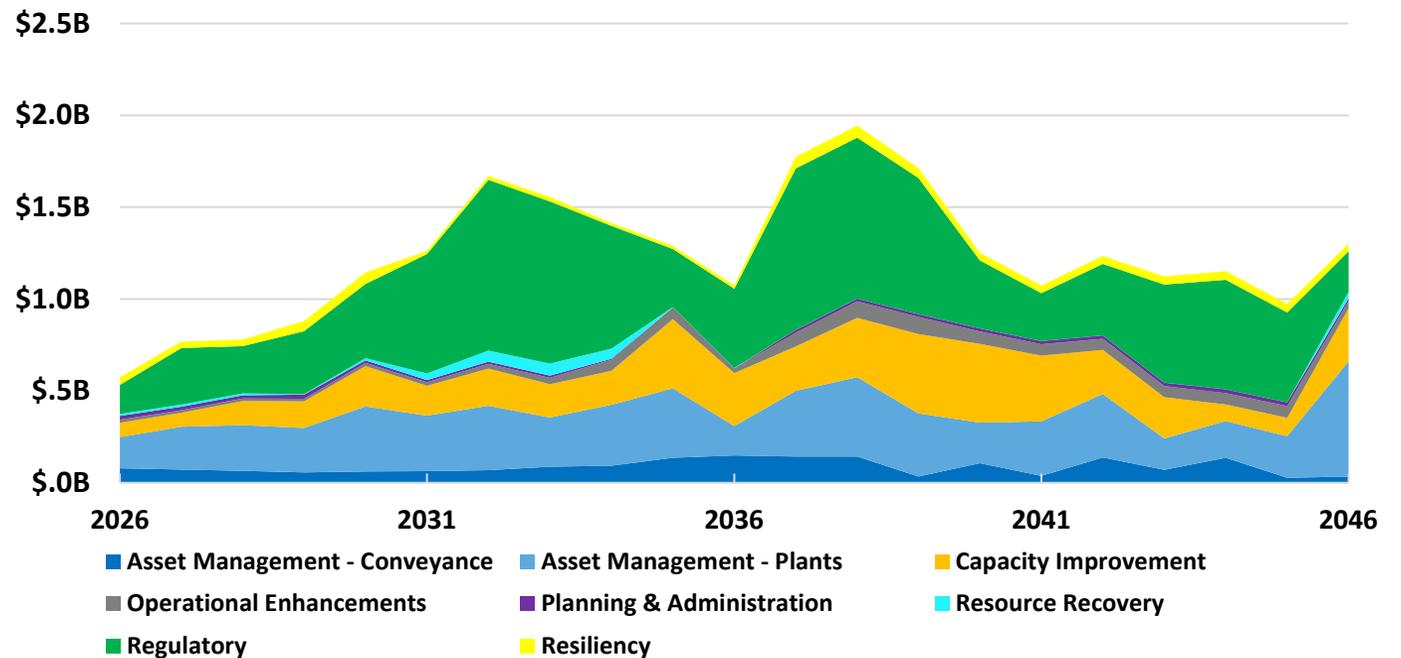
- Risk and implications remain the same for this criteria as the WTD Proposed scenario
- Capacity upgrade projects remain on same timeline as Current State scenario, posing moderate risk

❌ Regulatory Compliance and Financial Risk

- Regulatory compliance projects are no longer assumed to meet established deadlines
- Additional risks include:
 - future borrowing costs
 - civil contempt sanctions
 - injunctive relief
 - criminal contempt proceedings.

Regulatory Deadline Extension Scenario: 20-year Forecast by Portfolio Category

With Illustrative CSO Completion Milestones



Rate Impacts – Theoretical Regulatory Deadline Extension

2026 Rate Forecast:

	Adopted										
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Rate Increase %	7.50%	12.75%	12.75%	13.50%	13.50%	13.50%	7.25%	7.25%	2.00%	2.00%	2.00%
Monthly Sewer Rate	\$62.66	\$70.65	\$79.66	\$90.42	\$102.63	\$116.49	\$124.94	\$134.00	\$136.68	\$139.42	\$142.21
Rate Increase \$	\$4.38	\$7.99	\$9.01	\$10.76	\$12.21	\$13.86	\$8.45	\$9.06	\$2.68	\$2.74	\$2.79
All-In Debt Service Coverage	1.48x	1.47x	1.57x	1.50x	1.47x	1.57x	1.59x	1.57x	1.55x	1.53x	1.44x

		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Rate Increase %		4.50%	4.50%	4.50%	1.75%	1.75%	1.75%	0.50%	0.50%	0.50%	
Monthly Sewer Rate		\$148.61	\$155.30	\$162.29	\$165.14	\$168.03	\$170.98	\$171.84	\$172.70	\$173.57	
Rate Increase \$		\$6.40	\$6.69	\$6.99	\$2.85	\$2.89	\$2.95	\$0.86	\$0.86	\$0.87	
All-In Debt Service Coverage		1.55x	1.66x	1.78x	1.83x	1.88x	1.93x	1.95x	1.96x	1.98x	

2027 Theoretical Regulatory Deadline Extension Rate Forecast:

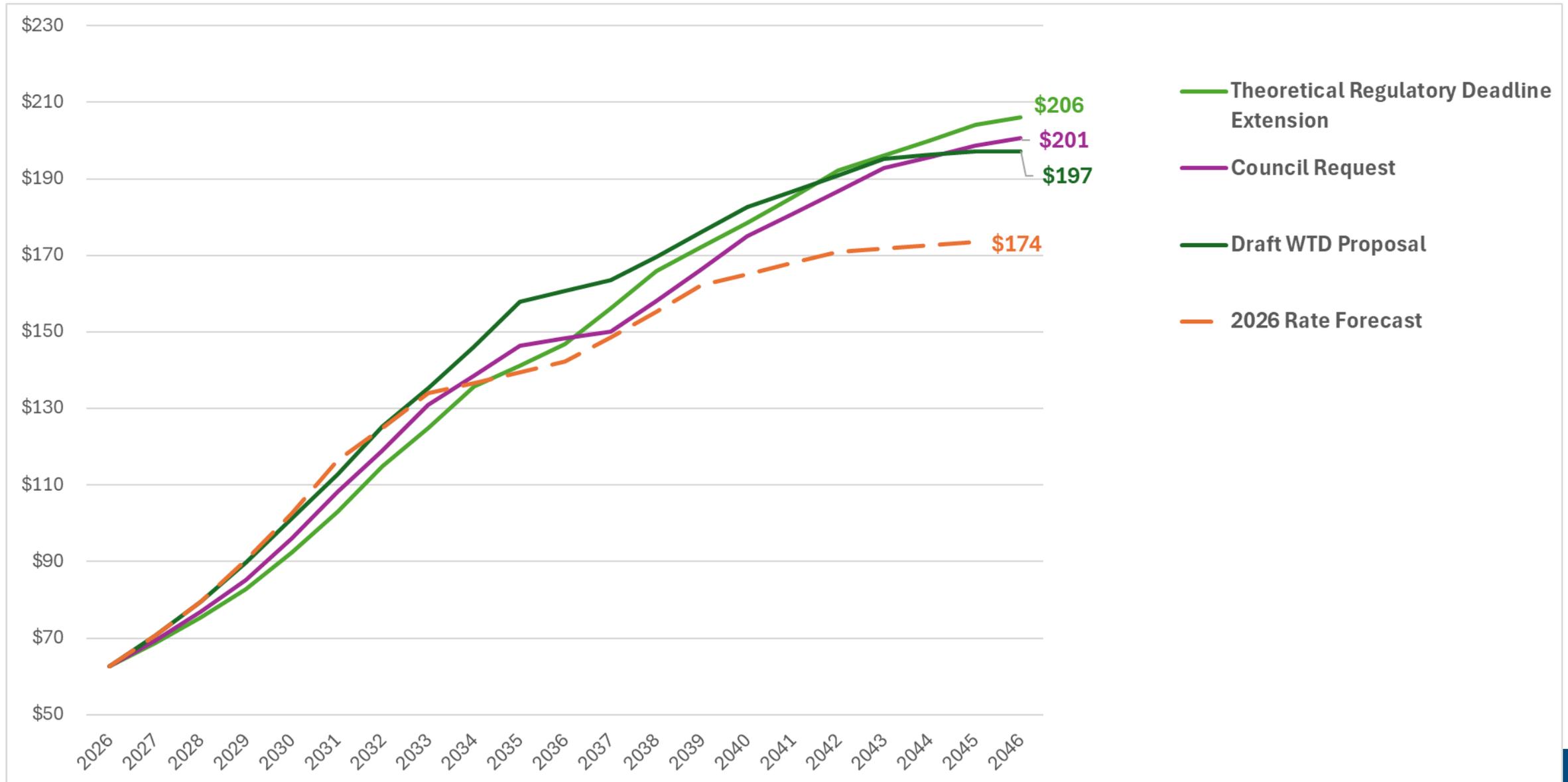
	Adopted	Proposed									
	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Rate Increase %	7.50%	9.75%	9.75%	9.75%	11.50%	11.50%	11.50%	8.75%	8.75%	4.00%	4.00%
Monthly Sewer Rate	\$62.66	\$68.77	\$75.48	\$82.84	\$92.37	\$103.00	\$114.85	\$124.90	\$135.83	\$141.27	\$146.93
Rate Increase \$	\$4.38	\$6.11	\$6.71	\$7.36	\$9.53	\$10.63	\$11.85	\$10.05	\$10.93	\$5.44	\$5.66
All-In Debt Service Coverage	1.62x	1.58x	1.69x	1.64x	1.57x	1.57x	1.63x	1.54x	1.60x	1.59x	1.57x

		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Rate Increase %		6.25%	6.25%	3.75%	3.75%	3.75%	3.75%	2.00%	2.00%	2.00%	1.00%
Monthly Sewer Rate		\$156.12	\$165.88	\$172.11	\$178.57	\$185.27	\$192.22	\$196.07	\$200.00	\$204.00	\$206.04
Rate Increase \$		\$9.19	\$9.76	\$6.23	\$6.46	\$6.70	\$6.95	\$3.85	\$3.93	\$4.00	\$2.04
All-In Debt Service Coverage		1.55x	1.57x	1.59x	1.58x	1.58x	1.61x	1.59x	1.63x	1.66x	1.66x

Scenario Rate Paths (Next 5 Years)



Scenario Rate Paths (20-Years)



Cost Management

- Improved transparency, cost containment initiative, overhead reductions
- Implement proviso and motion requirements (Increased reporting, third party oversight, etc.)
- Continue to pursue lower interest financing (SRF, WIFIA, etc.)

Affordability

- Define and measure affordability
 - RWSP update process
 - Nutrient Reduction Financial Capability Analysis
- Work with National Association of Clean Water Agencies
 - Low-Income Household Water Assistance Program, WIFIA protection
- Capacity charge payment plan program and low-income assistance

Summary and Next Steps

- Draft WTD rate proposal and forecast prioritizes regulatory compliance, limits rate increase forecast through 2034
- Alternative scenarios that shift project timing have modest value
 - Risk of equipment or facility failure, and/or risk of compliance, increases if further defer asset renewal/replacement and capacity projects
- Review CSO consent decree, NPDES permit, anticipated nutrient regulations, and pursue negotiations with regulators
- Next Steps
 - March 5 – MWPAAC R&F
 - March 25 – MWPAAC GEN
 - April 1 - RWQC

Q & A



King County | Wastewater Treatment



King County

Wastewater Treatment

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 	<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.</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 – April 1, 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>embedded in the long-term rate model and allow for 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 April 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 with MWPAAC's Rates and Finance Subcommittee for Q2 2026.</p>

Wastewater Treatment Division (WTD's) Sewer Rate and Capital Work Plan to Continue to Improve Engagement, Transparency, and Accountability – April 1, 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>4. Evaluate regulatory requirements and develop options to 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>	<ul style="list-style-type: none"> Evaluate the costs/benefits of seeking regulatory changes to improve the environmental and financial sustainability of the regional system. 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>Q3 2025 – 2026</p>	<p>WTD's Planning team is meeting in Q1 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.</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. Three proposals were submitted and are in review currently.</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.</p> <p>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 second summit in 2026.</p>

Wastewater Treatment Division (WTD's) Sewer Rate and Capital Work Plan to Continue to Improve Engagement, Transparency, and Accountability – April 1, 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>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. The next meeting with local agency communications employees is tentatively scheduled for 4/28/26.</p>

March 25, 2026

The Honorable Girmay Zahilay
County Executive, King County
401 Fifth Avenue
Seattle, WA 98104

Subject: Wastewater Treatment Division 2027 Rate Recommendation

Dear Executive Zahilay

The Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC) champions a financially sustainable regional wastewater treatment system. We embrace our role to advise the county on wastewater treatment matters, including the county's recommended rate. MWPAAC remains concerned with the current trajectory for substantial sewer rate increases. Faced with considering such impactful increases, the annual rate process does not provide the necessary look ahead to adequately inform decision makers.

We appreciate that the rate trajectory is driven by WTD's substantial capital program, and that large rate increases are also needed over the next ten years to satisfy costly regulatory requirements. However, the current annual rate setting process does not allow adequate time to fully understand the planning information for the capital program. Nor does it allow sufficient time to evaluate the assumed risks and long-term financial implications of the recommended rate forecast.

The rate recommendation and alternative scenarios presented to MWPAAC all include double-digit rate increases over the next several years. A forecast this significant demands a longer period of review to fully understand and discuss options before choosing a path forward. MWPAAC requests that WTD develop and conduct a longer review process, ideally in place of the annual rate setting process, to better inform and build support for the next decade of rate increases.

As highlighted during the recent Rate Summit, year-over-year rate increases of this magnitude are a significant contributor to affordability challenges for families across the region. These increases also severely constrain our individual member utilities' ability to fund our own systems' needs, creating compounding financial pressure on local jurisdictions and ratepayers alike. We all share the responsibility of ensuring that wastewater services remain reliable, compliant, and affordable well into the future. We must work collaboratively toward solutions that seek a balance between affordability, regulatory compliance, and long-term system sustainability.

MWPAAC members deeply appreciate the opportunity to engage with WTD in discussions about the system's financial outlook. We share the concerns expressed by the Regional

Water Quality Committee that the process would benefit from a clearer structure and stronger policy direction, which should include:

- A thorough assessment of long-term asset renewal and replacement needs of the regional utility. This would provide for broad policy direction for a multi-year system reinvestment strategy to promote financial sustainability;
- Regional policy guidance to define wastewater rate affordability goals, which can be used as benchmarks to consider future rate adjustments. This guidance should recognize that rate affordability and system sustainability are at odds;
- Strategic and ongoing collaboration, a partnership, with regulators to develop financially sustainable strategies to comply with clear, measurable, and effective environmental outcomes;
- A long-term financial management plan that provides for the immediate funding needs for the system and plans for long-term system reinvestment. The long-term financial plan should be designed to provide deeper evaluation and risk assessment of capital program and rate scenarios to create meaningful choices for policymakers.

MWPAAC is dedicated to partnering constructively in this work. We welcome continued opportunities to:

- Participate in facilitated workshops focused on project prioritization and sequencing;
- Provide jurisdictional perspectives on affordability impacts and cumulative utility burdens;
- Engage early in the development of alternative scenarios to help test assumptions and identify workable trade-offs;
- Collaborate on communicating the financial strategy and its implications to our shared constituents.

Our goal is to ensure that the rate path reflects clear policy choices, rigorous analysis, and broad confidence among partner jurisdictions. We need to step off the annual hamster wheel and open the curtain on a longer view. We are asking for transformational change - with strengthening collaboration and leadership, we can achieve this.

Sincerely,

John McClellan, Chair

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**

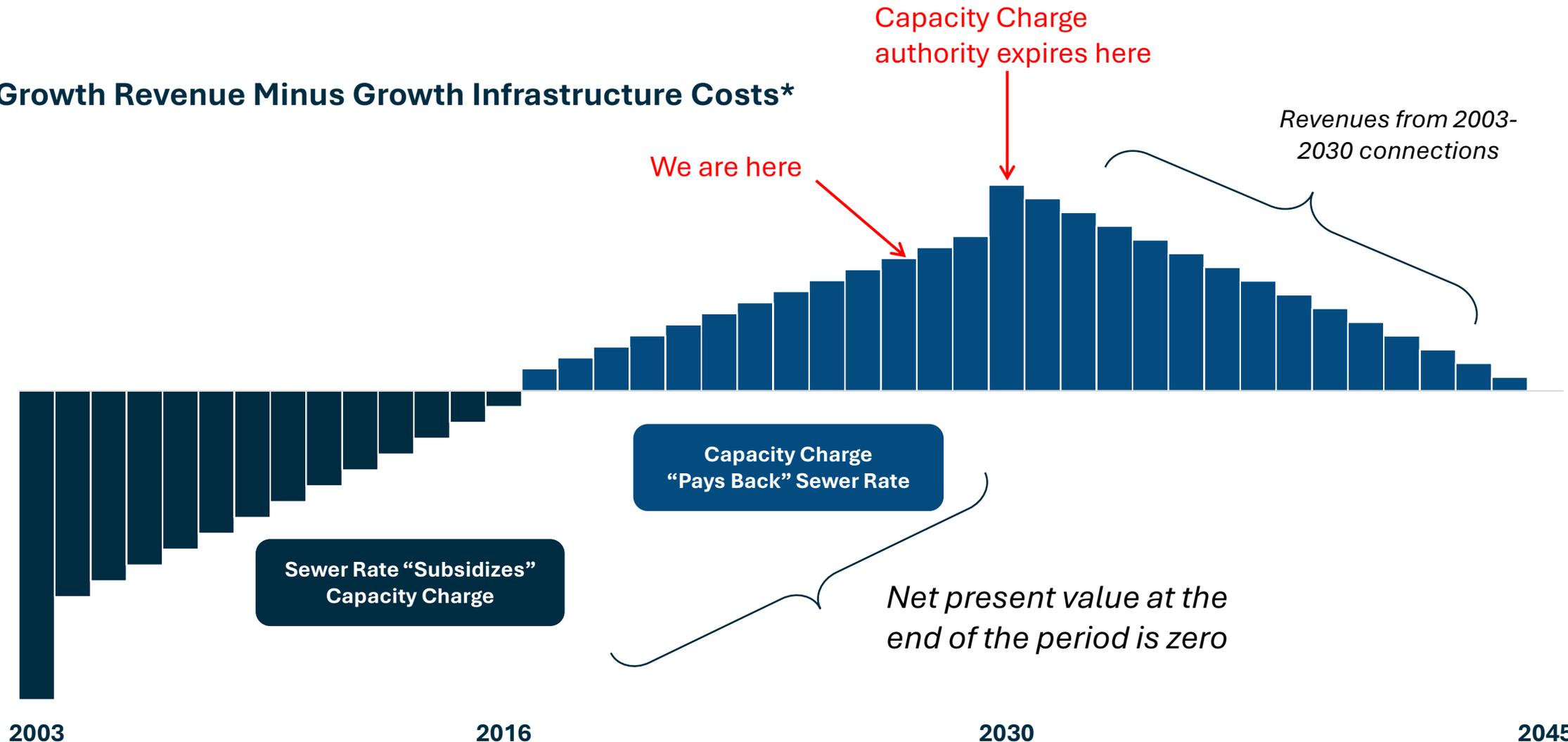
“The regional wastewater financing structure should reflect uniform regional rates for existing and new customers and achieve the principle of “growth pays for growth.”

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
Signature Report

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

Ordinance

Proposed No. 2026-0066.1

Sponsors

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~~ 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

**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.

RWQC Work Program for 2026 April 1, 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

- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 3: Asset Renewal and Replacement (40 minutes).
- Executive's Proposed 2027 Sewer Rate and Capacity Charge (Consider comment letter to Council.) (25 minutes).
- If transmitted, Proposed 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).

Optional June Site Visit. Date TBD. SoDo Tour of MDCSO planned area. This would be a pre-construction tour.

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).
- Proviso Response Implementation Plan for Expanding Eligibility Requirements for WTD's Payment Plan Program. Transmittal Due April 3, 2026. (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).

August Optional Site Visit to non-plant projects such as M Street Trunk Rehabilitation. Date TDB.

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).

October 1, 2026

- Regional Wastewater Services Plan Update Policy Questions Initial Analysis Group 8: Resource Recovery (60 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.