RAFTELIS

King Co. Wastewater Treatment Division

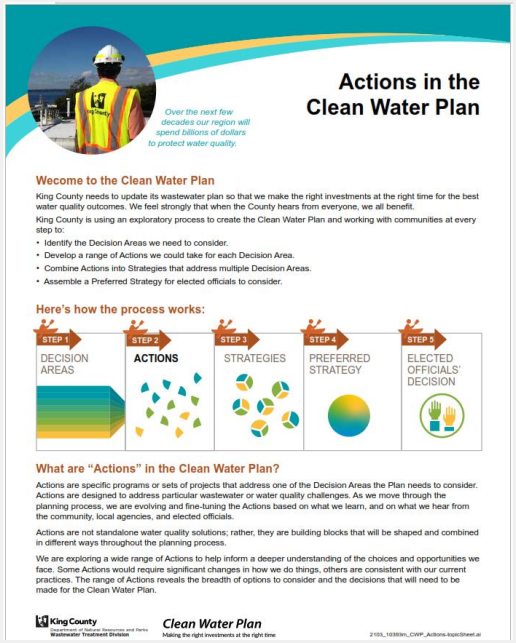
Capacity Charge Review Study

MWPAAC Refresher

April 24, 2024

Agenda

- Introduction
- Project drivers
- History of current methodology
- Where we’re at now
- Where we’re headed: alternative methodologies
- Next steps



Actions in the Clean Water Plan

Over the next few decades our region will spend billions of dollars to protect water quality.

Wecome to the Clean Water Plan

King County needs to update its wastewater plan so that we make the right investments at the right time for the best water quality outcomes. We feel strongly that when the County hears from everyone, we all benefit.

King County is using an exploratory process to create the Clean Water Plan and working with communities at every step to:

- Identify the Decision Areas we need to consider.
- Develop a range of Actions we could take for each Decision Area.
- Combine Actions into Strategies that address multiple Decision Areas.
- Assemble a Preferred Strategy for elected officials to consider.

Here's how the process works:

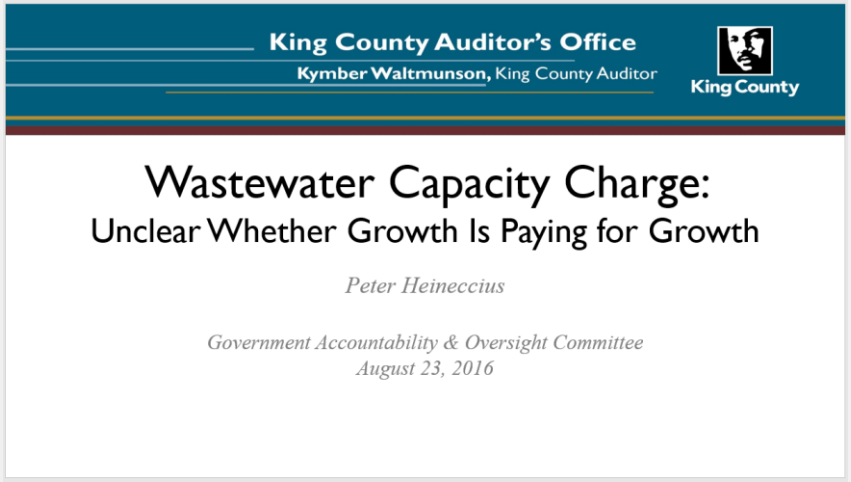
What are "Actions" in the Clean Water Plan?

Actions are specific programs or sets of projects that address one of the Decision Areas the Plan needs to consider. Actions are designed to address particular wastewater or water quality challenges. As we move through the planning process, we are evolving and fine-tuning the Actions based on what we learn, and on what we hear from the community, local agencies, and elected officials.

Actions are not standalone water quality solutions; rather, they are building blocks that will be shaped and combined in different ways throughout the planning process.

We are exploring a wide range of Actions to help inform a deeper understanding of the choices and opportunities we face. Some Actions would require significant changes in how we do things, others are consistent with our current practices. The range of Actions reveals the breadth of options to consider and the decisions that will need to be made for the Clean Water Plan.

King County Wastewater Treatment Division — Clean Water Plan — Making the right investments at the right time



King County Auditor's Office

Kymber Waltmunson, King County Auditor

King County

Wastewater Capacity Charge:

Unclear Whether Growth Is Paying for Growth

Peter Heineccius

Government Accountability & Oversight Committee
August 23, 2016

Why is WTD performing this study?

- Current capacity charge methodology "expires" in 2030
- RWSP Update being completed that will help identify capital needs over the next 40 years
  - Update was relaunched in March after more than 2 years of pause
- Some imbalances in the approach due to the structure
- 2016 Auditor's report recommended a more transparent model

Current Methodology

Background

Current version of the charge started with the "Robinswood Agreement" Letter

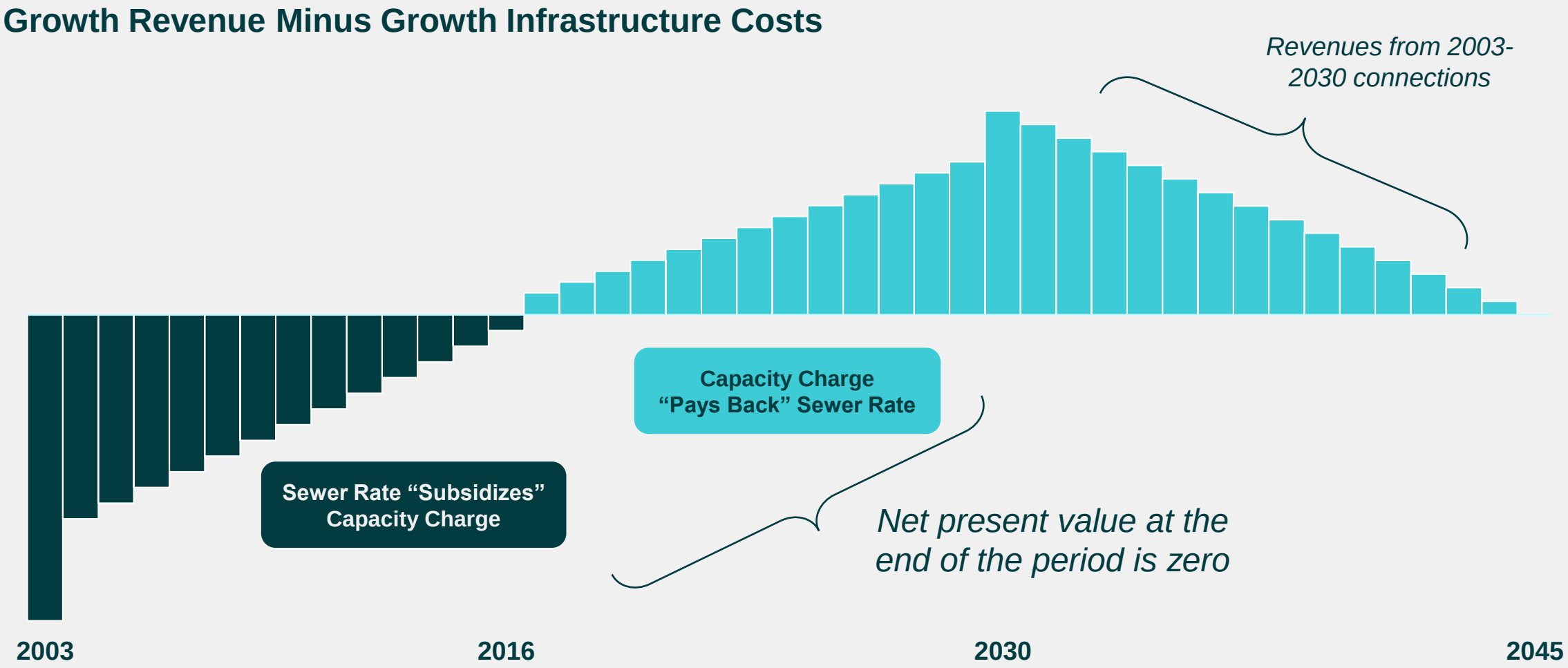
- Developed at the conclusion of the 1998 Regional Water Quality Committee retreat
- Established guiding principles related to the Regional Wastewater Services Plan to manage wastewater through 2030, including:

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

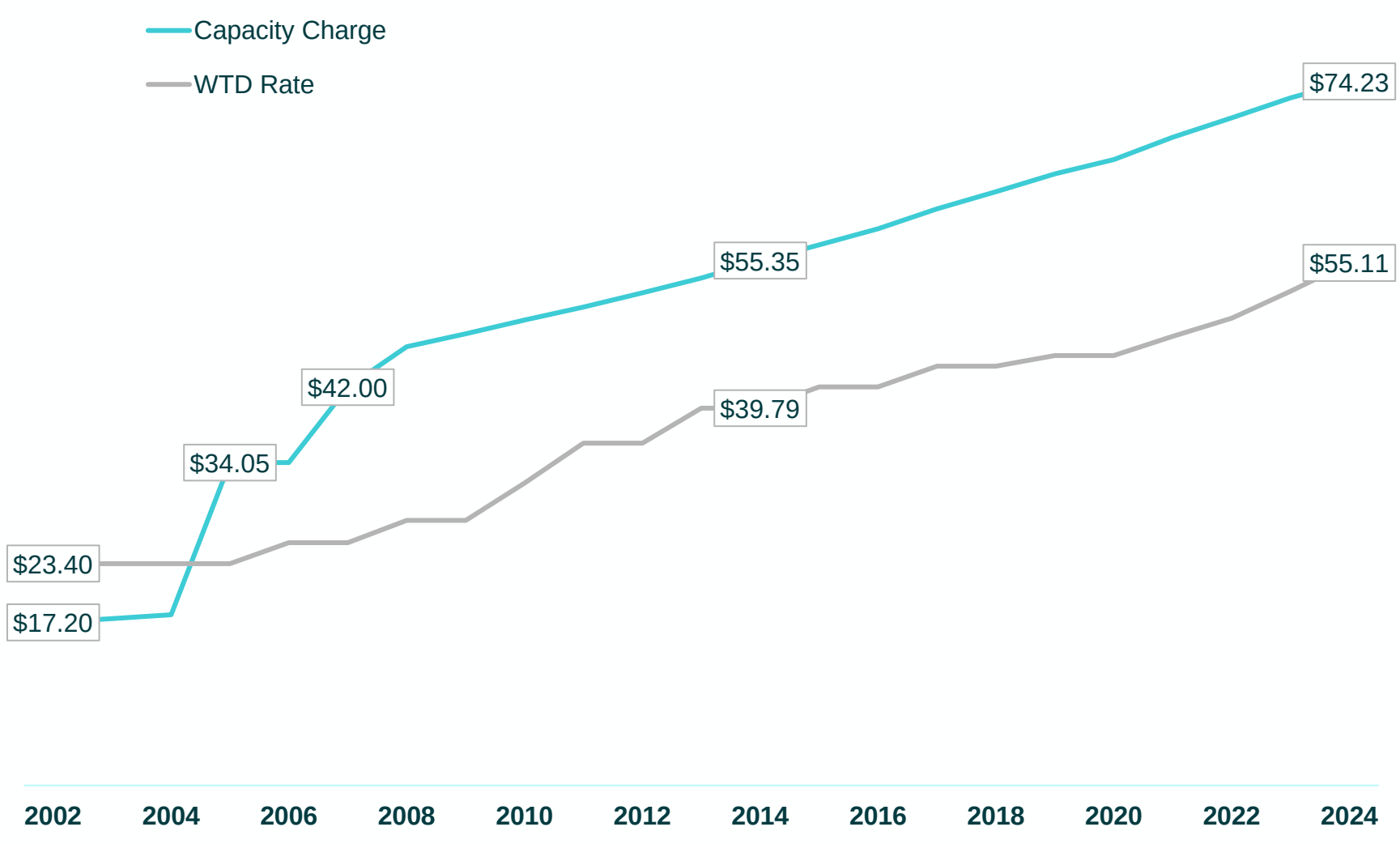
Current capacity charge methodology was developed in 2001

- 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
- How it works:
    1. Growth-related costs are identified
    2. Monthly rate revenue from growth customers is calculated
    3. The capacity charge is set to cover any shortfall from rate revenues

How the capacity charge model tries to achieve “growth pays for growth”



The capacity charge has increased significantly since 2002



- 6.9% average annual increase
- Approx. 3.4% per year after Brightwater completed in 2007
- WTD Rate has increased 4.0% per year over the same period

Original methodology lacks transparency in meeting objective of "growth pays for growth"

- We're now 24 years into a 30-year plan – the system is different than it was in 2000
- The model calculations are "locked away" inside macros
- WTD engaged Raftelis to:
  - Review the existing methodology
  - Rebuild the existing model
  - Evaluate alternative methodologies

Current Methodology

Where we're at now

Raftelis: the current approach of balancing revenue over a 30-year period is atypical

- Conceptually, provides for equitable share of system investment and operational costs

- Practically, difficult to keep track of existing v. growth-related costs and subject to volatility based on past performance and market conditions (discount rate)

Part of this study was to validate the current model

- Raftelis developed a model without macros to provide transparency to the calculations and process
  - Evaluates the system costs and revenues based on the same assumptions and constraints
  - Also allows for various inputs to be evaluated for their impact on the results more clearly (e.g., inflation, discount rate, growth estimates, etc.)

- Key findings from the rebuild: *the calculation is very sensitive to the discount rate*

Discount Rate	Resultant Capacity Charge - 2020
6.0%	$67.25
5.0%	$44.74
4.0%	$28.02
3.0%	$13.55

The capacity charge calculation is minimally sensitive to changing assumptions/inputs, but very sensitive to a different discount rate

Cash Financing %	Resultant Capacity Charge - 2020
40%	$67.25
30%	$66.62

Parity Debt Coverage	Resultant Capacity Charge - 2020
1.25x	$67.25
1.50x	$65.59

Growth CIP	Resultant Capacity Charge - 2020
Original	$67.25
10% Reduction	$50.78

Discount Rate	Resultant Capacity Charge - 2020
6.0%	$67.25
5.0%	$44.74
4.0%	$28.02
3.0%	$13.55

Why explore alternative capacity charge methodologies?

- Develop a more transparent calculation
- Based on the value of system assets (existing and future)
- Existing and future capacity will determine costs per RCE
- A more predictable charge that is less dependent on historical revenues

Goals of alternative capacity charge methodology

- Aligned with RCW Requirements
  - Key concept in RCW 35.58.570 is **“equitable share”**
  - Industry standard methodologies are based on the Rational Nexus Test – 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 costs per RCE

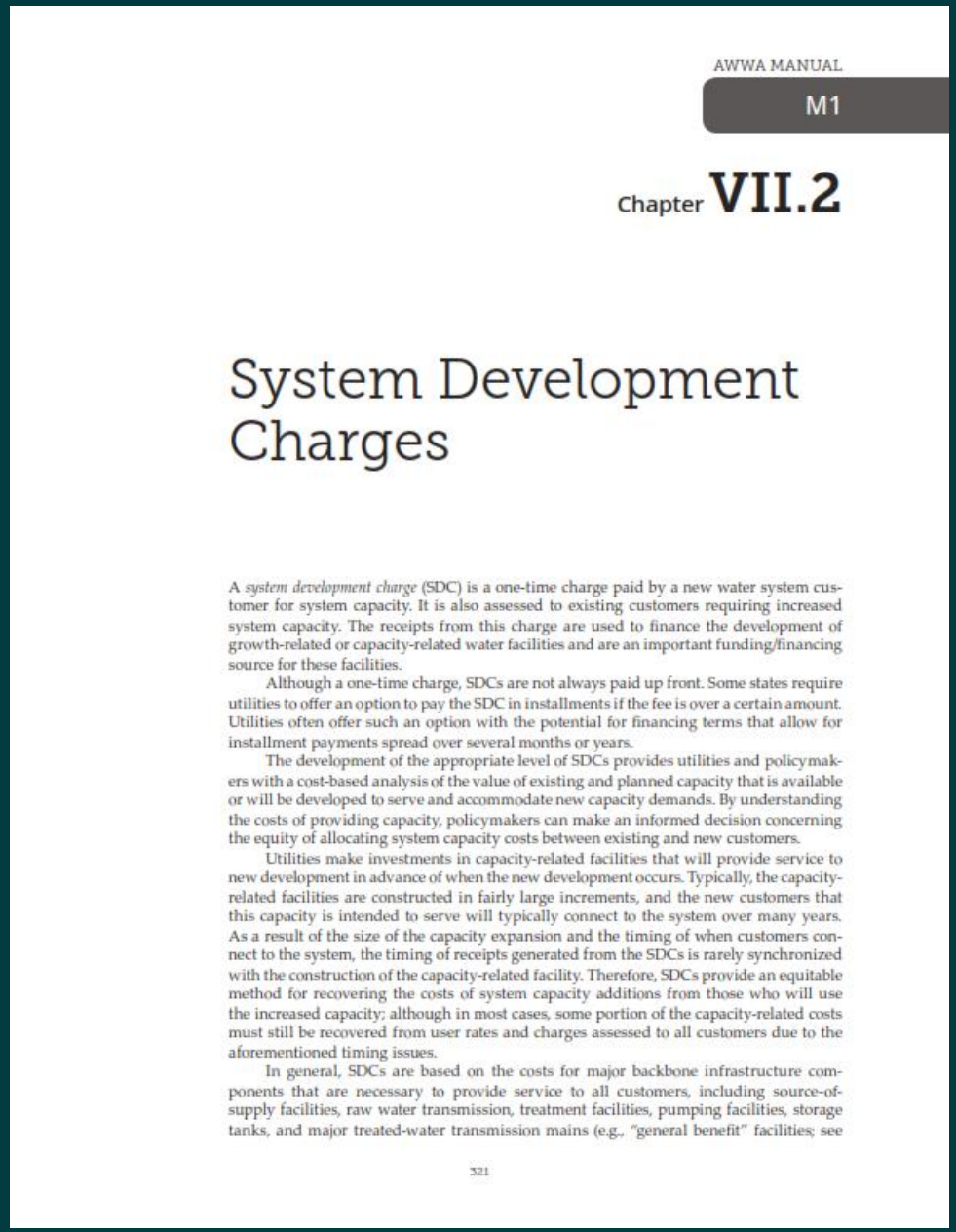
- More transparent & predictable calculation

Alternative Methodologies

Where we're headed

Typical Fee Calculation Methodologies

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



AWWA MANUAL

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Chapter VII.2

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

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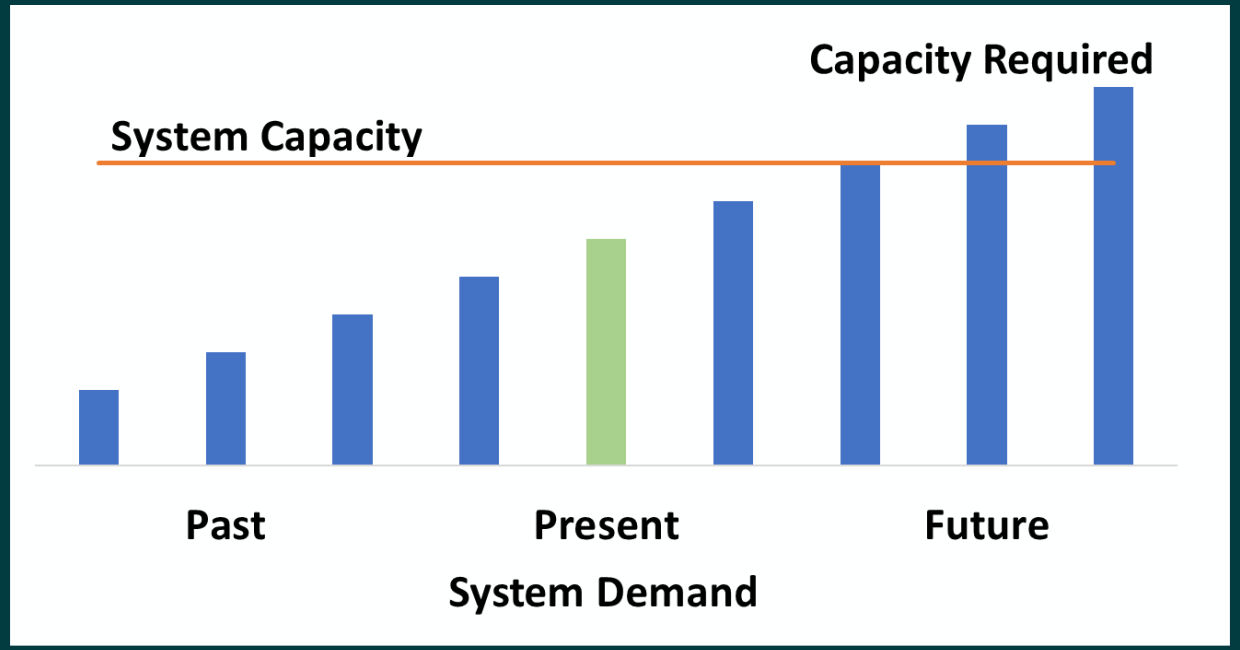
Combined Methodology

- System Buy-in + Incremental Cost
- Existing assets have capacity to serve new customers
- Recognizes additional growth-related facilities in capital improvement plan



Benefits of Alternative Approaches

- Achieves the principle of growth pays for growth by recovering an equitable share of:
  - Existing system assets based on available capacity
  - Future system investments to serve growth

- Transparent and predictable since it is based on assets and not cashflow

Where do we go from here?

Next Steps

Next Steps

- WTD will update previous analysis using currently available information
- MWPAAC re-establishing a Workgroup to participate in this update
- A more thorough review of the alternative methodologies is scheduled for May 2
  - WTD would like feedback from MWPAAC


Q&A

Thank you!