2016 Water and Recycled Water Rate Study

FRAMEWORK AND HIGHLIGHTS

MAY 12, 2016







Steps in Conducting a Rate Study



Financial Plan

- Evaluation of CIP and financing options
- Cash flow analysis for financial sufficiency



Cost of Service & Rate Design

- Cost allocations
- Rate design
 - Rate calculations
 - Customer impact analyses



Final Rate Adoption

- Report
- Prop 218 Notice
- Public Hearing



Rate Setting Framework

- Financial goals and policies
- Pricing objectives



Rate Setting Framework

LEGAL ENVIRONMENT

INTERNAL STRUCTURE





Legal Environment of Rate Making

Cost of Service Requirements

- Proposition 218 and Proposition 26 (Article XIIIC and XIIID of California Constitution)
- California Government Code 54999

Pass-through Provision

AB 3030 – Section 53756 of the Government Code

Water Conservation

- Article X of California Constitution
- CA Water Code Chapter 3.4 Allocation-based Conservation Water Pricing (AB 2882)
- SB X7-7 20% reduction by 2020
- Executive Order B-29-15 (25% reduction State-Wide)
- Executive Order B-36-15 (restrictions extended until 10-31-16)





Financial Policy Framework

The District currently does not have an Adopted Financial Policy

Reserves	Target Levels	Bases	
Operation	90 - 120 days (25% to 33% Operating Budget)	Bi-Monthly Billings for Water Monthly billings for RW	
Rate Stabilization Fund (RSF)	10-20% of Revenues from Volumetric Rates	Revenue sensitivity analysis	
Capital R&R	100% Annual Depreciation		
Emergency	2.5% Asset Values	Average asset useful life ~30 – 50 years	
Debt Service (Restricted)	100% Annual Debt Service	Required by Debt Covenants	



Reserve Policy

FY 2016 Budget and Asset / Depreciation as of June 30, 2015

December	Minimum Towart Lovels	Water Fund	RW Fund	Impact Fee
Reserves	Minimum Target Levels	(FY 2016 Budget)	(FY 2016 Budget)	(FY 2016 Budget)
Operation	90 days (or 25%) O&M Budget	\$1,020K	\$109K	
Rate Stabilization Fund (RSF)	20% of Revenues from Volumetric Rates	\$743K	\$75K	
Capital R&R	100% Annual Depreciation	\$709K	\$174K	
Emergency	2.5% of Asset Values	\$309K	\$151K	
Debt Service	100% of Annual Debt Service	\$356K	\$0	\$273K
TOTAL TARGET		\$3,136K	\$509K	\$273K
Fund Balance		\$5,130K	\$122K	\$218K
(As of July 1, 2015)		73,130K	YIZZK	γΖΙΟΝ



Financial Policy Framework

Debt Coverage

- Debt Coverage ≥ 1.20x
 - Based on current debt covenant for existing debt
- S&P Criteria

Insufficient 0x

Adequate 1.0x to 1.25x

Good 1.26x to 1.50x

Strong>1.50x

Should SVWD maintain minimum debt coverage ratio at higher level (1.26x - 1.50x?)?



Financial Plan Development

KEY INPUTS AND KEY ASSUMPTIONS FINANCIAL PLAN MODEL OVERVIEW





Water Demand Scenarios

Water Production (includes 8.7% unaccounted water for Potable)	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020*
Full Rebound (2017 demand equal to 2010)	1,099 AF	1,106 AF	1,411 AF	1,420 AF	1,429 AF	1,438 AF
Moderate Rebound (2017 demand equal to 2010-15 average)	1,099 AF	1,106 AF	1,201 AF	1,253 AF	1,304 AF	1,355 AF
No Rebound (2017 demand equal to 2015)	1,099 AF	1,106 AF	1,114 AF	1,121 AF	1,128 AF	1,135 AF
RW Demand**	144 AF	160 AF	175 AF	189 AF	203 AF	218 AF

^{*} FY 2017 – FY 2020 Demand growth is based on Draft 2015 Urban Water Management Plan (UWMP)



^{**} Includes 16.5MG annual exempt RW usage of City of Scotts Valley



Financial Plan Scenarios

- 1. Status Quo Revenue Full Rebound
 - > Full rebound sales, no rate adjustments
 - No capacity and impact fees revenues are assumed
- 2. Status Quo Revenue No Rebound
 - No rebound sales, no rate adjustments
 - No capacity and impact fees revenues are assumed
- 3. Proposed Revenue No Rebound
 - No rebound sales with proposed rate adjustments
 - No capacity and impact fees revenues are assumed

Assumed proposed revenue adjustments are in addition to the adopted Dec 15, 2016 rates

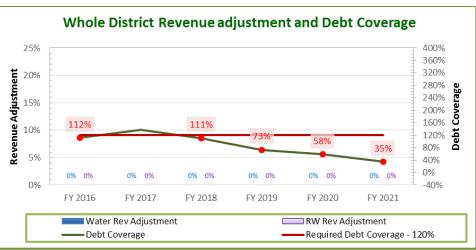


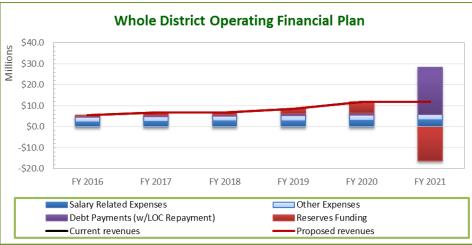


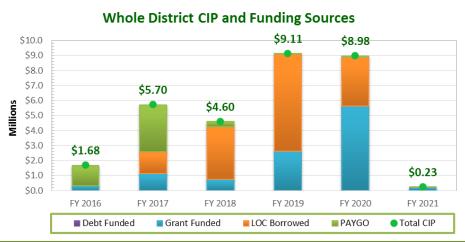
Financial Plan

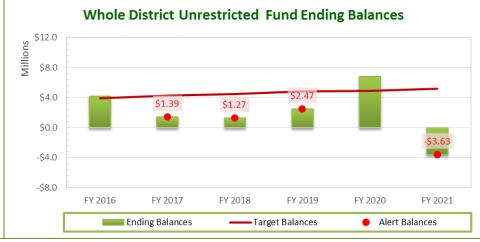
Scenario 1: Status Quo Full Rebound

If growth occurs as planned and capacity fees and impact fees are collected as intended, debt coverage are met in FY 2016 to FY 2019







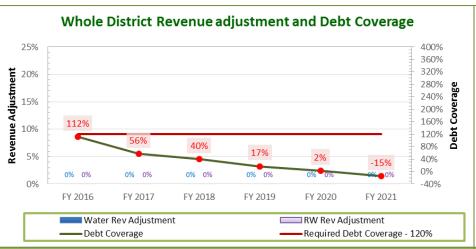


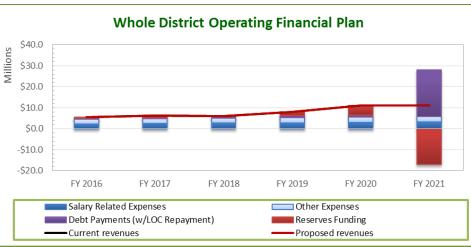


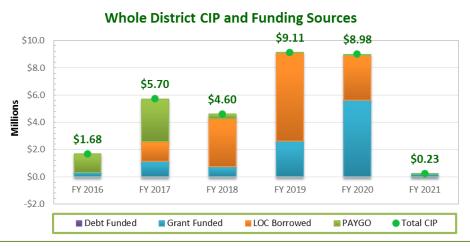


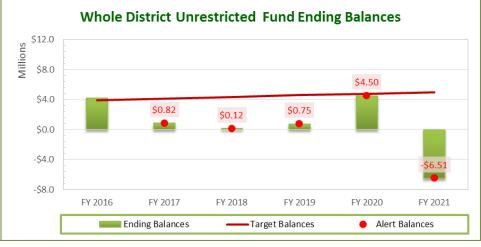
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Scenario 2: Status Quo No Rebound







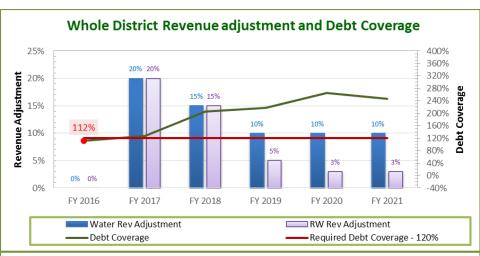


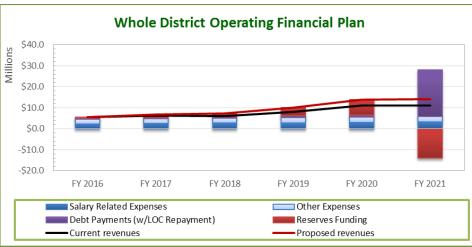


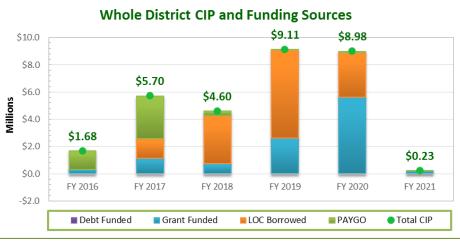


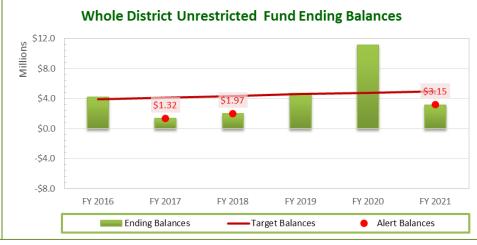
Financial Plan

Scenario 3: Proposed No Rebound











Capacity Fees Framework





Capacity Fees 101

- Capacity Fees are one-time capital charges assessed against new development as a way to provide or cover a proportional share of capital facilities costs that was constructed or will be constructed to accommodate growth
- Commonly known as capacity charges, system development charges, impact fees, etc.
- Objective "Growth pays for growth"
- AB1600 (codified as CA Gov Code Sections 66000 66008) as well as 66013, 66016, 66022, and 66023
- Capacity Fees must reflect the link between the fees and the benefits received by new customers and exceed the proportional share of costs associated with providing service



Impact Fees Discussion

Revise Impact Fees to recover Groundwater Recharge project costs(~\$20M)?

- The project brings new water supply, thus benefits both current and new users
- Assumptions: \$15M from grants and partner contributions & approx. \$5M from water rates (83%) and impact fees (17%)
 - Current population in 2015: approx. 10,500 (83% built-out)
 - Built-out population in 2040: approx. 12,600
 - \$5M will be financed by Line of Credit during construction then refinanced to long-term debt in FY 2021

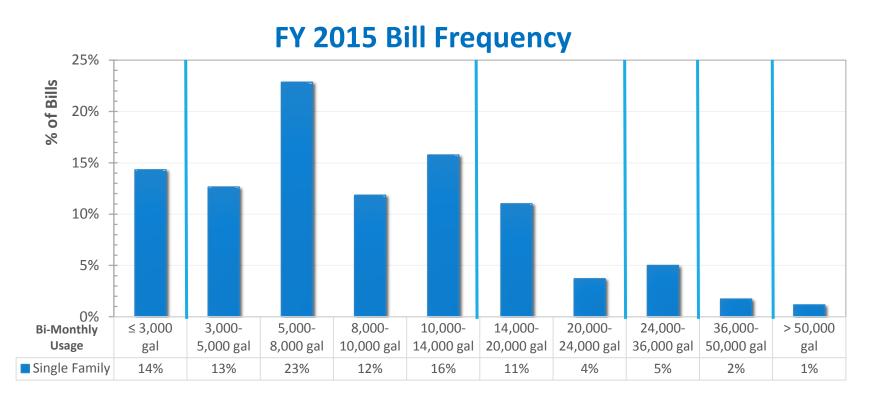


Rate Setting Process



Bill Frequency

2015 Usage



- Median bi-monthly single family usage = 8,000 gal
- > Tier 1 = 14% of Bills, Tier 2 = 63% of Bills, Tier 3 = 15% of Bills
- > Tiers 4 6 = 8% of Bills





Water Rate Setting - Residential

Recommendations: 3 to 4 tiers inclining rates

- Tier definition per dwelling unit
- - Indoor & Outdoor Usage
 - Winter & Summer Average
- Pricing objectives:
 - Promote conservation
 - Easy to administer
 - Customer understanding
 - Affordability for essential use (keeping Tier 1 low)
 - Funding for RW / conservation programs





Water Rate Setting – Non Residential

Tier rates are generally not recommended for these customer classes due to the diversity of consumption pattern and usage types

For irrigation accounts, water budget tiered rates are the recommended tiered rate structure

- Factors considered:
 - Landscape / Irrigable area
 - Seasons





Proposed Rate Structure Framework

Customer Class	Current Rate Structure	Proposed to Evaluate
Residential	Inclining Tier	Revised Inclining Tier
Irrigation	Inclining Tier	Uniform?
Commercial	Inclining Tier	Uniform?
RW	Inclining Tier	Uniform?





Water Rate Justifications

	Water Supply	Delivery	Peaking	Conservation	Revenue Offset
Residential					
Tier 1	Groundwater	х	Х		х
Tier 2	Groundwater	х	XX		
Tier 3	RW / GWR?	х	xxx	xx	
Tier 4	RW / GWR?	х	xxxx	xx	
Non-Residential	Groundwater	х	XX	х	х

Groundwater (in overdraft) is the only available potable water supply sources
Utilizing Property Tax (unrestricted) for Revenue Offset to provide affordability for essential use

Drought Rate



Water Shortage Stages

Potable Consumption	No Reduction		Stage 2 (15%)		Stage 3 (20%)	
	Summer	Winter	Summer	Winter	Summer	Winter
Residential – Single Family	100%	100%	80%	90%	75%	85%
Residential – Multi Family	100%	100%	90%	90%	85%	85%
Commercial	100%	100%	95%	95%	90%	90%
Landscape	100%	100%	70%	80%	50%	75%
Total Consumption	100%	100%	83%	91%	77%	86%
Total Reduction			17%	9%	23%	14%



FY 2015 Consumption Review

	May – Oct 2014 Usage	Nov 2014 – Apr 2015 Usage	Annual FY 2015 Usage	Stage 3 Goal May - Oct	Stage 3 Goal Nov - Apr	Stage 3 Goal Annual
Residential Single Family	118.65 MG	88.03 MG	207.67 MG	118.3 MG	85.5 MG	203.8 MG
Residential Multi Family	13.43 MG	11.79 MG	25.22 MG	13.8 MG	11.3 MG	25.1 MG
Commercial	37.76 MG	29.65 MG	67.42 MG	41.7 MG	33.7 MG	75.4 MG
Landscape	12.88 MG	4.56 MG	17.44 MG	9.8 MG	5.2 MG	15.0 MG
Others & Fire	6.5 MG	3.67 MG	10.17 MG	N/A	N/A	N/A
Total	189.22 MG	137.70 MG	326.92 MG	183.6 MG	135.8 MG	319.4 MG



Drought Rate Discussion

Is FY 2015 consumption is the "new normal" for the Financial Plan and do we anticipate further restrictions?

SFR Per Capita Usage (2015 as "New Normal")	No Reduction	Stage 2	Stage 3
SUMMER (May 1 – Oct 31)	90	70	65
WINTER (Nov 1 – Apr 30)	59	55	50



Drought Rates or Penalties?

DROUGHT RATES

Recovering the financial cost of having a drought

Revenue generating mechanism

There is a nexus between the cost of providing service and the associated rates

Subject to Prop 218 with legal avenue to adoption of rates

DROUGHT PENALTIES

Utilizes price to enforce water rationing

Non-revenue generating, strictly punitive

A violation not based on cost of service

Example: City of Santa Cruz excessive water use penalties applied to residential accounts

- 25 dollars per unit above 10 units
- 50 dollars per unit above 11 units





1. Monthly Fixed Charge

\$15 flat charge for 3/4 in. meter

2. Uniform Commodity Charge

\$0.70 per cf

3. Uniform Percentage applied to each Tier/Class

20% applied to existing rates for each tier/class

4. Inclining Commodity Charge

- Tier 1 (0 to 1,000 cf) no surcharge
- Tier 2 (1,000 to 5,000 cf) has \$1.50 per cf
- Tier 3 (5,000 cf) has \$2.50 per cf





Monthly Fixed Charges

ADVANTAGES

- Stable and guaranteed recovery of lost revenue
- Simple to understand and administer

DISADVANTAGES

- Not tied to use of water resources and does not provide incentive to reduce consumption patterns
- Assessing the same charge to all customers does not target highest users
- Impacts affordability





Uniform Commodity Charge

ADVANTAGES

- Applying surcharge to all volumetric usage sends consistent conservation signal to all customers
- High-use customers generate greater share of revenue in conjunction with their use
- Simple to understand and administer

DISADVANTAGES

- Moderate revenue volatility due to reliance on consumption that should be reduced
- Moderate affordability impacts





Uniform Percentage on Commodity Charge

ADVANTAGES

- Targets high volume users
- Customers have the ability to control their bill
- Minimal impact on affordability

DISADVANTAGES

Potential increase in revenue volatility due to reliance on consumption in higher tiers





Inclining Commodity Charge

ADVANTAGES

- Targeted use
- Customers have the ability to control their bill
- Minimal impact on affordability

DISADVANTAGES

- Potential increase in revenue volatility due to reliance on consumption in higher tiers
- Complex to understand/explain and administer





Policy Overview of Drought Rates

Objectives	Monthly Fixed Charge	Uniform Commodity Charge	Uniform Percentage	Inclining Commodity Charge
Easy to understand and administer	***	**	**	*
Stability and guaranteed recovery of revenue	***	**	*	*
Ability to change the bill	*	**	***	***
Targeted use / conservation	*	**	***	***
Promotes affordability	*	**	**	***

Discussion

Any other concerns / issues?



