



***City of Lompoc***

***Cost of Service Utility Rate Study***

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# Project Objectives

- Develop utility rate structures that:
  - Provide adequate revenues in short and long term
  - Incorporate CIP
  - Healthy financial outlook for utility
  - Minimize revenue adjustments
  - Review current financial policies
- Rate Design
  - Rates are defensible
    - Cost of service based rates
    - Equitable across customer classes
  - Limit significant changes to rate structure
  - Minimize rate shock
  - Customers / Community
    - Transparency achieved through outreach and public involvement
    - Explain proposed rate structure
    - Easy to understand
    - Illustrate customer impact
    - Palatable to customers

# Rate Study Components

## Revenue Requirements Analysis

- Determine revenue needed to meet utility costs
- Project O&M, capital, and debt expenses
- Analyze reserves

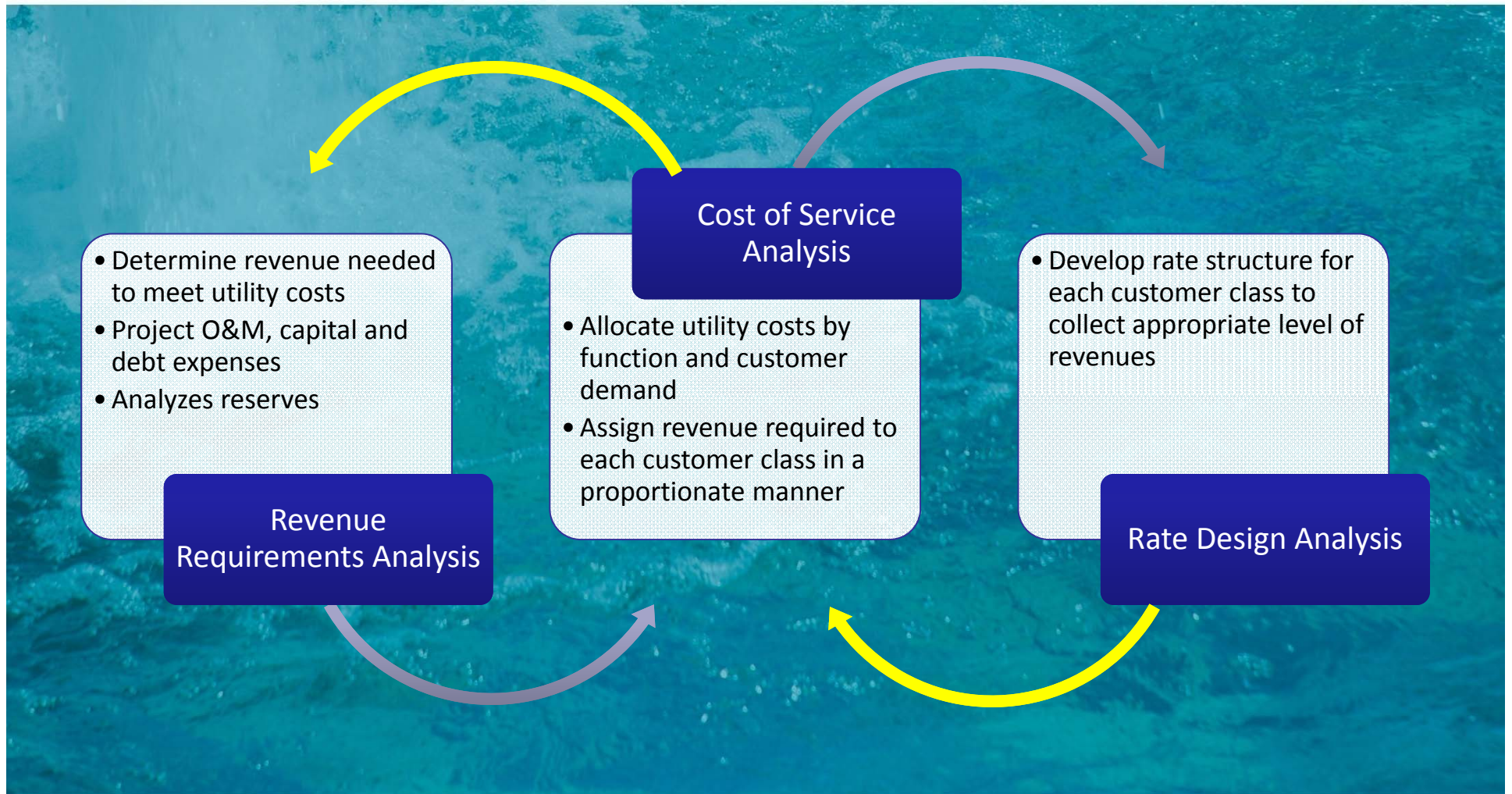
## Revenue Requirements Analysis

- Determine revenue needed to meet utility costs
- Project O&M, capital, and debt expenses
- Analyze reserves in a proportionate manner

## Rate Design Analysis

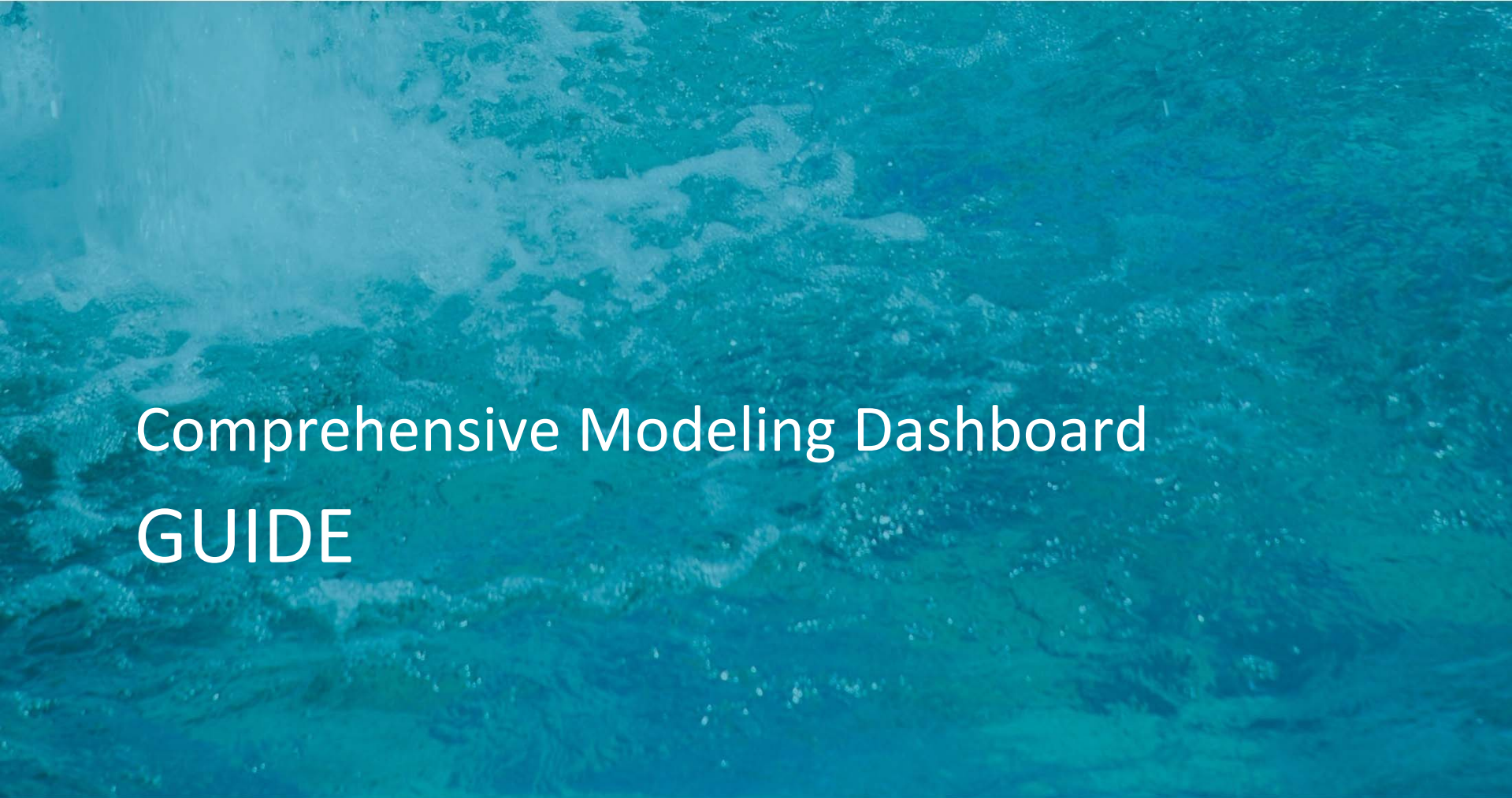
- Develop rate structure for each customer class to collect appropriate level of revenues
- Achieve equity and policy objectives

# Holistic Approach to Rate Design



## Revenue Requirements

- Analyzed Lompoc's Utility Budgets
  - Budget embedded within model
  - Model may be used as part of budgetary process
- Accounted for specific adjustments
  - Capital Improvement Plan
  - Debt obligations
  - 5yr / 10 yr projection
  - Reserve policies
- Establish financial thresholds



# Comprehensive Modeling Dashboard GUIDE

# Variable Assumptions Toggles and Inputs

# Programmed scenarios for quick comparisons

# Visualize impacts on revenue & rates immediately

Willdan Financial Services  
G.U.I.D.E.  
Graphical User Interface Design Engine

Run Scenario Save

Load Saved Scenarios  
Level Increases - No debt

	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023
Proposed Revenue Increase	Lock 10.0%	Unlock 10.0%	Unlock 10.0%	Unlock 10.0%	Unlock 4.0%	Unlock 4.0%	Unlock 4.0%	Unlock 4.0%	Unlock 3.0%	Unlock 3.0%	Unlock 3.0%
Days of Operating Reserves	67	136	144	170	212	234	256	272	287	300	305
Debt Service Coverage (110%)	188.0%	276.9%	334.7%	399.0%	401.8%	403.7%	404.8%	405.0%	390.5%	373.9%	355.1%
Net Income	\$ 483,347	\$ 971,919	\$ 1,287,615	\$ 1,638,000	\$ 1,651,117	\$ 1,659,595	\$ 1,663,004	\$ 1,661,562	\$ 1,580,386	\$ 1,488,026	\$ 1,383,571
Operating Fund Balance	\$ 741,294	\$ 1,587,148	\$ 1,758,699	\$ 2,185,633	\$ 2,870,686	\$ 3,319,215	\$ 3,828,154	\$ 4,278,651	\$ 4,752,972	\$ 5,235,155	\$ 5,612,883

Water Use / Metering Assumptions

Indoor Usage, per capita: 55

Single Family Density: 3.05

Indoor Allocation (gpd): 168

Monthly Indoor Allocation (hcf): 6.8

Average SFR Lot Size: 7,450

Average SFR BSF: 2,200

Irrigable Area (sq. ft.): 2,625

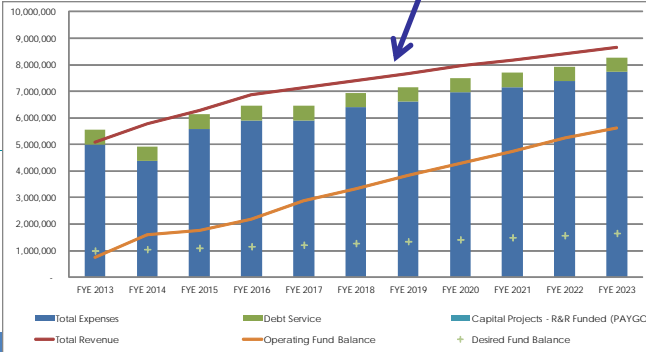
Usage, per 100 sq ft (gpd): 8

Outdoor Consumption (gpd): 210

Total Daily Household (hcf): 8.5

Total Daily Household, gpd: 378

Monthly Household Allocation (hcf): 15.4



# Financial Thresholds

Inflation / Escalation Factors

Materials & Supplies (%): 3.0

Treatment (%): 3.0

Purchased Power (%): 5.0

Labor (%): 7.0

Miscellaneous (%): 8.0

Elasticity (%): 3.0

Capitalized Expense (%): 3.0

Financing Options & Assumptions

Depreciation Options: Full Recovery

CIP: Yes

R&R Fund Balance Minimum (\$1,000): 400

Operating Reserve Buffer (%): 5.00

Debt Coverage Service Ratio (%): 110%

Minimum Operating Fund Balance (days): 90

1st Year Months Effective: 6.0

Include New Depreciation: Yes

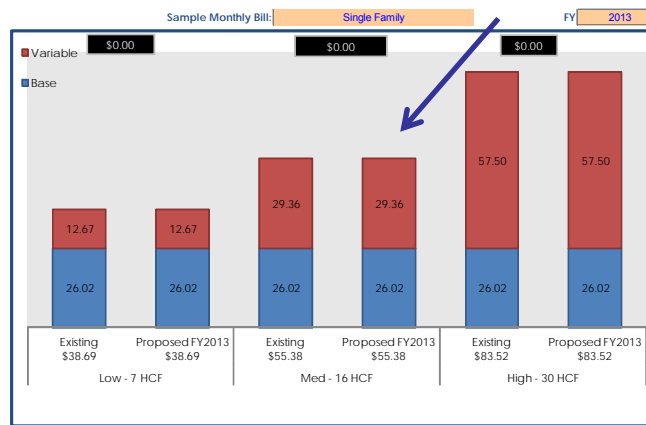
CIP Options: Full CIP Program

Finance Water Rights: Yes

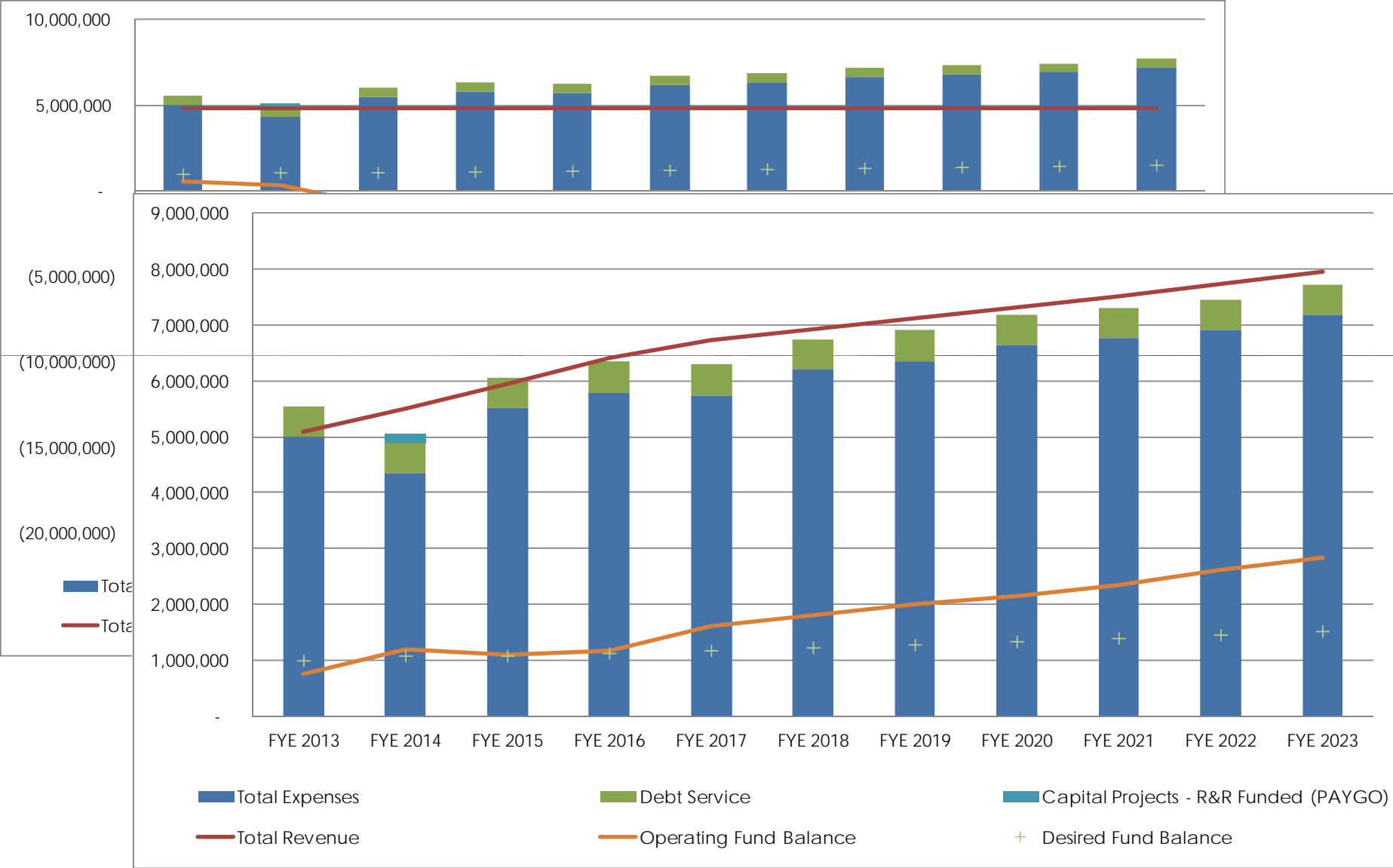
Finance Option: CIEDB Debt Service

Calendar or Fiscal Year Revenue Adjustments: Fiscal

# Customer Impact



# Immediate reflection of impacts to revenues & rates





# WATER UTILITY

## Current Water Utility Financials

- Last rate adjustment was in 2009
- O&M reserve has been depleted
- Revenues are currently not sufficient to set aside money to build up Capital Replacement Fund
  - Current depreciation value = \$1.2 million
- Utility has borrowed from other funds in recent years
- Enterprise is not self supporting

## Water Utility Fiscal Objectives

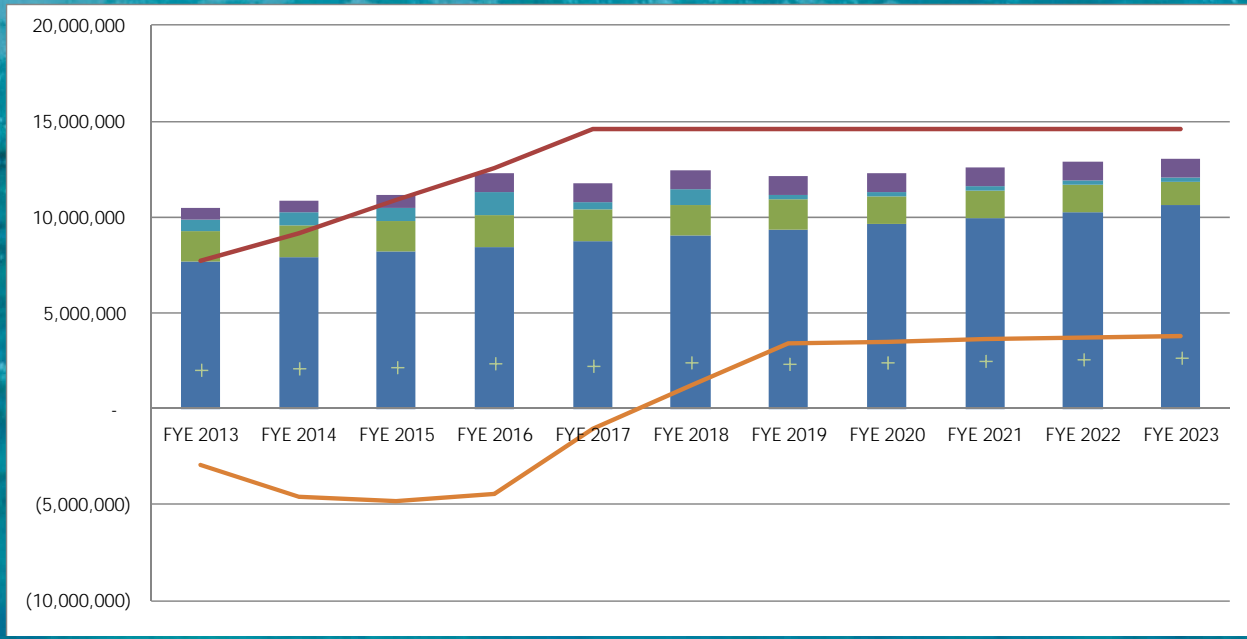
- Replenish operation reserve to 90 days of O&M
- Reinvest in capital infrastructure (Depreciation = \$1.2M)
- Establish a Repair/Replacement Reserve Fund
- Ensure compliance with existing bond covenants=125%
- Pay back Enterprise Pool Fund over 8 years
- Achieve self supporting utility

## Water Scenario 1 – (5-Year Plan)

- Reserves are not fully funded until 6<sup>th</sup> Year
- Negative net income in the first year
  - Trending in a positive direction
- Internal loan paid back by Water Enterprise over 8yrs
- CIP funded with a combination of existing Debt/PAYGO
- Depreciation fully funded by 3rd year
- Revenue adjustments – 19%, 18%, 17%, 15%, 0%

# Water Financial Plan – Scenario 1 (5-Year Plan)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019
Proposed Revenue Increase	19.0%	18.0%	17.0%	15.0%	0.0%	0.0%
Days of Operating Reserves (Gross)	-194.00	-198.00	-167.00	-41.00	44.00	132.00
Calculated Debt Coverage Ratio	266.1%	331.2%	385.2%	488.4%	456.2%	461.7%
Operating Income	1,101,063	2,587,031	3,713,643	6,263,882	5,532,621	5,846,419
Net Income	\$ (1,054,064)	\$ 433,526	\$ 1,012,260	\$ 4,381,296	\$ 3,203,282	\$ 4,131,272
Net Income w/ Depreciation	\$ (1,709,196)	\$ (221,606)	\$ 32,128	\$ 3,401,164	\$ 2,223,150	\$ 3,151,140

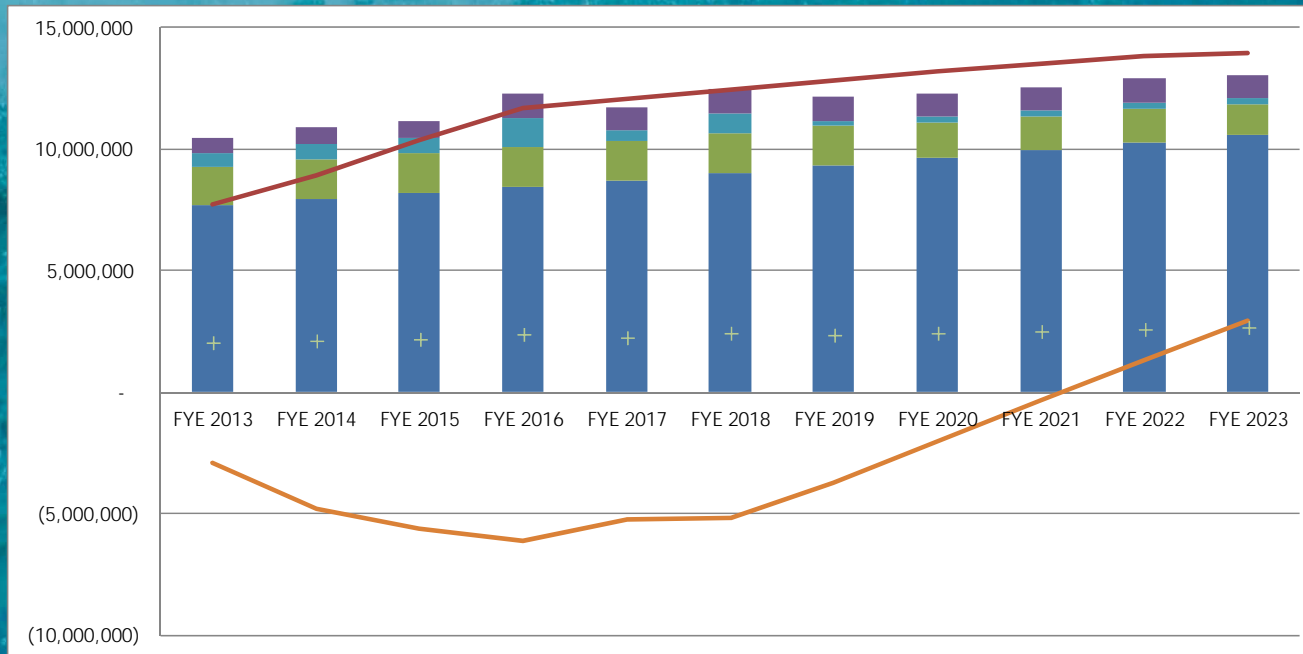


## Water Scenario 2 – (10-Year Plan)

- Reserves are not fully funded until 10<sup>th</sup> Year
- Negative net income in first two years
  - Trending in a positive direction
- Bond covenants satisfied
- Internal loan paid back by Water Enterprise over 8 yrs
- CIP funded with a combination of existing Debt/PAYGO
- Depreciation fully funded after 3rd year
- Revenue adjustments – 16%, 15%, 15%, 3%, 3%

# Water Financial Plan – Scenario 2 (10-Year Plan)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023
Proposed Revenue Increase	16.0%	15.0%	15.0%	3.0%	3.0%	3.0%	3.0%	2.0%	2.0%	1.0%
Days of Operating Reserves (Gross)	-204.00	-231.00	-232.00	-210.00	-191.00	-143.00	-76.00	-13.00	46.00	99.00
Calculated Debt Coverage Ratio	257.8%	311.6%	354.7%	401.8%	383.0%	401.9%	398.4%	388.8%	378.5%	414.9%
Operating Income	856,763	2,015,331	2,827,543	3,745,682	3,400,421	4,111,819	4,214,923	4,178,969	4,137,678	3,944,359
Net Income	\$ (1,298,364)	\$ (138,174)	\$ 126,160	\$ 1,863,096	\$ 1,071,082	\$ 2,396,672	\$ 2,667,276	\$ 2,684,564	\$ 2,640,498	\$ 2,610,611
Net Income w/ Depreciation	\$ (1,953,496)	\$ (793,306)	\$ (853,972)	\$ 882,964	\$ 90,950	\$ 1,416,540	\$ 1,687,144	\$ 1,704,432	\$ 1,660,366	\$ 1,630,479





# WASTEWATER UTILITY

## Current Wastewater Utility Financials

- Last rate adjustment was in 2010
- Negative fund balance
- Rate stabilization fund is depleting
- Revenues are currently not sufficient to set aside money to build up Capital Replacement Fund
  - Current depreciation value = \$1.5 million
  - With New Treatment Plant = \$5.0 million
- Utility has borrowed from other funds in recent years
- Outstanding bonds recently downgraded
- Enterprise is not self supporting

## Wastewater Utility Fiscal Objectives

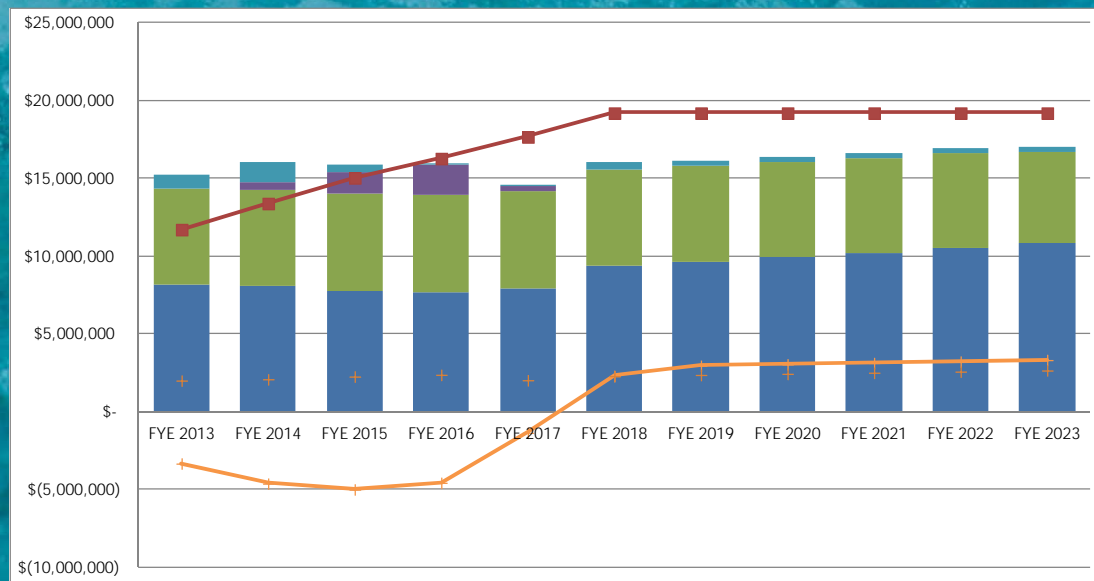
- Operation reserve at 90 days of O&M
- Reinvest in capital infrastructure
  - (Depreciation = \$1.5M)
- Establish a Repair/Replacement Reserve Fund
- Comply with existing bond covenants =
  - 125% coverage on Bond Debt through PFA
  - 100% coverage on SRF Loan
  - Build up required \$4.5M reserve
- Pay back Enterprise Pool Fund over 8 years
- Achieve self supporting utility

## Wastewater Scenario 1 – (5-Year Plan)

- Reserves are not fully funded until 5<sup>th</sup> Year
- Negative net income in the first year
  - Trending in a positive direction
- Internal loan paid back over 8yrs
- CIP funded with a combination of existing Debt/PAYGO
- Depreciation fully funded after 3rd year
- Revenue adjustments –21%, 17%, 11%, 11%, 11%

# Wastewater Scenario 1 – (5-Year Plan)

	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018
Proposed Revenue Increase	21.0%	17.0%	11.0%	11.0%	11.0%
Days of Operating Reserves	-198.00	-197.00	-172.00	-59.00	90.00
Debt Coverage Ratio (PFA)	265.2%	302.2%	353.2%	500.4%	544.5%
Debt Coverage Ratio (SRF)	135.9%	159.3%	191.3%	285.0%	313.4%
Net Income	\$ (290,486)	\$ 80,422	\$ 550,652	\$ 3,342,874	\$ 4,930,191
Net Income w/ Depreciation	\$ (1,294,069)	\$ (373,162)	\$ 425,068	\$ 3,218,291	\$ 3,646,608

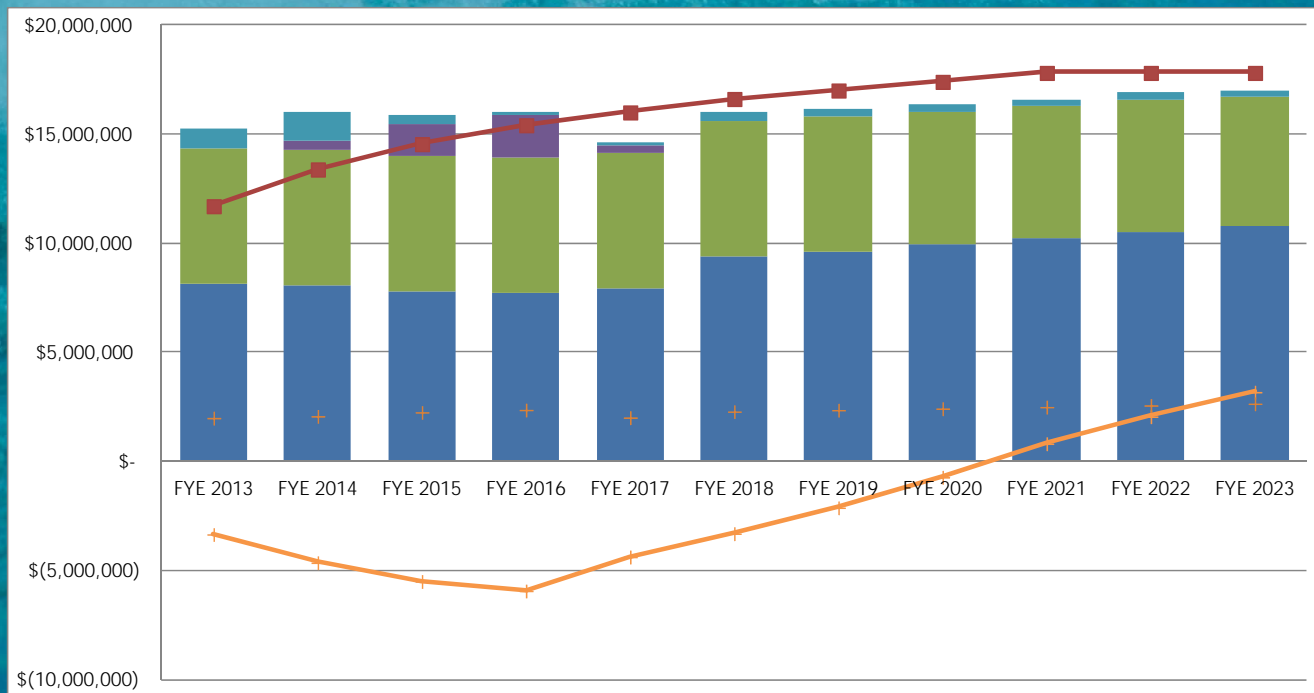


## Wastewater Scenario 2 – (10-Year Plan)

- Reserves are not fully funded until 10<sup>th</sup> Year
- Negative net income in first three years
  - Trending in a positive direction
- Bond covenants satisfied
- Internal loan paid back over 8 yrs
- CIP funded with a combination of existing Debt/PAYGO
- Financial plan complies with bond covenants through high revenue increase in first year; then lower increases
- Depreciation fully funded in 3rd year
- Revenue adjustments – 21%, 12%, 8%, 5%, 5%

# Wastewater Scenario 2 – (10-Year Plan)

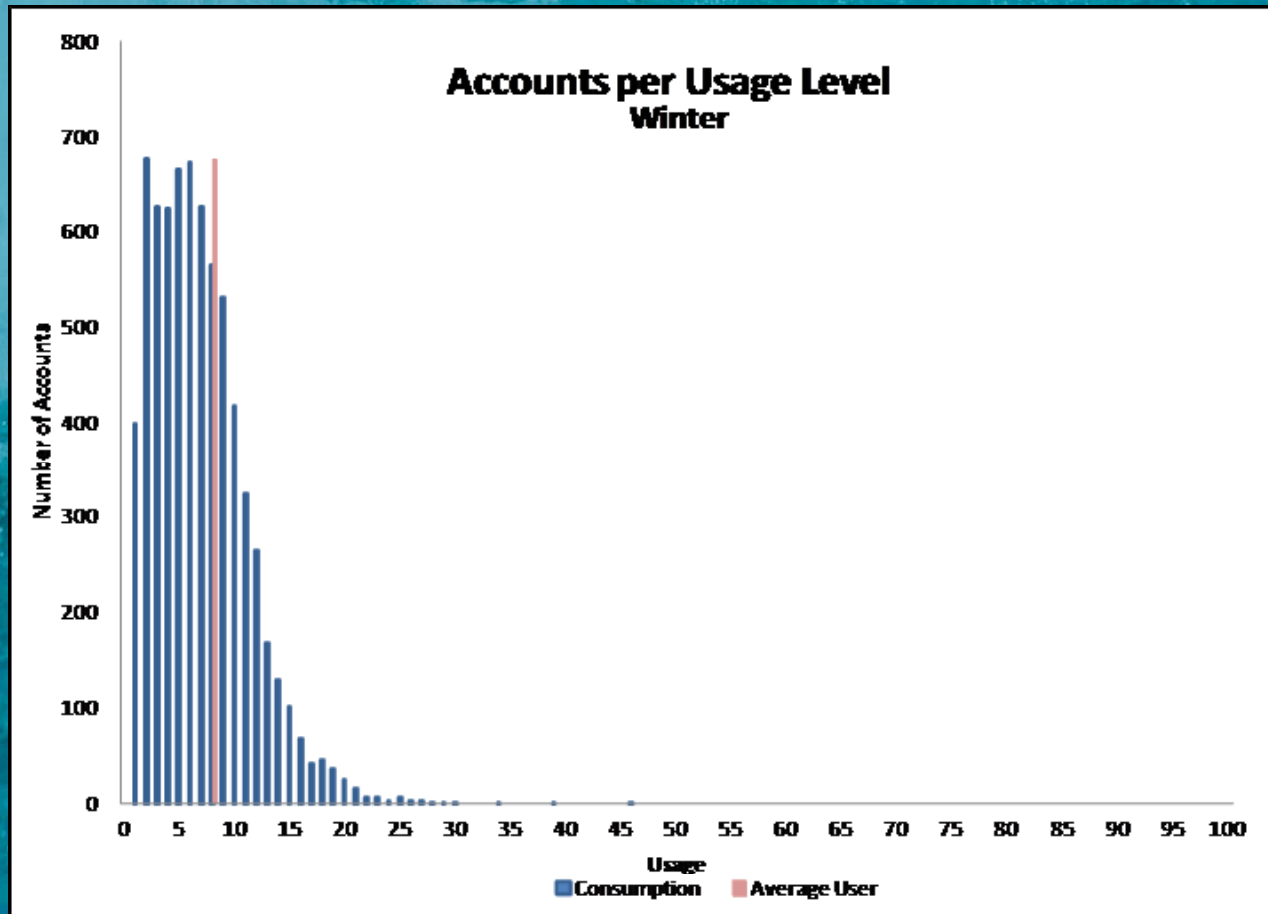
	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	FYE 2020	FYE 2021	FYE 2022	FYE 2023
Proposed Revenue Increase	21.0%	12.0%	8.0%	5.0%	5.0%	3.0%	3.0%	3.0%	0.0%	0.0%
Days of Operating Reserves	-198.00	-217.00	-223.00	-192.00	-128.00	-79.00	-26.00	30.00	72.00	108.00
Debt Coverage Ratio (PFA)	265.2%	285.6%	323.5%	443.3%	455.9%	451.1%	444.8%	437.2%	414.6%	448.0%
Debt Coverage Ratio (SRF)	135.9%	148.7%	172.5%	248.7%	257.0%	253.2%	249.1%	244.7%	230.9%	221.0%
Net Income	\$ (290,486)	\$ (403,478)	\$ (311,648)	\$ 1,683,374	\$ 2,350,691	\$ 2,470,873	\$ 2,678,127	\$ 2,824,544	\$ 2,519,897	\$ 2,407,286
Net Income w/ Depreciation	\$ (1,294,069)	\$ (857,062)	\$ (437,232)	\$ 1,558,791	\$ 1,067,108	\$ 1,187,289	\$ 1,394,544	\$ 1,540,960	\$ 1,236,314	\$ 1,123,703



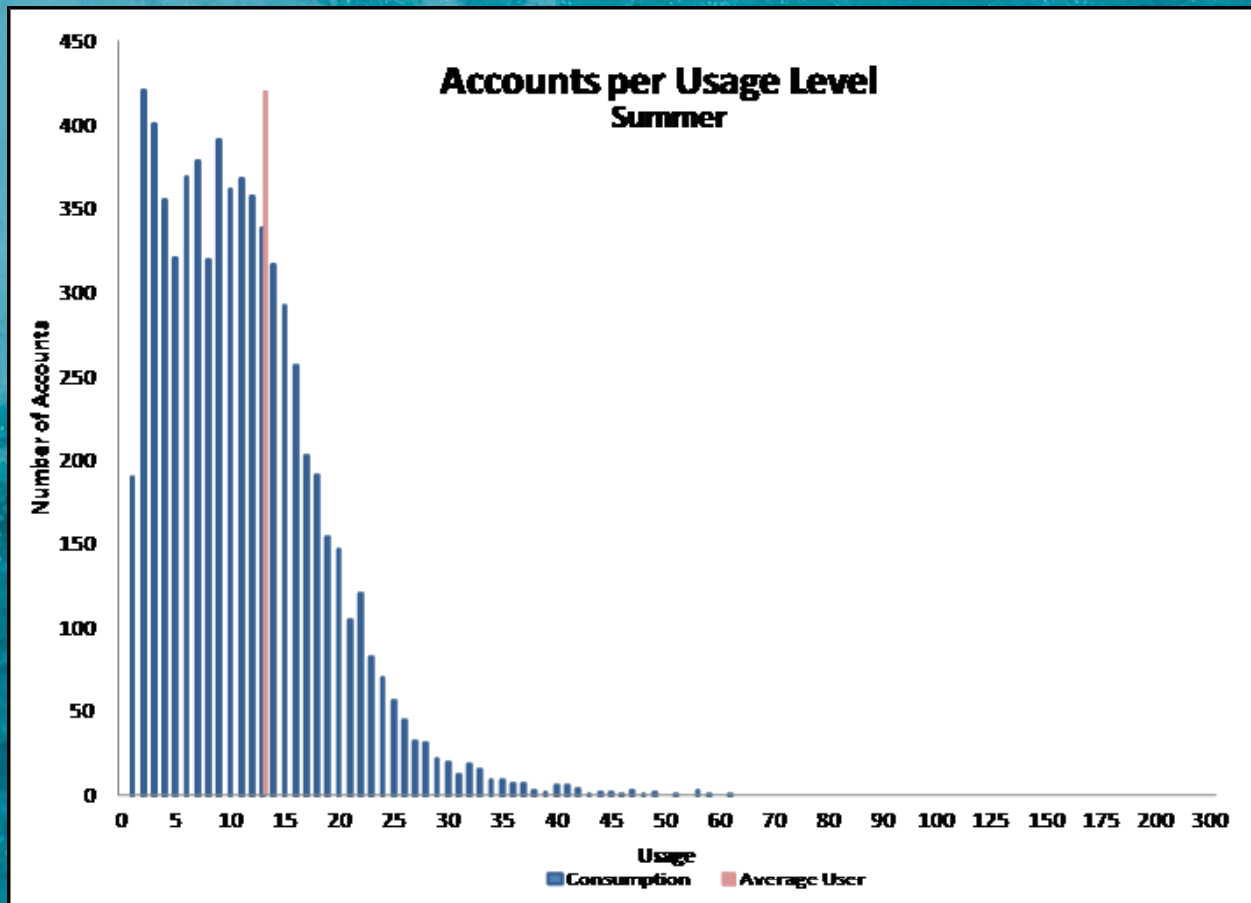
## Next Steps

- Refine financial plan based on tonight's meeting
- Schedule meeting with City Council to review rates
  - Determine fixed / variable revenue split
  - Review peaking and demand characteristics
  - Establish unique rates for each customer class
  - Customer impact
- Collaborate with Lompoc staff throughout rate design process

# Winter Water Usage



# Summer Water Usage



# Questions and Answers

