

Rates and Revenues in a Difficult Economic Environment

WESTCAS 2013 ANNUAL CONFERENCE



Agenda

- ▶ Importance of Financial Planning and Financial Policies
- ▶ Financial Planning Tools
- ▶ Case Studies
 - ▶ Mesa Consolidated Water District
 - ▶ Alameda County Water District
 - ▶ Santa Cruz Water Department

Financial Challenges of Managing a Water and Wastewater System

A FINANCIAL MODEL CAN BE A TOOL TO NAVIGATE THROUGH THESE CHALLENGES

Properties of Utility System

- ▶ Capital intensive
- ▶ Highly fluctuating capital cost
- ▶ Unknown liability
- ▶ Increasing regulatory demand



Political Acceptance on Rates

- Rate stability
- Affordability
- Equity
- Environmental stewardship



Why Financial Planning?

- ▶ Financial Sufficiency for the Short and Long-Term
 - ▶ Short-term operating expenses
 - ▶ Anticipated capital expenditures

- ▶ Preparation for the Future
 - ▶ Identify known facts and variables
 - ▶ Anticipate unknown variables and evaluate associated risks

- ▶ Tool for Agencies
 - ▶ Minimize rate fluctuations from year to year
 - ▶ Assess risks and develop financial policies, budget goals and objectives

Risk Assessment According to Donald Rumsfeld



Things you
know



Things you
know you don't
know



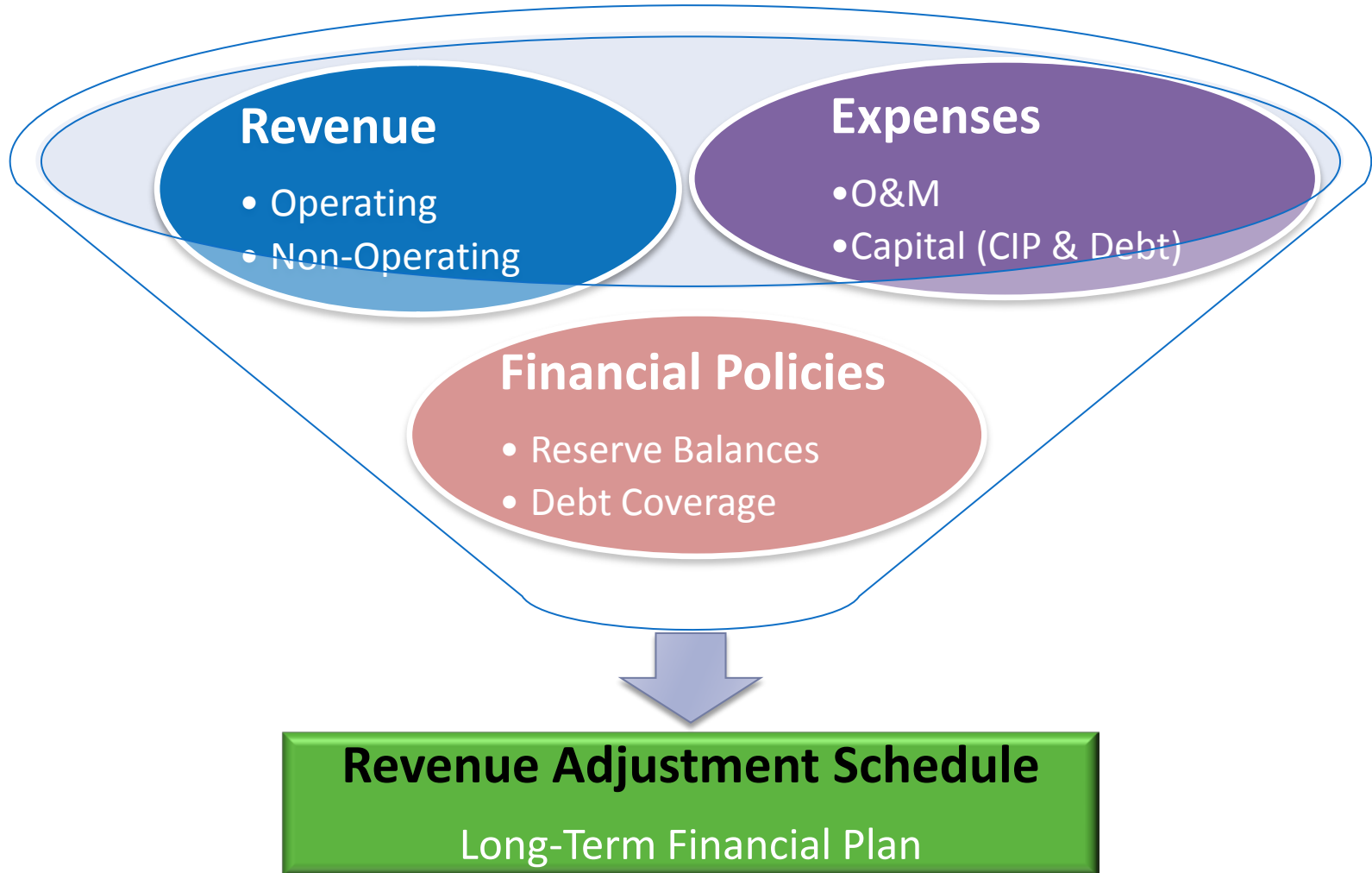
Things you
don't know you
don't know

No Risk

Known Risk

Unknown Risk

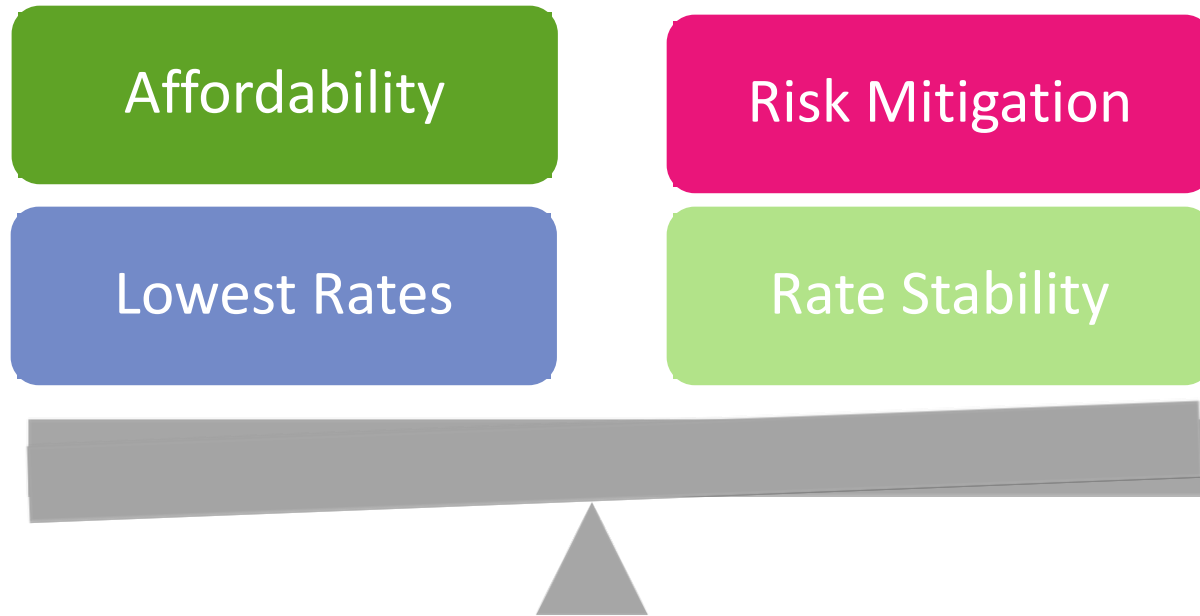
Key Financial Plan Components



Financial Policies At A Glance

- ▶ Importance of Financial Policies
 - ▶ To maintain financial solvency
 - ▶ Provide a basis for coping with fiscal emergencies (revenue short-falls, asset failure, emergency etc ...)
 - ▶ To provide guidelines for sound financial management with an overall long-range perspective
 - ▶ To enhance financial management transparency
 - ▶ Improve public's confidence and elected officials' credibility

What Are Your Policy Objectives?



- ▶ Financial Policies should be determined by each agency based on what the agency values most

Types of Reserves

- ▶ **Operations and Maintenance (O&M)**
 - ▶ Used to provide working capital to support the operation, maintenance and administration of the water and wastewater utilities
 - ▶ Ex. 90 days (25%) of Operating Budget

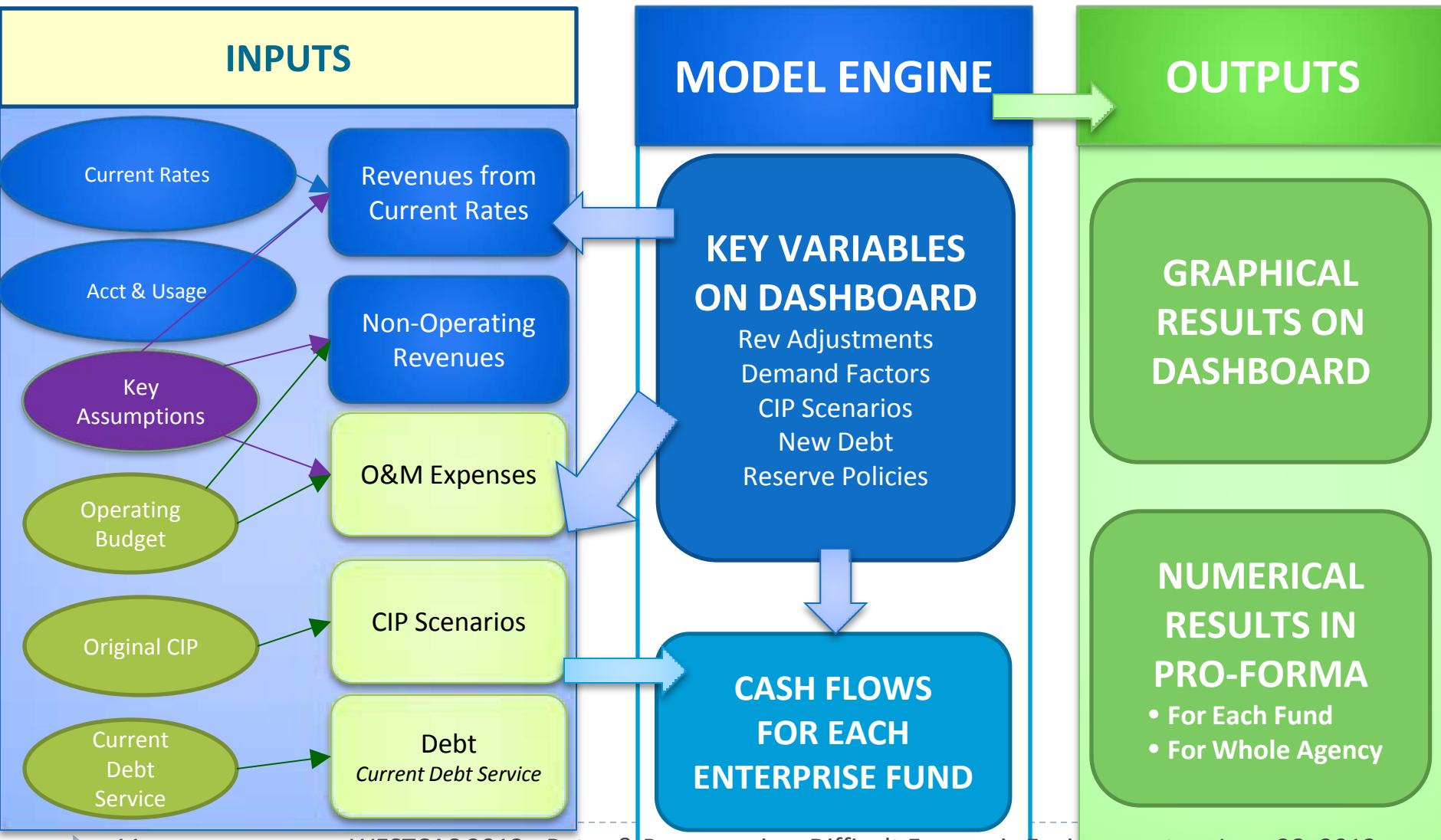
- ▶ **Rate Stabilization**
 - ▶ Used to smooth rate increases caused by decreasing sales or unexpected increases in third party cost

Types of Reserves (cont.)








- ▶ **Emergency**
 - ▶ Maintained to allow the utility to provide uninterrupted service in the event of a natural disaster or facility failure

- ▶ **Capital Refurbishment and replacement (R&R): for future R&R expenditures / liabilities**
 - ▶ Water is a capital intensive industry, reserve is used to ensure the maintenance of necessary infrastructure
 - ▶ Ex. % of total asset value

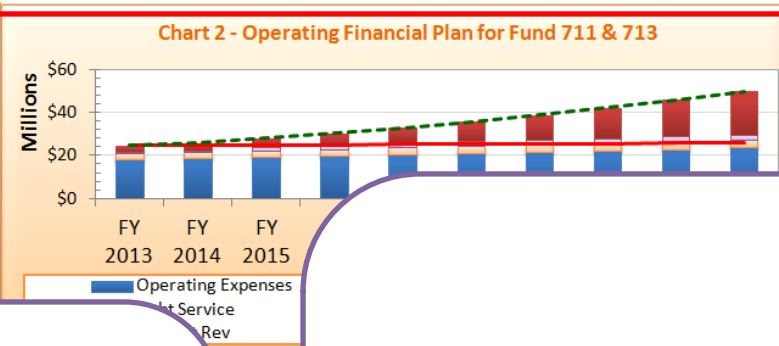
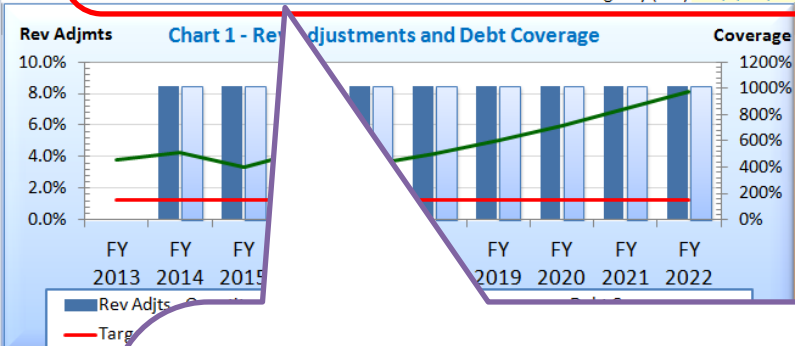
Financial Plan Model Overview



Financial Plan Dashboard Example

		Zero Selected Variables		Select CIP Scenario	Cashflow CIP		Select Fund to Display on Charts				Fund 711 & 713		Checks for Errors		No Errors	
KEY VARIABLES		Increments	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Other Variables			
  Rev Adjts - Quantity		0.5%	0.0%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	RTS to 711-Capital		100.0%	
Rev Adjts - RTS		0.0%	0.0%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	8.5%	Exclude Desal Project		TRUE	
 New Fund 711 Debt		\$2,000,000			\$10,000,000		\$14,000,000						O&M for projections		Forecast	
  Demand Factor		0.5%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%				
 Projected Water Sales			8,546 AF	8,623 AF	8,700 AF	8,726 AF	8,752 AF	8,779 AF	8,805 AF	8,832 AF	8,869 AF	8,906 AF				
Financial Policies		Target Balances for	Operations (711)		90 days O&M Expenses		Rate Stabilization (713)		12% Rate Revenues							
Debt Coverage		150%	Maintenance (711)		\$3,000,000		Capital R&R (711)		100% 10-yr avg R&R CIP				R&R CIP excludes Desal project			
			Emergency (711)		\$3,000,000											

Other Variables	
RTS to 711-Capital	100.0%
Exclude Desal Project	TRUE
O&M for projections	Forecast



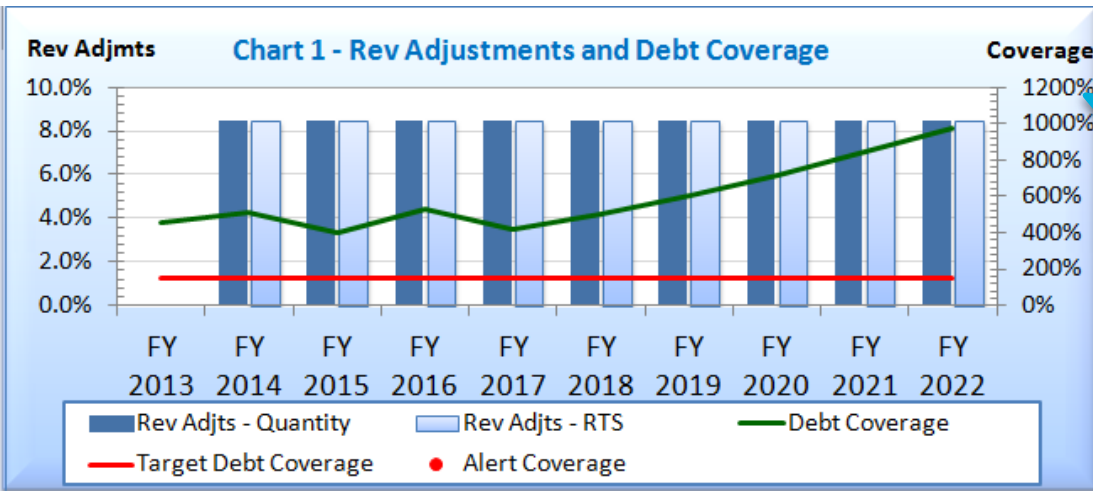
Key inputs for Financial Plan:

- Revenue adjustments
- New debt issues
- Demand factors
- Based on % of prior yr consumption
- Financial Policies
- Debt coverage
- Reserve requirements

Scenario analysis tools:

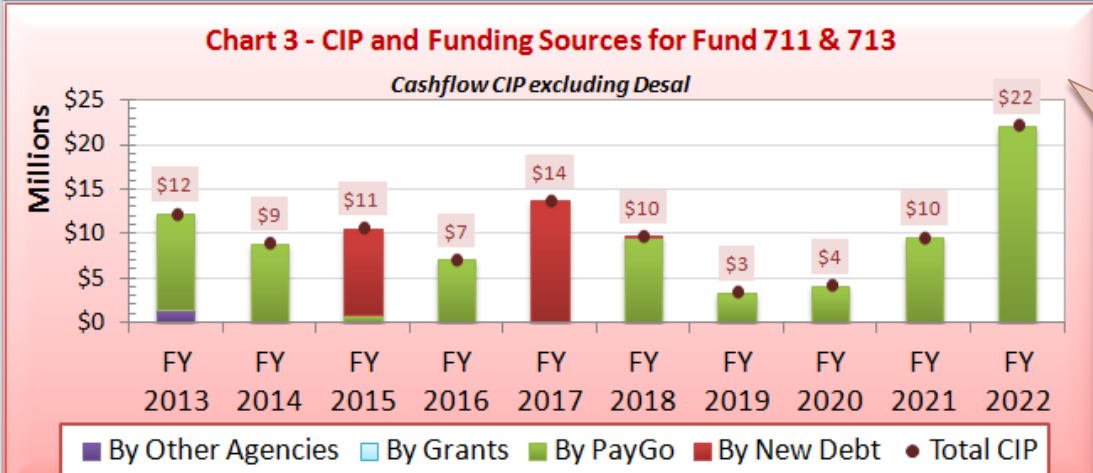
- O&M Expenses selector
- Budget vs. Forecast
- CIP Scenario selector
- Budget vs. Cash flow
- Excluding Desal project option

Financial Plan Dashboard Example



Rev Adjustments & Coverage Ratio

- Blue bars – 8.5% revenue adjustments
- Red line – Target debt coverage
- Dark green line – Water debt coverage



Fund Balances

- Green bar – PayGo
- Red bar – new debt (\$10M in FY 2015 and \$14M in FY 2017)
- Purple bar – by other agencies
- Blue bar – by grants

Financial Plan Dashboard Example

Chart 2 - Operating Financial Plan for Fund 711 & 713

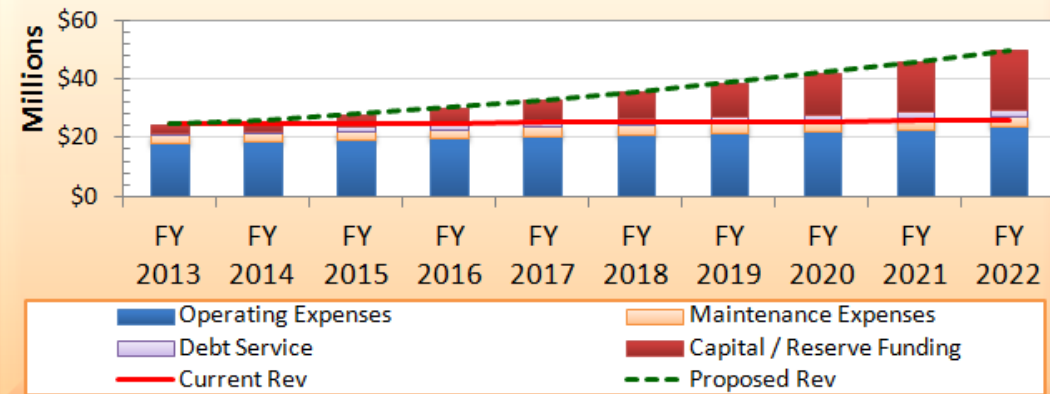


Chart 2 – Operating Financial Plan

- Lines – revenues
 - **Red** – current rates
 - **Green** – proposed rates
- Stacked bars - expenses

Chart 4 - Fund Balances for Fund 711 & 713

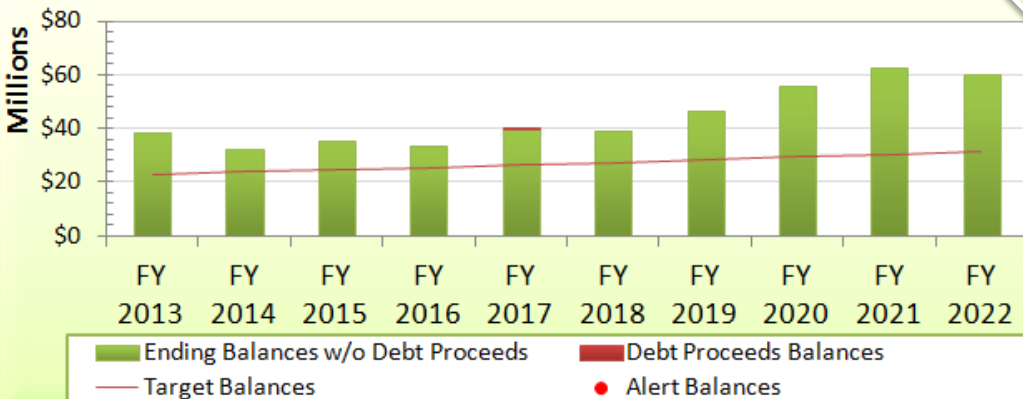


Chart 4 – Fund Balances

- **Green** bar – selected fund's projected ending balances without debt proceeds
- **Red** bar – Debt proceeds balances
- **Red** line – target balances (360 days cash)
- **Red** dot – alert balances when ending balances fall below target levels

Case Studies

Mesa Consolidated Water District
Alameda County Water District
Santa Cruz Water Department

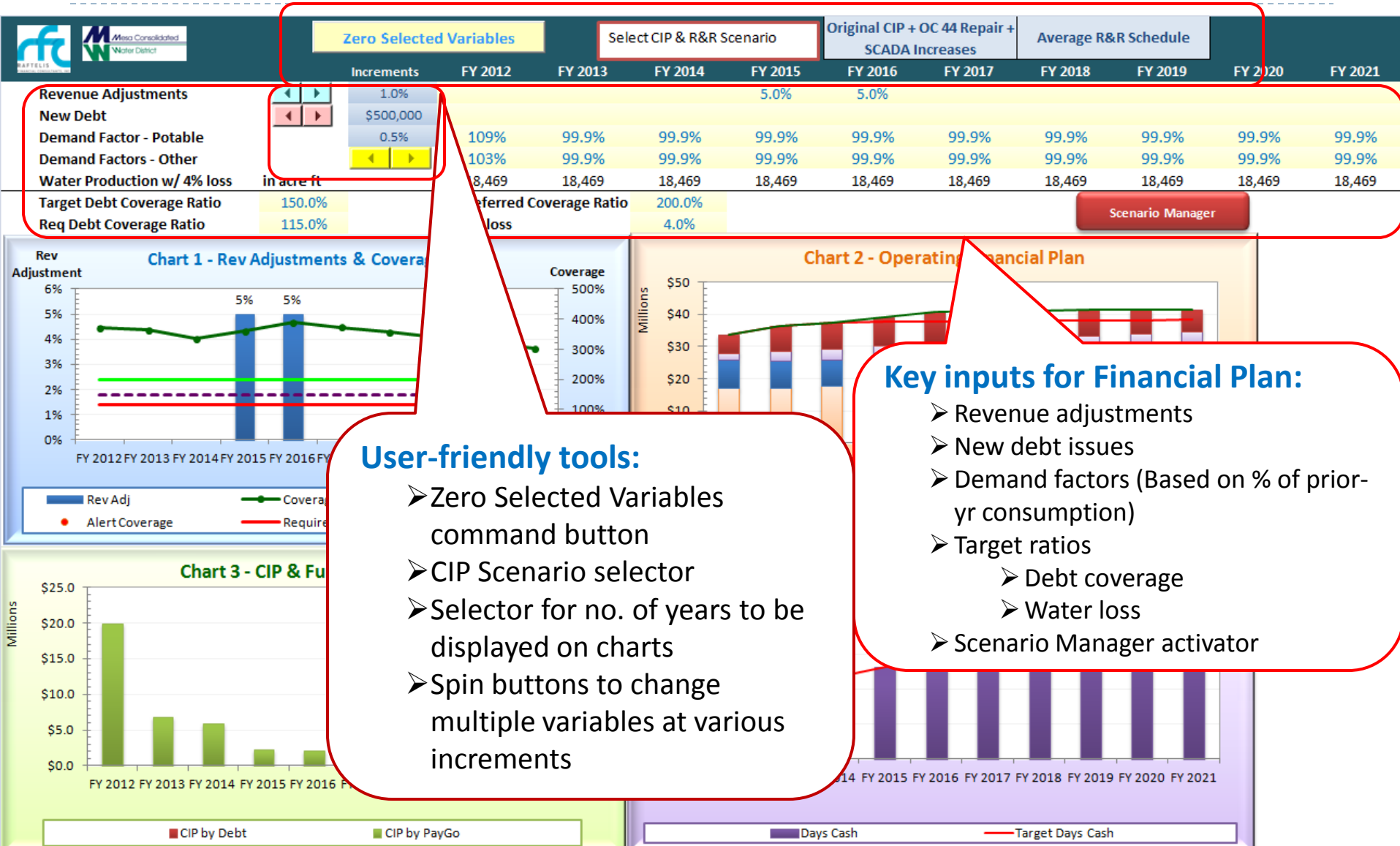
Mesa Consolidated Water District

▶ Current Issues and Challenges

- ▶ Achieving strategic goal set by the Board – AAA credit ratings from all three rating agencies by FY 2016
 - ▶ 600 days cash by the end of FY 2016
 - ▶ 200% debt coverage
- ▶ Sufficient capital funding for 100-yr capital R&R
- ▶ Changes in water supply costs: Imported water supply is replaced by the groundwater treated by the newly- built Colored Water Treatment Plant

Financial Plan Model

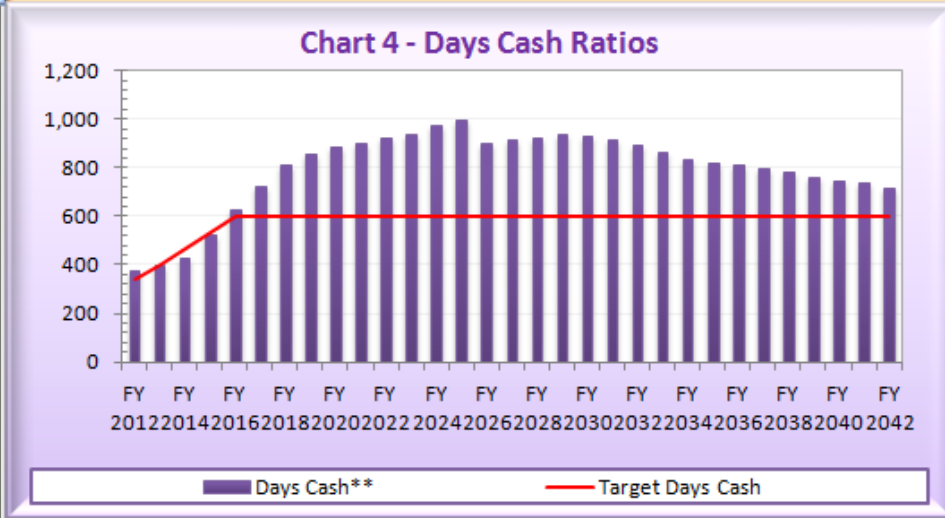
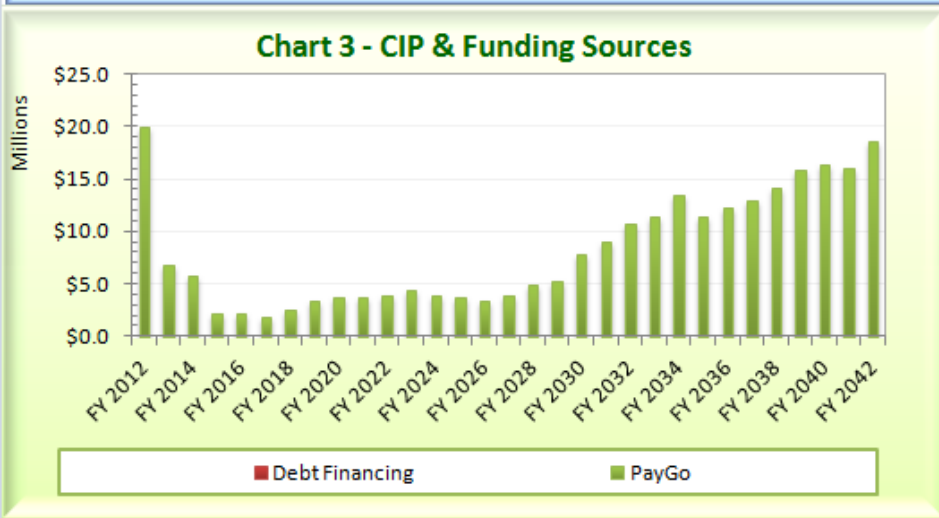
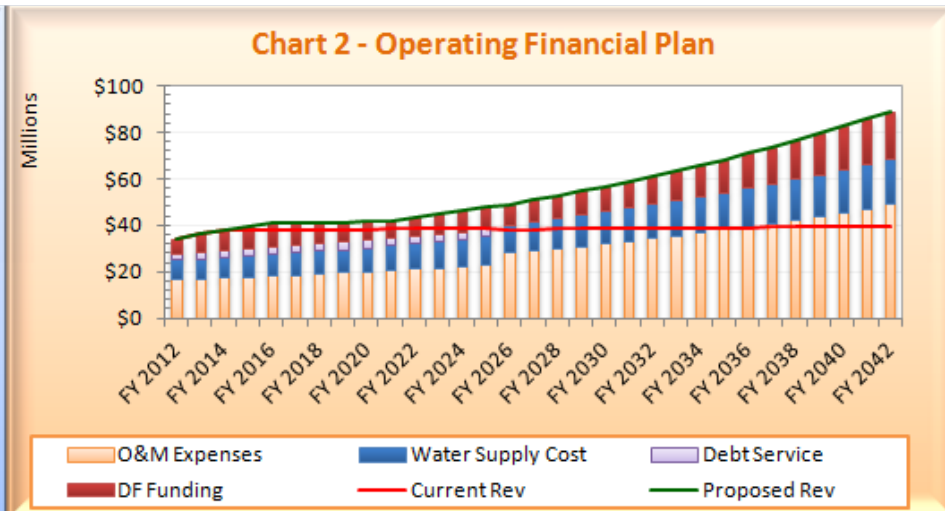
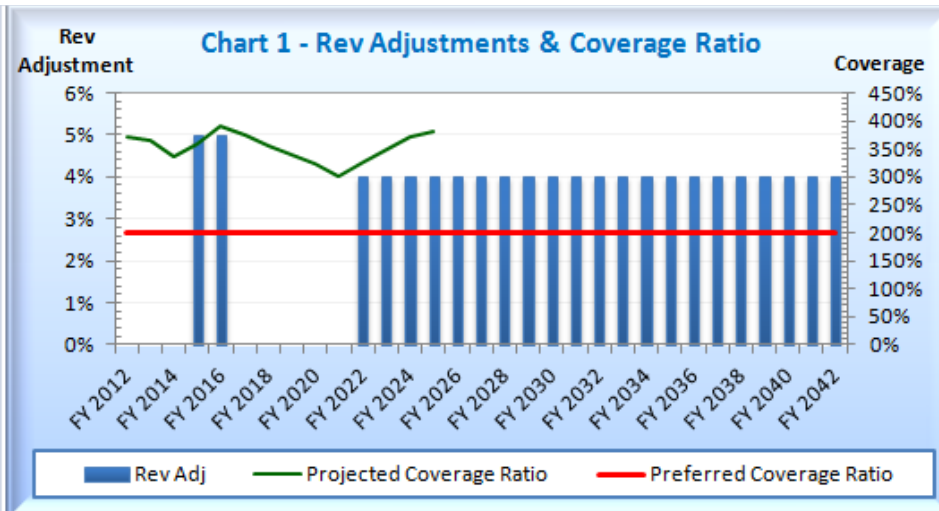
The Dashboard



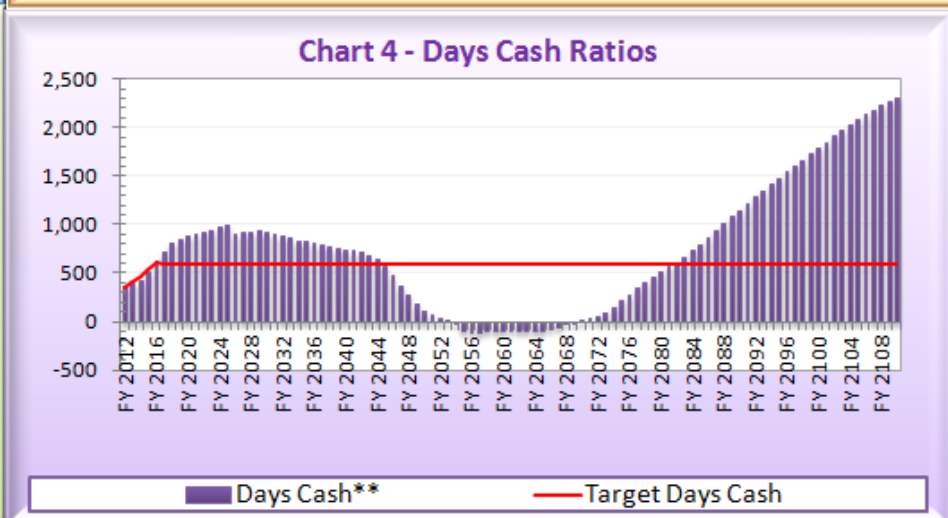
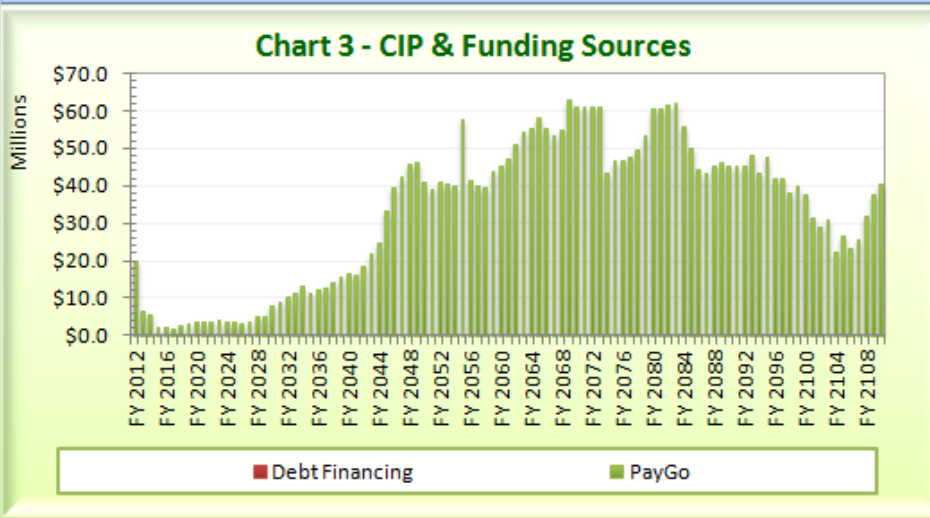
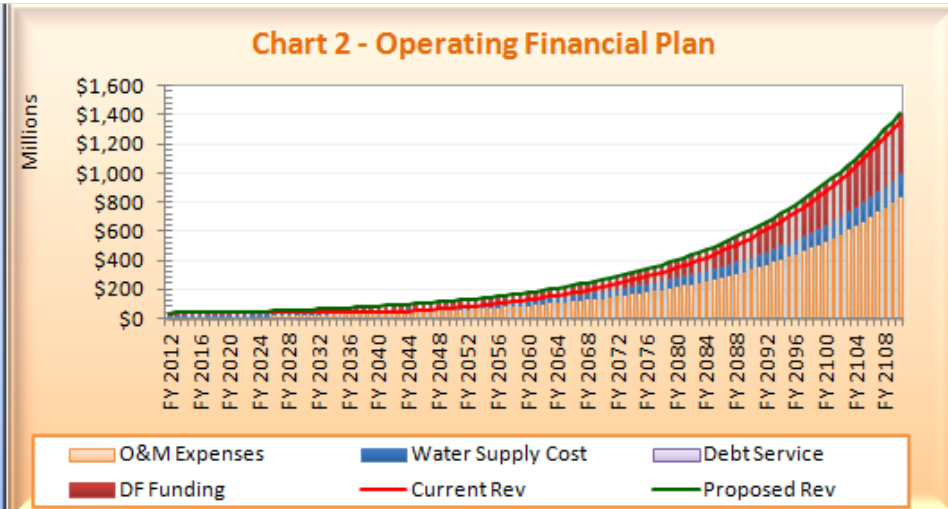
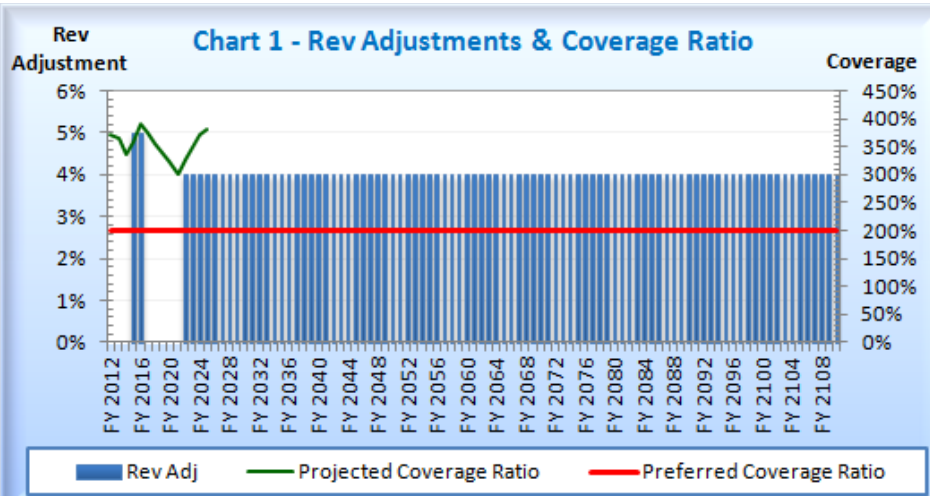
Goals of Financial Plan

- ▶ Achieve 600 Days Cash in FY 2016
- ▶ Meet required debt coverage ratios
- ▶ Maintain designated funds (DF) at minimum target levels

30-year LRF



100-year LRFP

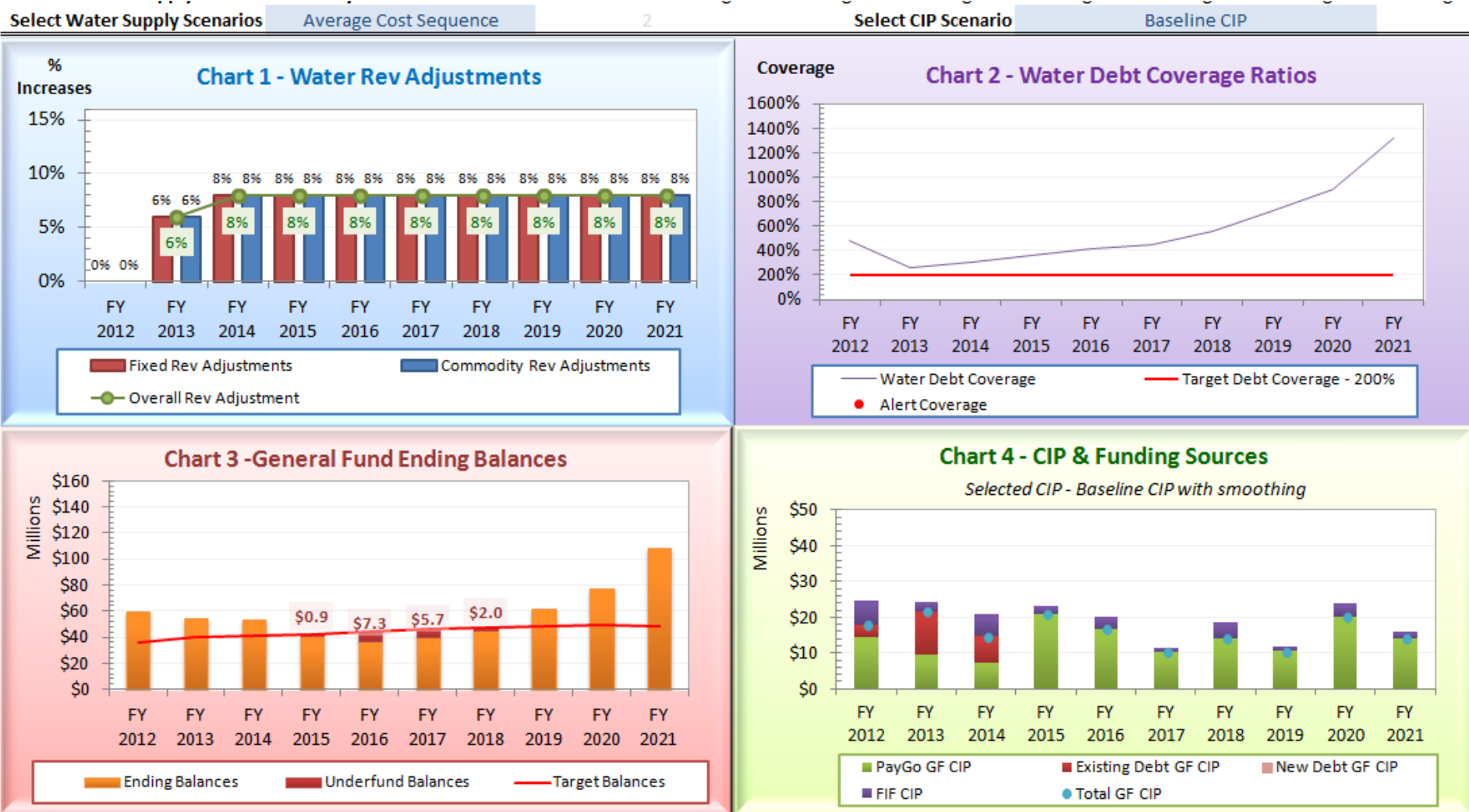


Alameda County Water District

- ▶ Current Issues and Challenges
 - ▶ Complex water supply sources and costing scenarios
 - ▶ Capital improvement uncertainties
 - ▶ Approved 25-yr CIP (Baseline)
 - ▶ Delta Fix (\$5M /yr for 30 yrs)
 - ▶ Main Replacement Program (MRP) (\$10M/yr for 30 yrs)
 - ▶ Other cost drivers
 - ▶ OPEB Funding

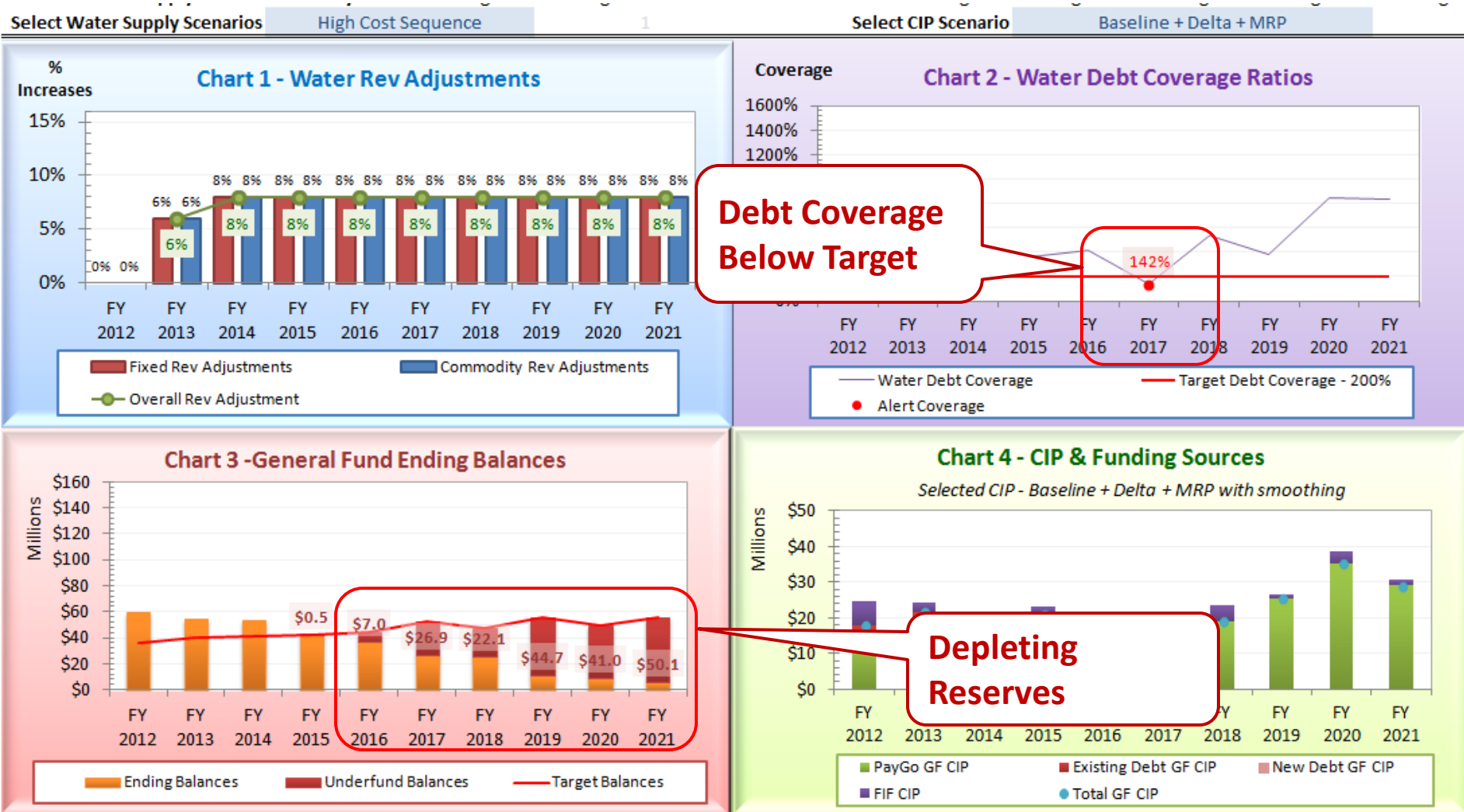
Baseline Scenario

Baseline CIP + Average Water Supply Costs



“Perfect Storm” Scenario

MRP & Delta Fix + High Water Supply Costs



Santa Cruz Water Department

- ▶ **Current Issues and Challenges**
 - ▶ SCWD does not have a financial policy in place to mitigate risks and to cope with fiscal emergencies
 - ▶ Water demand has fallen significant in the last 10 years (more than 20 percent reduction) with potential further mandatory water curtailment during severe drought

- ▶ **Goals of the Study**
 - ▶ Develop and evaluate financial policy options to maintain long-term financial solvency
 - ▶ Assess risk profile of the financial policy options

Case Study

Santa Cruz Water Department – Evaluated Financial Policy Options

	“Ideal” Financial Policy	“Practical” Financial Policy
Minimum Debt Coverage Ratio	150 %	150 %
Days Cash Target	360 days	175 days

Financial Plan and Financial Impact Analyses for Financial Policy Options

- ▶ To achieve the target days cash as set by the two financial policies, the Department needs to increase water rates and issue new debt
- ▶ The table below shows the different rate increases and debt issuances

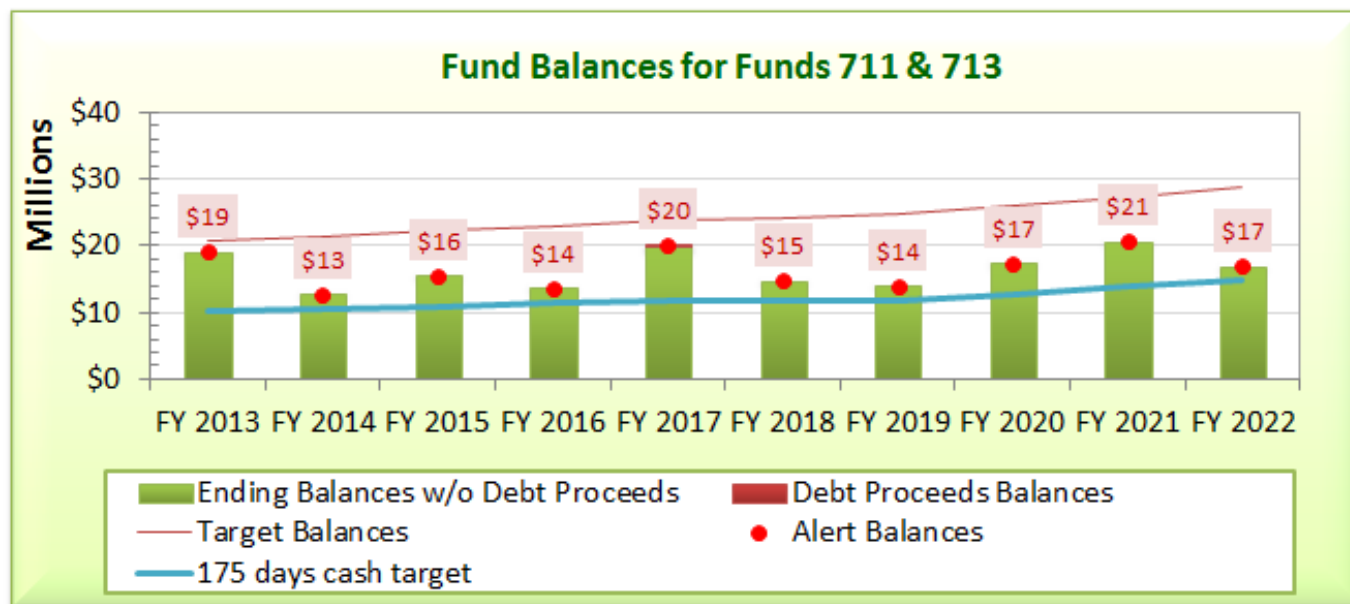
Financial Plan	"Ideal" Financial Policy	"Practical" Financial Policy
New Debt Issues	\$10M in FY 2015 \$14M in FY 2017	\$10M in FY 2015 \$22M in FY 2017 \$22M in FY 2021
Revenue Adjustments		
RTS	8.5% per year (FY 2014 – FY 2022)	5% per year (FY 2014 – FY 2022)
Quantity	8.5% per year (FY 2014 – FY 2022)	5% per year (FY 2014 – FY 2022)

Risk Assessments

20 Percent Per Year Reduction in Demand in FY 2018 & FY 2019

► Under “Ideal” Financial Policy

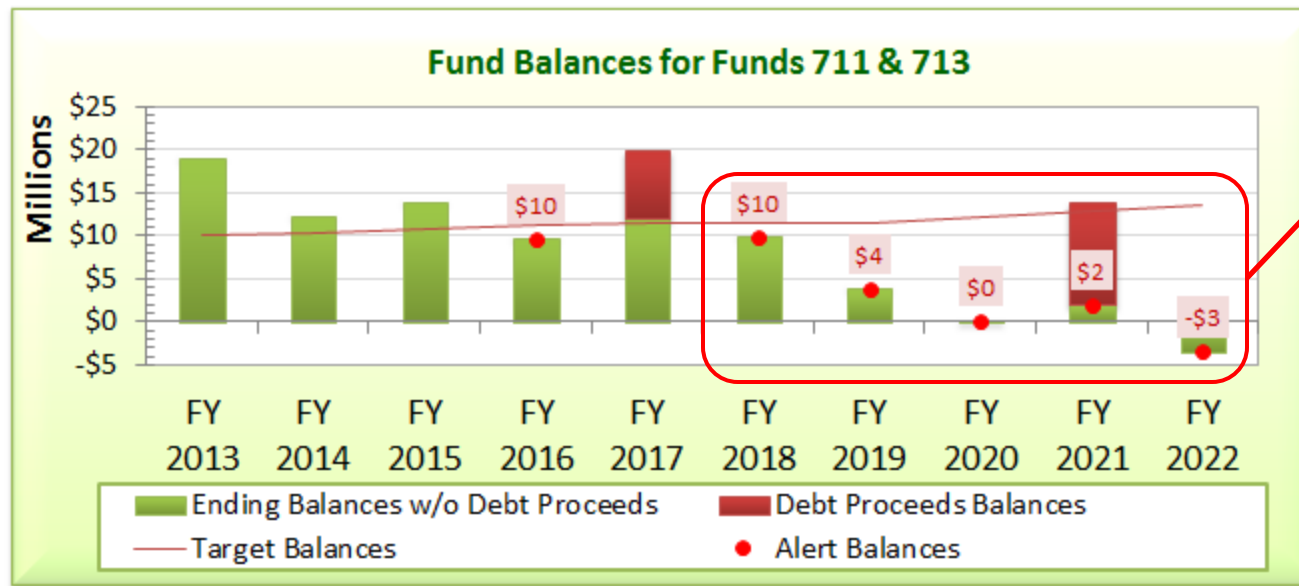
- Reserves are below ideal target but well above the 175 days cash target even with the drop in water demand
- No additional rate increases necessary



Risk Assessments

20 Percent Per Year Reduction in Demand in FY 2018 & FY 2019

- ▶ Under “Practical” Financial Policy
 - ▶ In order to maintain necessary and healthy fund balances, rates need to be raised higher than originally planned



Fund balances drop below target balances

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Credit Rating Criteria on Liquidity

- ▶ Debt rating agencies such as Standard & Poor's & Fitch place an importance on liquidity
- ▶ Liquidity is described as:
 - ▶ Unrestricted cash balances available to meet working capital needs
 - ▶ Unrestricted cash balances include all cash and investments dedicated for working capital, rate stabilization or R&R needs
 - ▶ Criteria – measures in Days Cash
 - ▶ Days Cash = Unrestricted balances / average daily O&M expenses for the year

Median Ratings	Days Cash on Hand
BBB	226
A	239
AA	354
AAA	415

Debt Coverage Requirements

- ▶ Debt Coverage = Ratio of cash available for debt service to interest and principal payments
 - ▶ Popular benchmark used in measuring an entity's ability to issue new debt
 - ▶ Typical debt coverage equation = (Net Revenues / Debt Service)

- ▶ Criteria used by Standards & Poor's (S&P) for credit ratings:
 - ▶ Insufficient 0x to 1.00x
 - ▶ Adequate 1.01x to 1.25x
 - ▶ Good 1.26x to 1.50x
 - ▶ Strong >1.50x