

Ventura Water Cost of Service & Rate Design Study

Citizen Advisory Committee Meeting

December 14, 2011



Overview

- Updated Financial Plans
 - Debt funding scenarios
- Conceptual Rate Structure Design
 - Water rate structure alternatives
 - SFR and MFR customers impacts
 - Wastewater rate structure alternatives
 - SFR and MFR customers impacts
- Next Steps/Discussion/Q&A



UPDATED FINANCIAL PLANS

Water CIP Financing Plan

Scenario 1: 87% Debt Funding

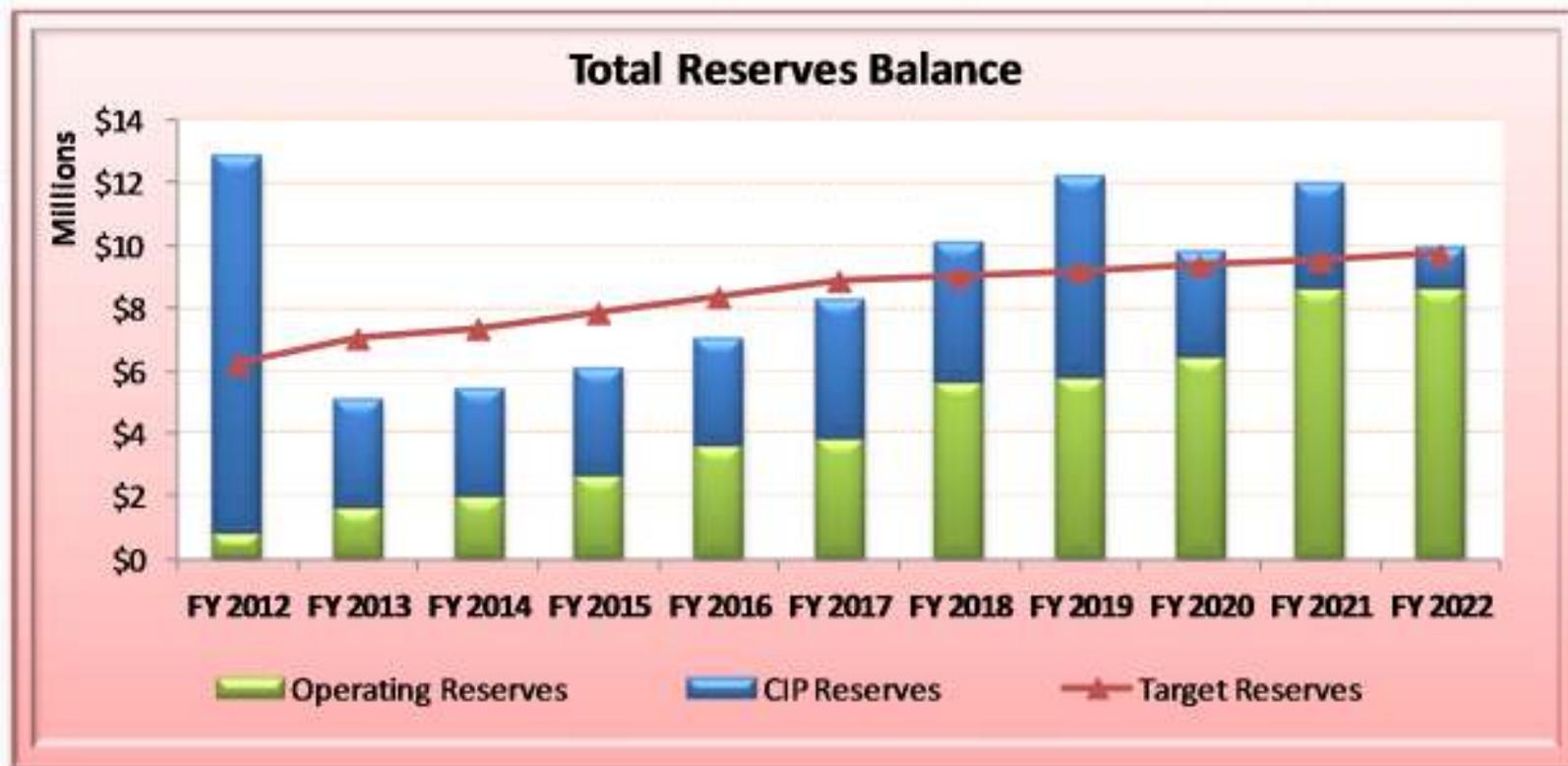


CIP shown at 75% of budget

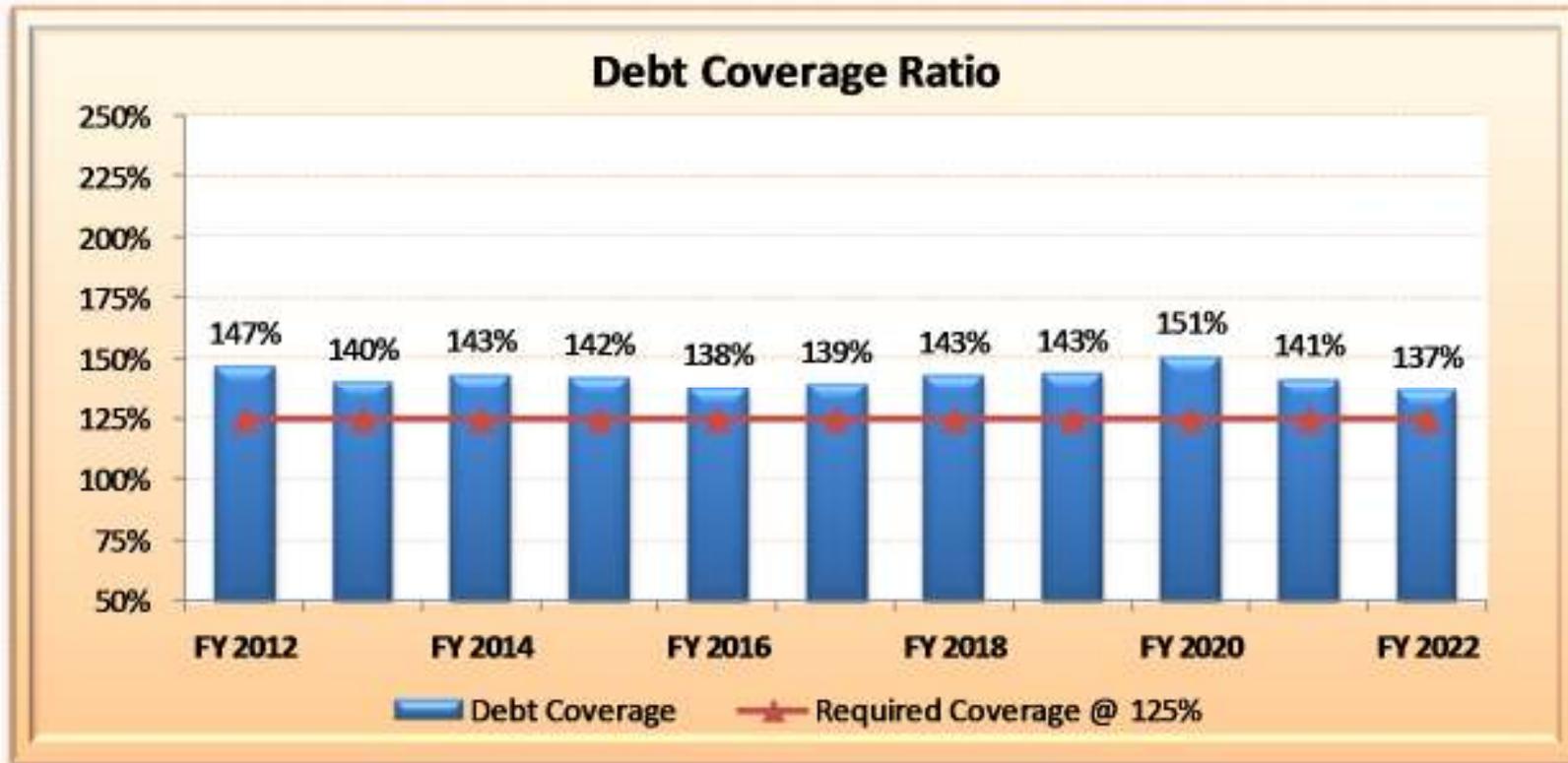
Additional Revenue Needs – Scenario 1 Water



Reserves Balance – Scenario 1 Water

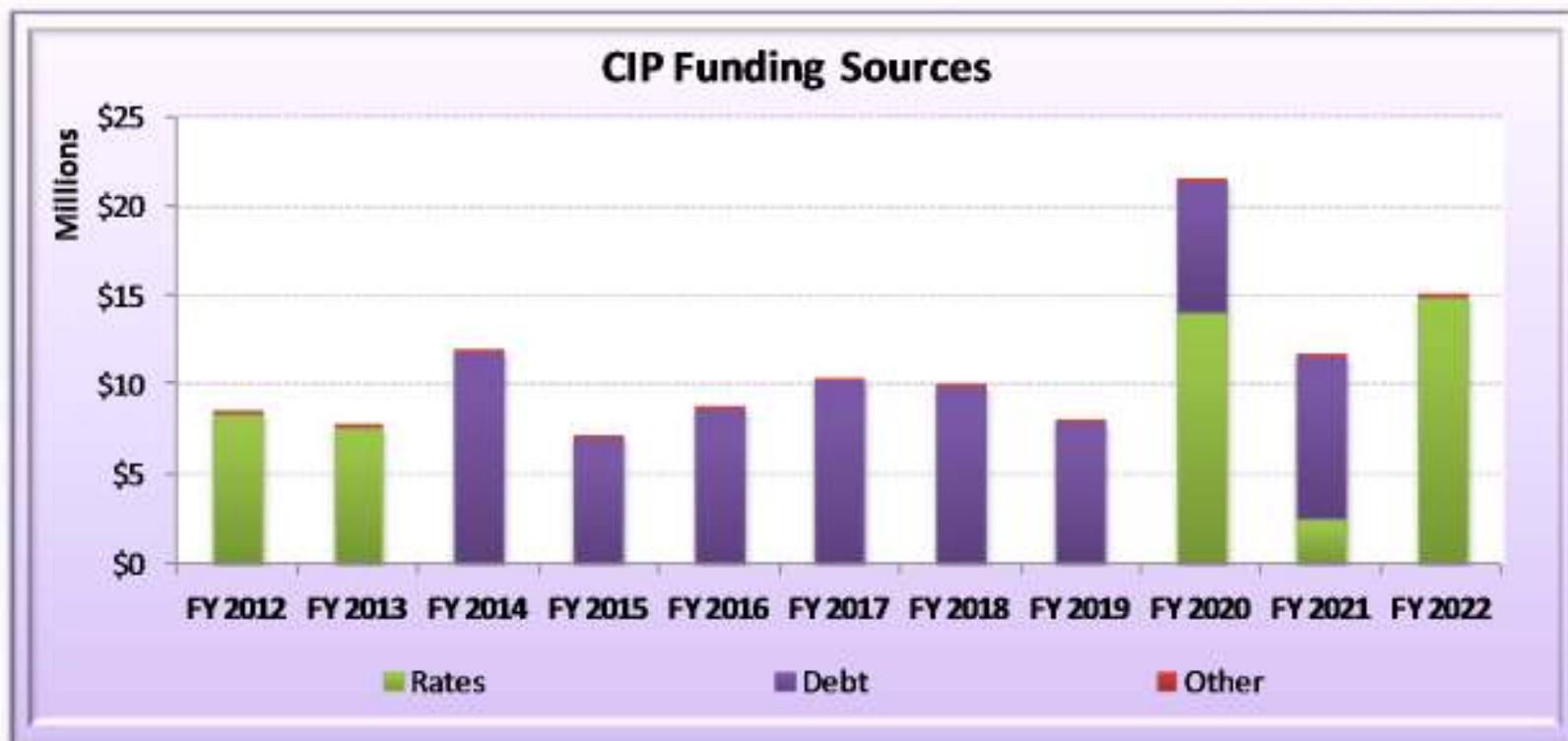


Debt Coverage Ratio – Scenario 1 Water



Water CIP Financing Plan

Scenario 2: 67% Debt Funding



CIP shown at 75% of budget

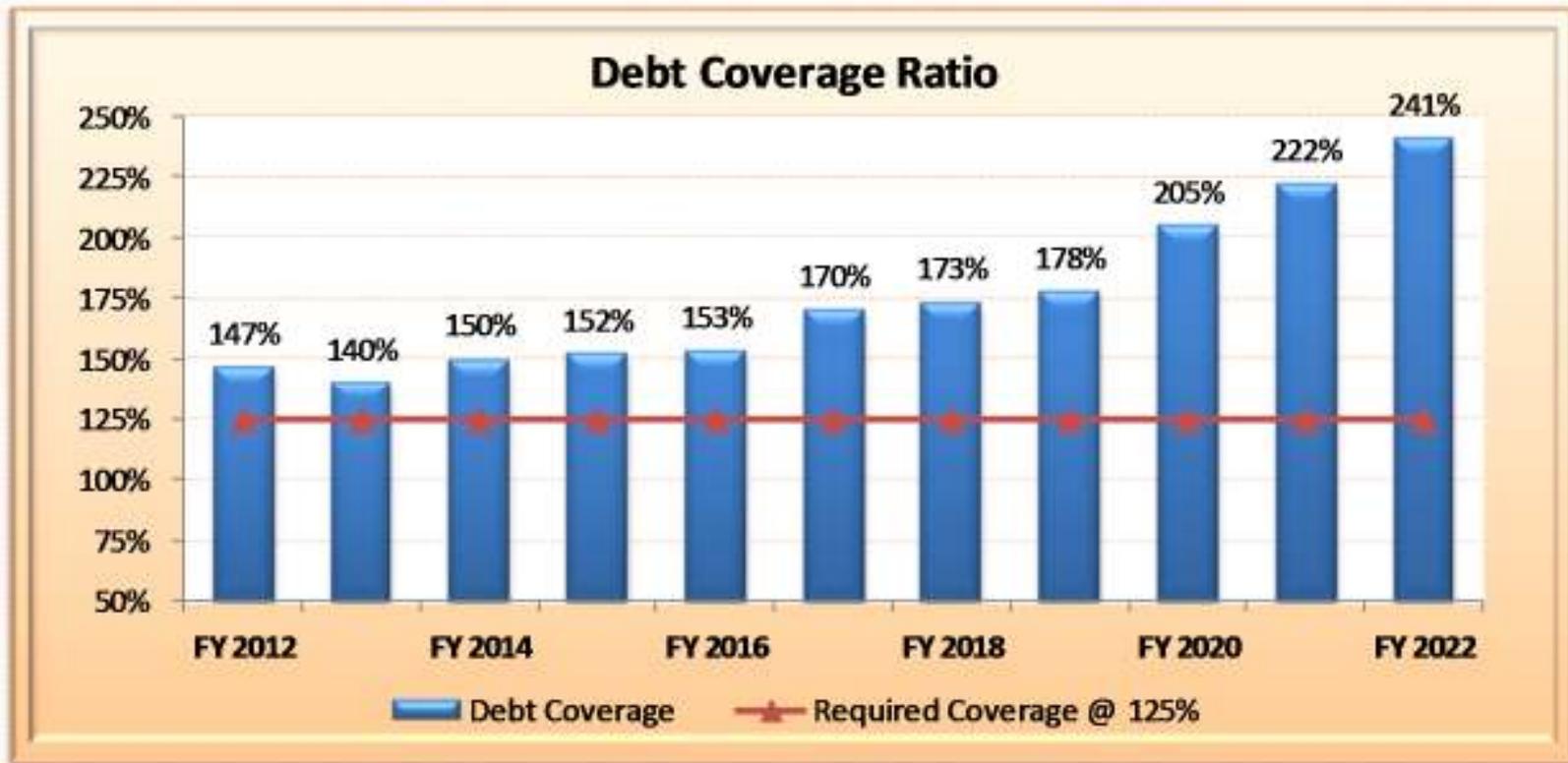
Additional Revenue Needs – Scenario 2 Water



Reserves Balance – Scenario 2 Water



Debt Coverage Ratio – Scenario 2 Water



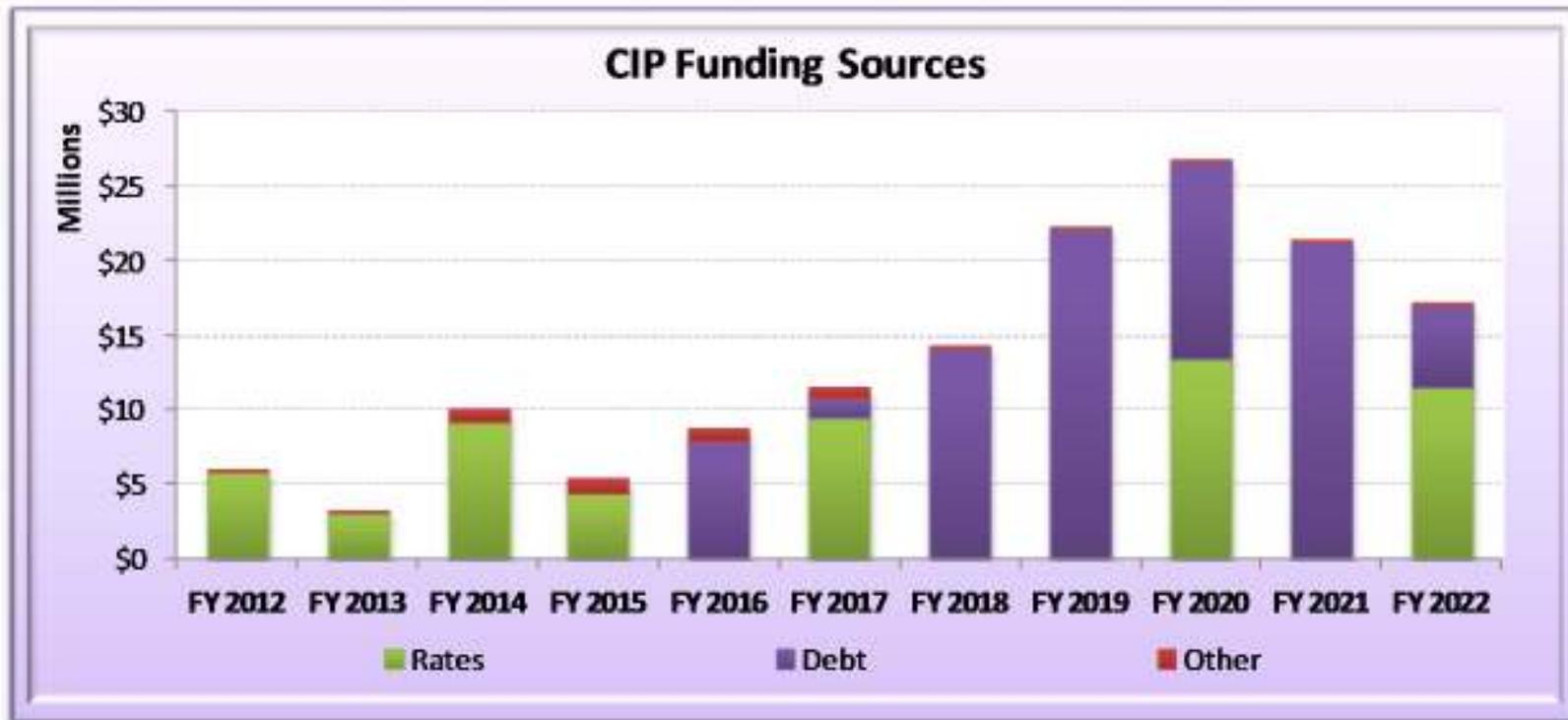
Scenarios Comparison - Water

in millions	Scenario 1		Scenario 2	
	Revenue Needs	Debt Funding	Revenue Needs	Debt Funding
FY 2012	\$0.00	\$0	\$0.00	\$0
FY 2013	\$1.66	\$0	\$1.66	\$0
FY 2014	\$3.42	\$30	\$3.42	\$25
FY 2015	\$5.33	\$0	\$5.33	\$0
FY 2016	\$7.39	\$30	\$7.39	\$20
FY 2017	\$8.95	\$0	\$9.61	\$0
FY 2018	\$10.59	\$20	\$11.86	\$25
FY 2019	\$12.32	\$0	\$14.13	\$0
FY 2020	\$13.53	\$0	\$16.55	\$0
FY 2021	\$14.89	\$25	\$19.29	\$10
FY 2022	\$16.31	\$0	\$22.25	\$0
TOTAL	\$94.38	\$105	\$111.48	\$80

Discussion

- Debt funding scenario
 - Scenario 1 (87% debt) or
 - Scenario 2 (67% debt)

WW CIP Financing Plan - 65% Debt Funding

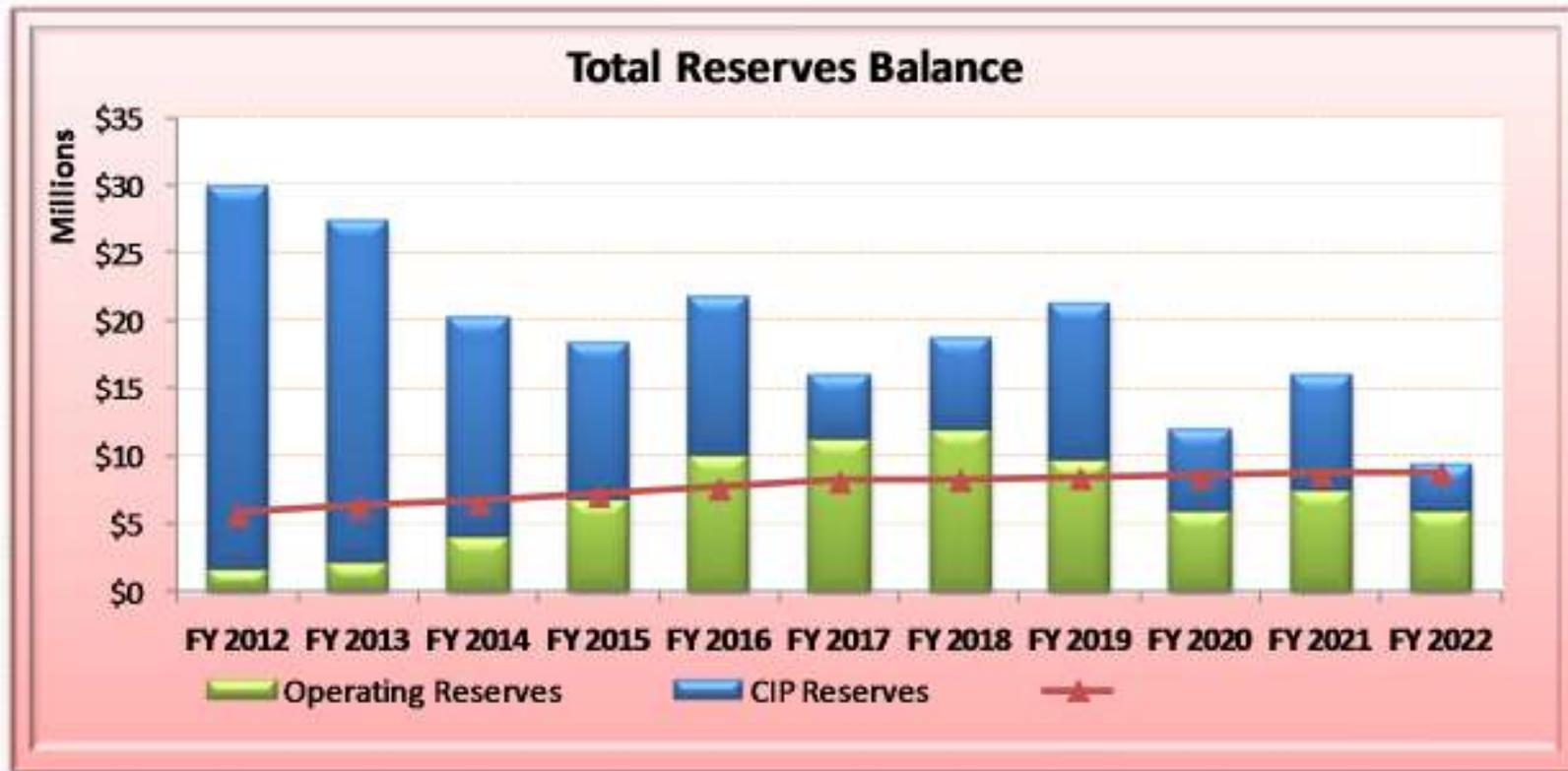


CIP shown at 75% of budget

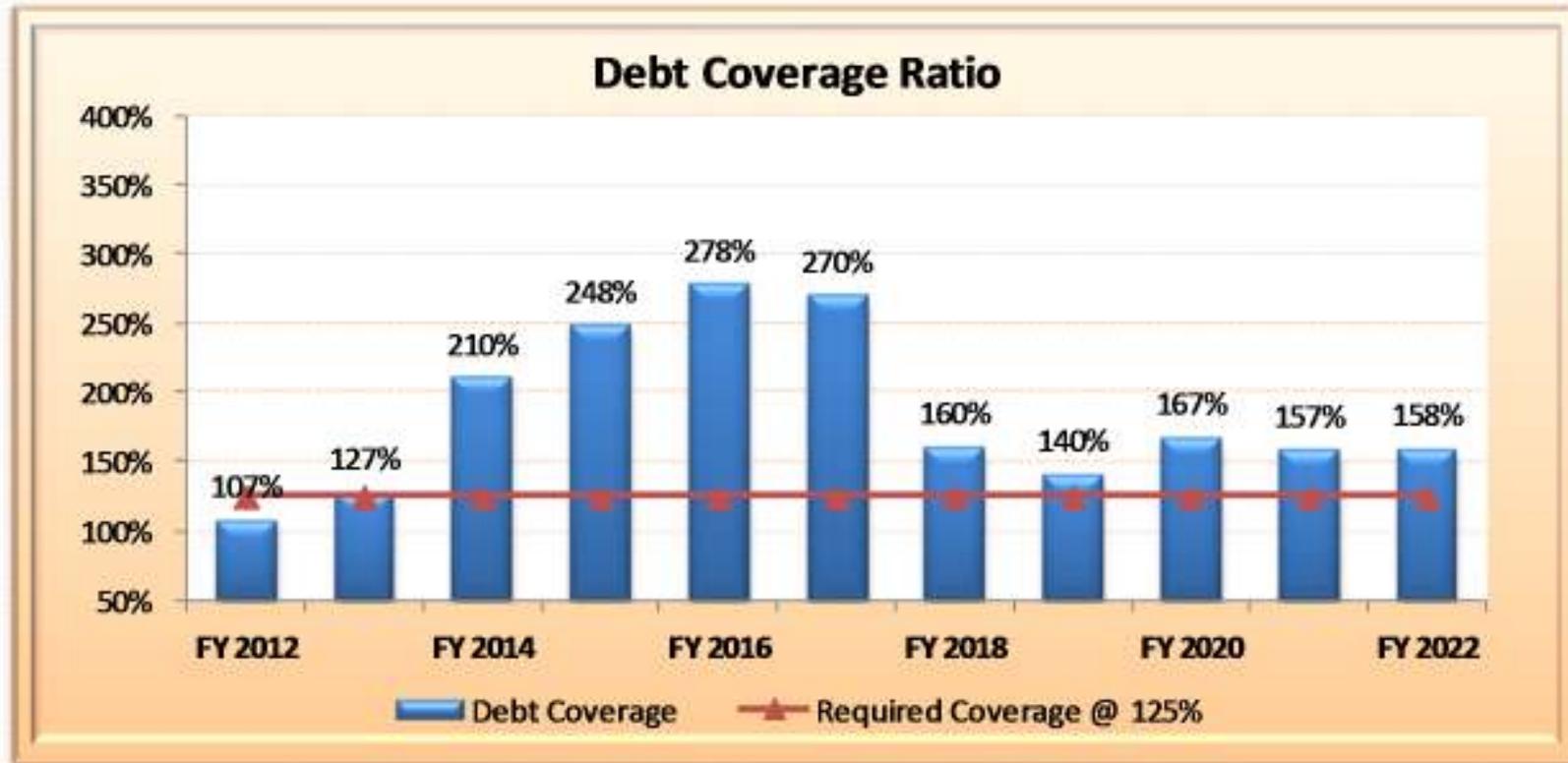
Additional Revenue Needs – Wastewater



Reserves Balance – Wastewater



Debt Coverage Ratio – Wastewater





CONCEPTUAL RATE DESIGN



Pricing Objectives Recap - Water

Ranking	Classifications	Pricing Objectives	Current Rate Structure	Option 1: Revise Current Tiers	Option 2: Add New Tier	Option 3: Hybrid	Option 4: Water Budget Based
1	Most Important	Cost of Service Based Allocations	B-	A	A	A	A
2	Very Important	Rate Stability	A	A	A	A	A
3		Revenue Stability	B-	A-	A-	A-	A-
4		Conservation	B-	A	A+	A+	A
5	Important	Defensibility	B-	A	A	A	A
6		Minimization of Customer Impacts	A	A-	B+	B	C+
7		Simple to Understand and Update	A+	A	A-	A-	C-
8	Least Important	Equitable Contributions from New Customers	B+	B+	B+	B+	B+
9		Economic Development	B	B	B	B	B
10		Ease of Implementation	A+	A	A	A	C
11		Affordability	B	B+	A-	A	B+
Overall Scores			80.6	95.4	95.3	95.0	86.0

Methodology

- Conceptual design is used to show the impacts resulting from a change in rate structure only
- Rates under all options/scenarios recover the same amount of revenue (revenue neutral) and exclude the additional revenue requirements shown in the financial plans
 - These are not necessarily cost of service rates

Water Rate Structure Scenarios

- Scenario 1: Keep Current Fixed Meter Charges
 - Current fixed charge revenue is 19% of total rate revenue
 - Typical percentage is closer to 25% (CUWCC recommends less than 30%)
 - Results in higher commodity rates and conservation signal
 - Less revenue stability
- Scenario 2: Increase Fixed Revenue Percentage to 25% of Rate Revenue
 - Results in lower commodity rates and conservation signal
 - Greater revenue stability

Water Rate Structure Alternatives

- Scenario 1: Keep Current Fixed Meter Charges
 - Option 1: Revise Tiers
 - Adjusting tiers to match current usage characteristics
 - Option 2: Revise Tiers and Add 4th Tier
 - Provide greater affordability at lower usage and stronger conservation signal
- Scenario 2: Increase Fixed Revenue Percentage to 25% of Rate Revenue
 - Option 1: Revise Tiers
 - Option 2: Revise Tiers and Add 4th Tier

Scenarios Comparison – Meter Charges

Meter Size	Scenario 1 (19%)	Scenario 2 (25%)	Difference
5/8" & 3/4"	\$15.03	\$19.79	\$4.76
1"	\$28.74	\$37.84	\$9.10
1 1/2"	\$47.76	\$62.88	\$15.12
2"	\$66.76	\$87.89	\$21.13
3"	\$150.42	\$198.02	\$47.60
4"	\$245.49	\$323.16	\$77.67
6"	\$483.06	\$635.90	\$152.84
8"	\$720.60	\$948.59	\$227.99
10"	\$958.15	\$1,261.30	\$303.15
12"	\$1,100.68	\$1,448.93	\$348.25

Scenarios Comparison – SFR Tiers

Current	HCF	% of Usage	% of Total Bills
Tier 1	0 – 16	62%	44%
Tier 2	17 – 42	30%	49%
Tier 3	42+	8%	7%
Option 1	HCF	% of Usage	% of Total Bills
Tier 1	0 – 14	56%	37%
Tier 2	15 – 30	29%	45%
Tier 3	30+	14%	19%
Option 2	HCF	% of Usage	% of Total Bills
Tier 1	0 – 14	56%	37%
Tier 2	15 – 24	22%	33%
Tier 3	25 – 36	11%	20%
Tier 4	36+	10%	11%

Scenarios Comparison – MFR Tiers

Current	HCF	% of Usage	% of Total Bills
Tier 1	0 – 10	70%	38%
Tier 2	11 – 24	28%	59%
Tier 3	24+	2%	3%
Option 1	HCF	% of Usage	% of Total Bills
Tier 1	0 – 10	70%	38%
Tier 2	11 – 16	21%	42%
Tier 3	16+	9%	21%
Option 2	HCF	% of Usage	% of Total Bills
Tier 1	0 – 10	70%	38%
Tier 2	11 – 14	16%	30%
Tier 3	15 – 20	10%	23%
Tier 4	20+	4%	9%

Rate Options Comparison

Scenario 1: Keep current fixed meter charges

Scenario 1	Current Rates	Option 1 Rates	Option 2 Rates
Tier 1	\$2.02	\$1.76	\$1.72
Tier 2	\$2.66	\$2.66	\$2.66
Tier 3	\$4.27	\$4.27	\$3.50
Tier 4			\$4.35

Rate Options Comparison

Scenario 2: Increase fixed charge percentage to 25%

Scenario 2	Current Rates	Option 1 Rates	Option 2 Rates
Tier 1	\$1.72	\$1.48	\$1.44
Tier 2	\$2.66	\$2.66	\$2.66
Tier 3	\$4.27	\$4.27	\$3.50
Tier 4			\$4.35

SFR Impacts – Total Water Bill

Scenario 1: Meter charges the same at 19% of revenues

SFR	Usage (hcf)	Current Rate	Option 1	Option 2	Difference 1	Difference 2
Very Low	5	\$25.13	\$23.83	\$23.63	(\$1.30)	(\$1.50)
Low	12	\$39.27	\$36.15	\$35.67	(\$3.12)	(\$3.60)
Average	21	\$60.65	\$58.29	\$57.73	(\$2.36)	(\$2.92)
High	35	\$97.89	\$103.58	\$104.21	\$5.69	\$6.32
Very High	50	\$150.67	\$167.63	\$168.61	\$16.96	\$17.94

Scenario 2: Increase meter charges to cover 25% of revenues

SFR	Usage (hcf)	Current Rate	Option 1	Option 2	Difference 1	Difference 2
Very Low	5	\$28.39	\$27.19	\$26.99	(\$1.20)	(\$1.40)
Low	12	\$40.43	\$37.55	\$37.07	(\$2.88)	(\$3.36)
Average	21	\$60.61	\$59.13	\$58.57	(\$1.48)	(\$2.04)
High	35	\$97.85	\$104.42	\$105.05	\$6.57	\$7.20
Very High	50	\$150.63	\$168.47	\$169.45	\$17.84	\$18.82

Note: Assume 3/4" meter

MFR Impacts – Total Water Bill

Scenario 1: Meter charges the same at 19% of revenues

MFR	Usage (hcf)	Current Rate	Option 1	Option 2	Difference 1	Difference 2
Very Low	3	\$21.09	\$20.31	\$19.47	(\$0.78)	(\$1.62)
Low	8	\$31.19	\$29.11	\$26.87	(\$2.08)	(\$4.32)
Average	13	\$43.21	\$40.61	\$37.81	(\$2.60)	(\$5.40)
High	22	\$67.15	\$74.21	\$71.41	\$7.06	\$4.26
Very High	35	\$119.44	\$129.72	\$126.92	\$10.28	\$7.48

Scenario 2: Increase meter charges to cover 25% of revenues

MFR	Usage (hcf)	Current Rate	Option 1	Option 2	Difference 1	Difference 2
Very Low	3	\$24.95	\$24.95	\$24.11	\$0.00	(\$0.84)
Low	8	\$33.55	\$33.55	\$31.31	\$0.00	(\$2.24)
Average	13	\$44.97	\$44.97	\$42.17	\$0.00	(\$2.80)
High	22	\$68.91	\$77.33	\$74.53	\$8.42	\$5.62
Very High	35	\$121.20	\$133.88	\$131.08	\$12.68	\$9.88

Note: Assume 3/4" meter

Pricing Objectives Recap - WW

Ranking	Classifications	Pricing Objectives	Current Rate Structure	Option 1: Fixed Charge Only	Option 2: Flow Based Only	Option 3: Fixed + Flow Based
1	Most Important	Cost of Service Based Allocations	B-	B	A	A
2	Very Important	Rate Stability	A	A	A	A
3		Revenue Stability	B+	A+	C+	A-
4		Conservation	B+	C	A+	A-
5		Defensibility	A	A	A	A
6	Important	Minimization of Customer Impacts	A	A-	A-	A
7		Simple to Understand and Update	A+	A+	B+	A
8		Equitable Contributions from New Customers	B+	B+	B+	B+
9	Least Important	Economic Development	B	B	B	B
10		Ease of Implementation	A+	A	B+	A
11		Affordability	B-	C+	A-	B+
		Overall Scores	87.8	86.8	90.4	95.1

Wastewater Rate Structure Options

- Option 1: Fixed Charge for All Residential Customers
 - Greater revenue stability
 - No incentive for conservation
 - Reduced equity
- Option 2: Fixed Charge for All plus Flow-based Rate
 - Lower revenue stability
 - Greater incentive for conservation
 - Enhanced equity

Wastewater Rate Structure Alternatives

- Option 1: Fixed Charge for All Residential Customers
 - Revenue stability
 - No conservation incentive
 - Option 1a: Same charge for SFR and MFR
 - Reduced equity
 - Minimizes impact to SFR customers
 - Option 1b: Different charges for SFR and MFR
 - Enhanced equity

Wastewater Rate Structure Alternatives

- Option 2: Fixed Charge for All plus Flow-based Rate
 - Reduced revenue stability
 - Provides conservation incentive
 - Methodology
 - Flow basis – average winter water usage with cap
 - Accounts for irrigation usage
 - Constant sewer bill throughout the year
 - More administrative effort
 - Flow basis – monthly water usage with cap
 - Results in high summer bills

Current Residential Structure

	Usage (hcf)*	Residential Rate
Tier 1	0 - 8	\$34.27
Tier 2	9 - 10	\$42.24
Tier 3	11 - 12	\$50.00
Tier 4	13 - 14	\$57.76
Tier 5	15 - 16	\$65.51
Tier 6	17+	\$73.27

*Based on lowest water usage between November through April of previous year.

Option 1: Fixed Residential Charge

- Rate calculation basis
 - Option 1a: Total wastewater revenue divided by total number of residential units
 - Option 1b: SFR revenue divided by total SFR units and MFR revenue divided by total MFR units

Per Unit	Same Rates (1a)	Different Rates (1b)	Difference
Single Family	\$49.10	\$52.23	\$3.13
Multi Family	\$49.10	\$45.46	(\$3.64)

Option 2: Fixed plus Flow

Per Unit	Fixed Bi-Monthly Charge	Flow Rate (\$/hcf)
Single Family*	\$15.95	\$3.06
Multi Family**	\$15.95	\$3.06

*SFR bi-monthly cap at 20 hcf

**MFR bi-monthly cap at 16 hcf

SFR Rate Comparisons

	Usage (hcf)	% of Bills	Current Rates	Option 1a Rates	Option 1b Rates	Option 2 Rates
Fixed						\$15.95
Tier 1	0 - 8	17%	\$34.27	\$49.10	\$52.23	\$3.06
Tier 2	9 - 10	17%	\$42.24	\$49.10	\$52.23	\$3.06
Tier 3	11 - 12	10%	\$50.00	\$49.10	\$52.23	\$3.06
Tier 4	13 - 14	10%	\$57.76	\$49.10	\$52.23	\$3.06
Tier 5	15 - 16	9%	\$65.51	\$49.10	\$52.23	\$3.06
Tier 6	17+	37%	\$73.27	\$49.10	\$52.23	\$3.06

SFR Impacts – Total WW Bill

Bi-Monthly Usage	Current Bill (1)	Option 1a Bill (2)	Option 1b Bill (3)	Option 2 Bill (4)	(2) - (1)	(3) - (1)	(4) - (1)
2	\$34.27	\$49.10	\$52.23	\$22.07	\$14.83	\$17.96	(\$12.20)
4	\$34.27	\$49.10	\$52.23	\$28.19	\$14.83	\$17.96	(\$6.08)
6	\$34.27	\$49.10	\$52.23	\$34.31	\$14.83	\$17.96	\$0.04
8	\$34.27	\$49.10	\$52.23	\$40.43	\$14.83	\$17.96	\$6.16
10	\$42.24	\$49.10	\$52.23	\$46.55	\$6.86	\$9.99	\$4.31
12	\$50.00	\$49.10	\$52.23	\$52.67	(\$0.90)	\$2.23	\$2.67
14	\$57.76	\$49.10	\$52.23	\$58.79	(\$8.66)	(\$5.53)	\$1.03
16	\$65.51	\$49.10	\$52.23	\$64.91	(\$16.41)	(\$13.28)	(\$0.60)
18	\$73.27	\$49.10	\$52.23	\$71.03	(\$24.17)	(\$21.04)	(\$2.24)
20	\$73.27	\$49.10	\$52.23	\$77.15	(\$24.17)	(\$21.04)	\$3.88

MFR Rate Comparisons

	Usage (hcf)	% of Bills	Current Rates	Option 1a Rates	Option 1b Rates	Option 2 Rates
Fixed						\$15.95
Tier 1	0 - 8	29%	\$34.27	\$49.10	\$45.46	\$3.06
Tier 2	9 - 10	16%	\$42.24	\$49.10	\$45.46	\$3.06
Tier 3	11 - 12	26%	\$50.00	\$49.10	\$45.46	\$3.06
Tier 4	13 - 14	14%	\$57.76	\$49.10	\$45.46	\$3.06
Tier 5	15 - 16	8%	\$65.51	\$49.10	\$45.46	\$3.06
Tier 6	17+	7%	\$73.27	\$49.10	\$45.46	\$3.06

MFR Impacts – Total WW Bill

Bi-Monthly Usage	Current Bill (1)	Option 1a Bill (2)	Option 1b Bill (3)	Option 2 Bill (4)	Difference		
					(2) - (1)	(3) - (1)	(4) - (1)
2	\$34.27	\$49.10	\$45.46	\$22.07	\$14.83	\$11.19	(\$12.20)
4	\$34.27	\$49.10	\$45.46	\$28.19	\$14.83	\$11.19	(\$6.08)
6	\$34.27	\$49.10	\$45.46	\$34.31	\$14.83	\$11.19	\$0.04
8	\$34.27	\$49.10	\$45.46	\$40.43	\$14.83	\$11.19	\$6.16
10	\$42.24	\$49.10	\$45.46	\$46.55	\$6.86	\$3.22	\$4.31
12	\$50.00	\$49.10	\$45.46	\$52.67	(\$0.90)	(\$4.54)	\$2.67
14	\$57.76	\$49.10	\$45.46	\$58.79	(\$8.66)	(\$12.30)	\$1.03
16	\$65.51	\$49.10	\$45.46	\$64.91	(\$16.41)	(\$20.05)	(\$0.60)
18	\$73.27	\$49.10	\$45.46	\$64.91	(\$24.17)	(\$27.81)	(\$8.36)
20	\$73.27	\$49.10	\$45.46	\$64.91	(\$24.17)	(\$27.81)	(\$8.36)

Discussion

- Rate structure alternatives
 - Water rate structure
 - Scenario 1 or Scenario 2?
 - Option 1 or Option 2?
 - Wastewater rate structure
 - Option 1 or Option 2?
 - Option 1a or Option 1b?

Next Steps

- Agenda for Next Meeting
 - COS Analysis
 - Proposed Water and Wastewater Rates
 - Customer Impacts