

County Water District of Billing Heights

Board Meeting Workshop: Water Financial Plan, Cost-of-Service, Rate, and Tap Fee Study Overview and Pricing Objectives

May 9, 2022

Presented by Andrew Rheem and Ellyse Szczepanski





Agenda



Rate Study Process Review



Tap Fee Process

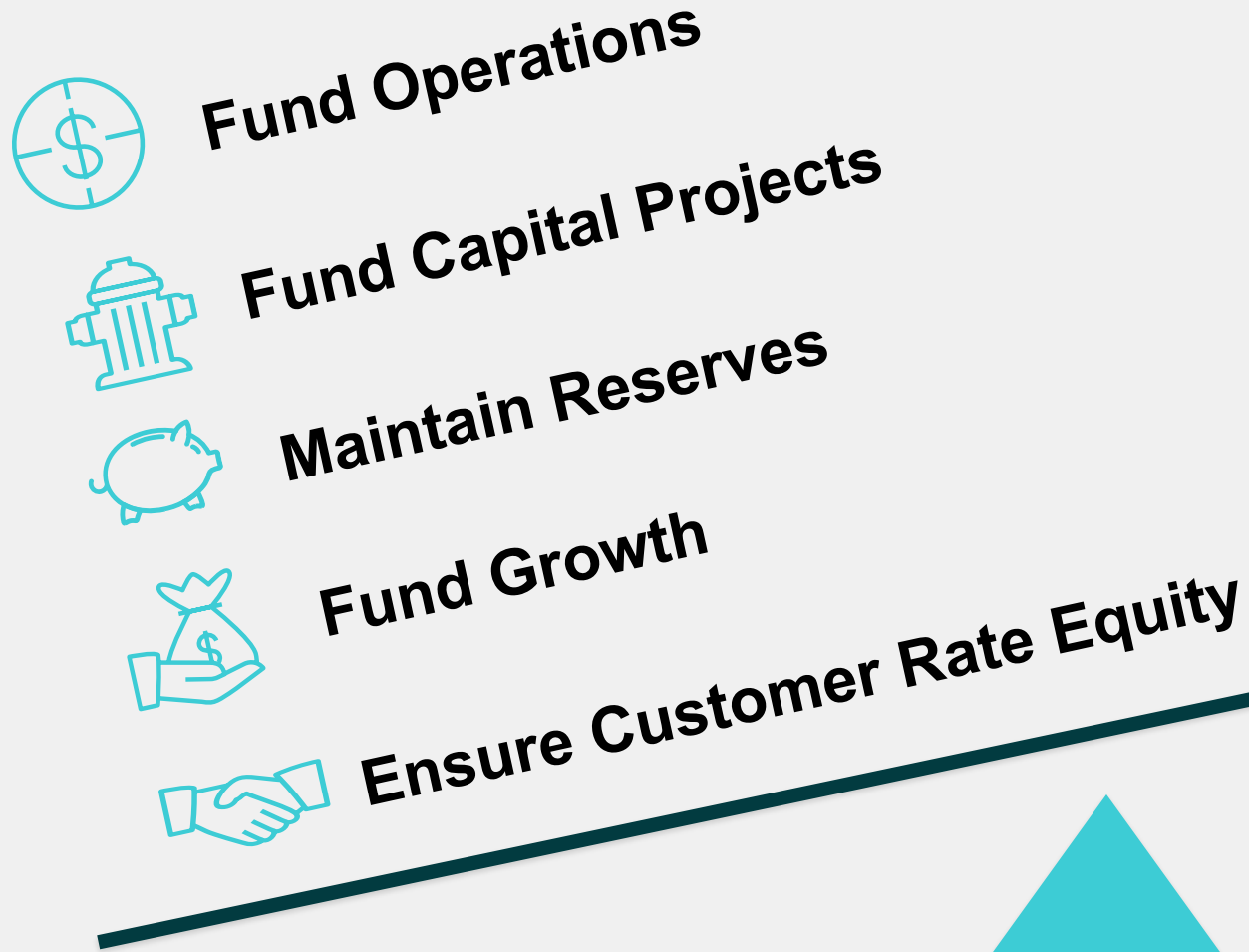


Pricing Objectives Ranking Exercise



Board Study Goals and Objectives

Billing Heights Rates and Fees Must:



How we'll get there



Fund Operations



Fund Capital Projects



Maintain Reserves and DSC



Fund Growth



Ensure Customer Rate Equity



Tap Fees



Rate Design

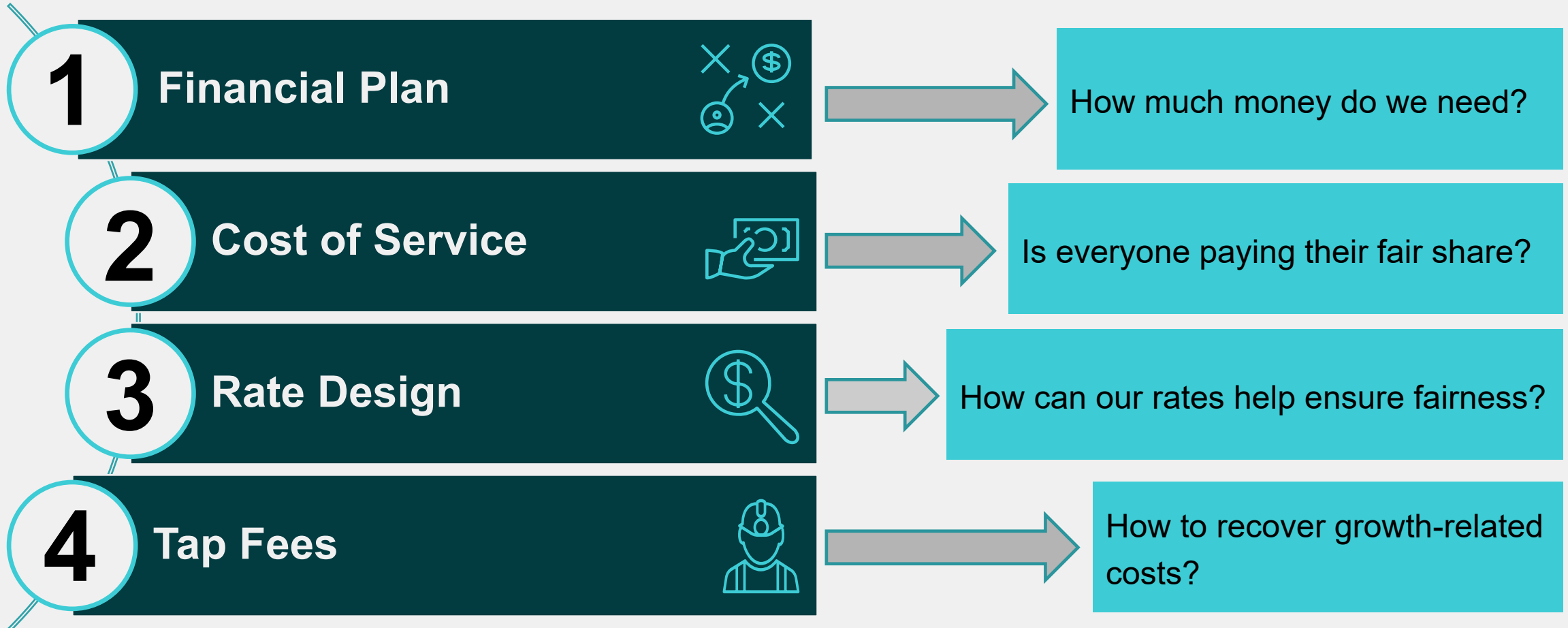


Cost of Service



Financial Plan

Rate Study Process



Financial Plan



Goal: Prudent Utility Financial Planning

- Revenue sufficient to maintain the financial stability of the utility and:
 - › Fund annual Operations & Maintenance (O&M) expenses, debt service payments and capital improvements and other requirements
 - › Exceed annual Debt Service Coverage (DSC) ratio targets with adequate revenues
 - › Exceed annual operating and capital reserve targets with adequate reserves

Cost-of-Service



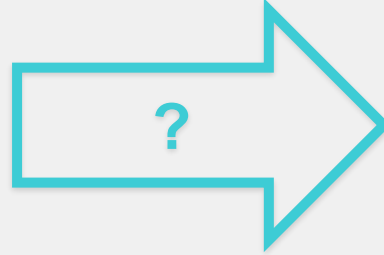


Step 2: Cost-of-Service Analysis

Is everyone paying their fair share?



Revenue Requirement



Residential

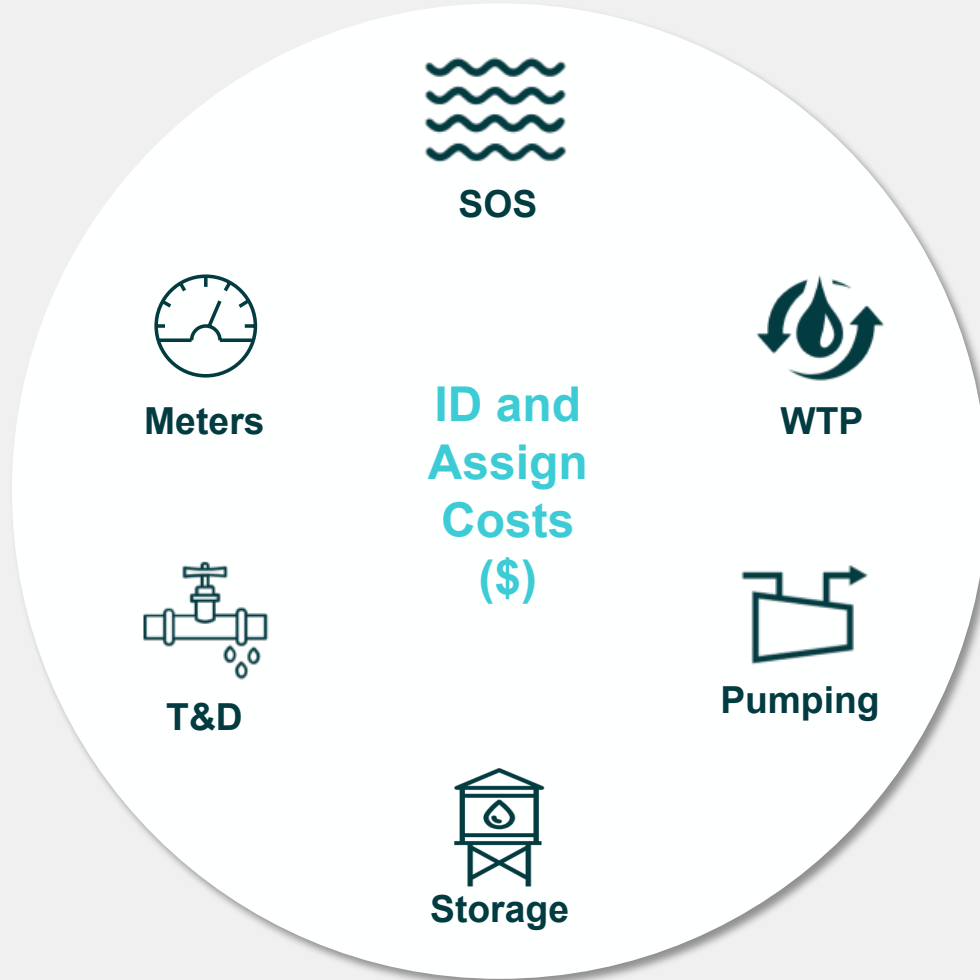


Commercial



Step 2: Cost-of-Service Analysis

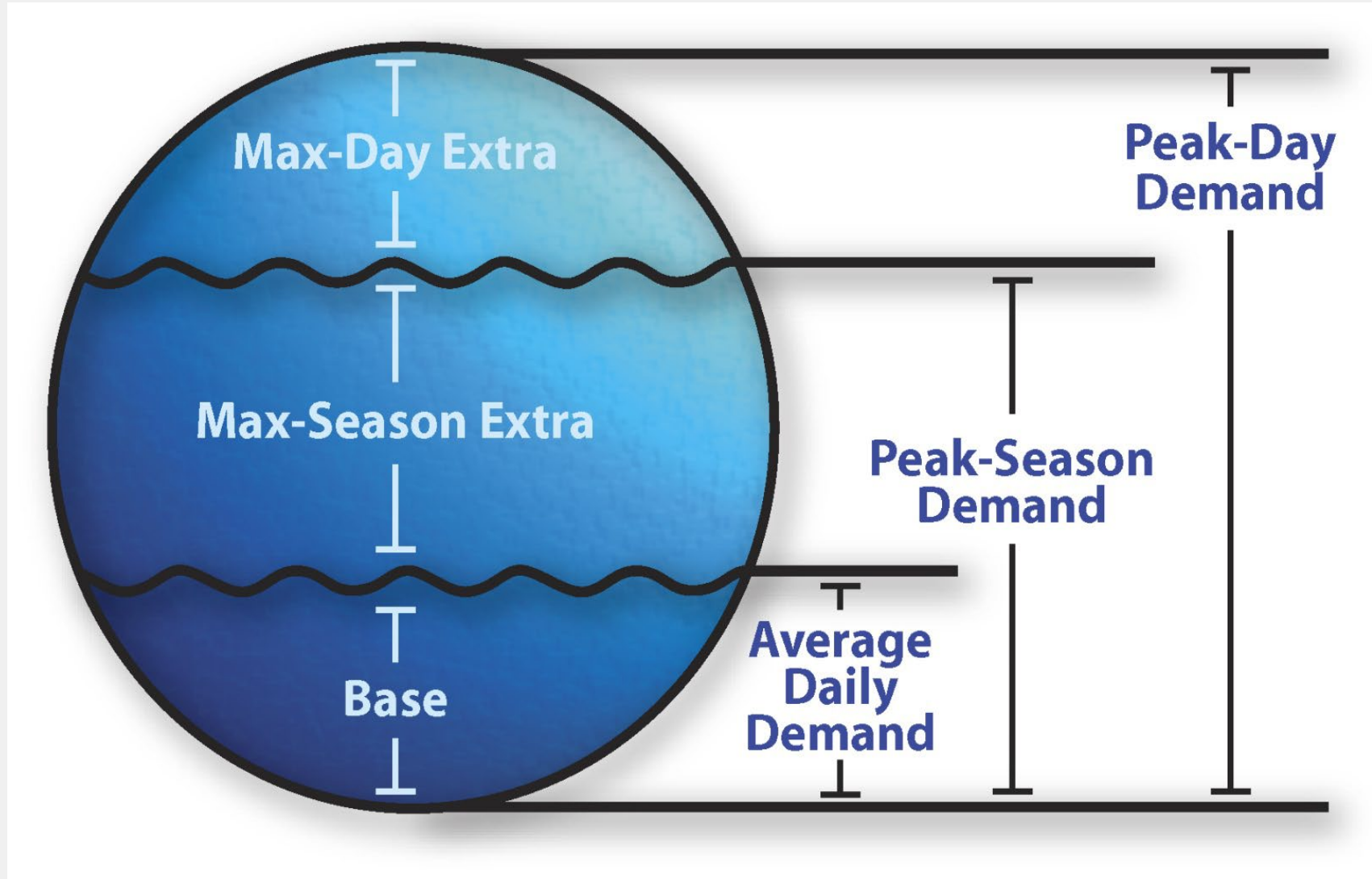
Is everyone paying their fair share?



Allocate Costs (\$)



How do we Determine Peak Demand?

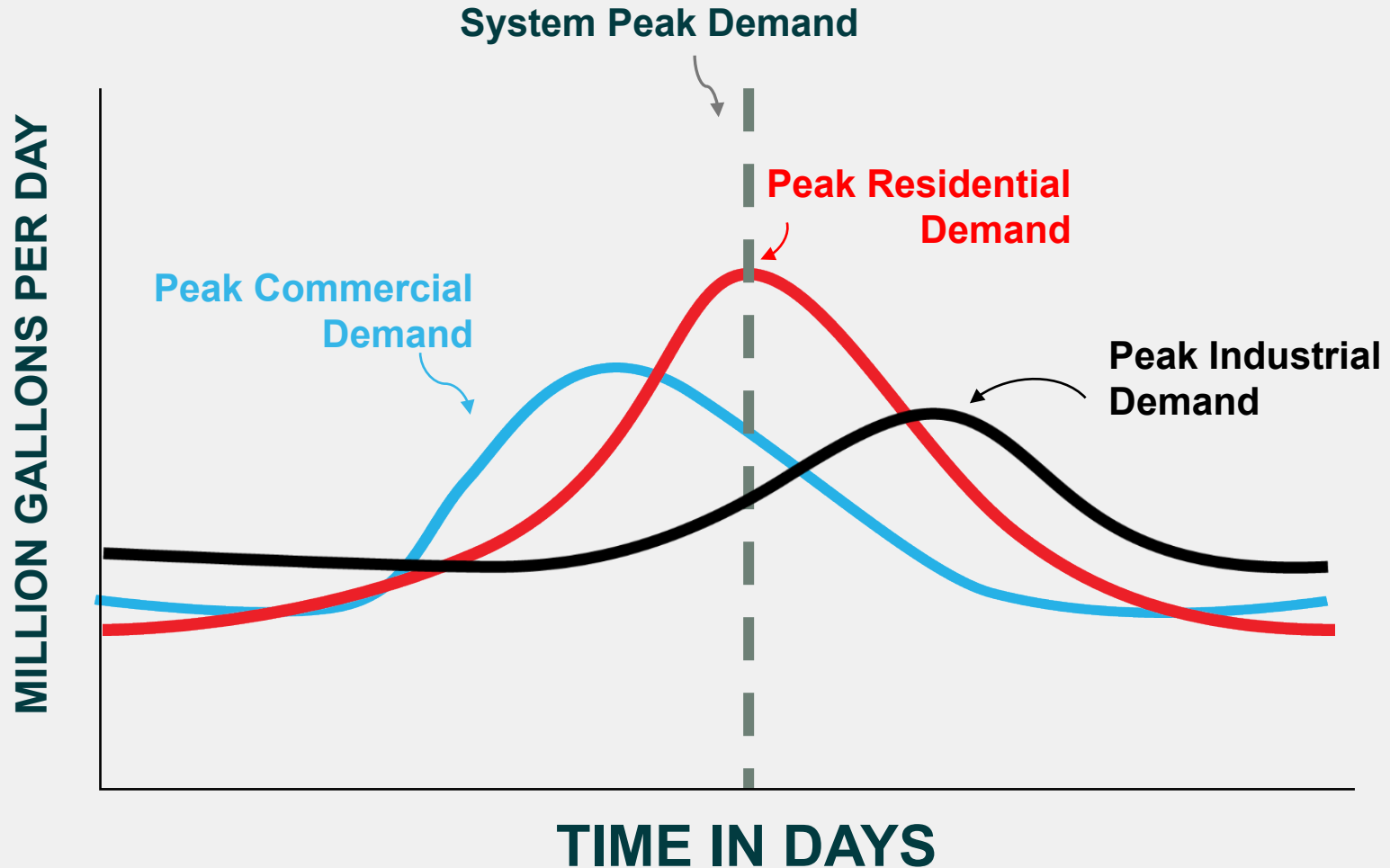




Step 2: Cost-of-Service Analysis

Is everyone paying their fair share?

System & Customer Demand Profiles



Tap Fee



What Are Tap Fees?

- One-time charge assessed to new and/or increased development (e.g., increased meter size for existing customer)
- Lots of different names for similar capital recovery fees (impact fees, connection fee, system development fee, plant investment fee, tap fee, etc).
- Required of all new customers for their share of capacity
- Based on the value (\$) of the utility's capacity and the amount of capacity needed by the new customer and/or increased customer demands
- Can be used to pay debt service that was used to expand or improve facilities
- Fee represents cost to reserve capacity in system backbone and supporting facilities
- Balances equity between existing and new customers
- Reasonably tied to impact of new development

District Tap Fee and Annexation Buy-In Fee

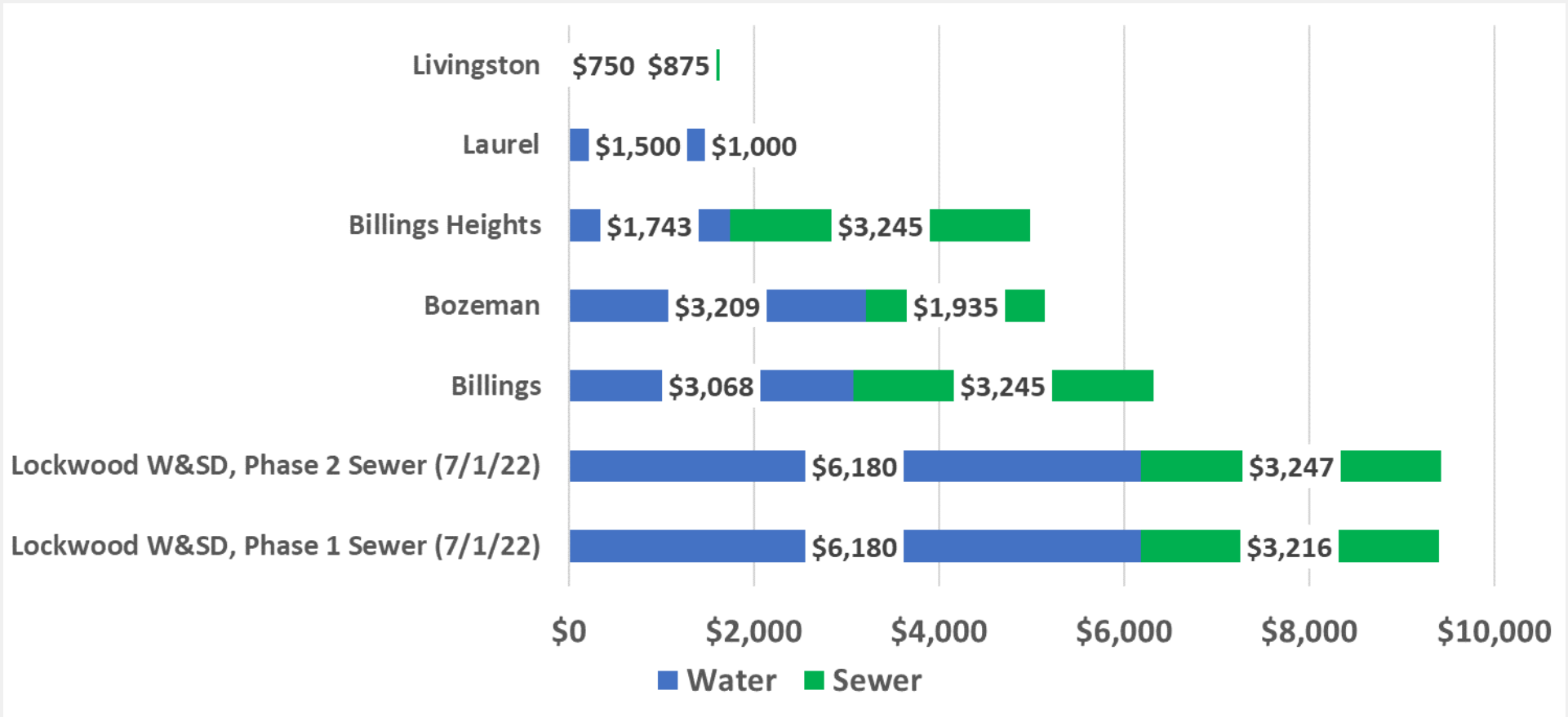
Meter Size	One Time Fee Per Service Connection
¾-inch	\$1,742.99
1-inch	\$4,385.99
1 ½-inch	\$6,972.07
2-inch	\$11,155.80
4-inch	\$43,923.36
6-inch	\$139,439.23
8-inch	\$244,018.59



Description	Annexation Buy-In Fee (1)
Residential & All Other	\$10,147.97 Per Acre OR \$0.233 per sq. ft.

(1) Only applies to developments not currently within the District service boundaries.

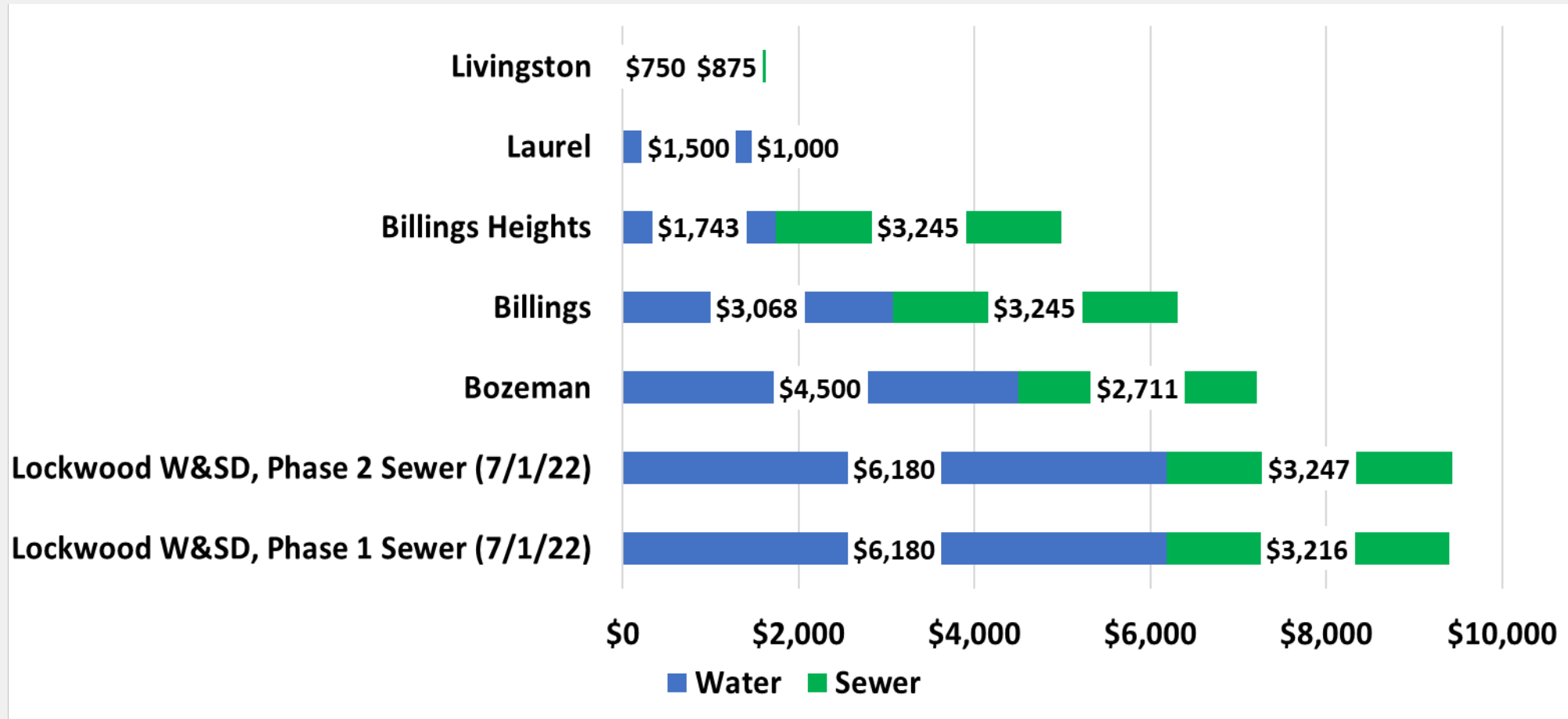
Residential SDF Survey Comparison (1) (2)



(1) ¾-inch water meter, 2,000 square feet residential development, 0.25 acre lot.

(2) Billings, Billings Heights, and Lockwood 7/1/22 incorporate the adopted 2021 Billings sewer SDFs..

Commercial SDF Survey Comparison (1) (2)



(1) ¾-inch water meter, 10,000 sq. ft. lot.

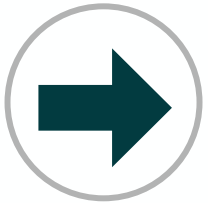
(2) Billings, Billings Heights, and Lockwood 7/1/22 incorporate the adopted 2021 Billings sewer SDFs.

Tap Fee Methodologies



Buy In

- Capacity available
- New customer buys into existing system
- Facilities valued at today's replacement cost



Incremental

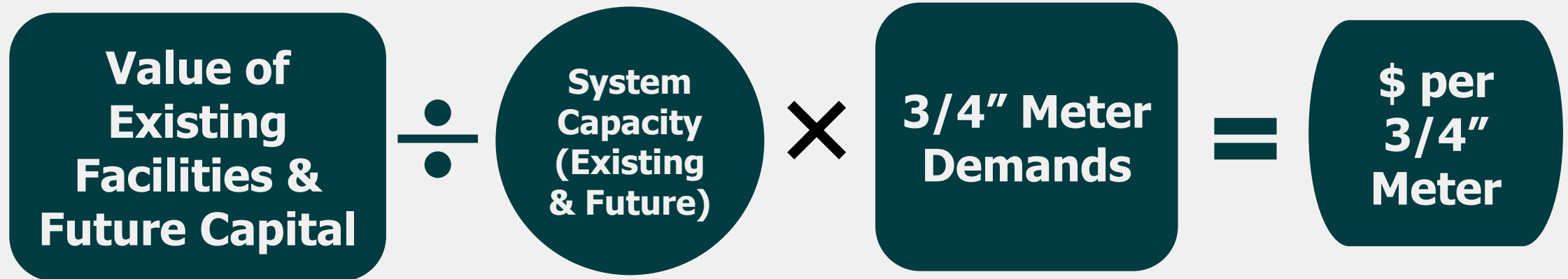
- Capacity needed for growth
- Existing system has little or no capacity for growth



Hybrid

- Capacity available and future capacity needed
- Considers existing and new facilities to serve new development

Basic Tap Fee Calculation



Pricing Objectives & Rate Design





Current Base and Volume Rates and Rate Structure

Base Rate

Meter Size	Monthly Charge \$ per bill*
¾-inch	\$19.75
1-inch	\$21.24
1 ½-inch	\$23.23
2-inch	\$28.74
3-inch	\$68.27
4-inch	\$84.14
6-inch	\$136.59
8-inch	\$158.98



Fixed Block Volumetric Rates

Threshold (gallons)	Volume Rate \$ per kgal
0 – 3,300	\$0.00
3,301 – 20,000	\$4.27
20,001 – 50,000	\$5.12
> 50,000	\$6.14



Monthly Water Bill



*Plus \$1.30 service line repair fee

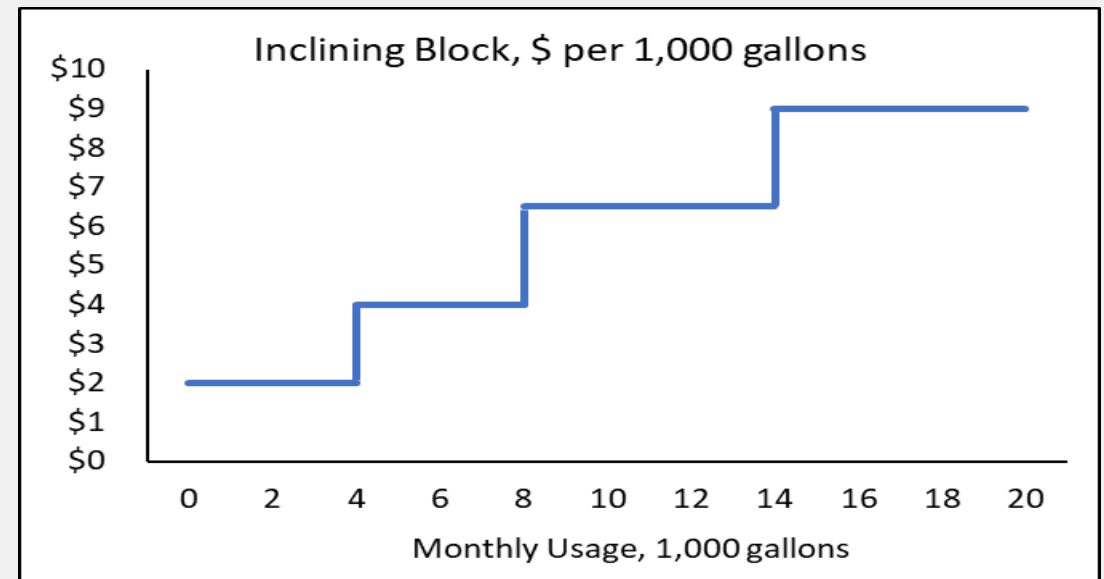
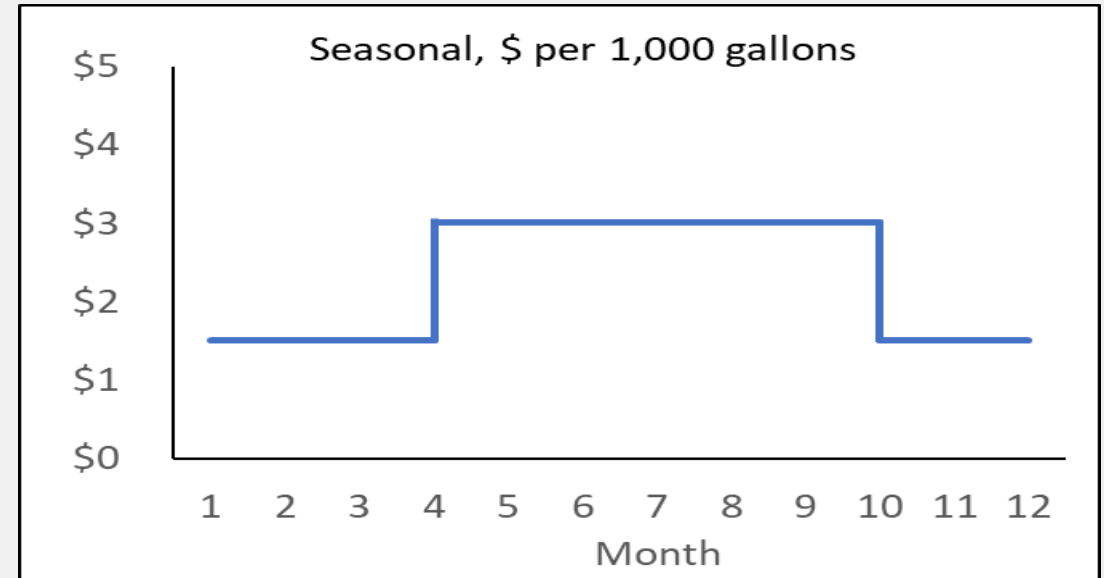
Summer Rate and Inclining Block Rate Structure Examples

- Seasonal example:

Period	Monthly Use	Rate	Bill
Winter	4,000 gal	\$1.50	\$6.00
Summer	12,000 gal	\$3.00	\$30.00

- Inclining block example:
 - › 12,000 gallons

Tier	Threshold	Usage	Rate	Bill
1	0-4 kgal	4	\$2.00	\$8.00
2	4-8 kgal	4	\$4.00	\$16.00
3	8-12 kgal	4	\$6.00	\$24.00
4	>12 kgal	0	\$9.00	\$0.00
Total		12		\$48.00



Required Rate Public Hearing and Adoption Timeline

- Provide notice of a public hearing if proposed increases are more than 5%
 - › Mailed to customers at least 7 days, but no more than 30 days before public hearing
 - Include an estimate of what the customer may be charged.
 - › Included twice in local newspaper, published at least 6 days apart
- Hold public hearing
- Vote on proposed fees
- Modified fees become effective
 - › Can't become effective sooner than 10 days after approval

Pricing Objectives

Ranking Exercise

A means of ensuring community values are reflected in the way costs of providing water service are recovered

10 Pricing Objectives



Revenue Stability



Equity between Classes



Equity within a Class



Equity between Existing and New Customers



Conservation Pricing Signal



Demand Management



Essential Use Affordability



Customer Understanding



Impact on Customers



Ease of Administration/Implementation

Pricing Objectives Defined



Revenue Stability

Rate structure should generate stable and predictable revenues sufficient to meet annual revenue requirements, bond covenants and other financial requirements.



Equity between Classes

Equity between customer classes. Through a cost-of-service analysis, costs are recovered proportionately from each customer class' rate structure based on their unique demand characteristics.

Pricing Objectives Defined



Equity within a Class

Equity between customers within a class. This equity is maximized when the rate structure results in individual customers paying their cost to receive service based on their unique demand characteristics.



Equity between Existing and New Customers

Equity between new and existing customers. New customers should not present a cost burden to existing customers.

The rate structure should exclude those costs associated with meeting the service requirements of new customers.

Pricing Objectives Defined



Conservation Price Signal

The rate structure should contain a pricing signal that encourages the wise use of water.



Demand Management

The rate structure should contain a pricing signal to promote the efficient consumption of water during peak usage periods.

Pricing Objectives Defined



Essential Use Affordability

A rate structure should provide essential water use at the lowest possible cost all the while allowing the utility to generate revenue sufficient to maintain their financial health.



Customer Understanding

Rate structure should be subject to as few misinterpretations by the customer

Rate structure should be consistent with other water use-related communication from the utility

Pricing Objectives Defined



Impact on Customers

Changes in a rate structure should be implemented in a manner that minimizes bill shock and minimizing the variability of shock among customer classes.



Ease of Administration / Implementation

Rate structure should be compatible with existing billing and accounting systems.

Information needed for rate structure implementation and administration should be based on readily available, accessible, and manageable data.

Complete Pricing Objectives Ranking Exercise

See Handout and Complete Ranking of Objectives 1 (least important) to 10 (most important)

Board Study Goals and Objectives



Thank you!

Contacts:

Andrew Rheem 303 305 1137

Ellyse Szczepanski 303 305 1143

arheem@raftelis.com

eszczepanski@raftelis.com