

Comprehensive Rate Study & Cost Allocation Analysis

Public Workshop | December 4, 2017



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Today's Workshop: Present findings and solicit Board input on rate design and fiscal policy considerations

Financial Outlook and Challenges



Financial Planning Scenarios



Rate Structure Recommendations



Next Steps / Q&A





Financial Outlook and Challenges

Financial Plan: Review uses three tests to assess the viability of the rates and corresponding revenues

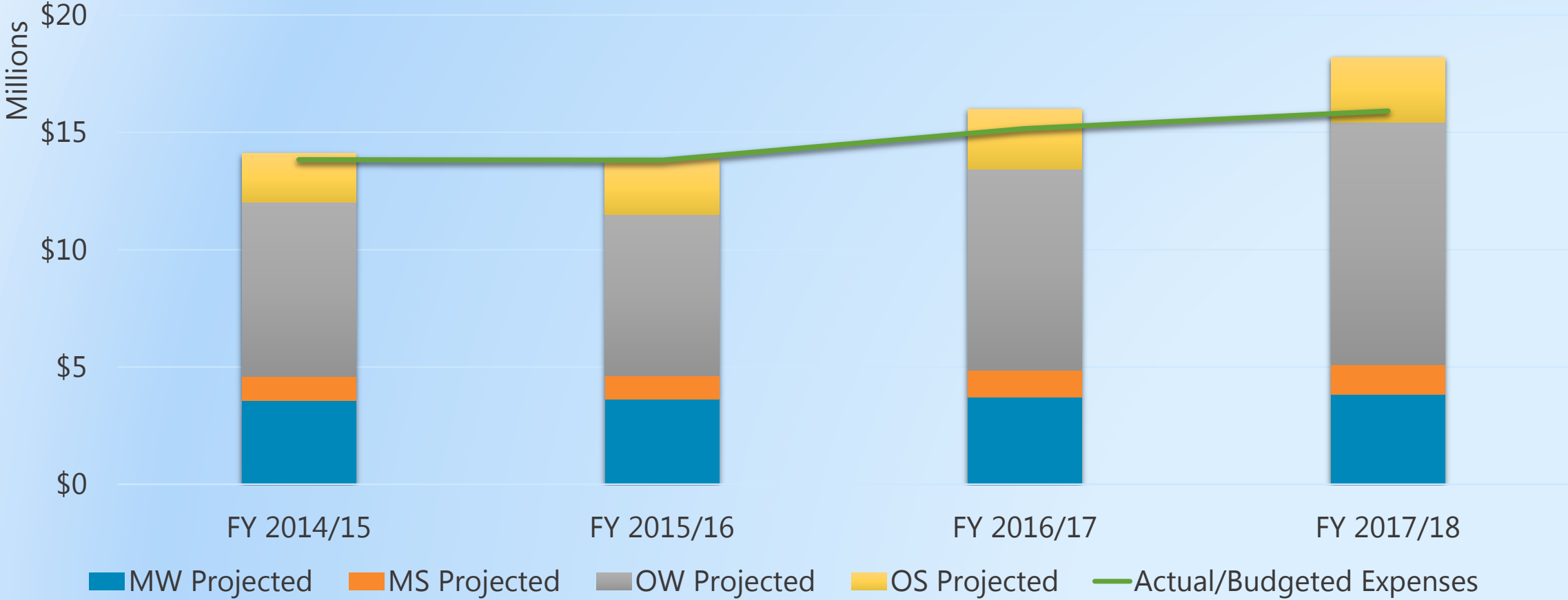
Do the rates fully fund operating expenditures?

Is there sufficient revenue for bond coverage?

Is the capital plan fully funded through rates, reserves, and/or debt?

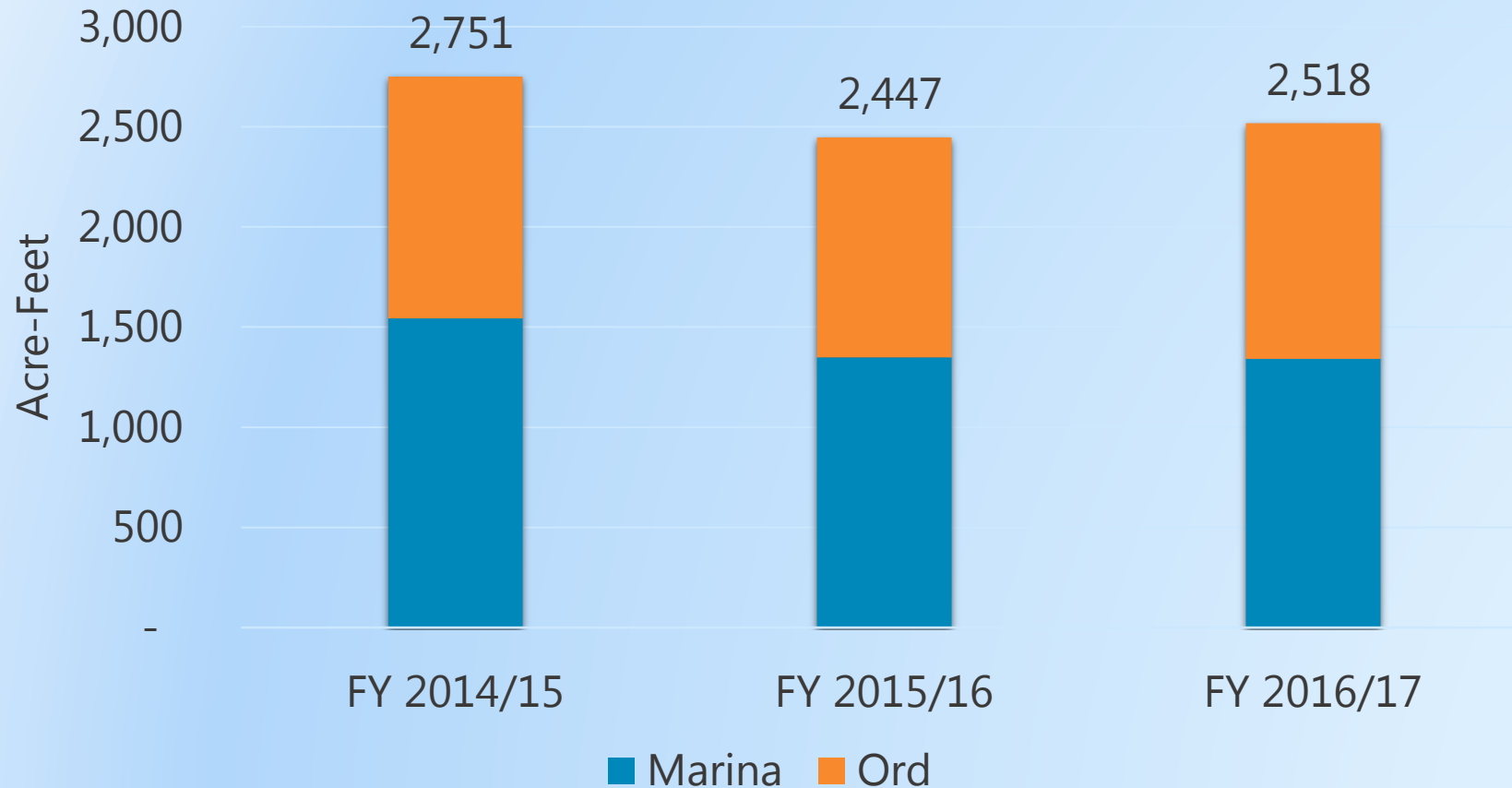
O&M expenses have kept pace with projected levels from the last rate study, and have even fallen below projections this year

Projected vs. Actual/Budgeted Expenses



Like most utilities in California, the financial plan is impacted by recent conservation, and ongoing capital funding needs

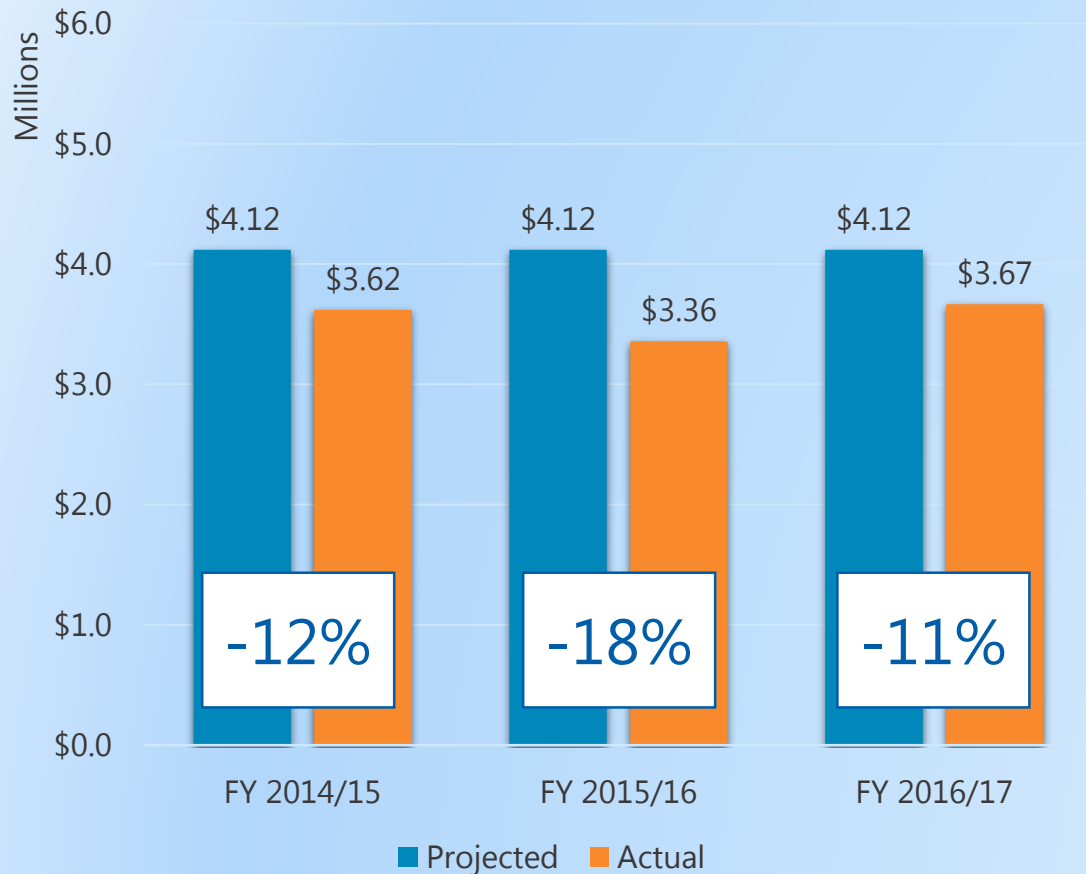
Water Demand Trends



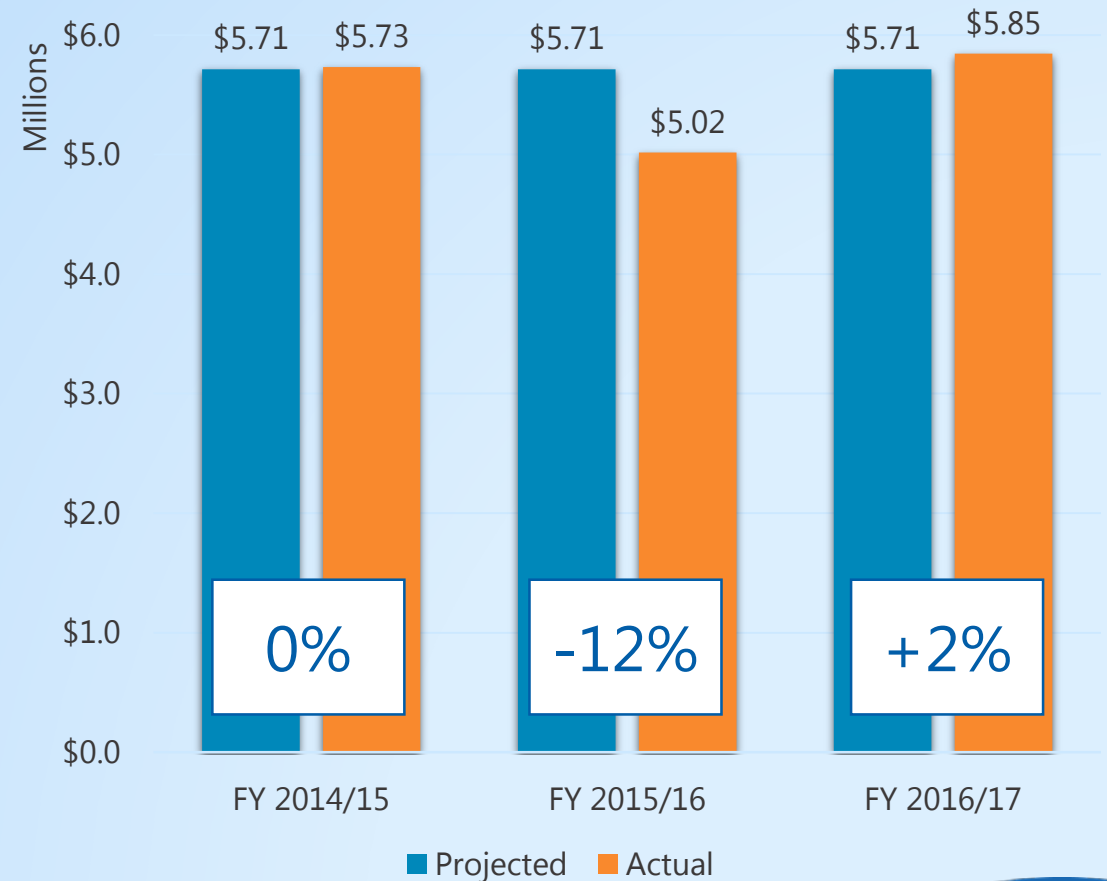
Total demand last year was
11% below
FY 2014/15 levels.

As a result of the conservation, water rate revenue was at least 10 percent below projected levels in FY 2015/16

Marina Water Rate Revenue

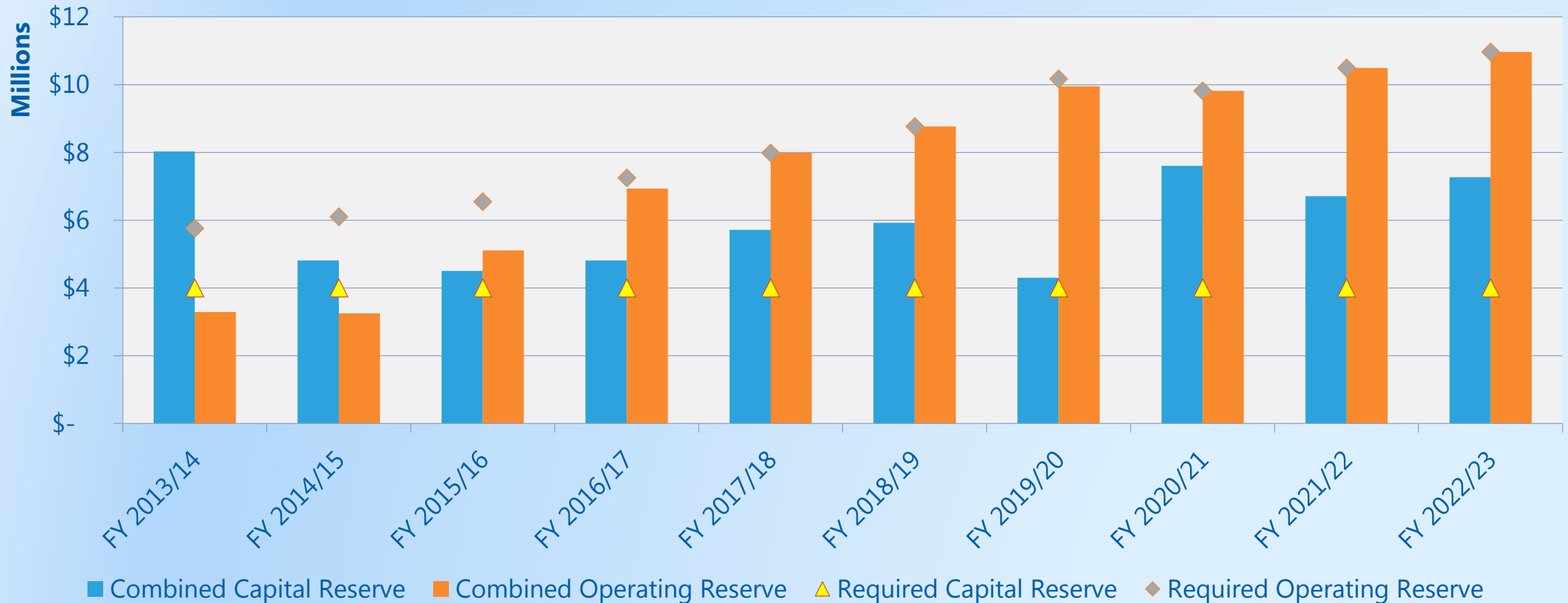


Ord Water Rate Revenue



Previous forecast of gradual buildup of reserves didn't materialize...

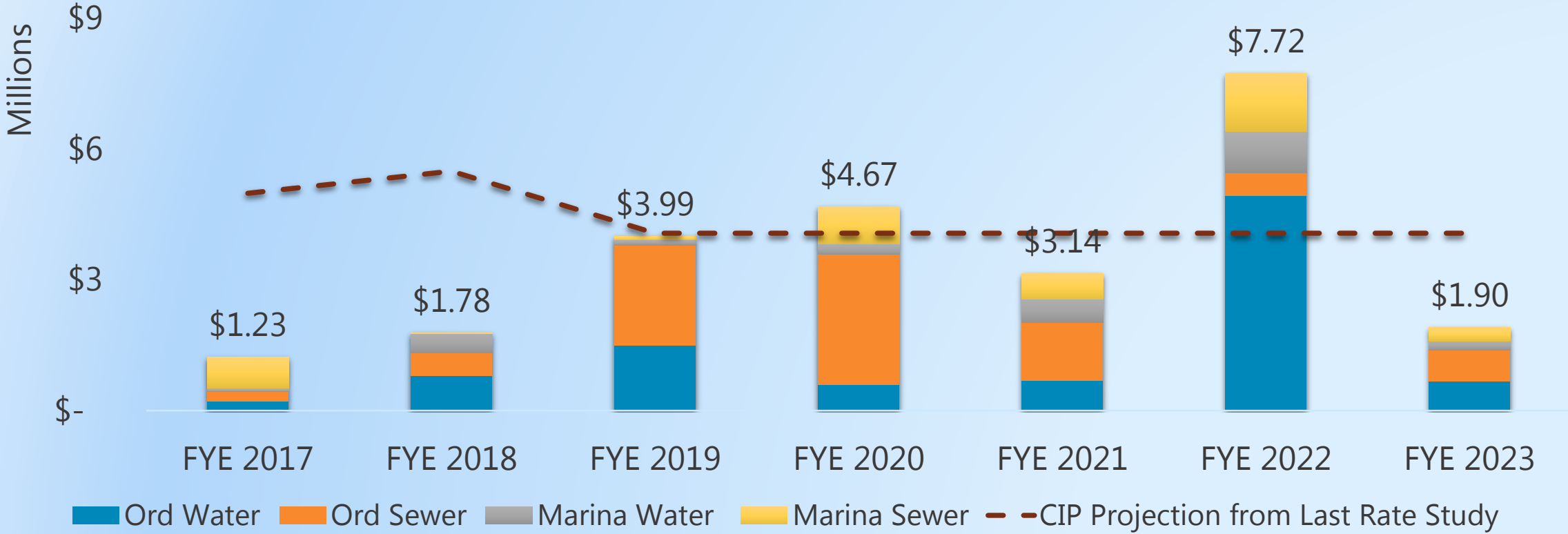
Combined Balances



■ Combined Capital Reserve ■ Combined Operating Reserve ▲ Required Capital Reserve ◆ Required Operating Reserve

All four systems have significant increases in capital funding needs forecasted in the next five years, a challenge with limited reserves for some cost centers

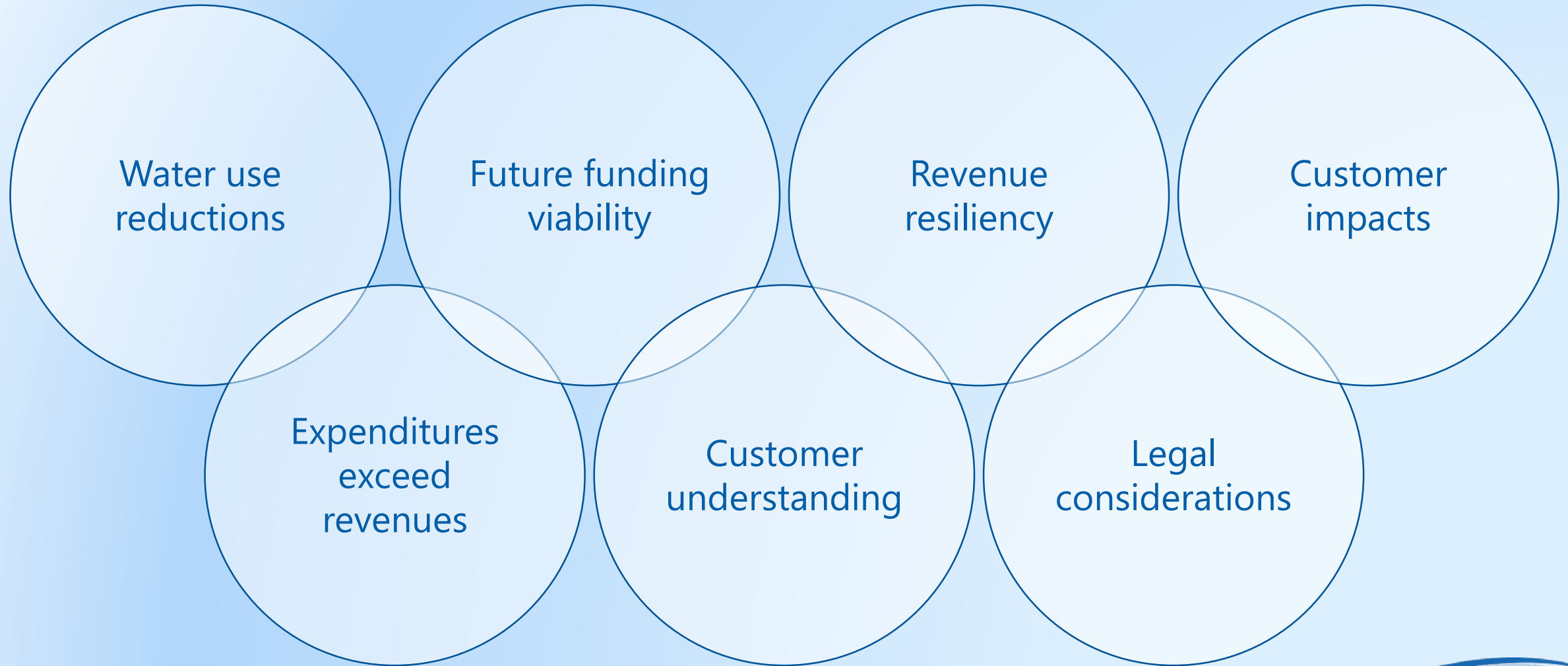
R&R Capital Funding Needs





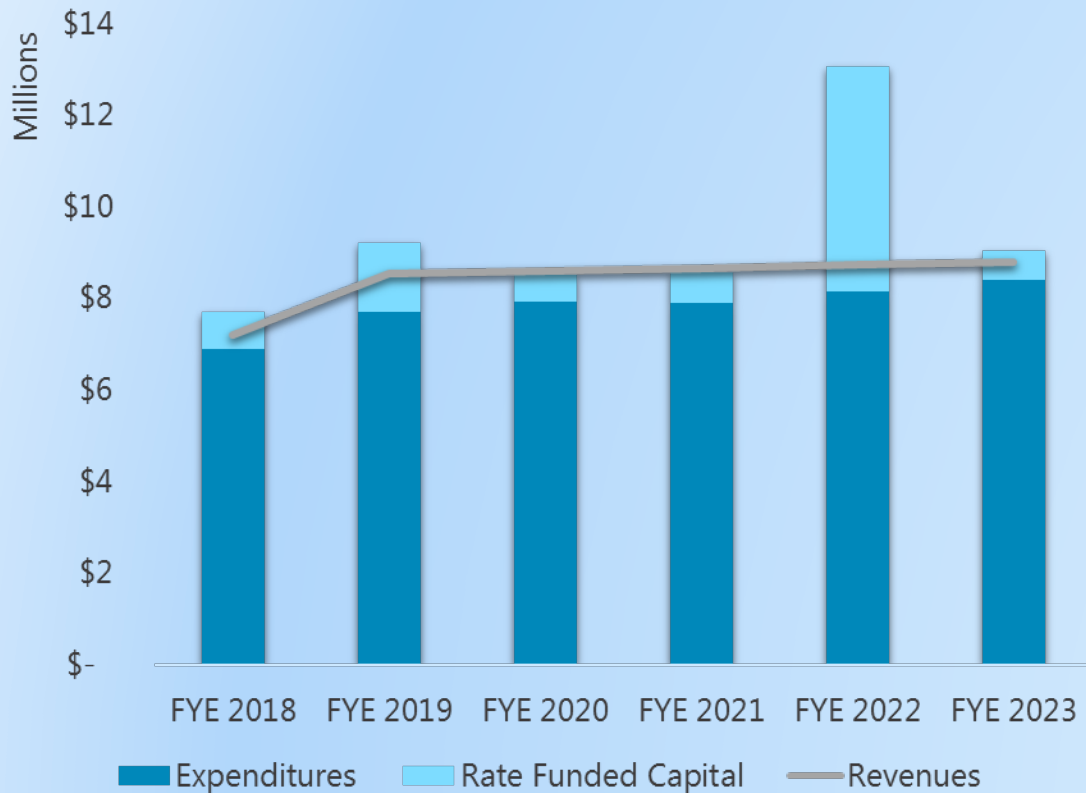
Financial Planning Scenarios

Adjusting to the New Normal: Key considerations and changes to system costs necessitate review of existing rates

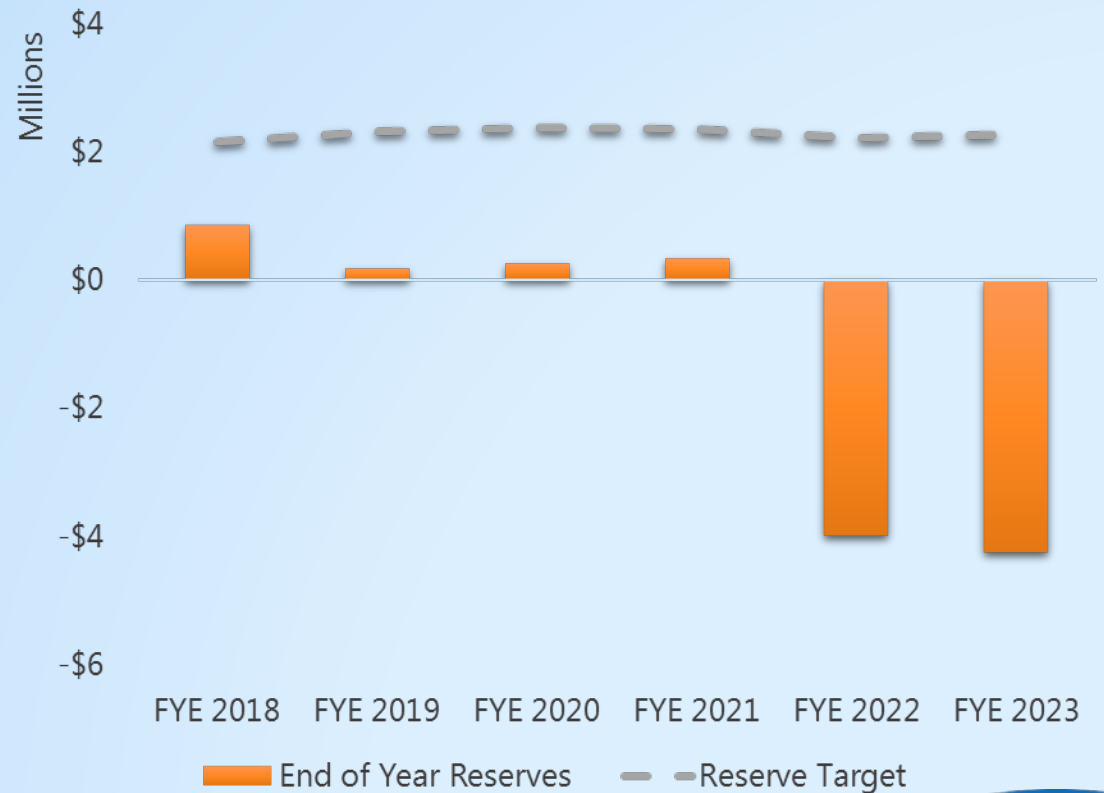


Ord Water: Significant capital needs that are currently underfunded by rates or reserves over the next five years

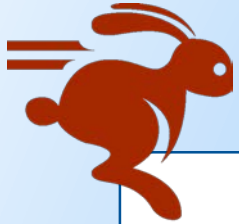
OW Revenues vs Expenditures with No Rate Change



OW Reserves with No Rate Change



Ord Water: Financial plan options offer a spectrum of capital funding scenarios



Immediate

- **Increases (%):**
 - 11 / 5 / 5 / 2 thereafter
- **Debt**
 - \$4.9m in FYE 2022
- **Reserves:**
 - O&M reserve \$1.5m below target in FYE 2019; \$300k in 2020
 - Meets target in all other years
- **Typical Customer Impact:***
 - Approx. \$10 per month



Balanced

- **Increases (%):**
 - 5 / 5 / 2 thereafter
- **Debt**
 - **\$1.5m in FYE 2019**
 - \$4.9m in FYE 2022
- **Reserves:**
 - O&M reserve \$250k below target in FYE 2019
 - Meets target in all other years
- **Typical Customer Impact:***
 - Approx. \$4 per month



Extended

- **Increases (%):**
 - 3 in all years
- **Debt**
 - \$1.5m in FYE 2019
 - \$4.9m in FYE 2022
- **Reserves:**
 - O&M reserve **\$1.4m below** target in FYE 2019; **\$1.0m** in FYE 2020
 - Meets target in all other years
- **Typical Customer Impact:***
 - Approx. \$2 per month

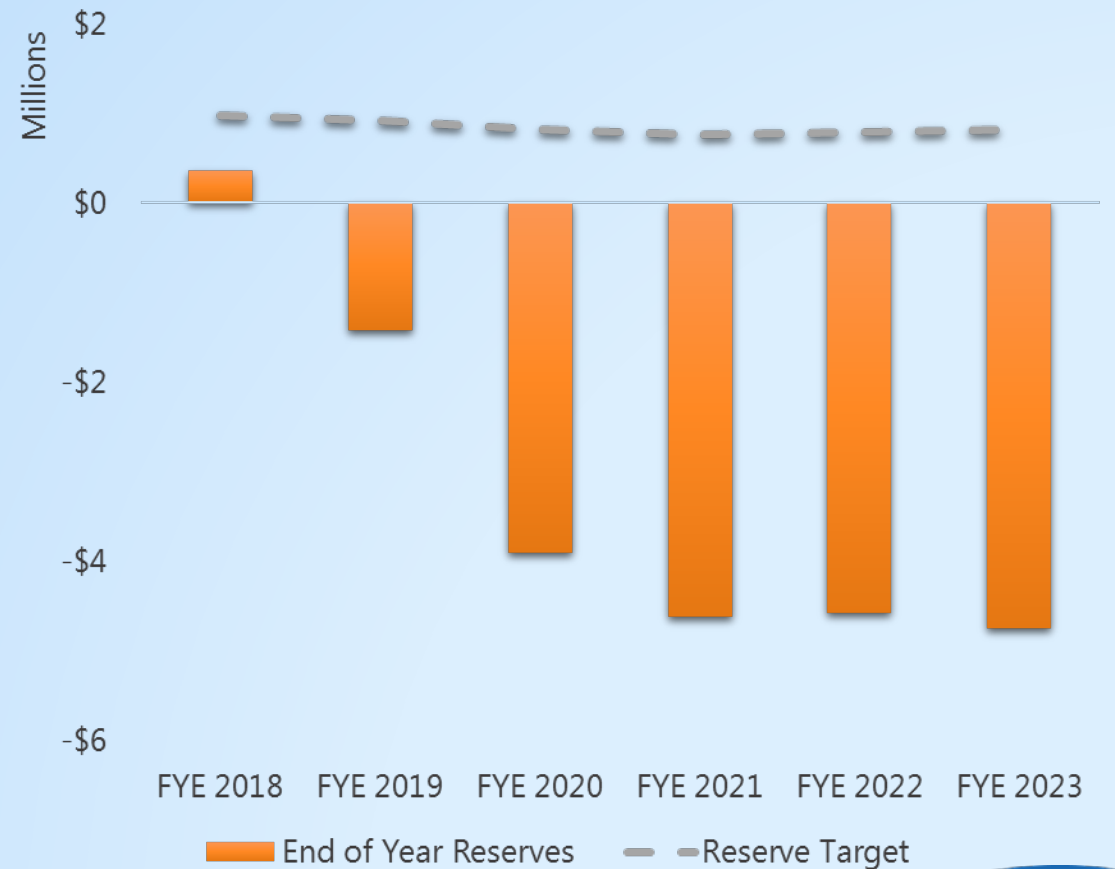
*Typical customer assumes 9 CCF with a 3/4" meter

Ord Sewer: Significant capital needs that are currently underfunded by rates or reserves over the next five years

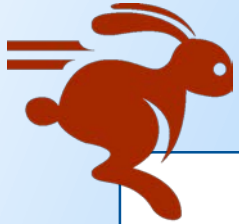
OS Revenues vs Expenditures with No Rate Change



OS Reserves with No Rate Change



Ord Sewer: Options offer either no debt in FYE 2019 and high increases, or lower increases with immediate debt



Immediate

- **Increases (%):**
 - 25 / 3 thereafter
- **Debt**
 - **No debt in FYE 2019**
 - \$3.0m in FYE 2020
 - \$1.4m in FYE 2021
- **Reserves:**
 - Allows **only 38% of FYE 2019** CIP to be funded before reserves go negative
 - Meets target in all other years
- **Typical Customer Impact:***
 - Approx. \$9 per month



Balanced

- **Increases (%):**
 - 6 / 3 thereafter
- **Debt**
 - **\$2.3m in FYE 2019**
 - \$3.0m in FYE 2020
 - \$1.4m in FYE 2021
- **Reserves:**
 - Meets target in all years
- **Typical Customer Impact:***
 - Approx. \$2 per month



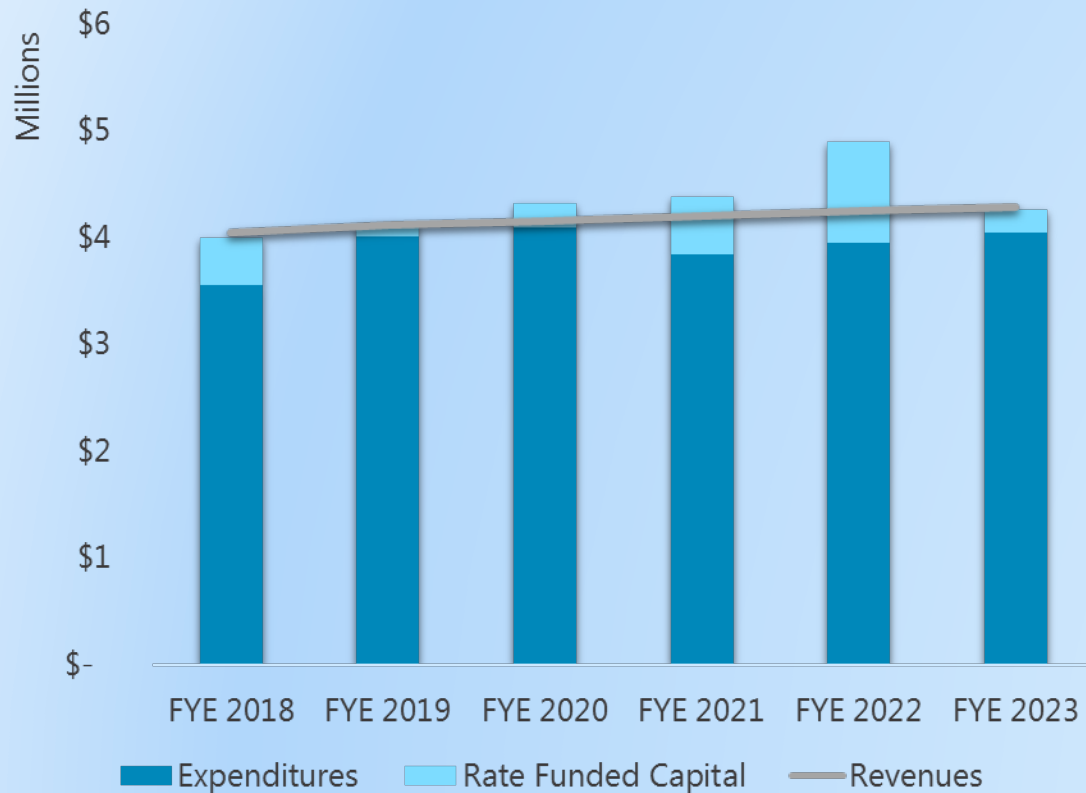
Extended

- **Increases (%):**
 - 3 in all years
- **Debt**
 - No additional debt
- **Reserves:**
 - Falls short of O&M target in all years
 - Allows only approx. 50% funding of total CIP over next 5 years
- **Typical Customer Impact:***
 - Approx. \$1 per month

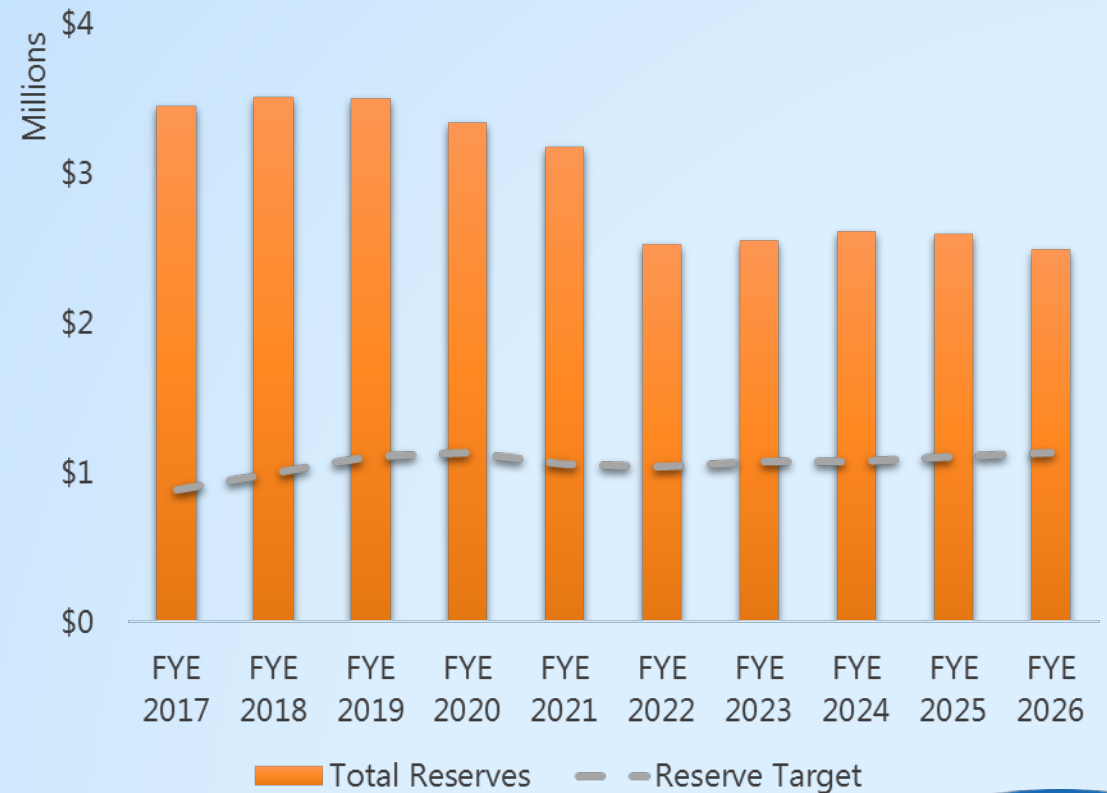
*Typical customer assumes SFR with 1 EDU

Marina Water: Rates would need increases to fund O&M, but increases would be inflationary and modest (<4%)

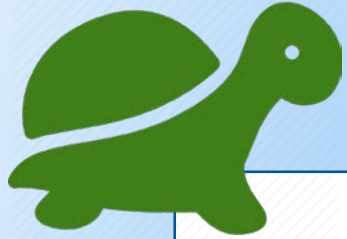
MW Revenues vs Expenditures with No Rate Change



MW Reserves with No Rate Change



Marina Water: Financial plan options balance how quickly to rebuild operating and capital reserves



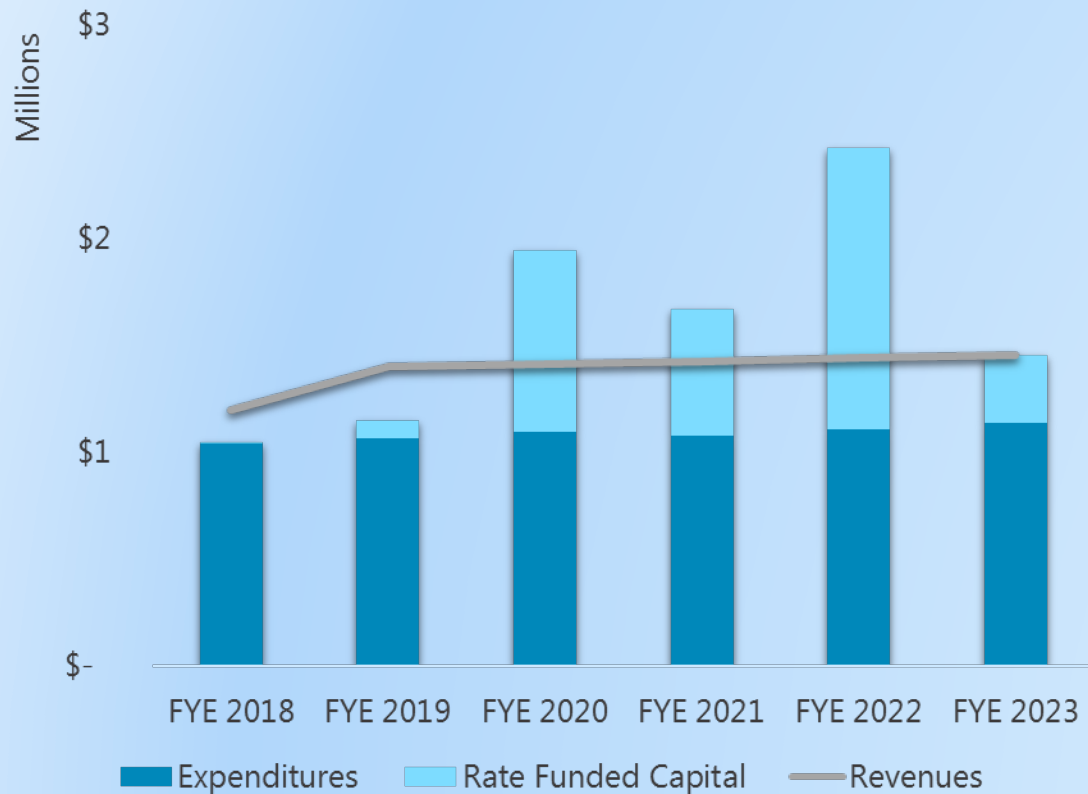
Balanced

- **Increases (%):**
 - 3 in all years
- **Debt**
 - No additional debt
- **Reserves:**
 - O&M reserve meets target in all years
- **Typical Customer Impact:***
 - Approx. \$3 per month

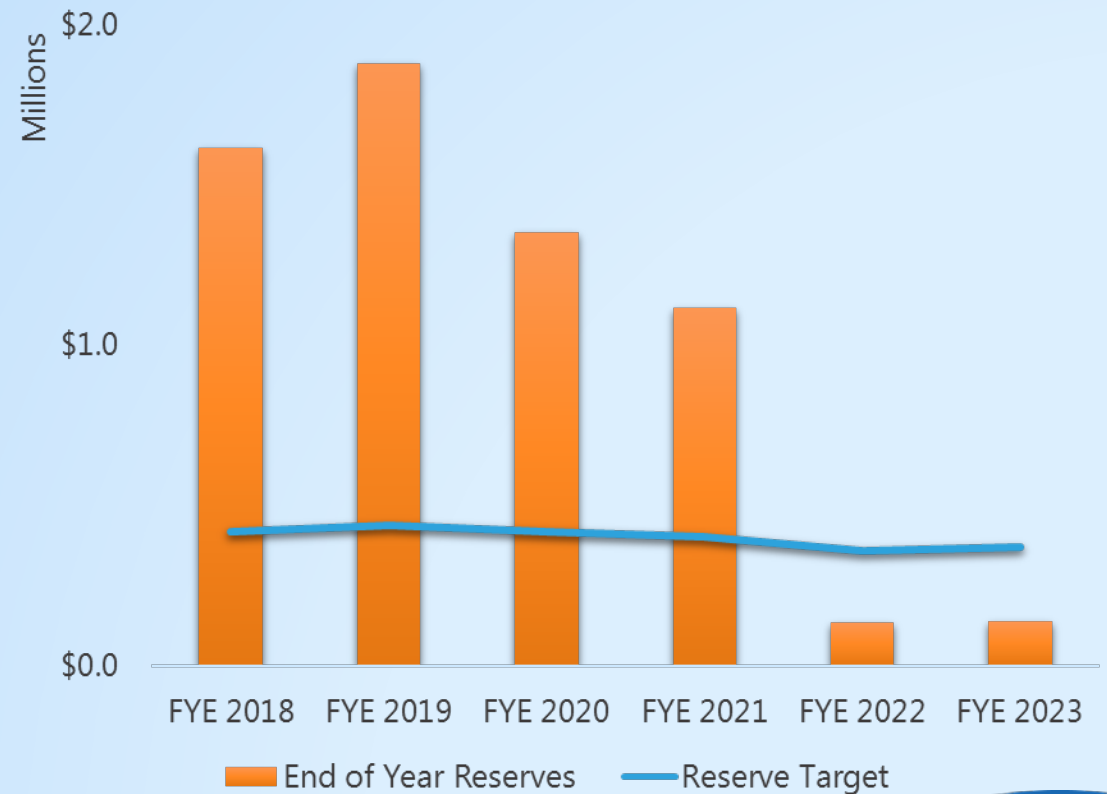
**Typical customer assumes 9 CCF with a 3/4" meter*

Marina Sewer: Significant capital expenditures planning in FYE 2020-2022, necessitating additional funding

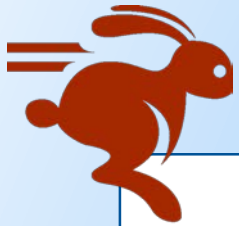
MS Revenues vs Expenditures with No Rate Change



MS Reserves with No Rate Change



Marina Sewer: Financial plan balances debt in FYE 2022 with more modest rate increases (3% versus 5% without debt)



Immediate

- **Increases (%):**
 - 5 in all years
- **Debt**
 - No additional debt
- **Reserves:**
 - Meets target in all years
 - Relies on reserve funding in FYE 2020 and 2022
- **Typical Customer Impact:***
 - Approx. \$1 per month



Balanced

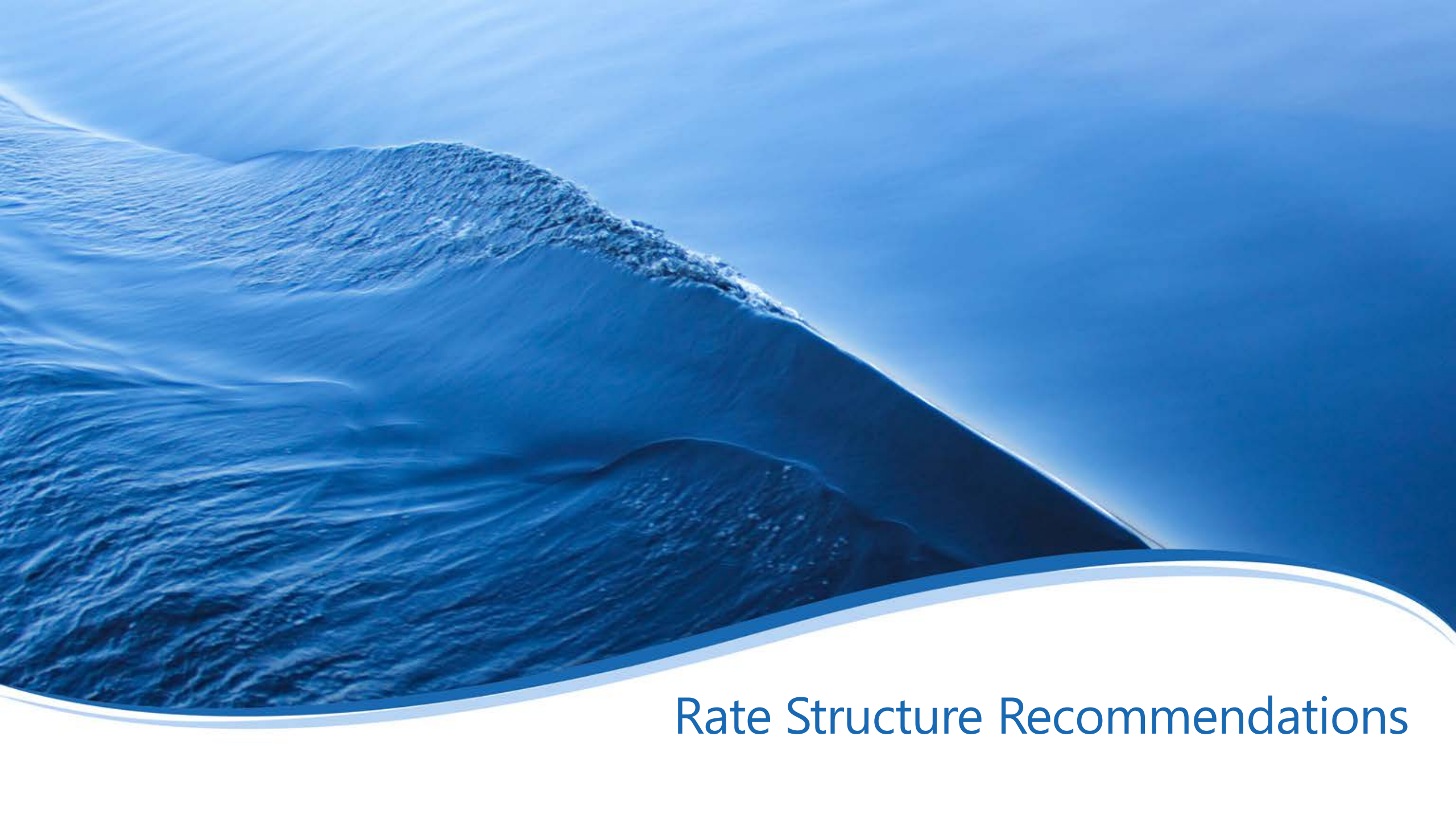
- **Increases (%):**
 - 3 in all years
- **Debt**
 - **\$1.3m in FYE 2022**
- **Reserves:**
 - Meets target in all years
 - Relies on reserve funding in FYE 2020
- **Typical Customer Impact:***
 - < \$1 per month



Extended

- **Increases (%):**
 - 3 in all years
- **Debt**
 - No additional debt
- **Reserves:**
 - Meets target in all years
 - Relies on reserve funding in FYE 2020 through 2022
- **Typical Customer Impact:***
 - < \$1 per month

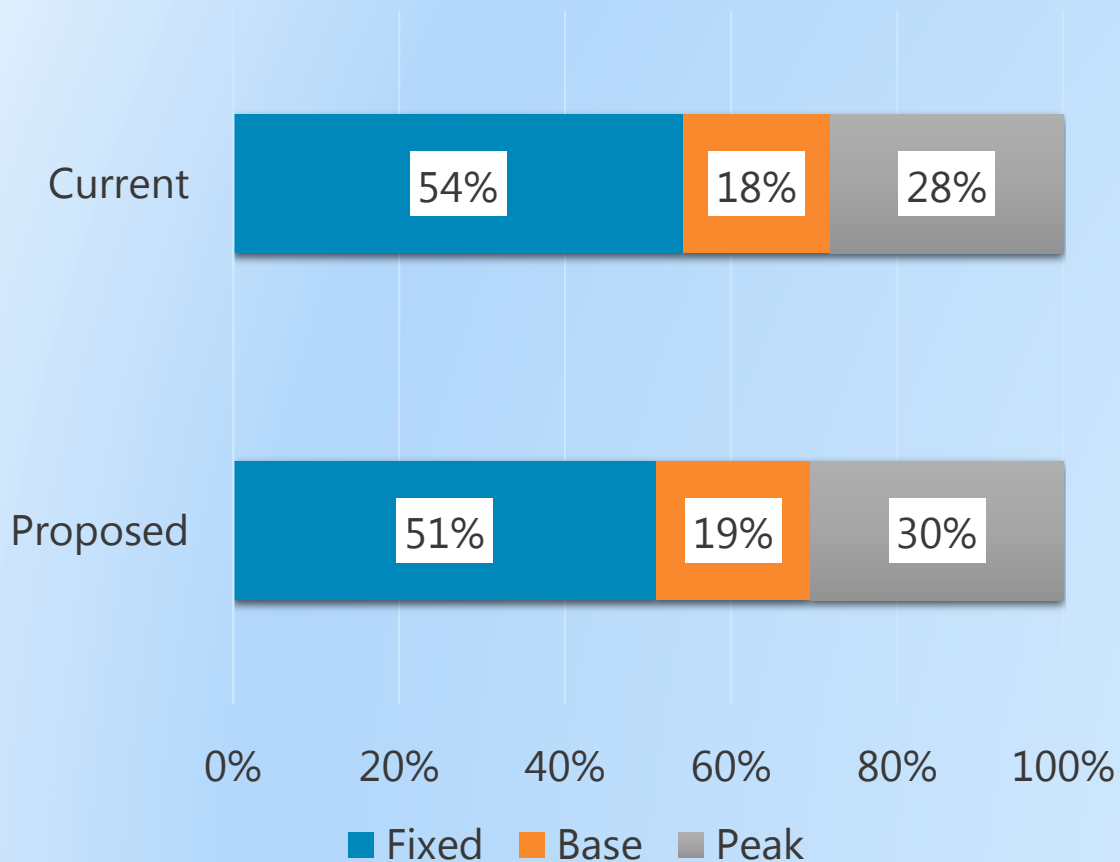
*Typical customer assumes SFR with 1 EDU



Rate Structure Recommendations

Ord Water: Cost recovery continues to be stabilized by a high percentage of revenues from fixed charges

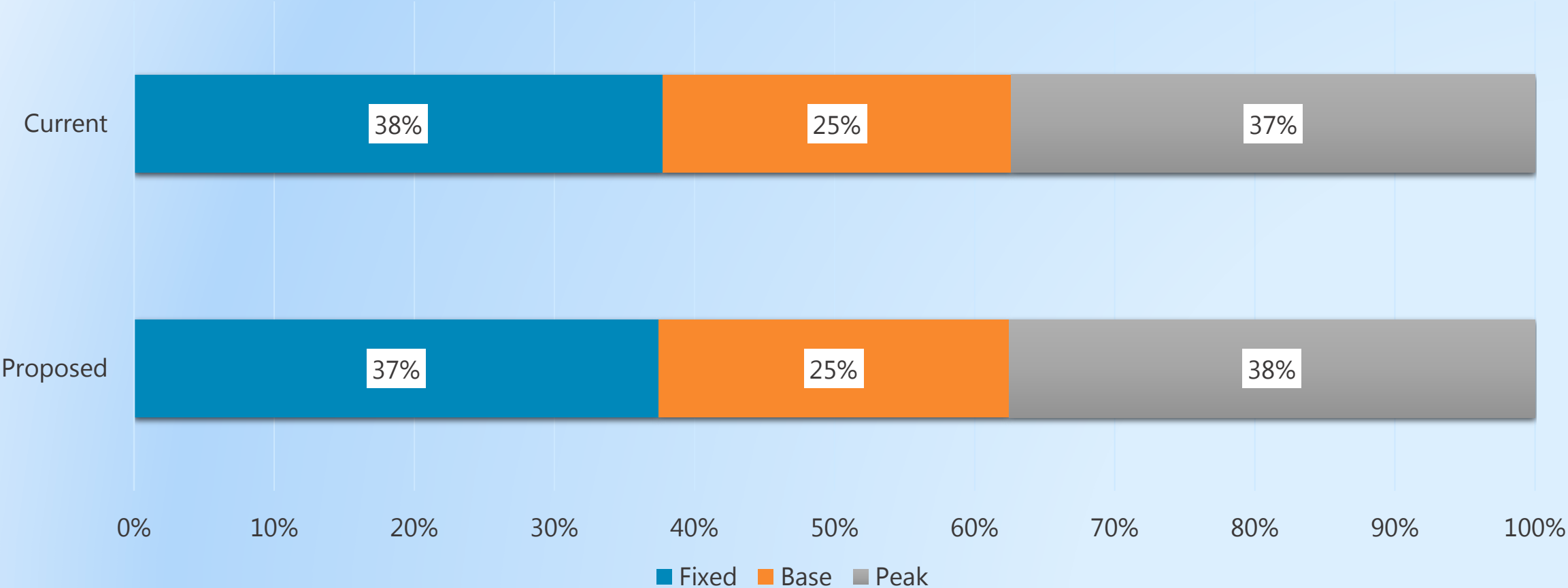
Ord Water Cost Allocation Results



- High fixed cost recovery helped smooth revenue collection during the drought
 - However, percentage went up as volumetric usage went down in recent years

While less than Ord, Marina Water fixed cost recovery is still high enough to help stabilize revenues

Marina Water Cost Allocation Results



Three-Tiered rates have a firm cost of service foundation

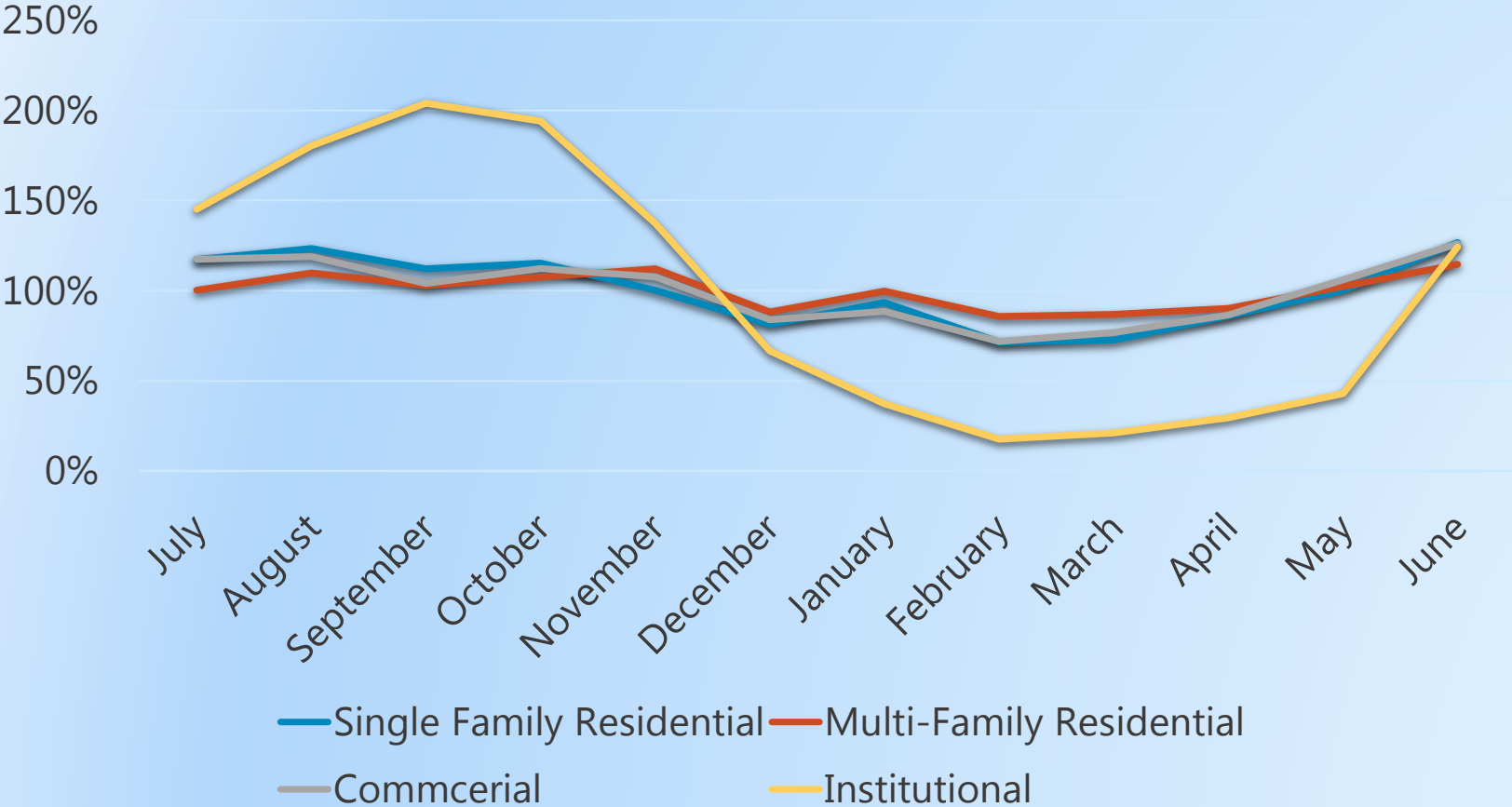
		July 1, 2016	January 1, 2017
Water Consumption Charge			
0-8 hcf	First Tier	2.97 per hcf	3.40 per hcf
8-16 hcf	Second Tier	4.56 per hcf	5.22 per hcf
16+ hcf	Third Tier	6.14 per hcf	7.03 per hcf

But have the underlying assumptions changed since these were developed?

- What changes could be made to the rates?
 - More closely tailored to cost of service?
 - More reflective customer demands?
 - Greater mitigation of financial risk?

With the exception of Institutional customers, MCWD customers have a relatively flat peak profile

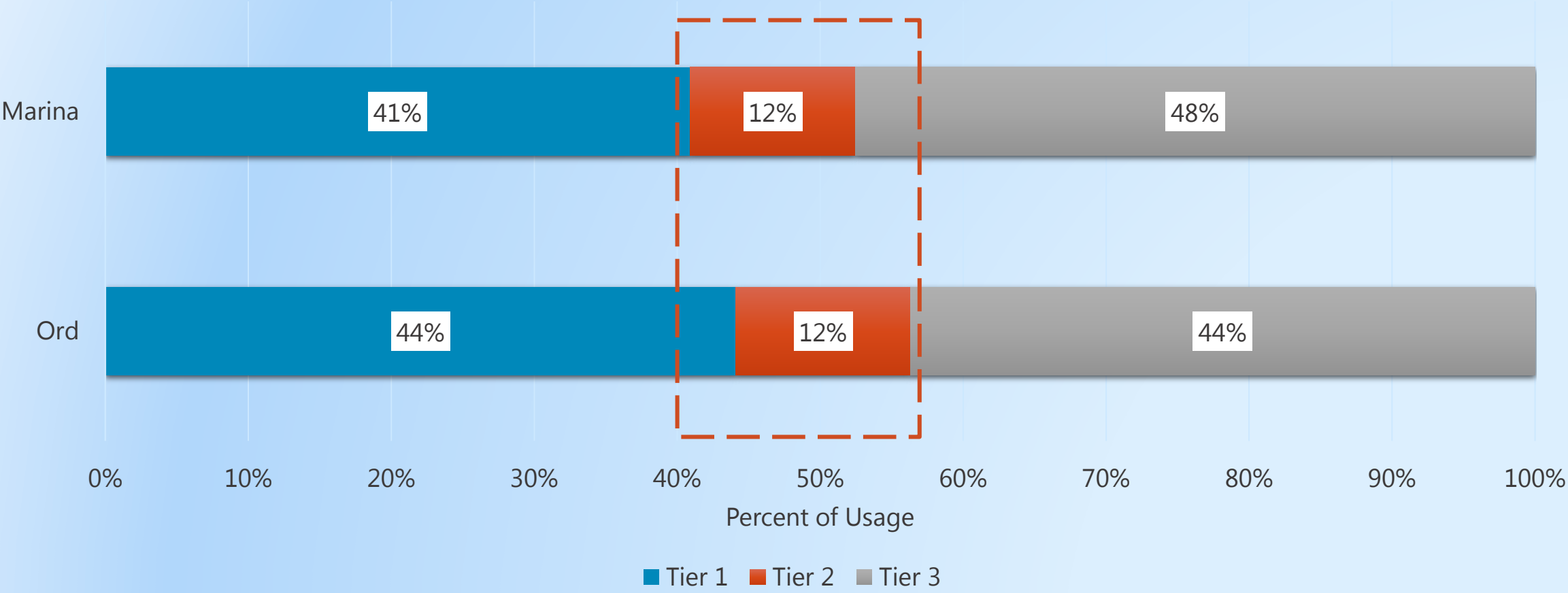
Month vs. Average Peak Profile



Max month is only **22% higher** compared to an average month for all customer classes

Over 85 percent of all usage for both Marina and Ord occurs within tiers 1 or 3, questioning the need for a tier 2

Usage by Tier



Given the limited peaking of the District's customers, a two-tiered approach may provide a better alternative



Easier to understand and administer

Simpler cost of service nexus

Potentially less subject to revenue risk

Two-Tier structure would expand the first tier, and consolidate the second and third tiers

- Tier 1 would be expanded to provide additional base capacity water
- Tier 2 would cover all usage above the tier 1 allowance
- Tier 3 would be eliminated

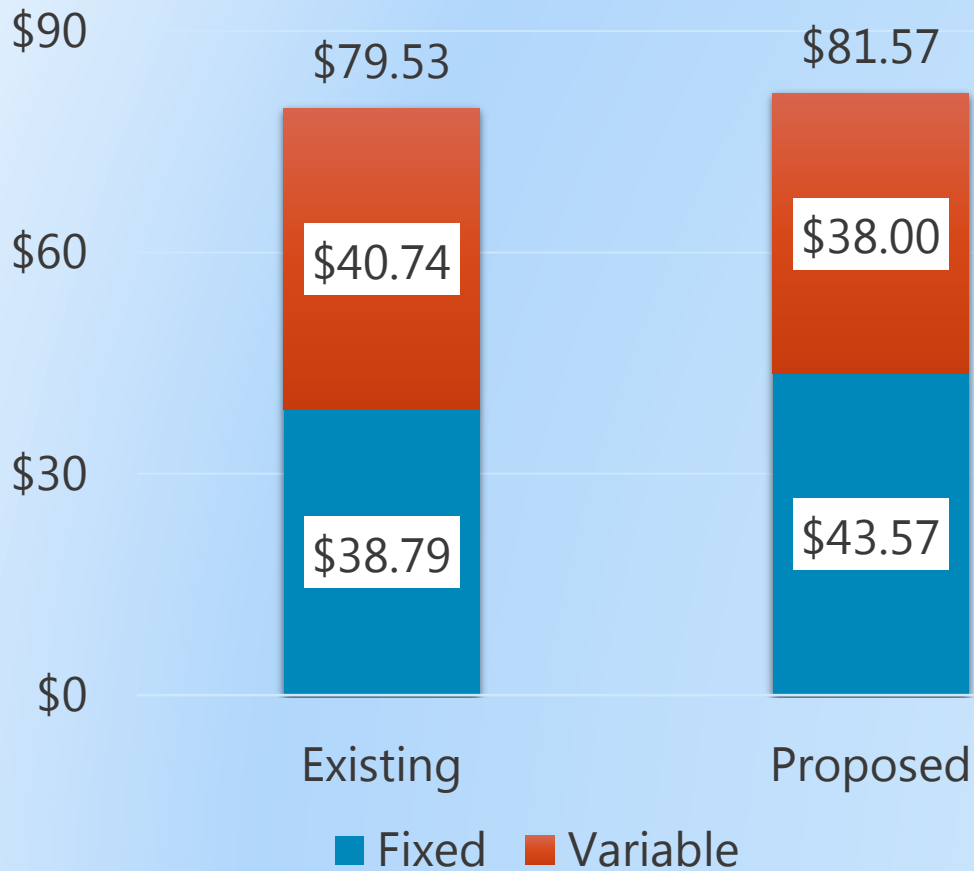
Tier	Three-Tier CCF	Two-Tier CCF
1	8	10
2	16	All other usage
3	All other usage	Eliminated

Proposed Water Rates: Assuming the balanced funding scenario

Ord				Marina			
Tier	<i>Current Rates (Eff. 1/1/18)</i>	<i>Three Tier (1/1/19)</i>	<i>Two Tier (1/1/19)</i>	Tier	<i>Current Rates (Eff. 1/1/18)</i>	<i>Three Tier (1/1/19)</i>	<i>Two Tier (1/1/19)</i>
1	\$3.68	\$4.15	\$4.08	1	\$2.78	\$3.29	\$3.28
2	\$5.65	\$5.80	\$8.33	2	\$3.19	\$4.19	\$4.99
3	\$7.62	\$8.57	-	3	\$5.63	\$5.02	-

Balanced Financial Plan: Bill impacts for the typical customers

Ord Monthly Bill Comparison (9 CCF)

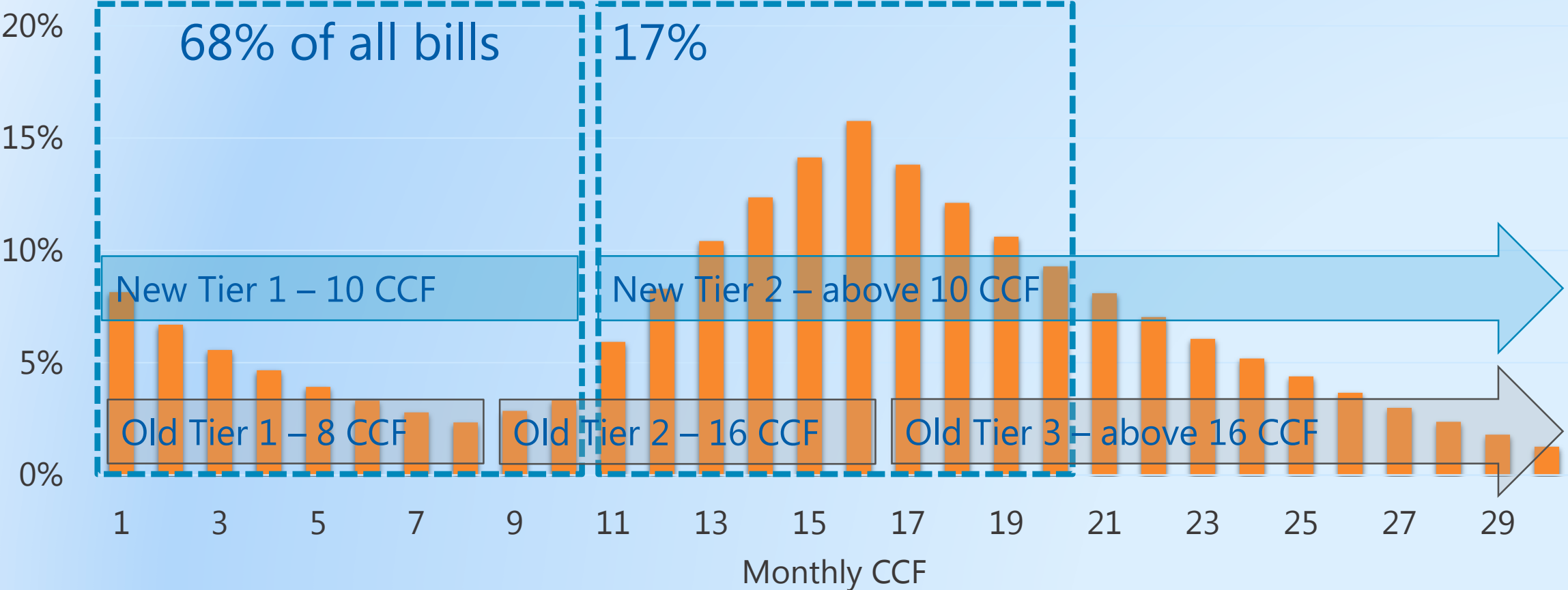


Marina Monthly Bill Comparison



Two-Tier structure would impact Marina water customers differently based on usage levels relative to old tier breakpoints

MW Bill Impact at Each Usage Level





Next Steps

Schedule and Next Steps

