

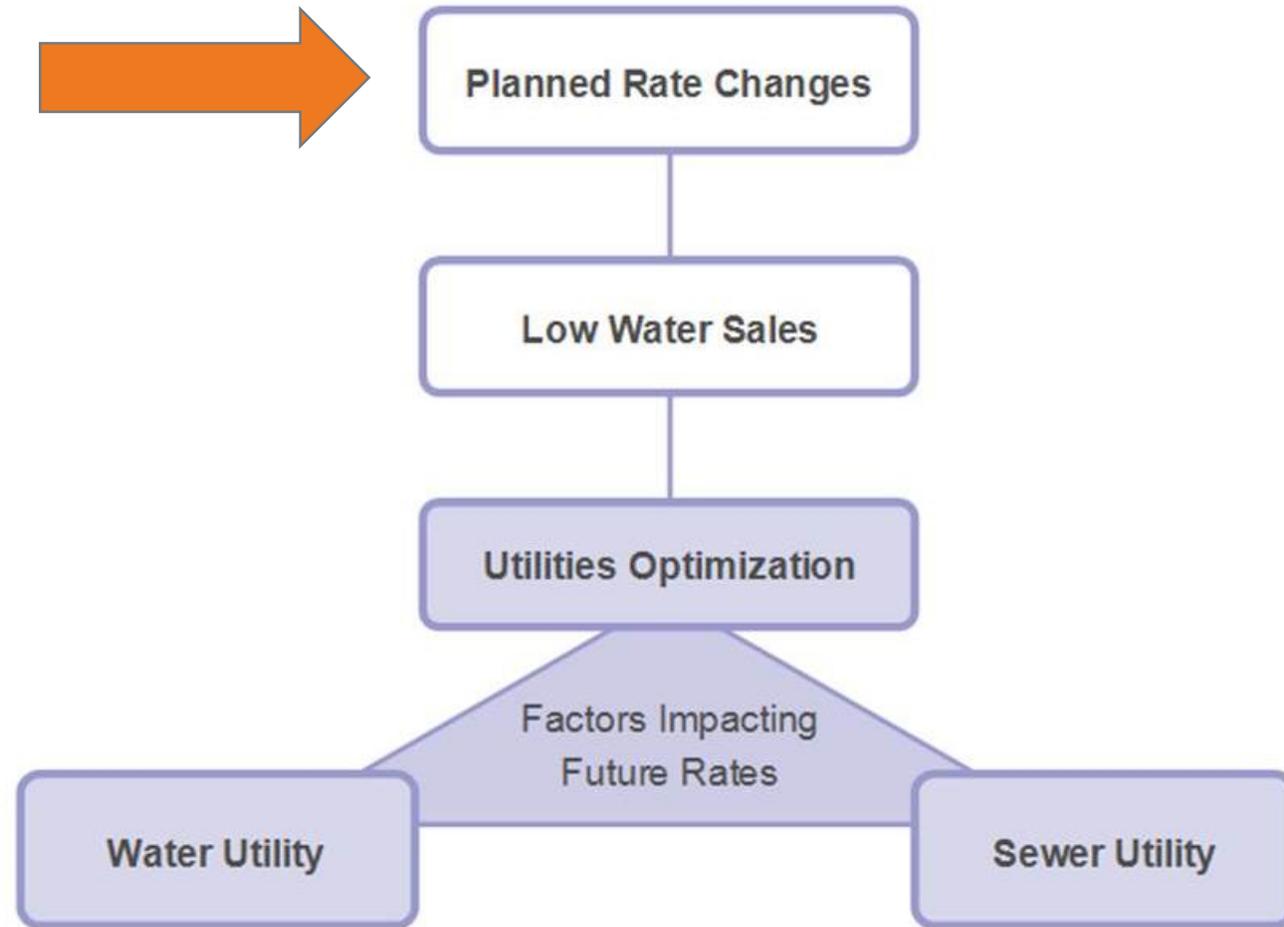
2017 Water and Sewer Rates

Public Works & Utilities

October 25, 2016



Agenda



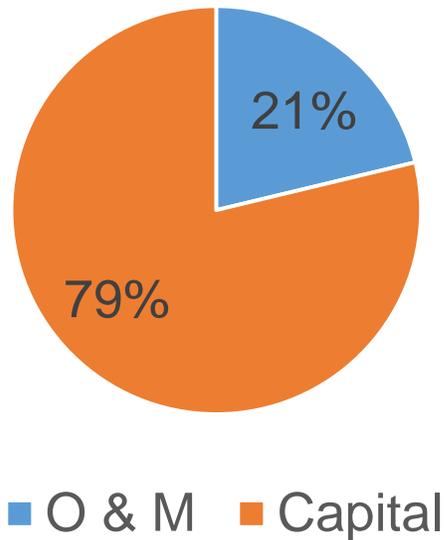
Planned Rate Changes

Projected Rate Increases											
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Water	5.6%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Sewer	5.1%	5.0%	5.5%	5.0%	5.0%	4.5%	4.5%	4.5%	4.5%	3.0%	3.0%
Combined	5.4%	4.4%	4.0%	3.8%	3.8%	3.6%	3.6%	3.6%	3.6%	3.0%	3.0%

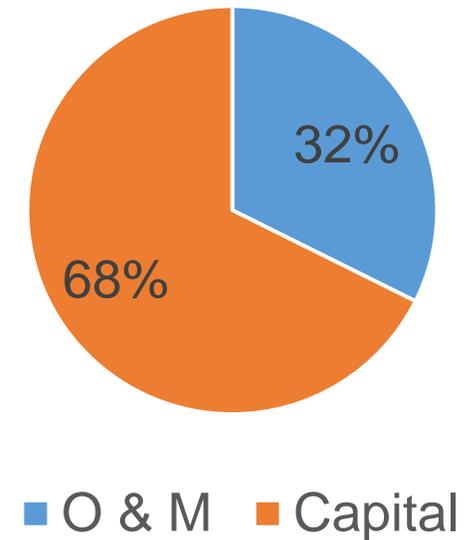
Planned Rate Changes

Cost Drivers of Rate Increases

Water

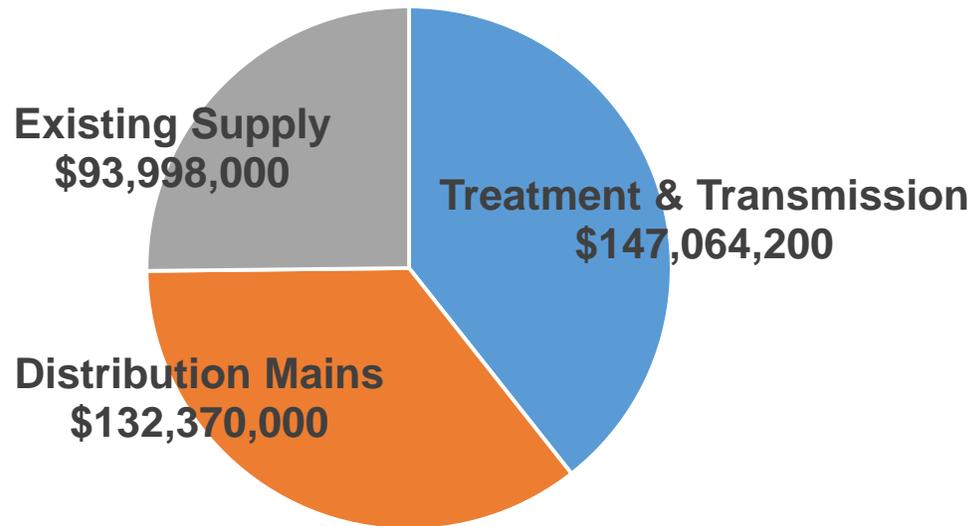


Sewer

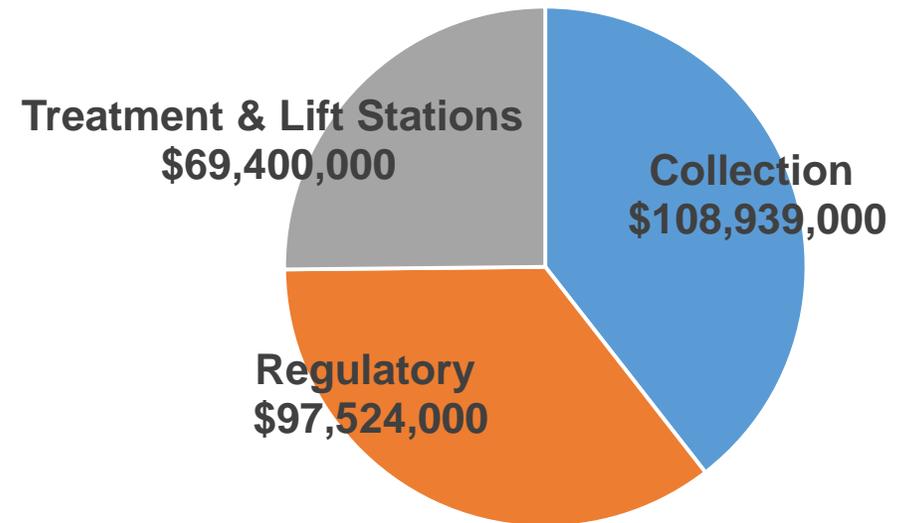


Planned Rate Changes

\$373 million Water CIP 10 years



\$276 million Sewer CIP 10 years



Planned Rate Changes

Total Debt Coverage Ratio

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Water	176%	164%	151%	143%	137%	138%	135%	135%	135%	131%
Sewer	176%	168%	164%	165%	168%	170%	168%	180%	164%	155%
Combined	176%	166%	156%	151%	148%	149%	146%	150%	145%	139%

Minimum is 125%

Planned Rate Changes

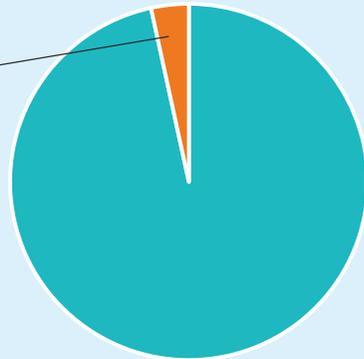
Combined Monthly Water & Sewer Bills			
	Current	2017 Proposed	Increase
Residential			
3,750 Gallons	\$41.10	\$42.95	\$1.85
7,500 Gallons	\$61.12	\$63.90	\$2.78
15,000 Gallons	\$109.95	\$114.68	\$4.73
Commercial			
100,000 Gallons	\$575.31	\$601.86	\$26.55
Industrial			
10 Million Gallons	\$53,833	\$56,323	\$2,489

Planned Rate Changes



2016 Funding*

Donations
\$4,280



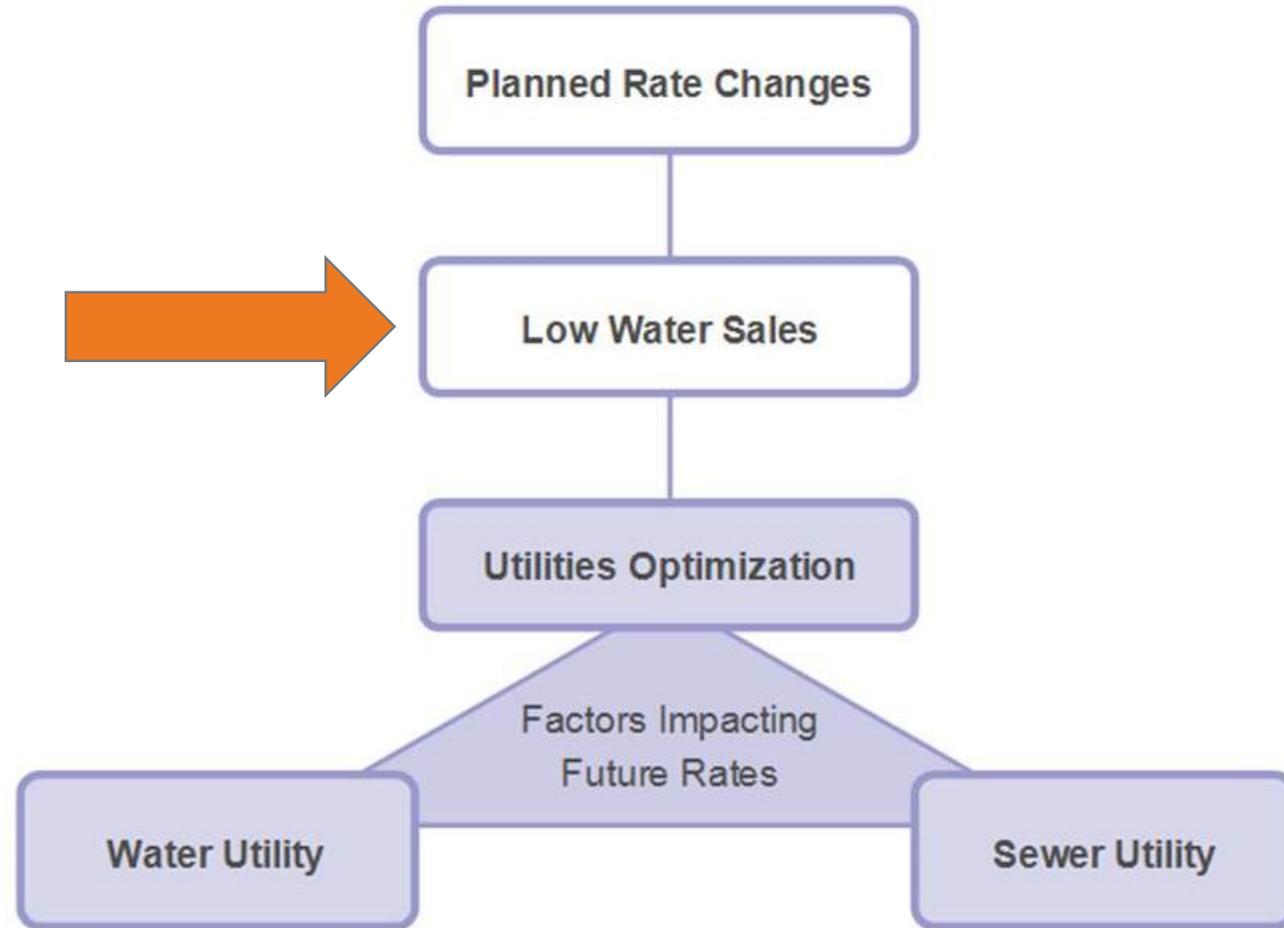
0.1% Rates
\$121,320

Households Helped

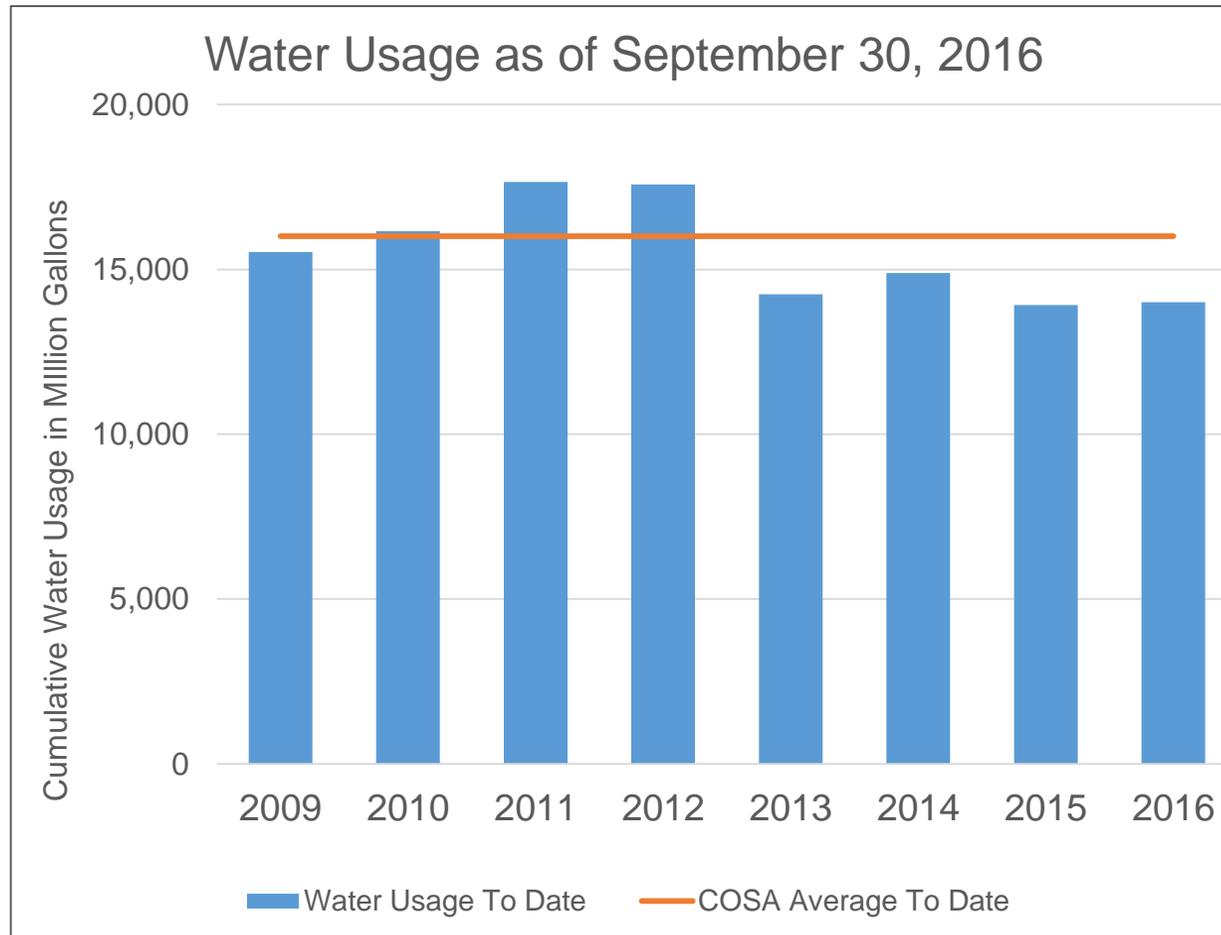
2014	265	\$26,901
2015	280	\$25,323
2016*	393	\$39,705

*2016 amounts are projected based on actuals as of September 30

Agenda



Low Water Sales



Summer rainfall in 2016 was 80% higher than average.

Contingency Plan

Defer portions of discretionary Water CIP

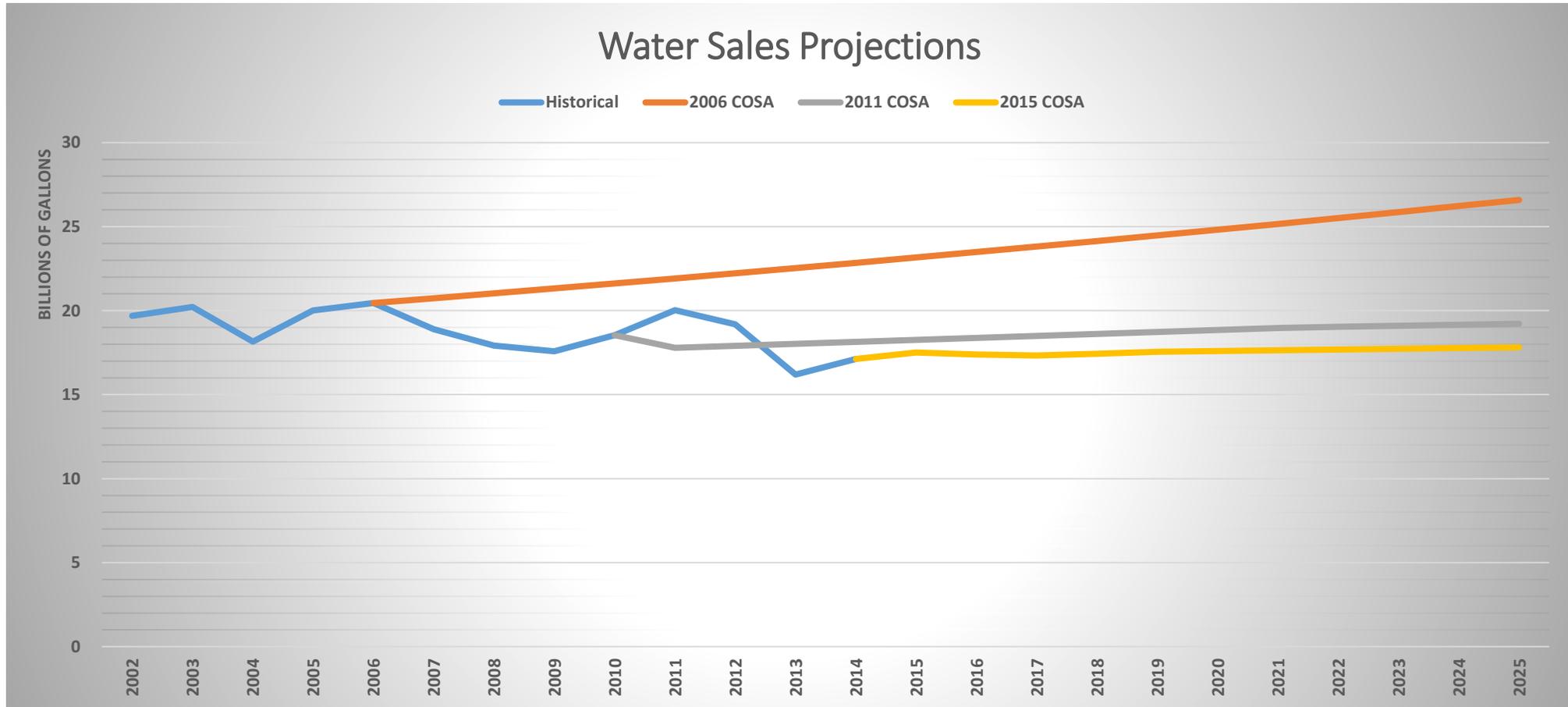
- ✓ Maintain debt coverage ratio and reserve targets
- ✓ Proceed with high priority improvements
- ✓ Projects phased back in
- ✓ **No rate impact**

Low Water Sales

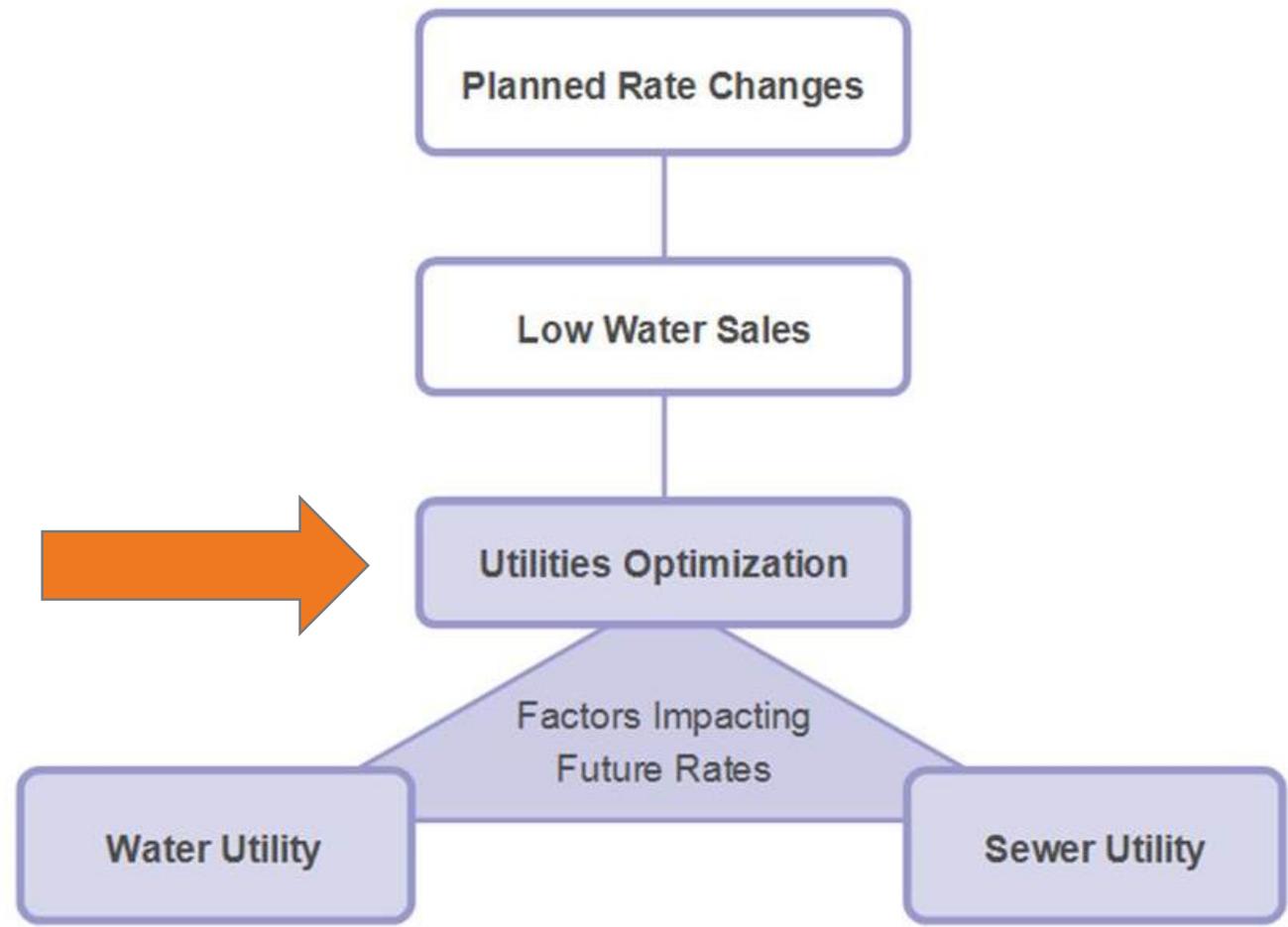
Projects Deferred in 2016

- **Cheney Improvements (\$378,000)**
 - 60-inch Line Air Release Replacement
 - Strainer Replacement
 - Switch Gear Enclosure and Cooling
- **Booster Stations (\$9.1 million)**
 - Northeast – Variable Frequency Drive and Pump
 - Southeast – Feed Completion
- **Neighborhood Main Replacements (\$250,000)**
- **Water Supply Rehab Projects (\$2 million)**
- **Water Treatment Plant (\$2.2 million)**
 - Central Basins and Aerator Racks Repairs
 - Update SCADA
- **West Wellfield Improvements (\$1.2 million)**
 - 48-inch Cross Connect Cathodic Protection
 - 66-inch Line Air Relief Replacement
- **ASR Surface Water Treatment Plant Ozone Purge System (\$500,000)**

Low Water Sales

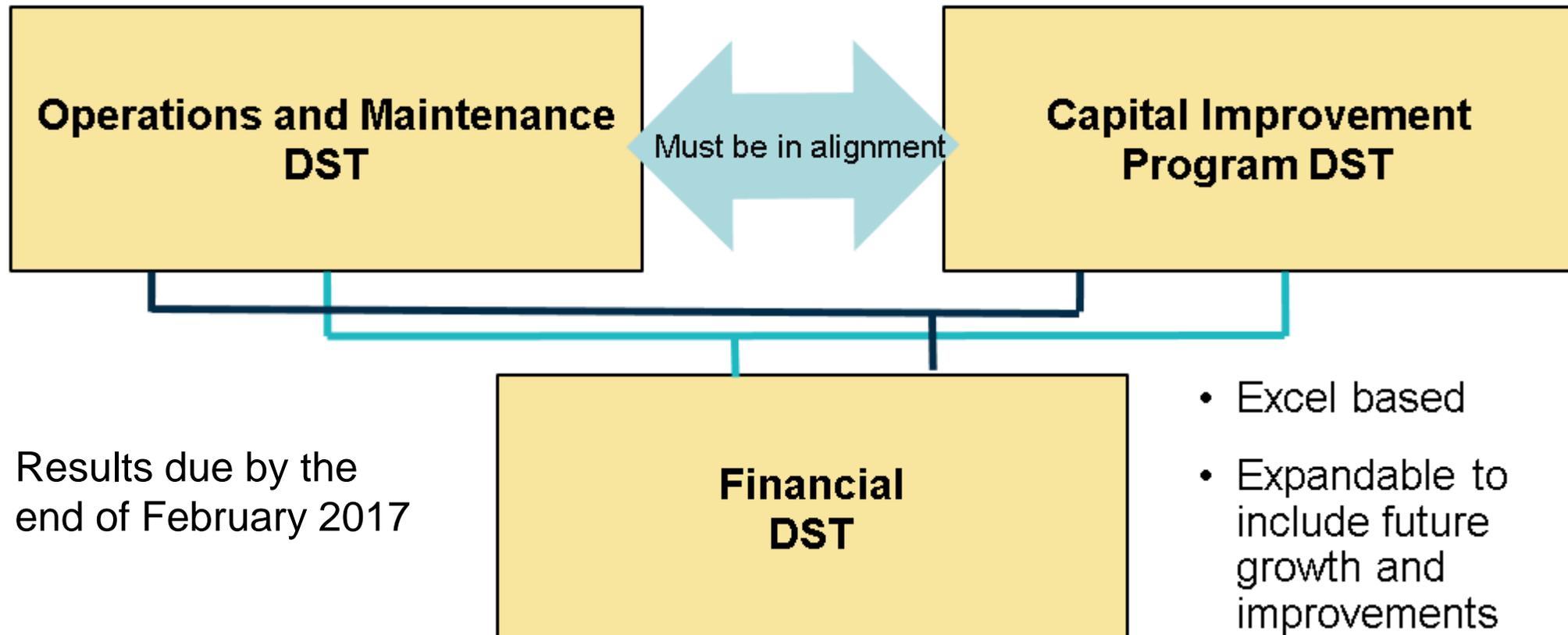


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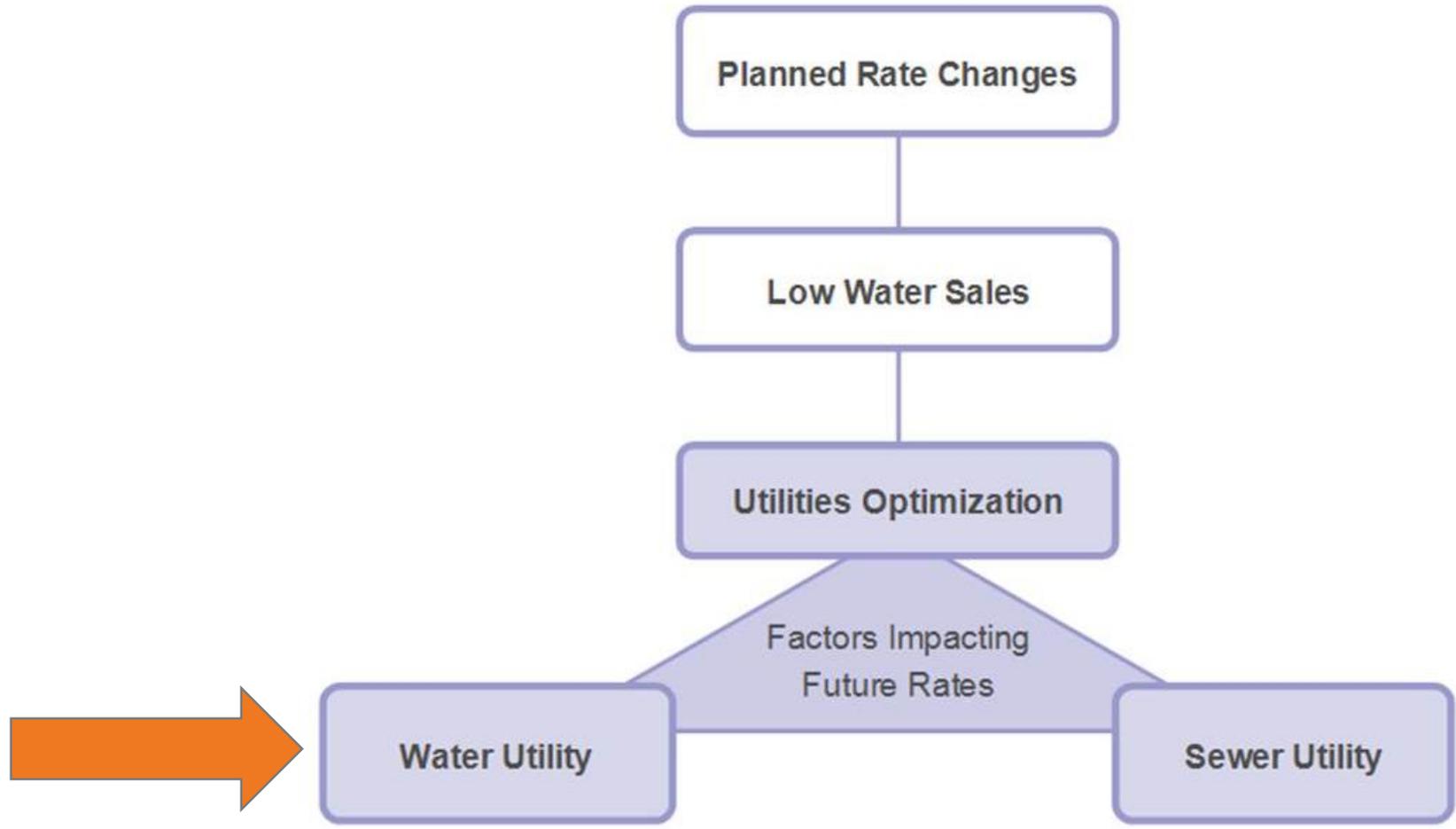


Utilities Optimization

DECISION SUPPORT TOOL

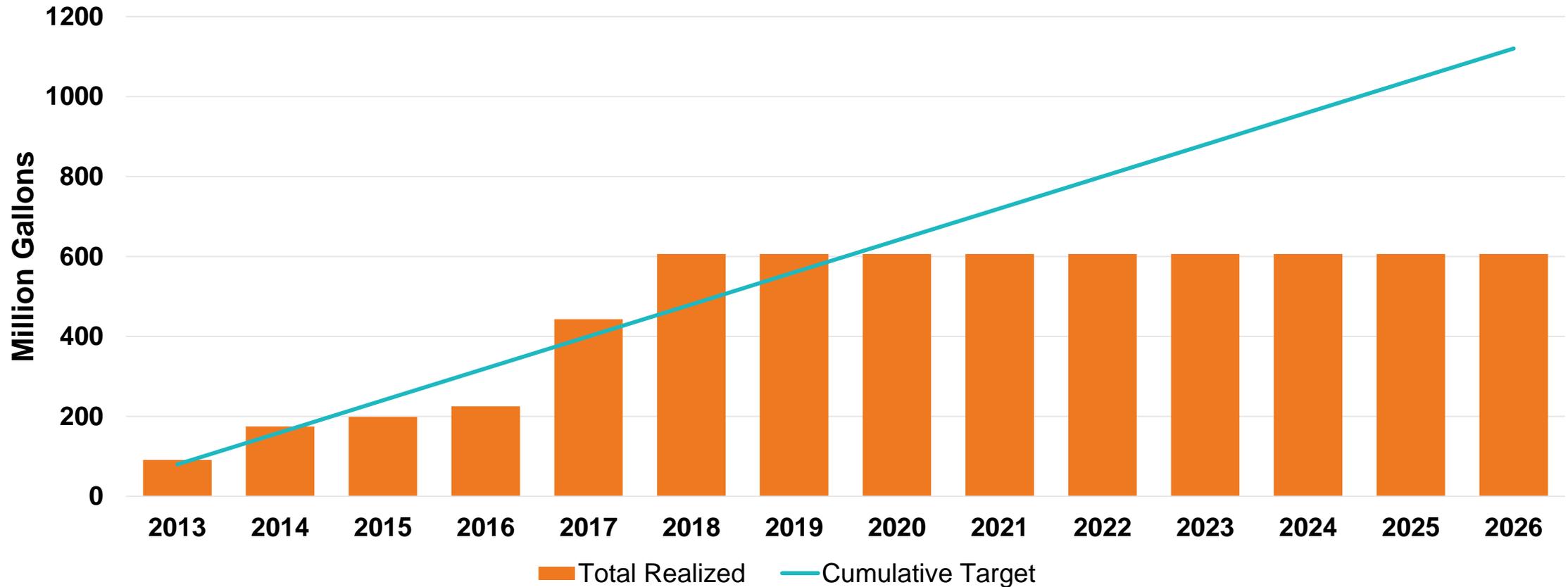


Agenda



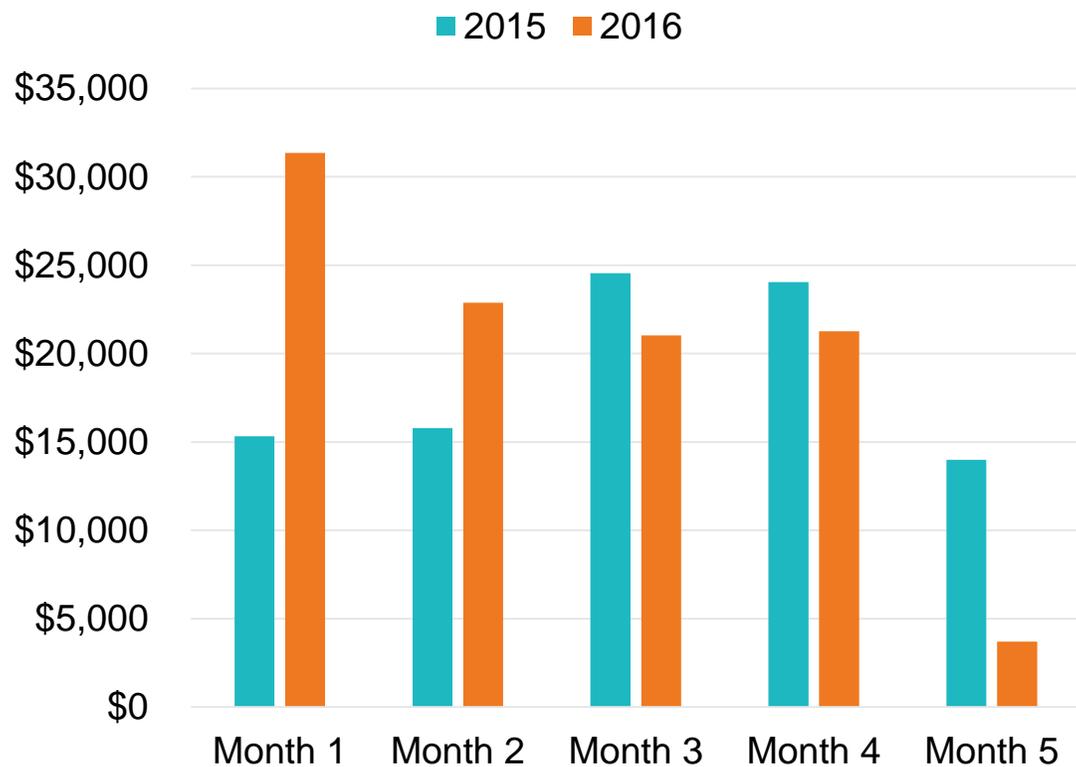
Water Utility

Conservation - Target vs Realized



Water Utility

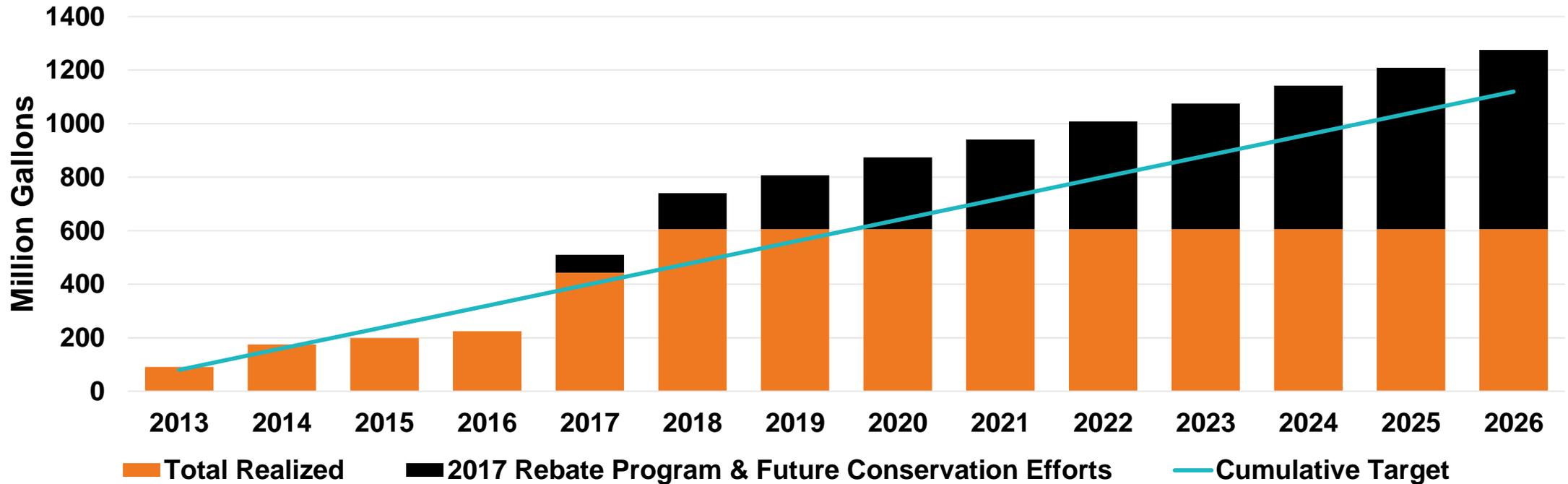
Value of Approved Applications: Water Conservation Rebate Programs



	2015	2016	Diff.
CC Approval	4/7/15	1/19/16	
Date Money Ran Out	8/21/15	6/6/16	
Days of Rebate Program	136	139	+ 2%
Total Amount Spent	\$93,744	\$100,000	+ 7%
Amount of Rebates Per Day	\$689	\$719	+ 4%

Water Utility

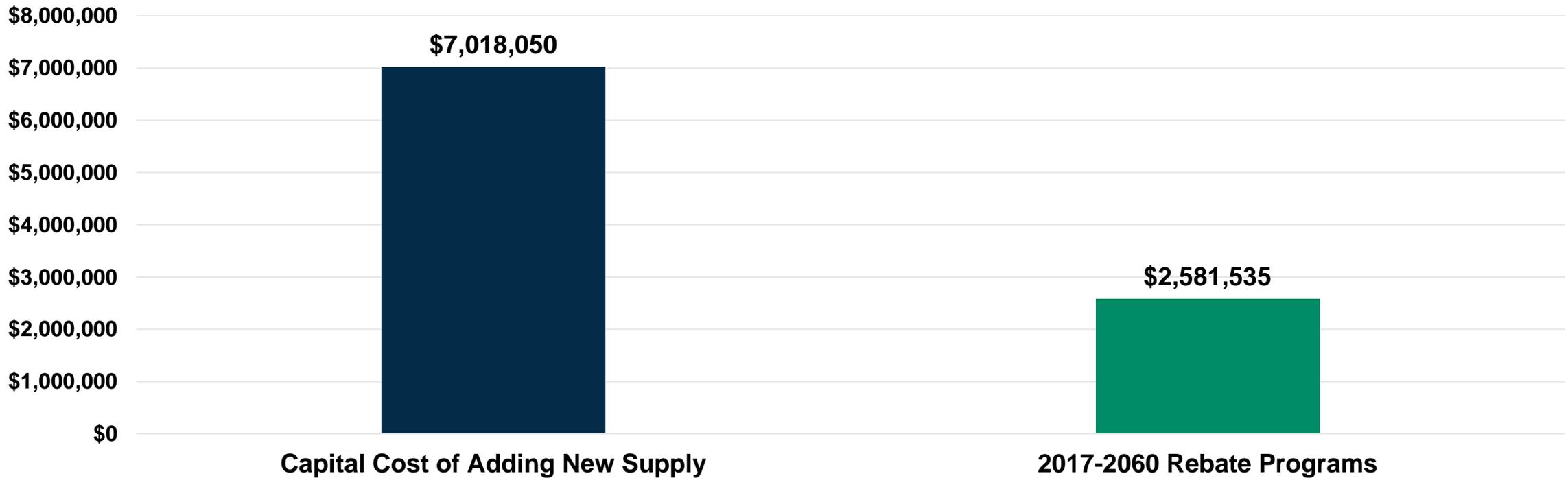
Conservation - Target vs Realized



Based on recent demand for rebates, it would cost about \$270,000 to fully fund a rebate program to last through all of 2017. An additional water rate increase of 0.3% would be needed to fund the program.

Water Utility

COST PER 1 MGD OF WATER



The 2017 Rebate Program would cost about \$270,000 and provide a benefit of approximately 0.18 MGD reduction in water supply needs

Water Utility

Goal is to avoid the harsh restrictions in Stages #3 and #4 of the Drought Response Plan

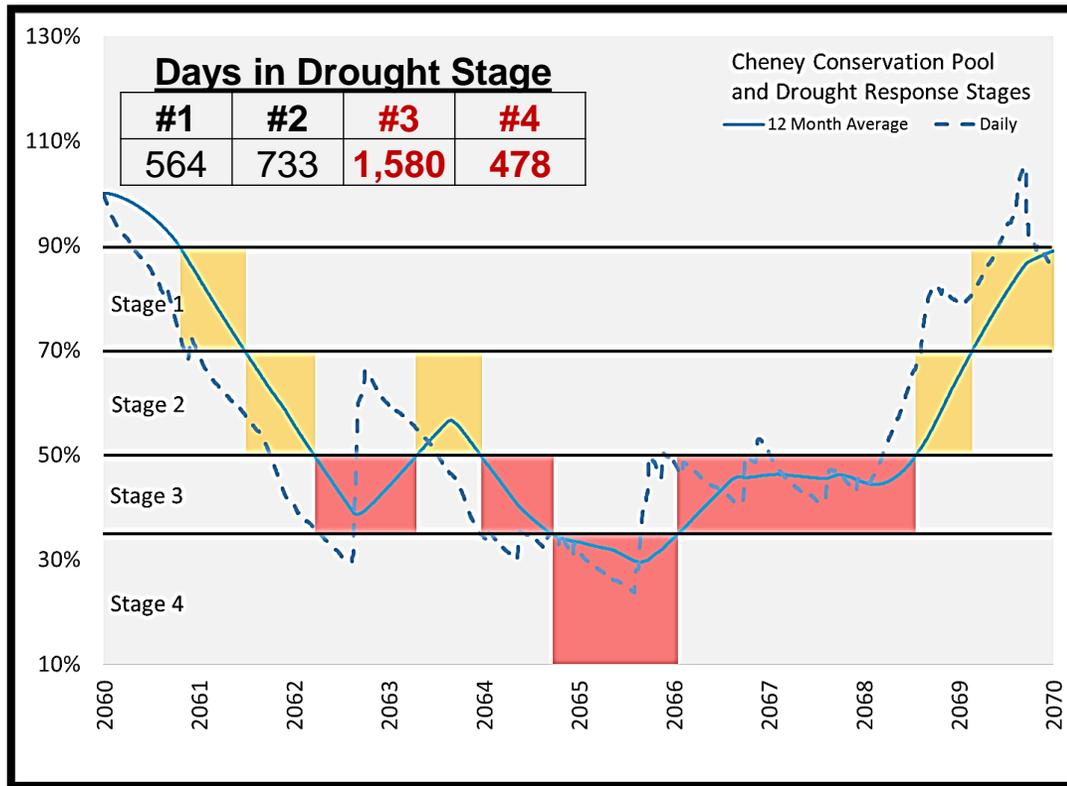
Stage	Trigger	Restriction	Exemption
3	35% - 50%	All outdoor watering banned	Food producing gardens and businesses reliant on irrigation
4	Below 35%	All outdoor watering banned. Base demand reductions of 15%.	No exemptions for irrigation. Hospitals exempt from base demand reductions

Trigger is the 12-month average lake level at Cheney

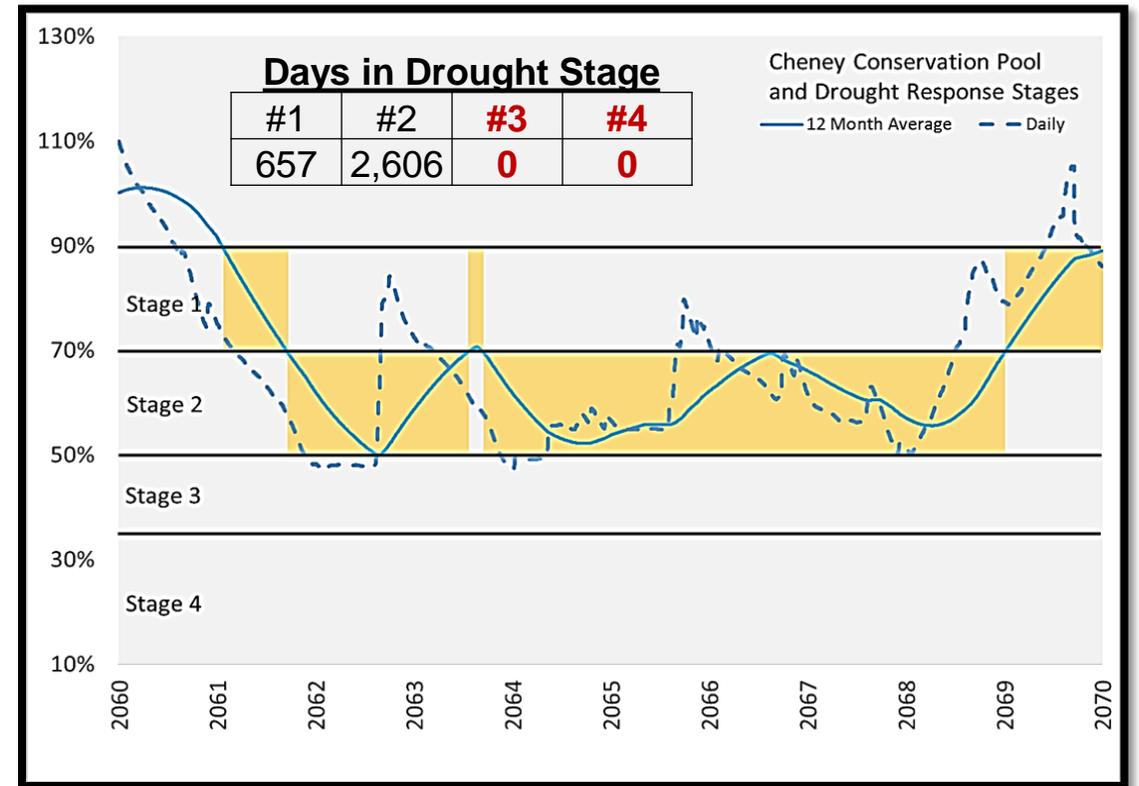
Drought Response Plan approved October 2013
Phased Supply Plan presented December 2015

Water Utility

Without ASR



With ASR and Planned Improvements



1% drought starting in 2060

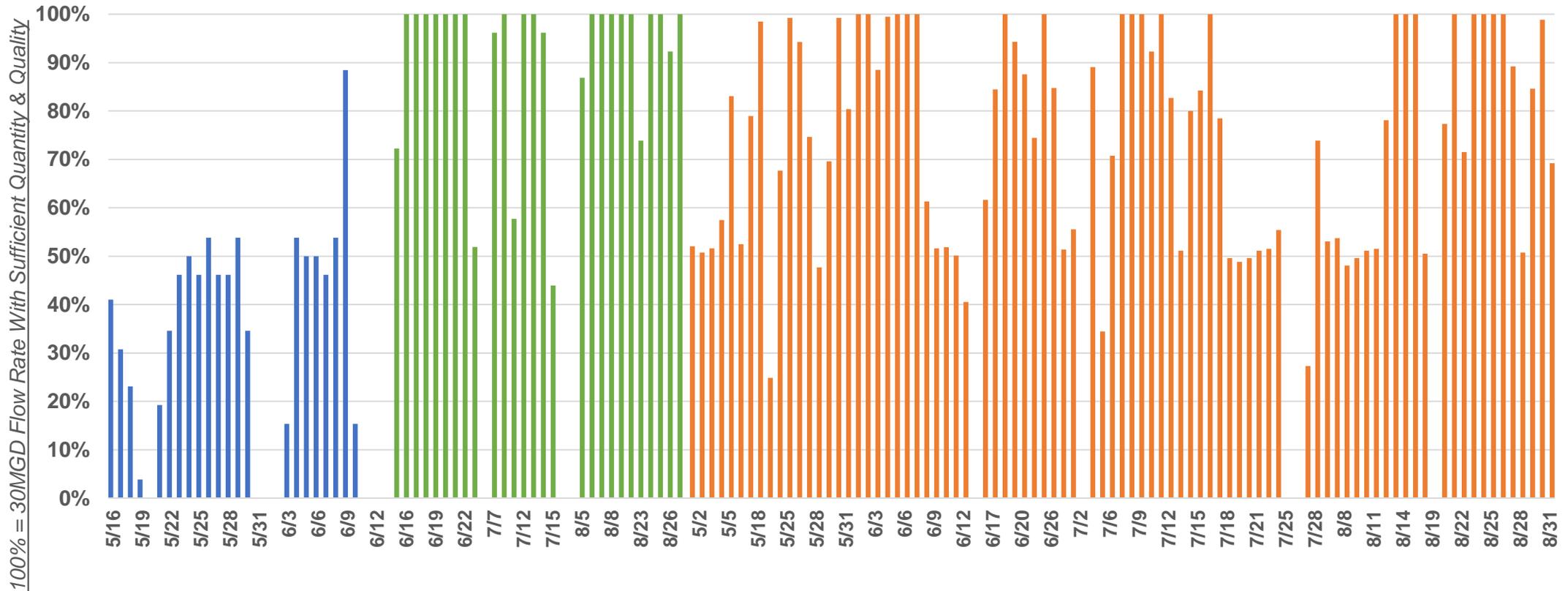
Water Utility

Phase	Title	Date	Capital Cost
1	ASR Optimization	2016	-----
2	1993 Elevation Adjustment	2016	-----
3	Operational Credits	2018	-----
4	Diversion Wells	2020	\$11.7 million
5	Rehabilitate Existing Recharge Wells	2020	\$11.3 million
6	Construct New Recharge Wells	2022	\$47.2 million

Water Utility

Available Water Processed Through ASR

■ 2015 Before Shakeout ■ 2015 After Shakeout ■ 2016



Water Utility

Main Water Treatment Plant Improvements

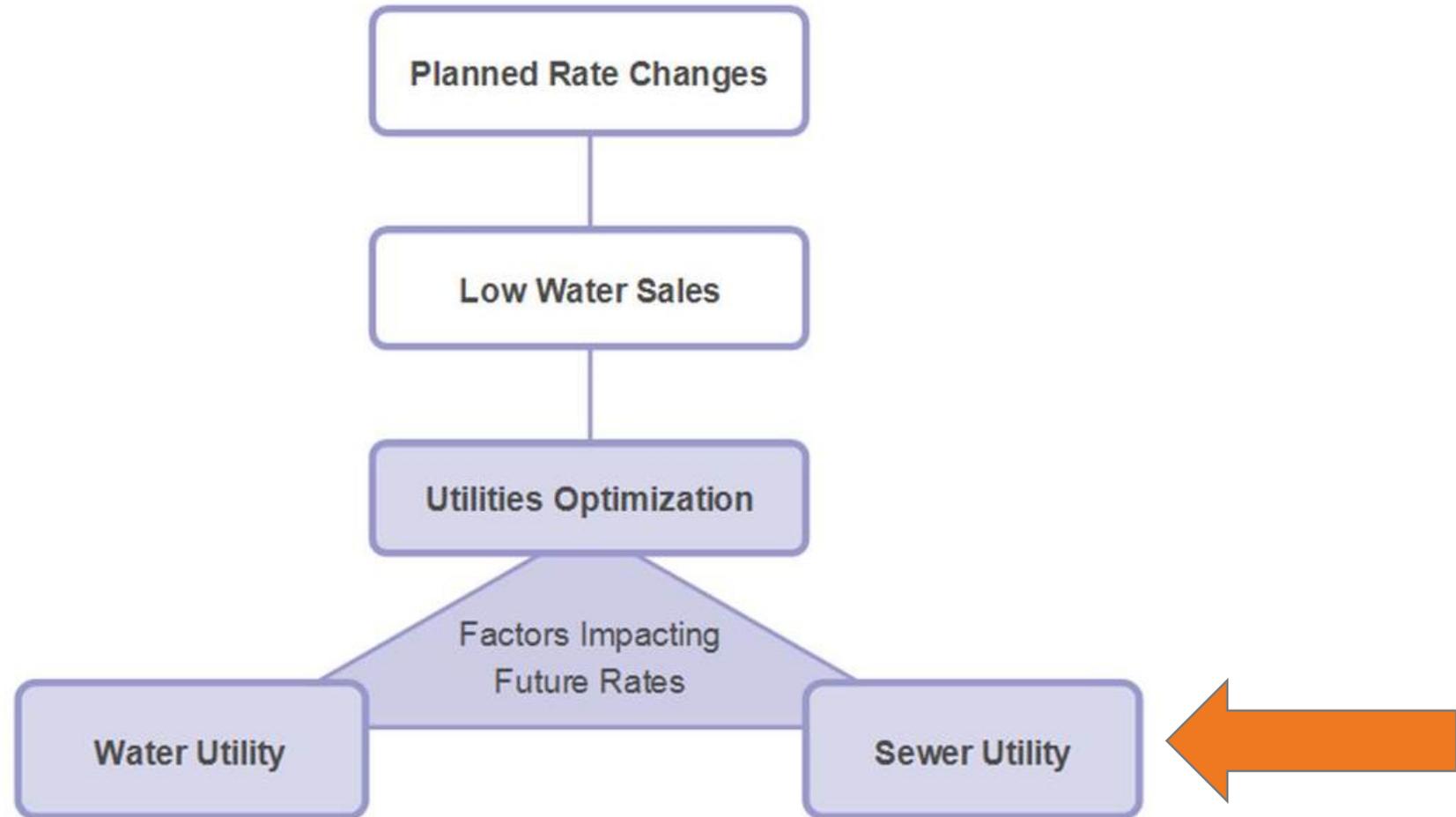
- Design started - January 2016
- Construction should start - January 2017
- Expected completion - December 2018

Water Utility

State of Kansas Water Plan

- Blue Ribbon Task Force seeking revenue increases for 50-year vision
- Could impact households through State taxes and fees on water
- City contracted WSU Environmental Finance Center to analyze

Agenda



Sewer Utility

KDHE Consent Order Update



Full compliance confirmed June 2016

Highlight of Resulting Improvements

- ✓ Risk Assessment
- ✓ Plant 3 Headworks and Solids Treatment
- ✓ Plant 2 UV Disinfection
- ✓ Plant 1 Roof and Backup Power

Sewer Utility

Sanitary Sewer Force Main

- Design started – June 2016
- Construction should start – March 2017
- Expected completion – December 2018

Sewer Utility

Biological Nutrient Removal (BNR)

- \$98 million in current CIP, \$146 million in long-term plan
- Negotiating amount and schedule with KDHE
- Considering locking in requirements with 15-year permit instead of current 5-year permit

Sewer Utility

Odor Complaints

- Reduced complaints by 50% since odor control changes were first made in 2012
 - Established 24-hour hotline
 - Increased odor control chemical budget by 25%
 - Utilized 2014 CIP funds to upgrade odor control biofilter
- Additional odor control measures could impact future rates
 - Example: Full odor containment at Plant 2 estimated at a capital cost of \$52.5 million and an ongoing operating expense of \$249,000 per year.

Summary

- Recommend same rates presented last year
- Rate vote planned for early December
- Additional analysis expected in 2017 to inform 2018 rates
- Water Conservation Investment

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Combined	5.4%	4.4%	4.0%	3.8%	3.8%	3.6%	3.6%	3.6%	3.6%	3.0%	3.0%

Water & Sewer Rates

Public Works & Utilities

Serving You, In Many Ways, Every Day

