

CITY OF BRE A

WATER RATE STUDY

August 25, 2015



AGENDA

- Draft Financial Plan
 - Key Assumptions
 - Revenue Adjustments
 - Reserves
- Cost of Service Analysis
- Proposed Water Rates
 - Monthly Charges
 - Residential
 - Customer Impacts
 - Commercial
 - Other Customers
- Next Steps



DRAFT FINANCIAL PLAN



KEY ASSUMPTIONS

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Cost Escalation Factors					
General	3%	3%	3%	3%	3%
Salary	1.5%	1.5%	2%	2%	2%
Benefits	2%	2%	2%	2%	2%
Chemical	3%	3%	3%	3%	3%
Utilities	5%	5%	5%	5%	5%
Construction	3%	3%	3%	3%	3%
Water	6%	6%	6%	6%	6%

KEY ASSUMPTIONS

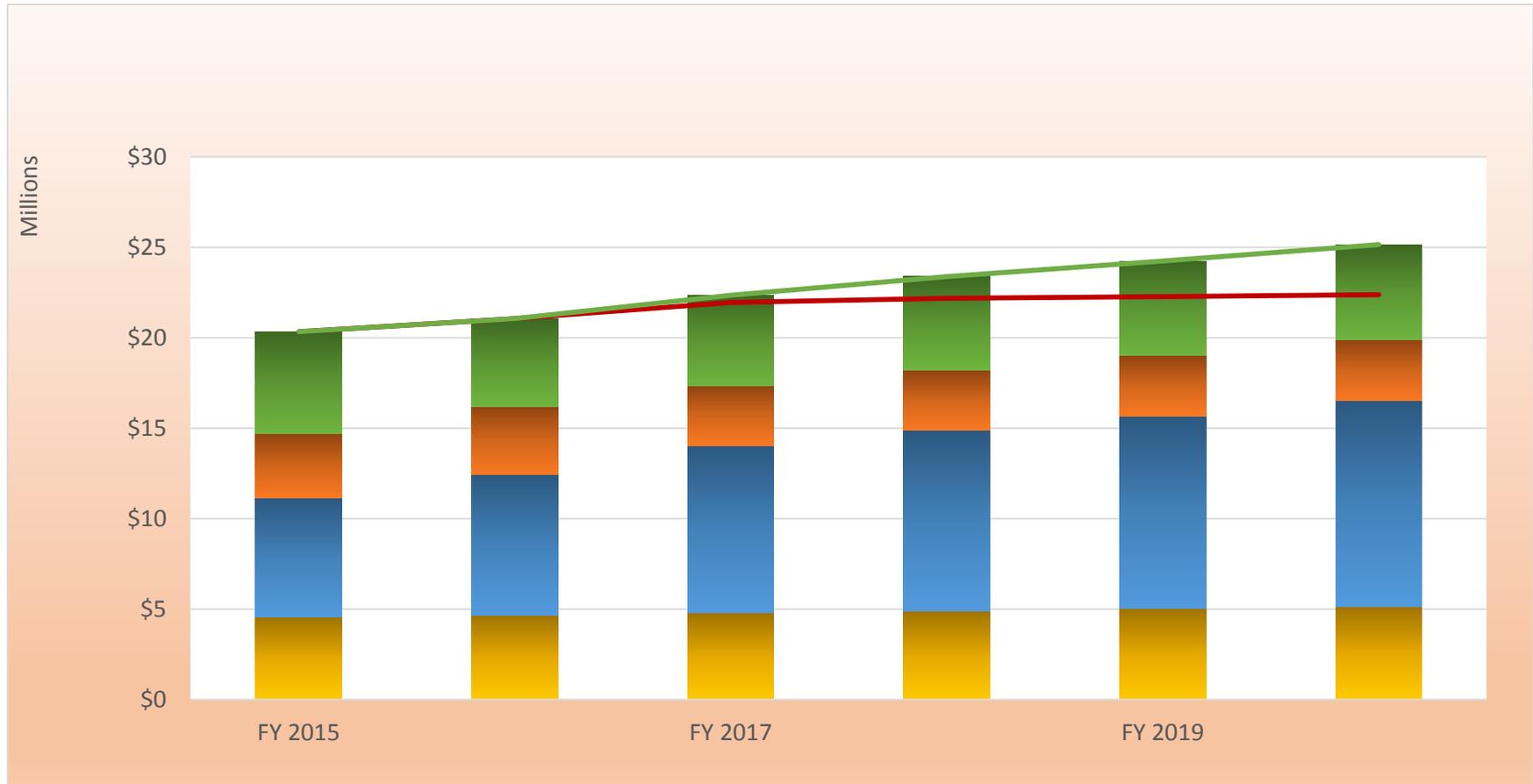
	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Revenues						
Interest		1%	1%	2%	2%	2%
Acct Growth		1.7%	2.4%	1.2%	0.5%	0.5%
Water Demand Factors						
	100%	100%	105%	100%	100%	100%

PROPOSED REVENUE ADJUSTMENTS

Fiscal Year	Proposed Adjustments
2015	
2016	3%*
2017	4%
2018	3.5%
2019	3.5%
2020	3.5%
2021	3.5%
2022	3.5%
2023	3.5%
2024	3.5%

* Indicates that the revenue adjustment is already in effect.

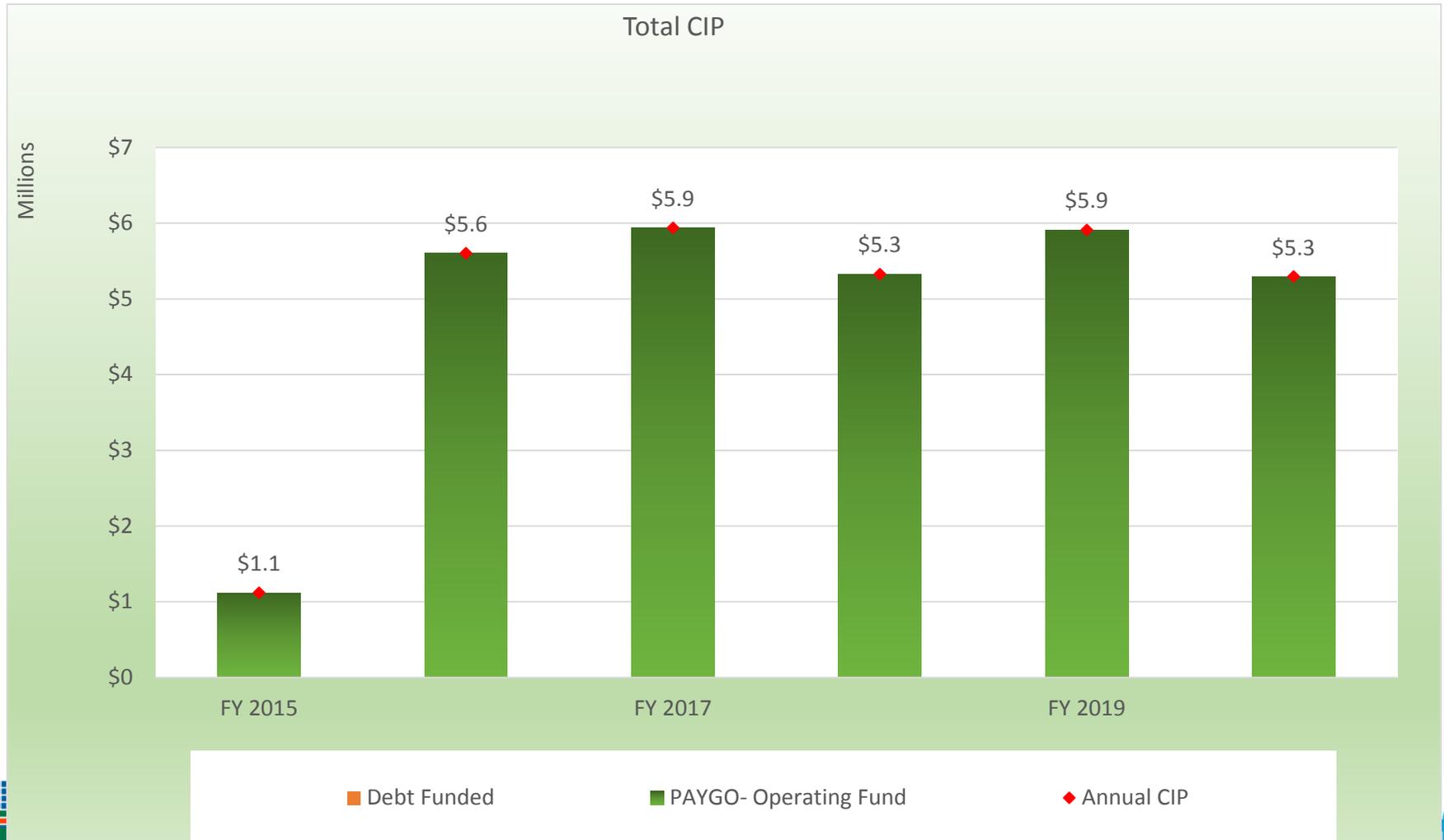
OPERATING FINANCIAL PLAN



■ O&M Expenses
 ■ Water Supply Cost
 ■ Debt Service
 ■ To Reserves
 — Rev - Existing Rates
 — Rev - Proposed Rates



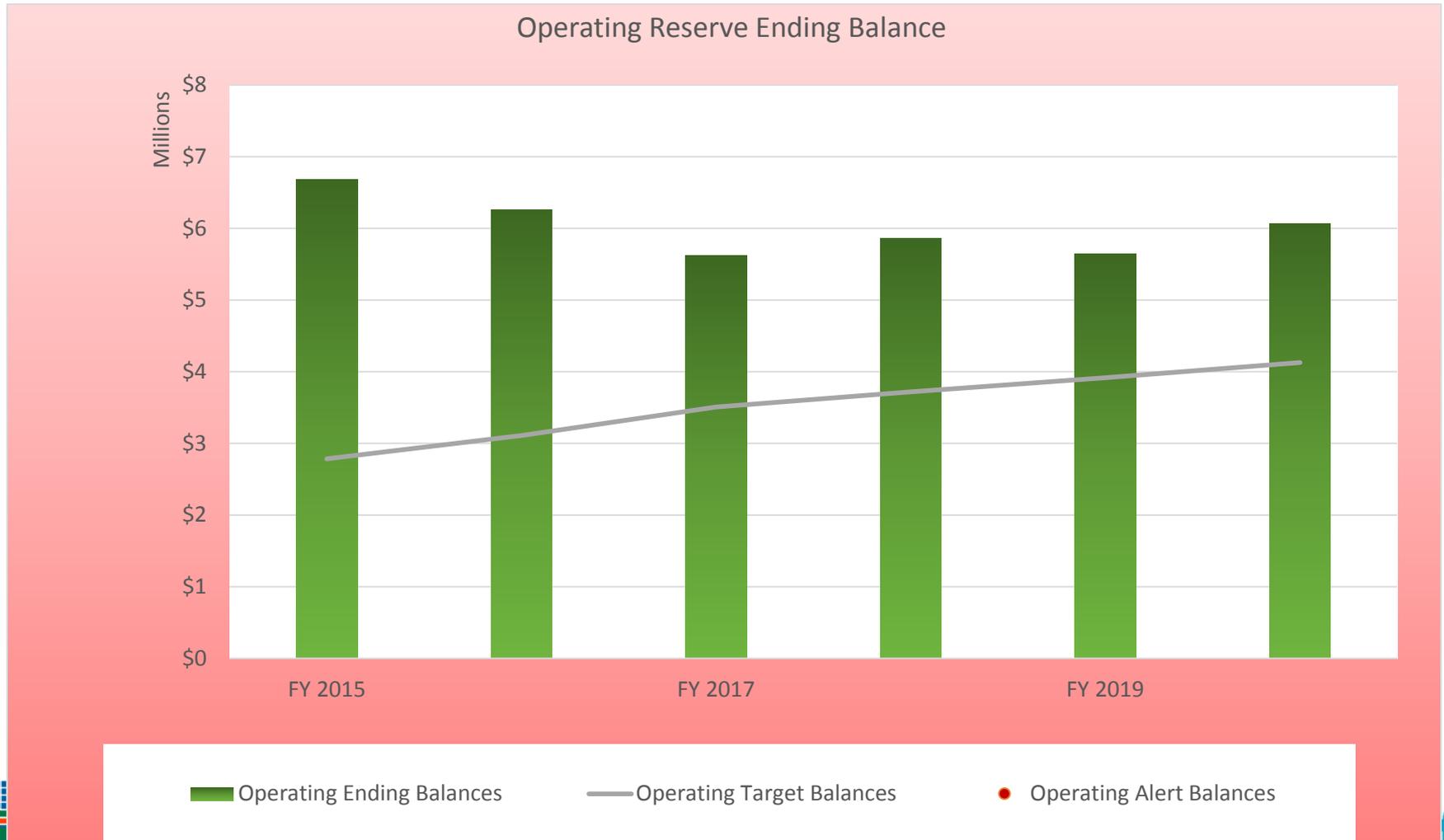
CIP FUNDING SOURCES



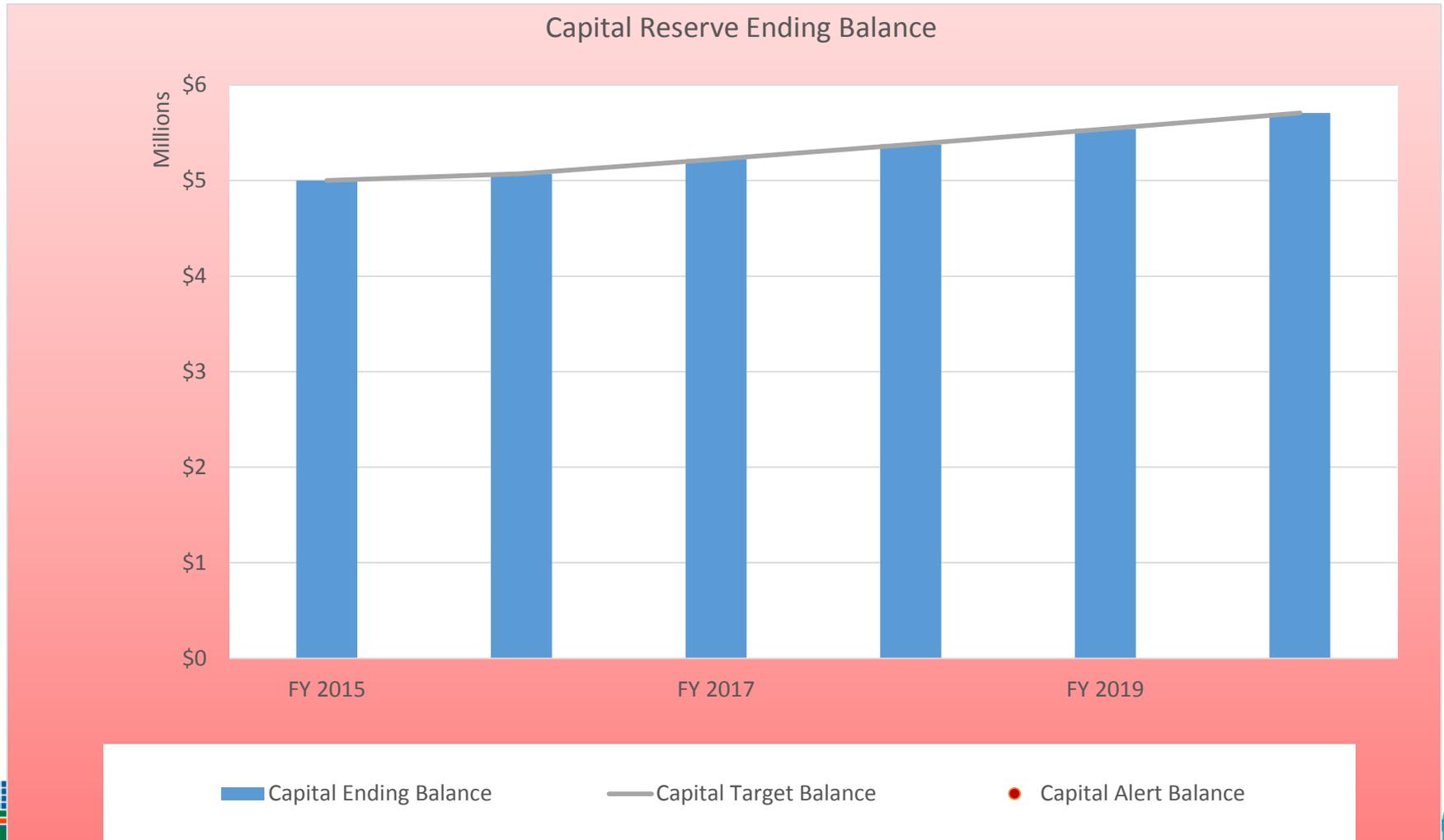
RESERVE TARGETS

- Operating Fund
 - Minimum balance – 90 days of O&M expenses ~\$3 M
- Capital Improvement Fund
 - Inflated Average of CIP Expenditures for FY 2015 through FY 2025
 - Capital Reserve Target of \$5 M in FY 2016, reaches \$6.6M in FY 2025

RESERVES BALANCE



CAPITAL RESERVE ENDING BALANCE



COST OF SERVICE ANALYSIS

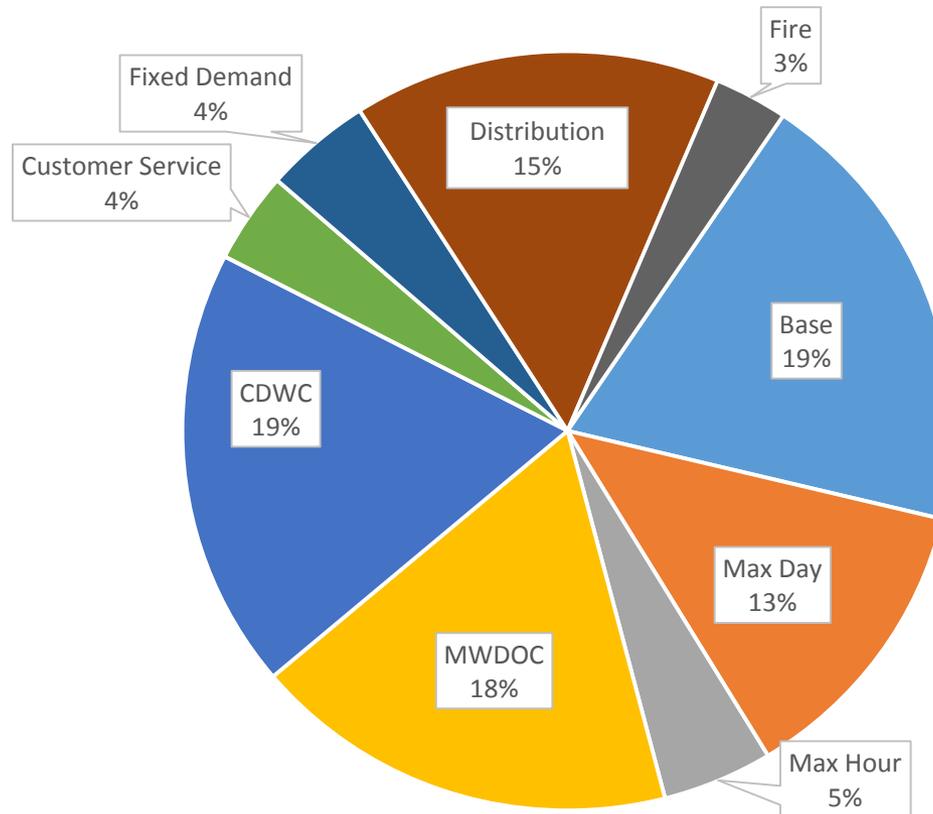
COST OF SERVICE ALLOCATION PROCESS

1. Identification of annual revenue requirements by function or activity
2. Allocation of these functional costs to appropriate cost components
3. Determination of customer class characteristics
4. Development of unit costs of service for each cost component
5. Distribution of costs to customer classes

SAN JUAN CAPISTRANO CASE

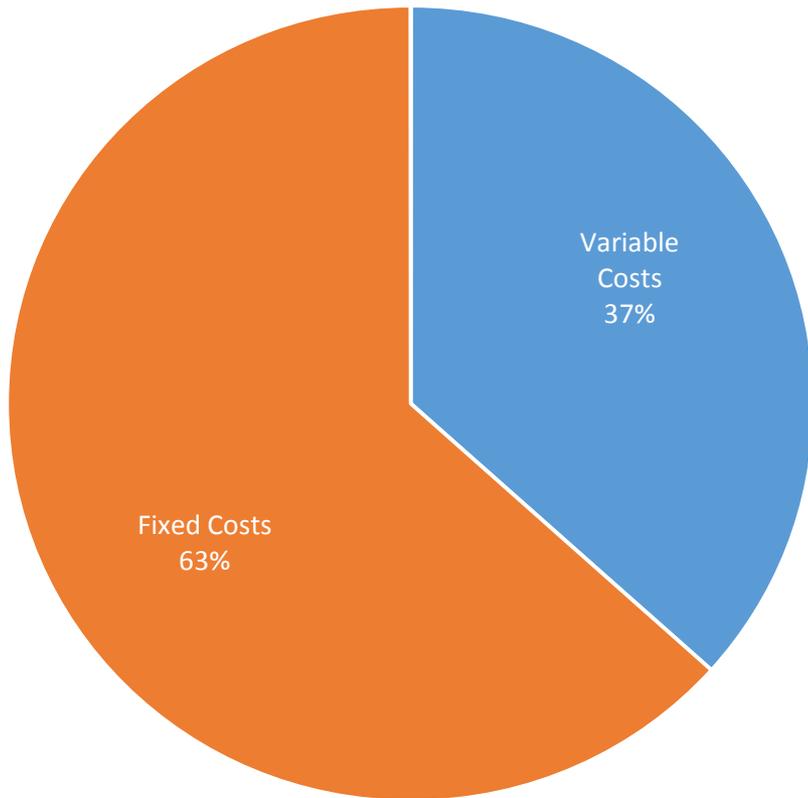
1. Requires rates to be proportional to cost of service
2. Previously proportionality by classes was sufficient
3. Now we need proportionality by tiers as well
4. Council has discretion to use property taxes to meet its objectives – conservation incentives

TOTAL EXPENSES BY COST COMPONENTS



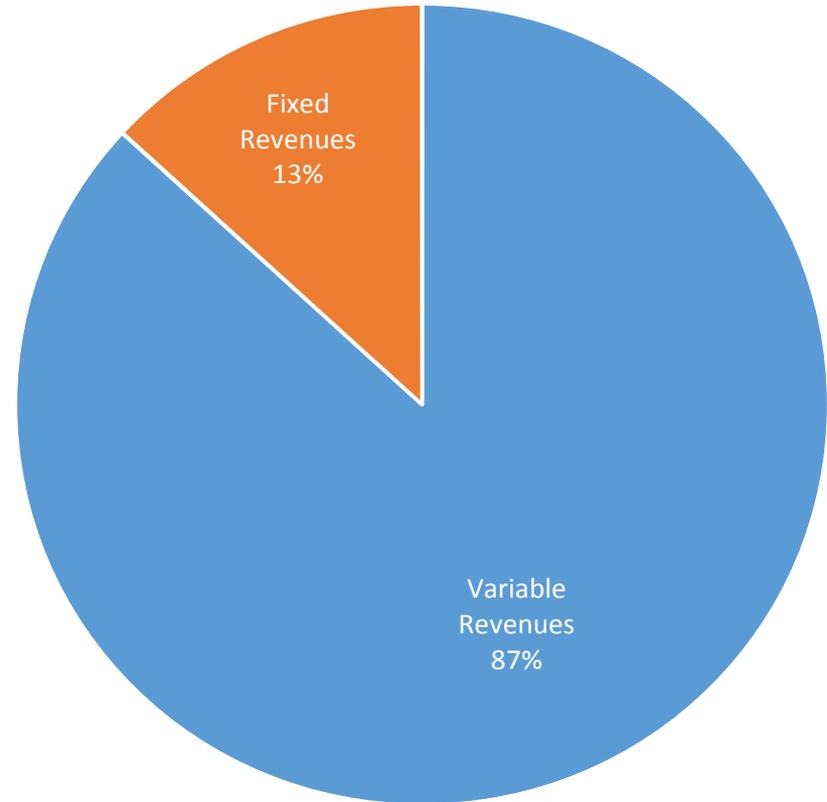
FIXED/VARIABLE O&M COSTS & REVENUES

FY 2016 Budgeted Expenses



■ Variable Costs ■ Fixed Costs

FY 2016 Projected Revenues



■ Variable Revenues ■ Fixed Revenues



* Indicates projected revenue under proposed rates

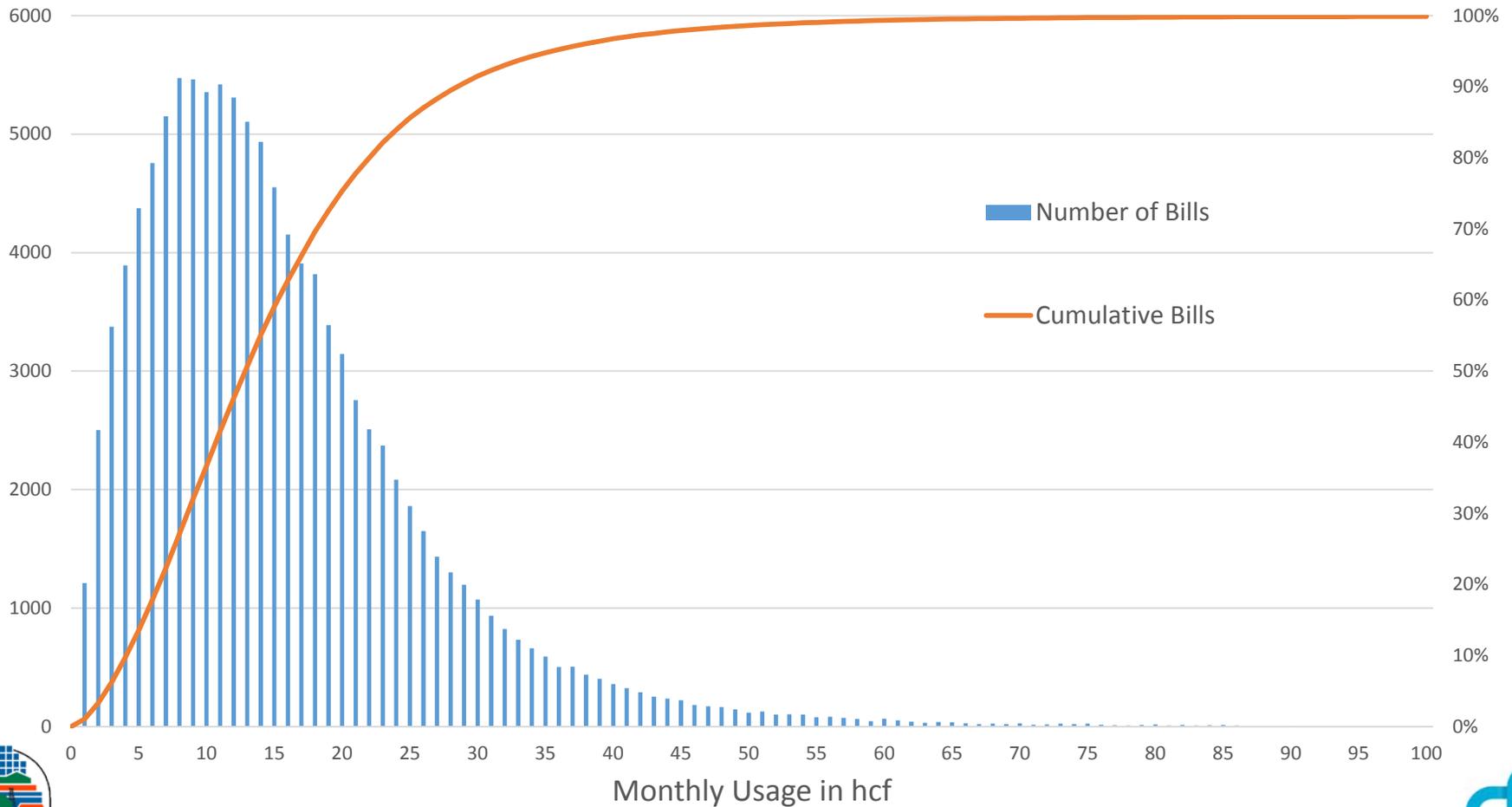


PROPOSED FIXED CHARGES

Meter Size	Meter Count	FY 2016 Current Charge	FY 2016 Proposed Rate	Difference (\$)	Difference (%)
5/8"	3,156	\$9.66	\$11.01	\$1.35	14%
3/4"	127	\$9.66	\$11.01	\$1.35	14%
1"	8,280	\$9.66	\$11.01	\$1.35	14%
1 1/2"	126	\$42.99	\$35.51	-\$7.48	-17%
2"	743	\$73.52	\$53.88	-\$19.64	-27%
3"	57	\$160.77	\$112.08	-\$48.69	-30%
4"	35	\$282.90	\$197.83	-\$85.07	-30%
6"	11	\$631.81	\$403.04	-\$228.78	-36%
8"	1	\$1,120.31	\$862.45	-\$257.87	-23%
10"	0	\$1,748.38	\$1,291.23	-\$457.15	-26%
12"	0	\$2,446.23	\$1,628.13	-\$818.10	-33%

RESIDENTIAL BILL HISTOGRAM

Residential Histogram



RATE OPTIONS

- Uniform Rates for all customers
 - Rates that are equal for all customer classes and at all usage levels
 - Easy to understand, water always the same price
- Tiered Rates for Single Family Residence (SFR)
 - Blended rate (calculated by averaging cost of MWDOC and CDWC water)
 - Differentiated rate (allocate lowest cost CDWC water first to lower tiers, give water MWDOC costs for higher tiers)

UNIFORM RATES

Uniform Rate

Uniform Rate Cost (\$/hcf)*	\$3.47
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*hcf is short for hundred cubic feet. Equivalent to 748 gallons.

WATER RATES – NON-SFR RATES

Customer Classes	Delivery Costs	Peaking Costs	Blended Supply	Proposed Rate	Current Rate	Difference
Multiple Family						
Residential	\$0.97	\$0.50	\$1.44	\$2.92	\$3.51	-\$0.59
Non Residential	\$0.97	\$1.10	\$1.44	\$3.52	\$3.51	\$0.01
Greenbelt	\$0.97	\$1.43	\$1.44	\$3.85	\$3.51	\$0.34
Outside Brea	\$1.22	\$0.96	\$1.80	\$3.98	\$4.39	-\$0.28
Brea Creek Golf						
Course	\$0.97	\$0.00	\$1.26	\$2.24	\$1.71	\$0.53
Construction	\$0.97	\$2.90	\$1.44	\$5.32	\$5.27	\$0.05

WATER RATES— SFR WITH BLENDED SUPPLY EXAMPLE

SFR Monthly Tiers		Delivery Costs	Peaking Costs	Blended Supply	Proposed Rate	Current Rate	Difference
Tier 1	1-10 Units	\$0.97	\$0.08	\$1.44	\$2.50	\$2.79	-\$0.29
Tier 2	11-20 Units	\$0.97	\$1.13	\$1.44	\$3.55	\$3.92	-\$0.37
Tier 3	21-30 Units	\$0.97	\$2.66	\$1.44	\$5.08	\$4.99	\$0.09
Tier 4	>30 Units	\$0.97	\$3.85	\$1.44	\$6.27	\$6.36	-\$0.09

WATER RATES – SFR WITH DIFFERENTIATED SUPPLY EXAMPLE

SFR Monthly Tiers		Delivery Costs	Peaking Costs	Differentiated Supply	Proposed Rate	Current Rate	Difference
Tier 1	1-10 Units	\$0.97	\$0.08	\$1.26	\$2.32	\$2.79	-\$0.47
Tier 2	11-20 Units	\$0.97	\$1.13	\$1.61	\$3.72	\$3.92	-\$0.20
Tier 3	21-30 Units	\$0.97	\$2.66	\$1.69	\$5.34	\$4.99	\$0.35
Tier 4	>30 Units	\$0.97	\$3.85	\$1.69	\$6.52	\$6.36	\$0.16

DROUGHT RATES

PERCENTAGE BASED INCREASE MODEL

Percentage Model Drought Rates	Current Rate	Proposed Rate (Blended)	10% Reduction Drought Rate (7% Rate Hike)	Difference (\$)	24% Reduction Drought Rate (18% Rate Hike)	Difference (\$)
SFR						
Tier 1	\$2.79	\$2.50	\$2.68	\$0.18	\$2.95	\$0.45
Tier 2	\$3.92	\$3.55	\$3.80	\$0.25	\$4.19	\$0.64
Tier 3	\$4.99	\$5.08	\$5.44	\$0.36	\$6.00	\$0.92
Tier 4	\$6.36	\$6.27	\$6.71	\$0.44	\$7.40	\$1.13
Multiple Family						
Residential	\$3.51	\$2.92	\$3.13	\$0.21	\$3.45	\$0.53
Non Residential	\$3.51	\$3.52	\$3.77	\$0.25	\$4.16	\$0.64
Greenbelt	\$3.51	\$3.85	\$4.12	\$0.27	\$4.55	\$0.70
Outside Brea	\$4.39	\$3.98	\$4.26	\$0.28	\$4.70	\$0.72
Brea Golf Course	\$1.71	\$2.24	\$2.40	\$0.16	\$2.65	\$0.41
Construction	\$5.27	\$5.32	\$5.70	\$0.38	\$6.28	\$0.96

DROUGHT RATES

PERCENTAGE BASED INCREASE MODEL

Percentage Model Drought Rates	Current Rate	Proposed Rate (Differentiated)	10% Reduction Drought Rate (7% Rate Hike)	Difference (\$)	24% Reduction Drought Rate (18% Rate Hike)	Difference (\$)
SFR						
Tier 1	\$2.79	\$2.32	\$2.49	\$0.17	\$2.74	\$0.42
Tier 2	\$3.92	\$3.72	\$3.99	\$0.27	\$4.39	\$0.67
Tier 3	\$4.99	\$5.34	\$5.72	\$0.38	\$6.31	\$0.97
Tier 4	\$6.36	\$6.52	\$6.98	\$0.46	\$7.70	\$1.18
Multiple Family						
Residential	\$3.51	\$2.92	\$3.13	\$0.21	\$3.45	\$0.53
Non Residential	\$3.51	\$3.52	\$3.77	\$0.25	\$4.16	\$0.64
Greenbelt	\$3.51	\$3.85	\$4.12	\$0.27	\$4.55	\$0.70
Outside Brea	\$4.39	\$3.98	\$4.26	\$0.28	\$4.70	\$0.72
Brea Golf Course	\$1.71	\$2.24	\$2.40	\$0.16	\$2.65	\$0.41
Construction	\$5.27	\$5.32	\$5.70	\$0.38	\$6.28	\$0.96

RESIDENTIAL CUSTOMER IMPACT – NORMAL USE BLENDED RATE

Usage Level	Monthly Usage	Current Bill-Base Rate	Proposed Bill-Base Rate	Difference (\$)	Difference (%)
Very Low	5	\$23.61	\$23.51	-\$0.10	0%
Low	10	\$37.56	\$36.01	-\$1.55	-4%
Average	15	\$57.16	\$53.76	-\$3.40	-6%
High	30	\$126.66	\$122.31	-\$4.35	-3%
Very High	55	\$285.66	\$279.06	-\$6.60	-2%

Bills assume 1" meter charge.

RESIDENTIAL CUSTOMER IMPACT – NORMAL USE DIFFERENTIATED RATE

Usage Level	Monthly Usage	Current Bill-Base Rate	Proposed Bill-Base Rate	Difference (\$)	Difference (%)
Very Low	5	\$23.61	\$22.61	-\$1.00	-4%
Low	10	\$37.56	\$34.21	-\$3.35	-9%
Average	15	\$57.16	\$52.81	-\$4.35	-8%
High	30	\$126.66	\$124.81	-\$1.85	-1%
Very High	55	\$285.66	\$287.81	\$2.15	1%

Bills assume 1" meter charge.

RESIDENTIAL CUSTOMER IMPACT – DROUGHT

24% CUTBACK

BLENDED RATE

Usage Level	Monthly Usage	Current Bill- Base Rate	Proposed Bill- 24% Reduction With Percentage Based Rates	Difference (\$)	Difference (%)
Very Low	5	\$23.61	\$25.76	\$2.15	9%
Low	10	\$37.56	\$40.51	\$2.95	8%
Average	15	\$57.16	\$61.46	\$4.30	8%
High	30	\$126.66	\$142.41	\$15.75	12%
Very High	55	\$285.66	\$327.41	\$41.75	15%

See model to get other rates and reduction scenarios.

RESIDENTIAL CUSTOMER IMPACT – DROUGHT

24% CUTBACK

DIFFERENTIATED RATE

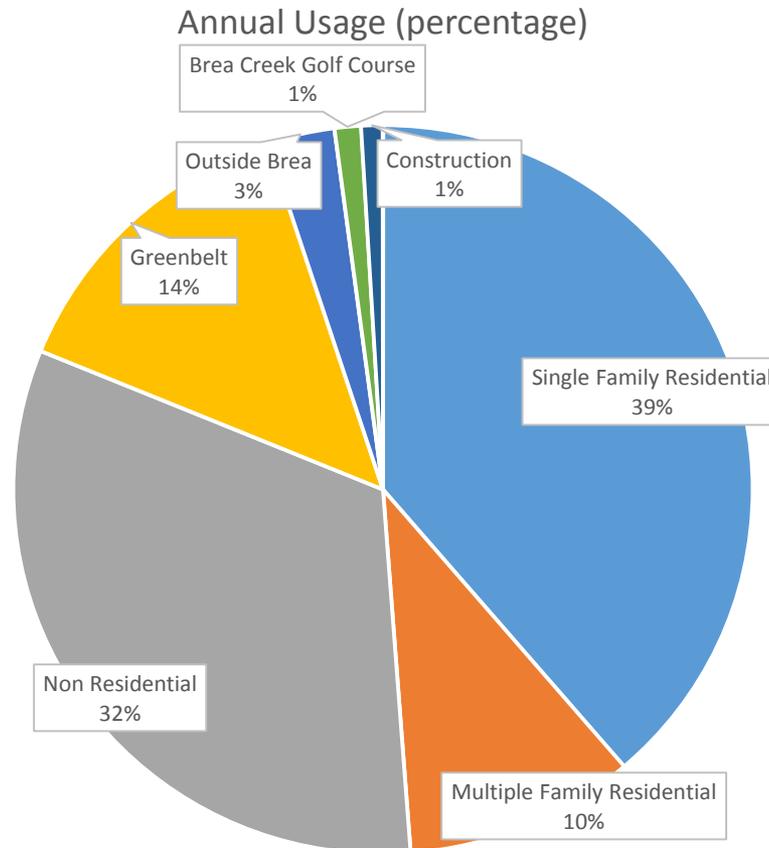
Usage Level	Monthly Usage	Current Bill- Base Rate	Proposed Bill- 24% Reduction With Percentage Based Rates	Difference (\$)	Difference (%)
Very Low	5	\$23.61	\$24.71	\$1.10	5%
Low	10	\$37.56	\$38.41	\$0.85	2%
Average	15	\$57.16	\$60.36	\$3.20	6%
High	30	\$126.66	\$145.41	\$18.75	15%
Very High	55	\$285.66	\$337.91	\$52.25	18%

See model to get other rates and reduction scenarios.

DISCUSSION/Q&A



PROJECTED WATER USE BY CLASS – FY 2016



■ Single Family Residential ■ Multiple Family Residential ■ Non Residential ■ Greenbelt ■ Outside Brea ■ Brea Creek Golf Course ■ Construction

BUDGETED OR PROPOSED CIP PROJECTS

Project	Uninflated Cost
Miscellaneous Water Improvement Program	\$2,850,000
Berry Street Booster Pump Station Upgrades	\$603,000
Glenbrook Tract Waterline Improvements	\$3,223,934
Gemini Avenue/Steele Drive Waterline Improvements	\$1,480,000
Walnut Avenue-Orange Avenue-Juniper Street et al. Waterline Improvements	\$2,100,000
Pleasant Hill Tract Water Improvements	\$1,012,500
Napoli Tract Water Improvements	\$1,073,503
North Hills West Tract Water Improvements	\$844,000
North Hills East Tract Water Improvements	\$1,300,000
Cliffwood Tract Water Improvements	\$870,000
Enterprise Tract Water Improvements	\$1,200,000
Puente Street Water Main Replacement	\$550,000
Candlewood Tract Water Main Replacement	\$1,300,000
South Brea Neighborhood Water Main Replacement	\$1,260,000
Eagle Hills Tract Water Main Replacement	\$1,525,000
Buttonwood Drive Tract Water Main Replacements	\$2,100,000
Pepper Tree Tract Water Main Replacements	\$850,000
Pump Replacement At Booster Station No.3	\$225,000
Construction of Booster Stations No. 2 and 3 Enclosures	\$840,000
Oleander Street-Catalpa Avenue Water Line Replacement	\$1,200,000
Valencia Reservoir Repainting	\$1,100,000
Pave Access Road To 830 Zone And Valencia Reservoirs	\$300,000

BUDGETED OR PROPOSED CIP PROJECTS- TURF REPLACEMENT

Project	Uninflated Cost
St. College medians Turf Conversion	\$63,290
Lambert medians Turf Conversion	\$156,560
Brea Blvd medians Turf Conversion	\$125,477
Old Associated medians Turf Conversion	\$114,021
Randolph circle Turf Conversion	\$18,272
Berry medians Turf Conversion	\$77,847
Northwood median Turf Conversion	\$69,991
*CCC - Total All Areas Turf Conversion	\$415,857
War Memorial Turf Conversion	\$34,654
CCC South Side Turf Conversion	\$83,530
CCC West Side Turf Conversion	\$103,923
BCC Turf Conversion	\$109,440
Sports Park Phase 1 Turf Conversion	\$141,870
Sports Park Phase 2 Turf Conversion	\$61,620
Pioneer Hall/Senior Center Turf Conversion	\$129,085
Lambert/St. College Turf Conversion	\$367,207
Orange St.pkwy Turf Conversion	\$9,750
Country Hills slope Turf Conversion	\$317,994
Greenbriar Park Turf Conversion	\$339,765
NE Brea/St. College Turf Conversion	\$48,191
Laurel Creek Turf Conversion	\$15,070
N&S side of Lambert Pdkwy Turf Conversion	\$263,367
Berry Pkwy Turf Conversion	\$41,839
New Associated pkwy Turf Conversion	\$33,345
Northwood/La Canada Turf Conversion	\$40,283
Aurora/Chevy Chase Turf Conversion	\$54,698
Catalpa/Imperial Turf Conversion	\$7,914

DROUGHT RATES- 30% REDUCTION

PERCENTAGE BASED INCREASE MODEL

Percentage Model Drought Rates	Current Rate	Proposed Rate (Blended)	30% Reduction Drought Rate (37% Rate Hike)	Difference (\$)
SFR				
Tier 1	\$2.79	\$2.50	\$3.43	\$0.93
Tier 2	\$3.92	\$3.55	\$4.87	\$1.32
Tier 3	\$4.99	\$5.08	\$6.96	\$1.88
Tier 4	\$6.36	\$6.27	\$8.59	\$2.32
Multiple Family Residential	\$3.51	\$2.92	\$4.01	\$1.09
Non Residential	\$3.51	\$3.52	\$4.83	\$1.31
Greenbelt	\$3.51	\$3.85	\$5.28	\$1.43
Outside Brea	\$4.39	\$3.98	\$5.46	\$1.48
Brea Golf Course	\$1.71	\$2.24	\$3.07	\$0.83
Construction	\$5.27	\$5.32	\$7.29	\$1.97