

Accessory Dwelling Units

February 27, 2019

- Anita Gallagher, Regional Relations Manager

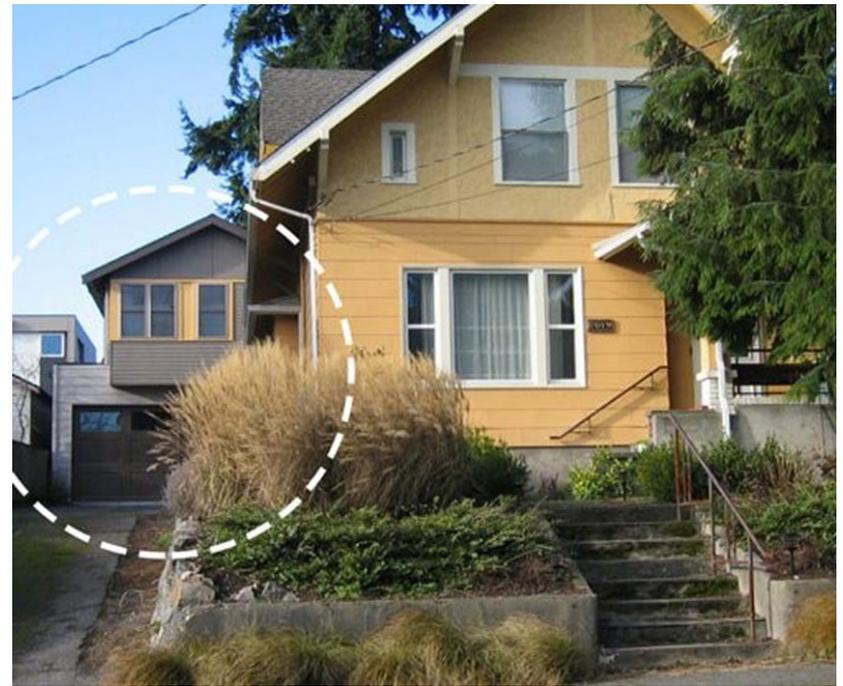


Overview

- **Proposed Land Use regulations for ADUs**
- **TPU coordination with General Government**
- **Seeking policy direction on potential affordability incentives**
- **Timeline and next steps**

Proposed ADU Regulations

- Allow Detached ADUs in single-family zoning districts
- Lot size flexibility
- ADU height and size flexibility
- Owner occupancy requirement removed
- Design standards



Coordination with General Government

- TPU staff have been working with Planning and Development Services and Environmental Services to discuss how the utilities will serve DADUs.
 - Service connections
 - Billing



Affordability

- **Affordable Housing Action Strategy**
 - No more than 30% of gross income spent on housing each month
- **Council interest in exploring utility fee waivers for ADUs rented at 50% of Area Median Income**
 - \$37,300 for a four-person household
 - \$33,600 for a three-person household
 - \$29,850 for a two-person household

Timeline and Next Steps

- **Land Use regulations—First Reading of Ordinance on March 5; Final Reading on March 19**
- **Utilities work on incentive program and administration—May- June 2019**



Utilities Considerations for Accessory Dwelling Units (DADUs)

<p>Scenario 1: Separate electrical service \$435-\$755 Power AND Same water service \$297 Water Total range: \$732- \$1,052</p>	<ul style="list-style-type: none"> • Power engineering fee: \$675 (overhead) or \$275 (underground). • Power inspection fee: \$80 (overhead) or \$160 (underground). • Water system development charge: \$297. No construction charge. • Separate Electricity billing for ADU (Solid Waste possible); Drinking water, Surface water, and Wastewater would remain on meter for primary structure and billed to the owner. • Resident of ADU would be eligible for Electrical and Solid Waste Bill Payment Assistance programs if they qualify.
<p>Scenario 2: Separate electrical service \$435-\$755 Power AND Same water service with larger meter \$922 Water Total range: \$1,357- \$1,677</p>	<ul style="list-style-type: none"> • Power engineering fee: \$675 (overhead) or \$275 (underground). • Power inspection fee: \$80 (overhead) or \$160 (underground). • Water construction charge: \$625 (5/8" meter to 3/4" meter). • Water system development charge: \$297. • Separate Electricity billing for ADU (Solid Waste possible); Drinking water, Surface water, and Wastewater would remain on meter for primary structure and billed to the owner. • Resident of ADU would be eligible for Electrical and Solid Waste Bill Payment Assistance programs if they qualify.
<p>Scenario 3: Separate electrical service \$435-\$755 Power AND Separate water service \$5,485-\$7,485 Water At most: \$8,240</p>	<ul style="list-style-type: none"> • Power engineering fee: \$675 (overhead) or \$275 (underground). • Power inspection fee: \$80 (overhead) or \$160 (underground). • Water construction charge: \$4,000-6,000 for new service line and meter. • Water system development charge: \$1,485. • Separate Electricity, Drinking water, and Wastewater billing (Solid Waste possible). Surface water would be billed to the owner. • Resident of ADU would be eligible for Bill Payment Assistance programs if they qualify.

Note: These costs are estimates only.



Additional Considerations:

The scenarios presented include separate Electricity service for the ADU for the following reasons:

- Tacoma Municipal Code 12.06A.380 provides that each newly constructed or remodeled dwelling unit, as defined by NEC 100, shall be independently metered by Tacoma Power. In other words, “master metering” is not currently practiced.
- Requiring the ADU to be separately metered for electricity encourages energy conservation because the residents of each structure on the property are fiscally responsible for their own energy consumption.
- Requiring the ADU to be separately metered for electricity also allows the potential for separate Solid Waste service, though this may not be possible due to logistical issues in some locations.
- A separate account is necessary for the ADU resident to be eligible to apply for the Bill Payment Assistance Programs (Discount Rate Program and Bill Credit Assistance Plan) available to households whose income qualifies at up to 150% of federal poverty guidelines.

Considerations for Water service:

- The existing load (demand) for water in the primary structure on the property is likely to be a strong factor influencing the necessity for a larger meter or separate water service for the ADU. The typical residential 5/8” meter can provide 20 gallons per minute. As long as the new water fixtures being added to the property are under this capacity, a larger or additional meter would not be required.
- Using the existing meter for the ADU provides the benefit of less upfront construction cost, and would likely be satisfactory for small- to medium-sized ADUs.
- If the water meter for the primary structure also serves the ADU, the Wastewater rate would change from “single-family dwelling” to “multi-family dwelling” and the fixed monthly charge would increase by \$25.87 (2019 rates). The water and wastewater billing must stay in the property owner’s name when one water meter serves the primary structure and the ADU.
- If the primary structure and ADU are separately metered, the billing for the primary structure and ADU can be separated into the owner and the tenant’s name.

AMI Rate Impact 2019-2028

Jodi Collins, Tacoma Water

Michelle Brown, Tacoma Power

February 27, 2019



AMI Impact

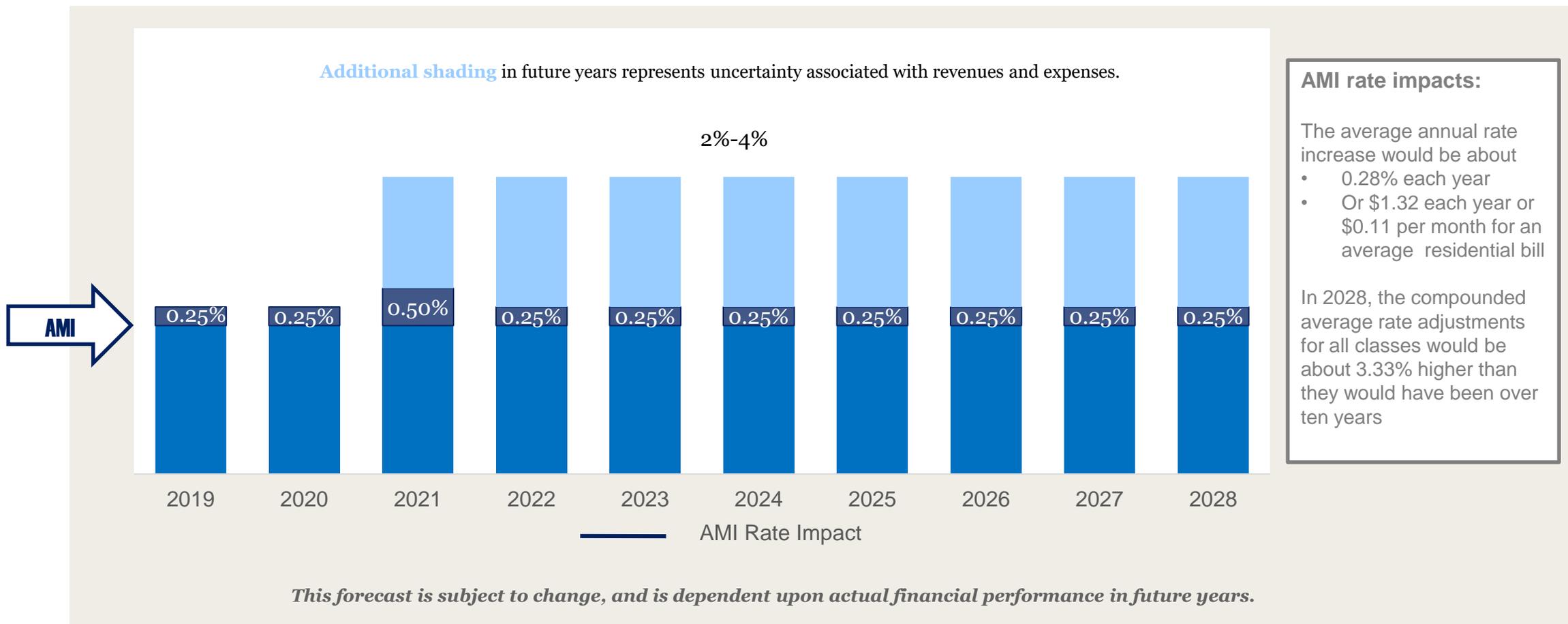
+ *Rate Impact*

+ *Bill Impact*

At the January 9th PUB study session, the Board members requested more information about how AMI implementation impacts rates. This document provides more information about the methodology and the summary of our findings shown on the next two pages.

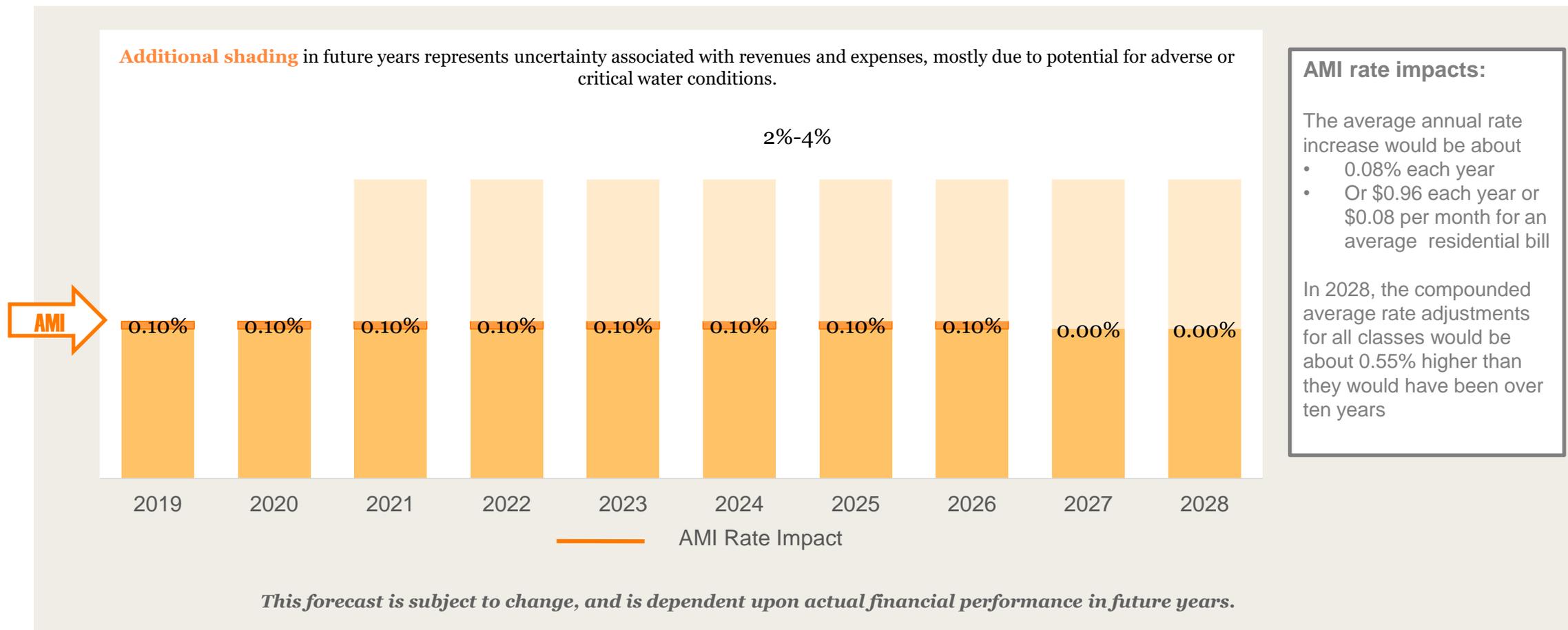
Rate Impact

Tacoma Water Estimated Rate Impacts with AMI



Rate Impact

Tacoma Power Estimated Rate Impacts with AMI

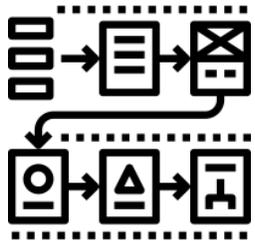


Appendix

+ Methodology

- *Methodology for Rate Impact Financial Analysis*
- *Economic Analysis vs Financial Analysis*

Financial Analysis of AMI



Created a new Base Case without AMI

- Removed all previously assumed AMI costs from the financial model

Added in business case Operations & Maintenance costs & benefits

- Incorporated the AMI costs and benefits that impact rates regardless of financing

Incorporated AMI capital costs through debt financing

- Included a 20 year bond issuance for the business case capital costs

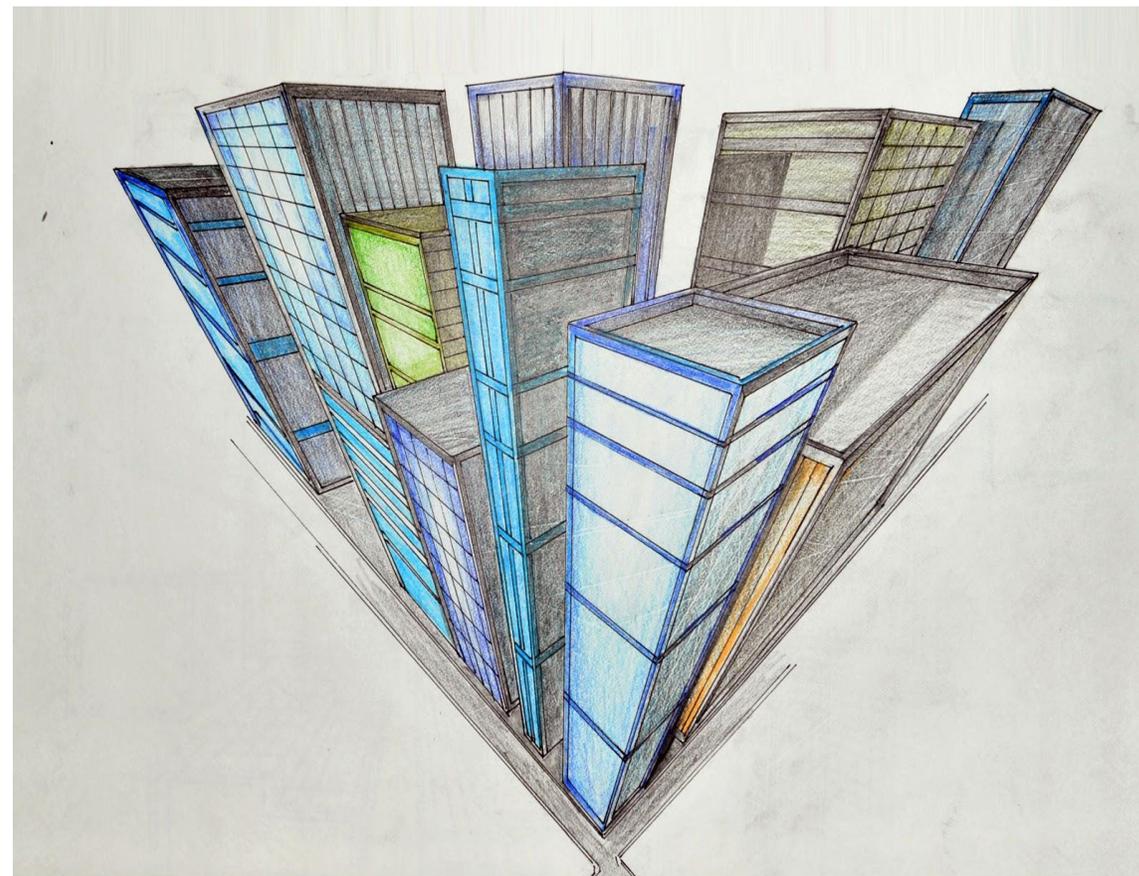
Determined scenario rate increases that maintain target ratios for 2019-2028

- Determined rates in 2019–2028 that closely reflect the financial metrics in the Base Case

Methodology

The view depends upon your perspective

- **Economic Analysis** – looks at total costs and benefits, including triple bottom line, over the life of the asset being evaluated. Not all costs or benefits may be reflected in customer rates. This analysis looks at the feasibility of the project and helps inform the decision of whether to proceed or choose an alternative.
- **Financial Analysis** - considers rate impacts over ten-years as shown in our long range financial plans. Considers only costs and benefits that are reflected in rates. Once the decision has been made to proceed, this analysis provides projected rate impacts.



Business Case

Here's what's included in the Business Case

20 years

5%

Costs

Benefits



Life of Asset

Discount Rate

- **Meters**
- **Software**
- **Communications**

- **Labor Savings**
- **Asset management**
- **Carbon reduction**

Business Case vs Financial Analysis

Differences between the financial analysis and the business case

10-year financial plan vs 20-year business case

- Financial Planning period to set rates is 10 years vs business case and meter life of 20 years

Isolated AMI rate impact

- Did not include monthly billing assumptions that are in the AMI business case

Removed benefit assumptions that are not currently impacting rates

- Did not include AMI carbon benefits
- Did not include AMI reduction in theft benefits for Power

Customer benefits not quantified in the business case



- Outage notifications
- Energy monitoring
- Bill management
- New products & services

Over time, many customers may see bill savings from the programs and services AMI enables



Wholesale Pricing & Policy Initiative

Sean Senescall, Finance and Analytics Manager

Lyna Vo, Utilities Economist

Public Utility Board Study Session | February 27, 2019

0 | Agenda

1 | Objective

2 | State of the Utility

3 | Contracted Capacity & Demand

4 | Recent Wholesale History

5 | Challenges

6 | Pricing

7 | Wholesale Customer Decision Points

8 | 10 Year Forecast Comparison

9 | Managing Supply Risk

10 | Timeline

1 | Objective

To increase net revenue in the wholesale market while responsibly managing supply risk.

Goal #1

Establish new pricing model

Goal #2

Draft policy changes

Goal #3

Ensure internal alignment

Goal #4

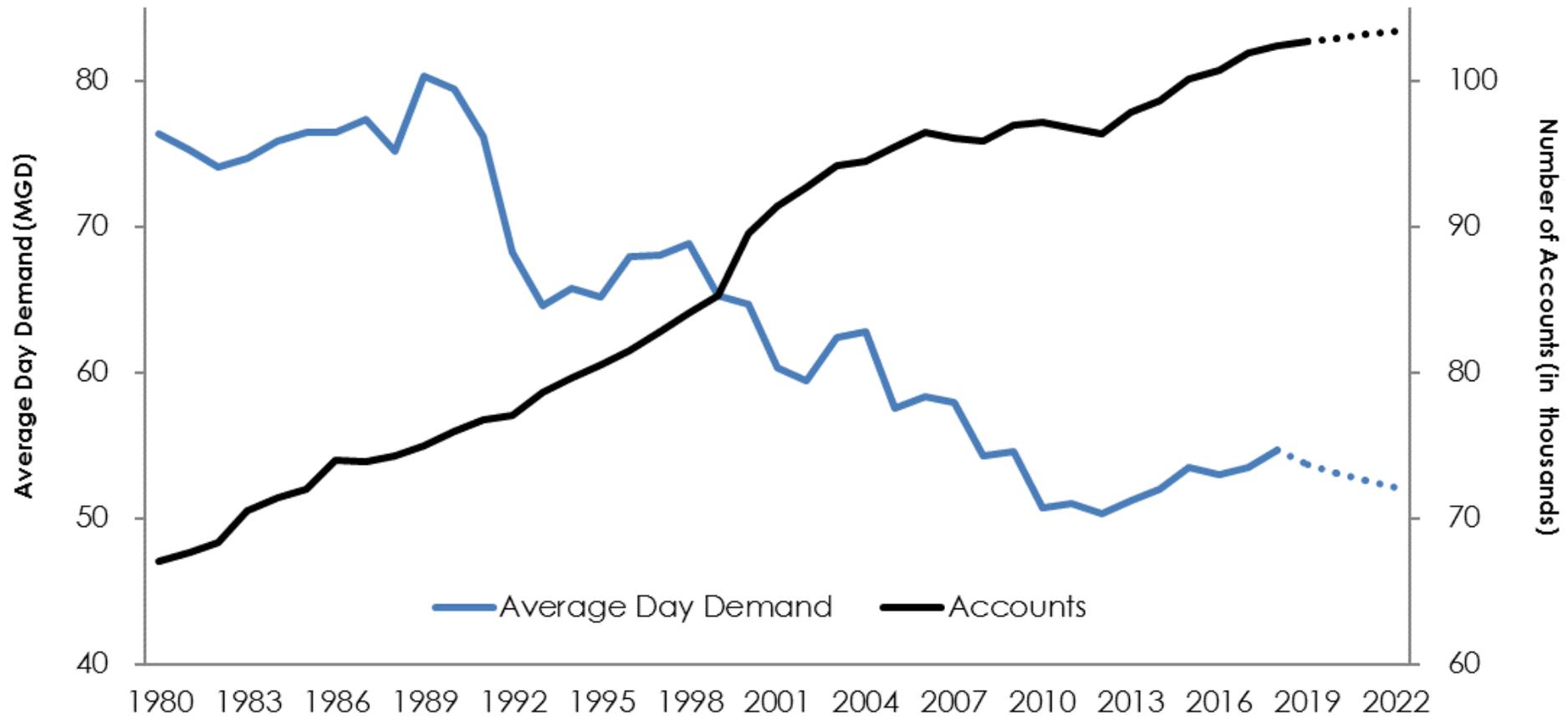
Communicate proposal

Goal #5

Implement revisions

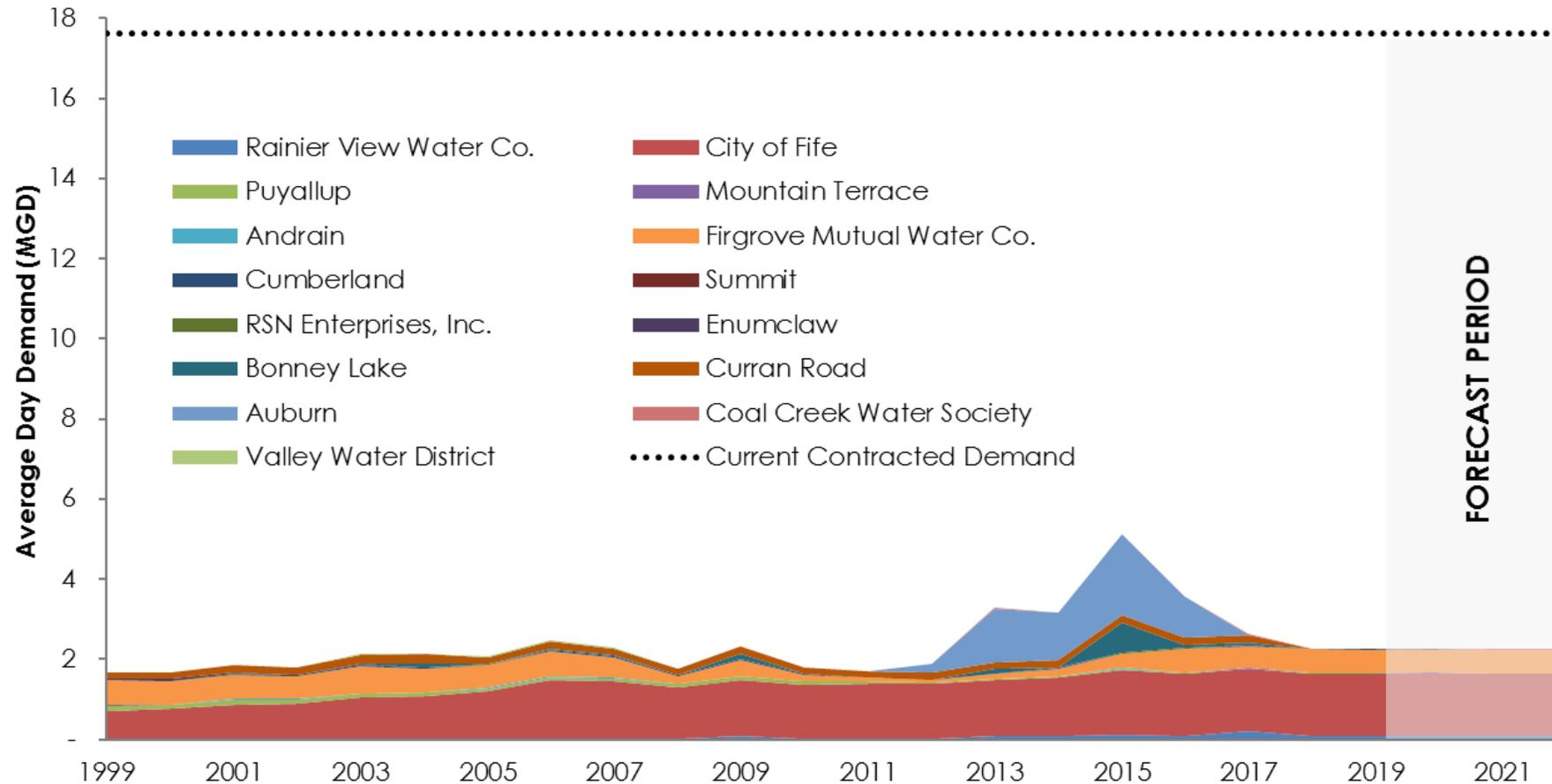
2 | State of the Utility

The trajectory of our demand and accounts over time.



3 | Contracted Capacity & Demand

Historical and forecasted underutilization of contracted capacity by wholesale customers.



4 | Recent Wholesale History

The trajectory of our wholesale market over recent years.

2006 - 2012	2013	2015	2016	2017 - Today
Demand Erosion/Decline	Market Pricing Effort	Drought	SI 98 & FCS Report	SI 143 & SI 145
<i>Wholesale behavior: declining demand, lack of pricing competitiveness, and underutilization of wholesale capacity.</i>	<i>We started exploring alternative pricing structures such as market-based pricing, designed to compete with a wholesale customer's supply options.</i> <i>We also received conceptual support from PUB/CC, and wholesale customers for this work effort.</i>	<i>The 2015 drought combined with concerns regarding the possibility of a methanol plant halted pricing discussions during this time.</i>	<i>SI 98 initiated pricing model and recommendations for cost recovery, with an evaluation of SDCs, fixed fees, time and material charges, private contracts, main charges, and rate discounts.</i> <i>FCS refreshed the SDC analysis and their findings supported a reduction in SDCs.</i>	<i>SI 143 laid the foundation for SI 145 in terms of communication and engagement with management, the Director, and wholesale customers.</i> <i>SI 145 seeks to implement a new pricing model along with comprehensive policy changes to support wholesale market revenue growth.</i>

5 | Challenges

The challenges facing our utility in the wholesale market.

Challenge #1

Some customers are not in a position to take water.

Example: Black Diamond

Black Diamond has yet to grow into their purchased capacity from Tacoma.

Challenge #2

Some customers are concerned with adverse changes.

Example: Fife

Fife has few alternatives to supply. We would like to minimize adverse impacts in order to preserve revenue stream while formalizing our supply obligation.

Challenge #3

Some customers have competing offers.

Example: Firgrove

Firgrove may be interested in the most economical offer and value.

Challenge #4

Some customers have a different business model.

Example: Rainier View

Rainier View may want to invest in additional infrastructure for an additional source of supply.

6 | Pricing | Comparison

The new pricing model attempts to equitably recover the cost of service for the wholesale class.

Current Pricing	Proposed Pricing	Potential Impact to Customers
<ul style="list-style-type: none">• Designed to recover about 9% of wholesale costs through a monthly ready-to-serve charge• 91% of cost recovery is through a variable rate per CCF• Ready-to-serve charge is allocated to customers based on meter size	<ul style="list-style-type: none">• Restructures embedded cost pricing to recover 35% of fixed costs through a monthly ready-to-serve charge• Only 75% of the remaining cost recovery would be through a variable rate per CCF• Ready-to-serve charge is allocated to customers based on peak capacity	<ul style="list-style-type: none">• Increase in charges: Auburn, Black Diamond, Bonney Lake• Decrease in charges: Fife, Firgrove, Valley WD• Neutral: Coal Creek, Enumclaw, RSN Enterprises

6 | Pricing | Rate Design

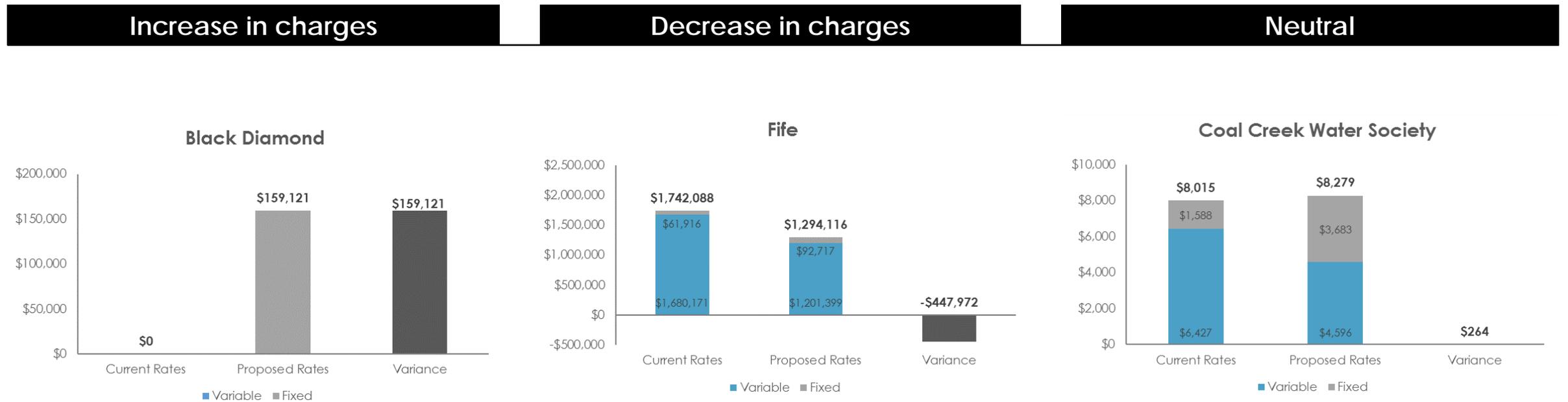
The general rate structure of the new pricing model.

Rate Design Comparison		
Cost Recovery	2019 Rate Design	Proposed Rate Design
Variable Cost Recovery	2,505,392	1,790,726
Fixed Cost Recovery	249,571	964,237
Total Wholesale Cost of Service	\$2,754,963	\$2,754,963
Winter Rate	\$2.04	\$1.46
Summer Rate	\$2.55	\$1.83
Peaking Rate	\$3.83	\$2.74
Fixed Cost Recovery	9%	35%

Through an unbundling process, we have established we can recover up to 53% in fixed costs from wholesale customers.

6 | Pricing | Proposed Rate Structure

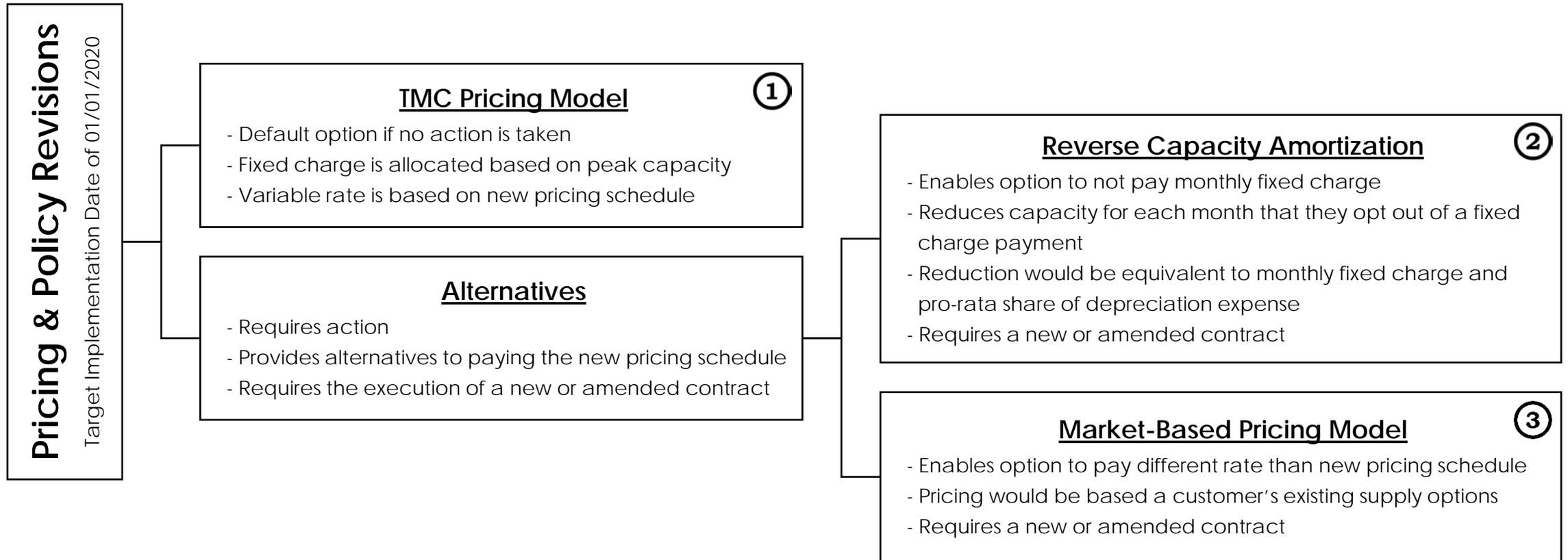
Comparing status quo to the proposed rate structure for different wholesale customers.



The comparisons are dynamic and based upon updated wholesale customer information.

7 | Wholesale Customer Decision Points

The flow chart of decision points for wholesale customers.



8 | 10 Year Forecast Comparison

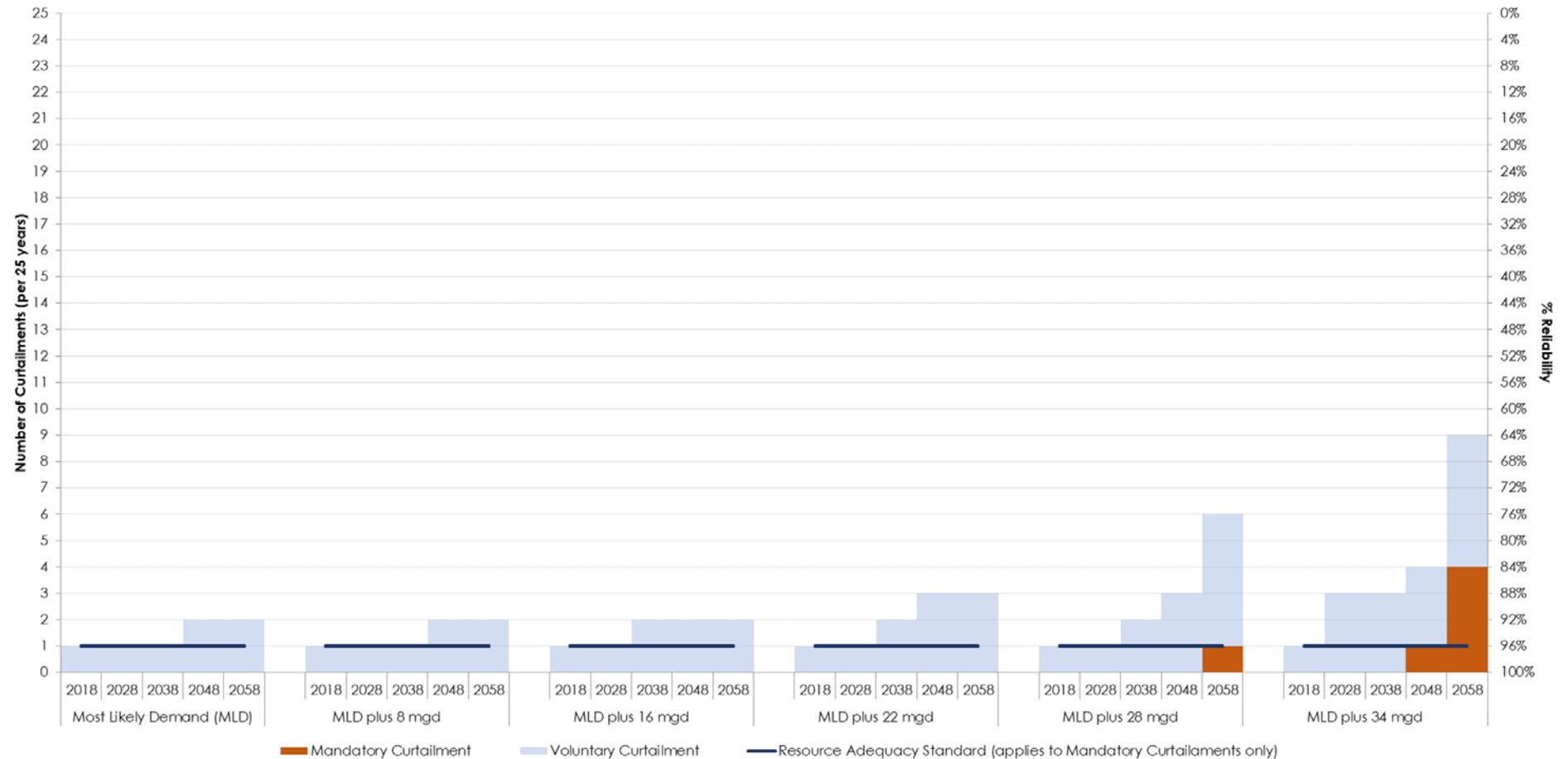
A comparison of various demand and revenue scenarios against the status quo.

10 Year Forecast Comparison			
Scenarios	Average Daily Demand (MGD)	Forecasted Wholesale Revenue	% of Total Expected Revenue
Status Quo	2.20	\$26,000,000	2.7%
Pricing & Policy Revisions	7.60	\$60,800,000	6.3%

Potential Opportunity Cost	\$34,800,000
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9 | Managing Supply Risk

The impact of incremental water sales and responsibly managing supply risk.



10 | Timeline

Next steps include meeting with key stakeholders to communicate proposal, incorporate feedback, and request approval.

Today	Mar 2019	Mar 2019	Jun 2019	Jan 2020
PUB SS	Wholesale Customers	GPFC	PUB & City Council	PUB & City Council
Informational	Informational	Informational	Approval Request	Implementation
<i>We are presenting our recommendations on wholesale pricing and policy revisions.</i>	<i>We are scheduled to present our pricing and policy revisions to wholesale customers on 03/13/2019.</i>	<i>We are tentatively scheduled to present our recommendations to the GPFC on 03/19/2019.</i>	<i>We intend to request approval on our changes to wholesale pricing and policy.</i>	<i>We have a target implementation date of 01/01/2020.</i>

11 | Feedback

We are asking for feedback and support on our general approach so that we can move forward with our work.

