

Briefing Summary of Motion 16449: Long Term Financial and Sewer Rate Forecast Scope and Status

May 21, 2025

The Wastewater Treatment Division (WTD) has been making progress to respond to the scope outlined in [Motion 16449](#). **The Motion has three main components we have identified to organize the response around: (1) the purpose statement, (2) request to develop the long-term revenue requirement forecast, and (3) specified reporting framework.** With many interested parties and a timeline for motion response set to conclude in July of 2025, there is an opportunity with the spring progress report to review the key elements of the Motion scope and ensure consistent expectations in line with the motion language. The three main components are summarized below.

1. The Purpose Statement

A series of “whereas” statements set the context for the service provided by WTD including, the sewer rate as a revenue source, three regional committees, restart of the Regional Wastewater Services Plan, increasing levels of uncertainty in a forecast the longer it goes out, and a focused purpose statement requesting to have a long-term forecast in place. The long-term forecast is scoped as a tool that will produce information that will “facilitate informed discussions on the policy decisions related to the update to the Regional Wastewater Services Plan” (lines 29 and 30) or RWSP. WTD approached this work and development of the forecast with this purpose in mind. When the RWSP begins generating scenario alternatives, this tool will function to analyze scenarios and produce well-communicated key results.

25 WHEREAS, the process to update the Regional Wastewater Services Plan is
26 scheduled to restart in 2023 and will include long-term planning for the regional
27 wastewater system beyond a twenty-year period and up to fifty years or more, and
28 WHEREAS, decision makers desire information from the wastewater treatment
29 division that will facilitate informed discussions on the policy decisions related to the
30 update to the Regional Wastewater Services Plan, and

The preceding Motion [16410](#) requested developing methodologies to forecast long-term costs of WTD’s capital improvement needs and this Motion 16449 references that work being complete in advance of this Motion’s briefing (line 86). The consultant report

deliverable for the preceding Motion 16410 was submitted in March 2024.

84 assumptions were selected. It is expected that the briefing on the long-term financial and
85 sewer rate forecast will be completed after the wastewater treatment division has

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Motion 16449

86 developed a methodology to forecast the long-term costs of capital improvement needs as
87 requested by Motion XXXXX (Proposed Motion 2023-0257).

Long-term capital costs are primarily sourced from utility planning documents. Forecasting capital costs comes from engineering and planning bodies of work that identify system needs and potential project solutions. Asset Management is the one major area of capital costs that can be reasonably supported by a forecasting methodology. A basic dataset incorporating the original cost of system assets, and their estimated useful life can produce asset replacement cycles into perpetuity for modeling purposes.

The Motion [16410](#) report reinforces that a methodology cannot produce information to forecast future regulation and related costs for example, (also acknowledged in this Motion 16449 line 32). Outside of asset replacement, there are not good alternatives to the system planning documents or other engineering and planning work for sourcing long term capital costs. WTD will rely on the updated RWSP for the planning and engineering work that produces the updated long term capital forecast and is now utilizing placeholder cost assumptions for outer years for purposes of the extended twenty-year sewer rate forecast, as shared during the sewer rate process.

2. WTD is to prepare a long-term financial and sewer rate *revenue requirement* forecast as the approach to facilitating informed discussions on policy discussions (lines 41 and 42).

39 NOW, THEREFORE, BE IT MOVED by the King County council:
40 A. The wastewater treatment division is requested to develop and maintain a
41 long-term financial and sewer rate forecast. The forecast should be based on revenue

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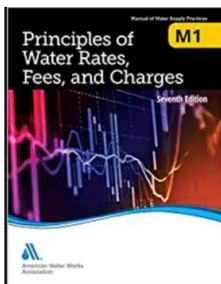
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Motion 16449

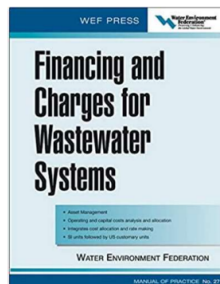
42 requirements needed for the operating and capital investment needs of the regional
43 wastewater system. The forecast should allow for periods of up to seventy-five years.

“Revenue requirement” is a utility industry term that has specific and consistent meaning across different utility services (water, sewer, stormwater, solid waste, electric). The industry consistently refers to one primary authoritative source for utility rate study methodology, the American Water Works Association Manual 1. Given the water-specific focus, wastewater rate studies also refer to a similar Water Environment Federation manual that is wastewater utility focused.

American Water Works Association:
Principles of Water Rates, Fees, and
Charges, Manual M1 (Seventh Edition)



Water Environment Federation:
Financing and Charges for Wastewater
Systems, Manual of Practice No. 27



The Motion request specifies that the components included in the revenue requirement forecast align with industry revenue requirement methodology, which serves the very foundational purpose of identifying all the annual cash needs that rate revenue must support.

The revenue requirement represents the first of three phases in a comprehensive rate study and answers the first question, “how much do we need.” WTD has historically modeled the revenue requirement and engaged a consultant to partner in 2020 to build an updated tool that would allow for both a longer-term forecast and improved functionality to support

scenario analysis and communication. The tool was built in preparation for the Clean Water Plan and to support evaluating alternative timelines for the Combined Sewer Overflow Consent Decree. Common to other models and analytical frameworks, this model accomplishes scenario analysis by allowing for changes to assumptions and data inputs as specifically requested in lines 66 through 71.

66 D. The long-term financial and sewer rate forecast ~~should allow for changes in~~
67 ~~various assumptions~~ including, but not limited to, the following: expected capital
68 expenditures; asset life expectancy, interest rates on debt; capital project accomplishment
69 rates; general and cost of construction inflation rates; percent of debt financing; length of
70 debt; revenue requirements; number of residential customer equivalents; and revenue
71 sources ~~such that forecast scenarios can be compared using different assumptions.~~

The Motion requests WTD seek an advisory recommendation from an independent national expert on the methodology used to develop the forecast and revenue requirements (lines 47 and 48). The consultant WTD used for the revenue requirement rebuild is Raftelis Consultants, a firm recognized as an independent national expert in utility rate setting.

44 B. The wastewater treatment division is requested to seek comments from
45 ratepayers and other stakeholders and advisors, including the metropolitan water
46 pollution abatement advisory committee. Additionally, the wastewater treatment division
47 is requested to ~~seek an advisory recommendation from an independent national expert on~~
48 ~~the methodology used to develop the forecast and revenue requirements.~~ The expert may
49 also offer observations and insights as to how such information might be best utilized in
50 decision-making.

This section additionally requests input from other parties including the Metropolitan Water Pollution Abatement Advisory Committee (MWPAAC). WTD has engaged with a dedicated MWPAAC work group to first review a module added to the revenue requirement to facilitate the asset replacement forecast identified in preceding Motion 16410. A second meeting with some MWPAAC members and their consultant was hosted to walk through a screen-sharing model tour and answer questions about how the model produces the long-term forecast revenue requirement.

This tool has been in use for the annual sewer rate forecast and proposal since 2021 (for the 2022 sewer rate proposal). The 2026 sewer rate proposal incorporated the requested longer-term forecast, extending an already long 10-year revenue requirements to 20 years, far longer than the typical five-year forecast identified in the peer agency analysis performed for the preceding Motion 16410, though representative of extending the forecast

for “up to” 75 years” in response to this Motion 16449. The model allows for a longer forecast to be produced for RWSP scenarios which will extend beyond the 20-year forecast offered in the 2026 sewer rate proposal.

There are two subsequent phases of a full rate study that are not requested in the motion, nor part of WTD’s annual rate setting process. A limited purpose rate study phase two (functional cost allocation) and three (rate design) analysis is modeled every few years to support setting the industrial waste surcharge for high strength commercial and industrial facilities. Modeling a system-wide cost of service allocation to distinguish contract agency customer classes based on other demand characteristics is not currently done as the contracts fix the cost of service and rate design for sewer service. There are plans to model potential alternatives considered during the RWSP development to inform deliberation on potential contract changes across RWSP topics including rate setting financial policies, though that is not directed to be included in this work in advance of the RWSP.

3. Reporting Framework

The reporting framework includes an executive summary, status update briefings, and a July 2025 briefing on the long-term financial and sewer rate forecast. The executive summary includes summary of the forecast, drivers behind the rates, and changes from prior years. The July briefing includes separate content on explanation of the rate models used to generate the forecast and description of the assumptions selected and utilized in the forecast.

72 E. The wastewater treatment division is requested to develop an executive
73 summary that explains the long-term financial and sewer rate forecast, the drivers behind
74 the rates, and changes from prior years in simple-to-understand terms.
75 F. The wastewater treatment division is requested to provide status update
76 briefings to the regional water quality committee in January 2024, July 2024, and April
77 2025, on the progress in developing a long-term financial and sewer rate forecast. By
78 July 2025, the wastewater treatment division is requested to brief the regional water
79 quality committee on the wastewater treatment division's long-term financial and sewer
80 rate forecast. The July 2025 briefing should include supporting materials explaining the
81 rate models used to generate the forecast in simple-to-understand terms. In presenting the
82 long-term financial and sewer rate forecast in July 2025, the wastewater treatment
83 division should report on the assumptions that were adopted for the forecast and why the
84 assumptions were selected. It is expected that the briefing on the long-term financial and
85 sewer rate forecast will be completed after the wastewater treatment division has

This memo has been prepared in support of the requested April 2025 briefing (delayed from the meeting for other agenda priorities). The executive summary is in progress and began

with an outline shared to MWPAAC for input ahead of the consultant preparing a draft. WTD is working with the consultant to bring the executive summary report to final deliverable status by the July briefing and will be preparing a presentation to incorporate the July briefing specifications.