Developing Strategies for Financial Resiliency in Uncertain Times

CSMFO

2023 Conference

February 2, 2023

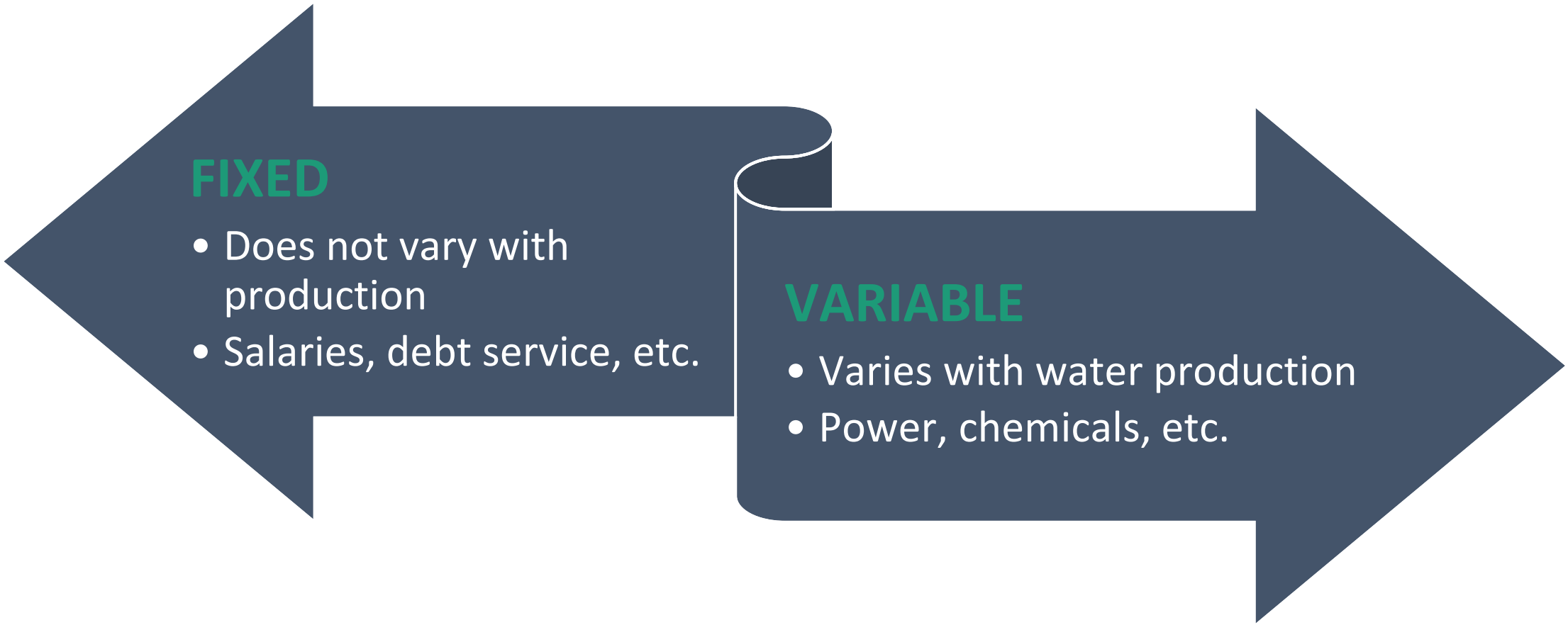
Water Resources Economics

PROMOTING THE VALUE AND PRICE OF WATER SERVICE

Agenda

- The Nature of the Water Sector
- Understand your Risk
- Develop a Financial Resiliency Plan
- Communicate your Needs to Stakeholders

Water Cost Structure



Water Cost Structure

Fixed Costs are High

80 TO 95%
of total annual costs

Variable Costs are Low

5 TO 20%
of total annual costs

Financial Requirements of Reinvestment of Infrastructure

- Water Service is one of the most capital-intensive product
- Asset life varies between 20 to 100 years
- Many assets are buried underground, hard to see, hard to access
- Asset registry lists tend to be outdated
- Many agencies' assets are at the end of their useful life

Creates a ticking time bomb of liability – as we don’t know when an asset will fail unless a detailed asset management study is completed

Political Nature of Increasing Rates

- The adoption of water rates are typically approved by an elected body
  - This creates a political dimension associated with rate adoption
- Since water are an essential service, affordability plays a major role
- Elected officials typically want:
  - Affordability
  - Rate stability
  - Address economic concerns
  - Environmental stewardship

Revenue Structure

- To ease the political pressure, most agencies' rate structures tend to have:
  - High variable and low fixed revenue for residential customers
    - Variable revenue based on metered water consumption

- Achieves the goal of general affordability – but at the expense of revenue instability

Summary of Water Service

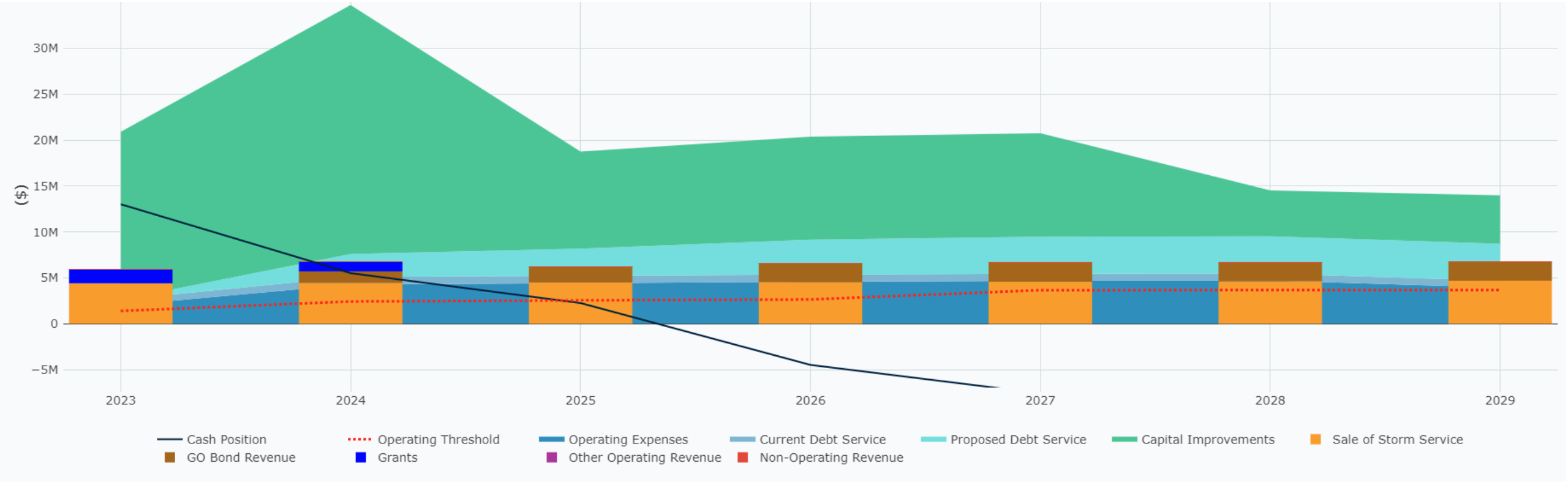
- High fixed cost business
- Capital intensive with most assets at the end of their useful life and unknown liability associated with future ability to provide service
- Rates are highly political to adopt with the key concern being affordability
- Revenues based primarily on variable consumption creates instability

These factors combine to create financial risk!

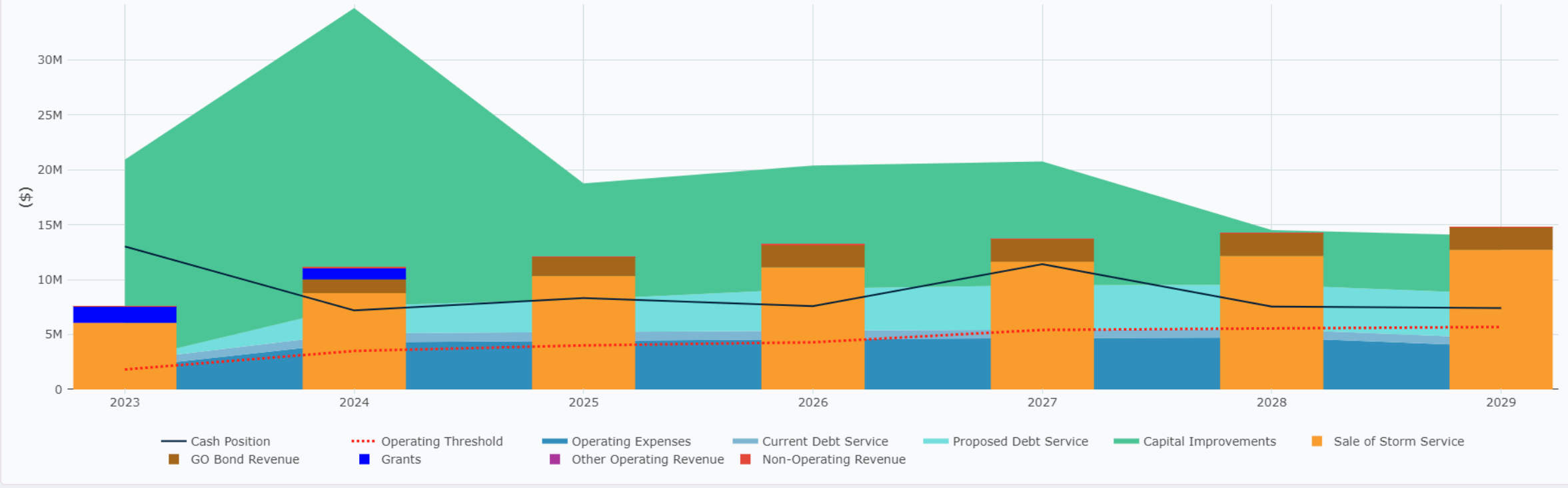
Steps to Develop Financial Resiliency

- Understand the risk you face
  - Financial model where cost and revenue structures are mirrored
  - “What if” scenarios can be examined
  - Book end analysis is recommended
- Develop mitigation strategies
  - Reserves
  - Understand core water sales
  - Development of emergency surcharge rates
  - Increase the fixed revenue streams
- Communicate your challenges and strategies to stakeholders
  - Be sure to allocate ample time and energy to this challenging component

Visual Graphics are Important



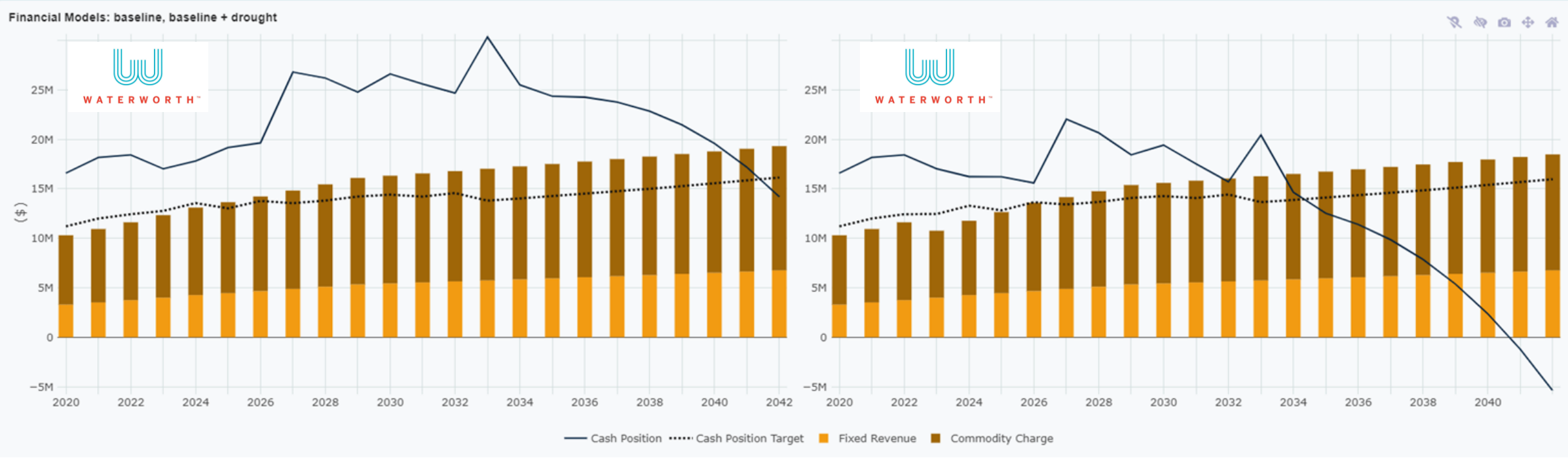
Graphics Help Communicate your Plan



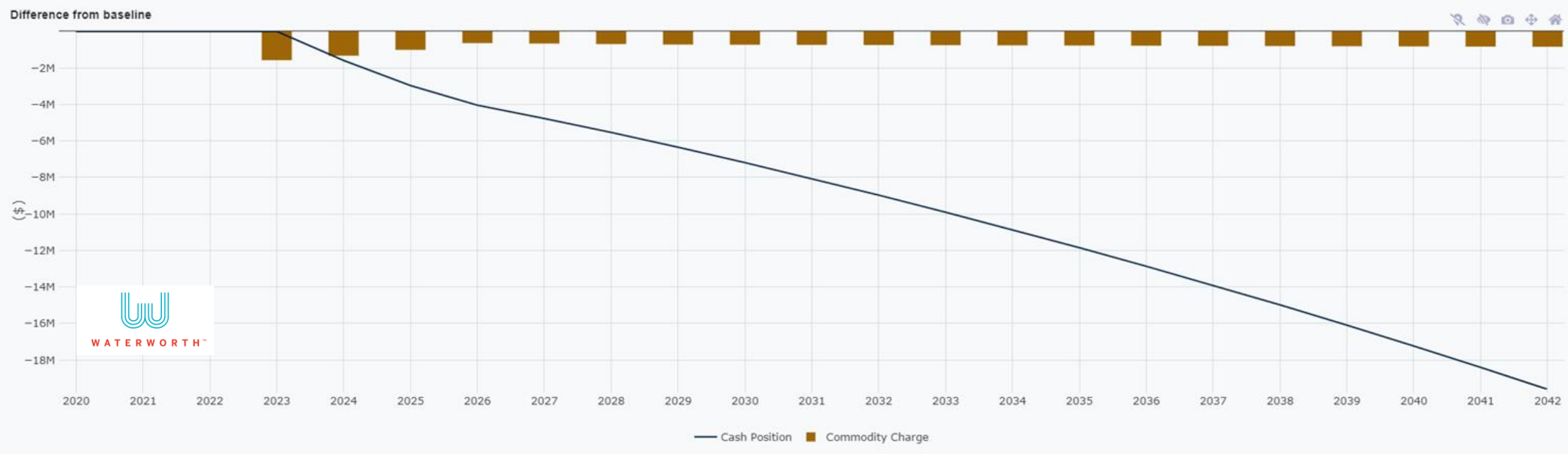
Financial Models: Tools to Understand Uncertainty

Baseline Scenario

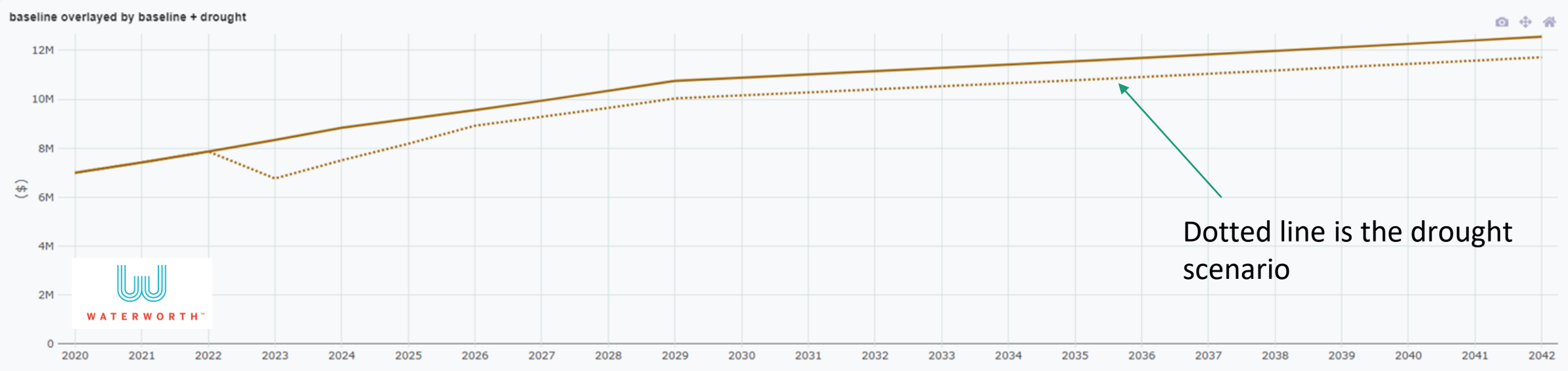
20% Reduction in Demand in 2023: slow rebound



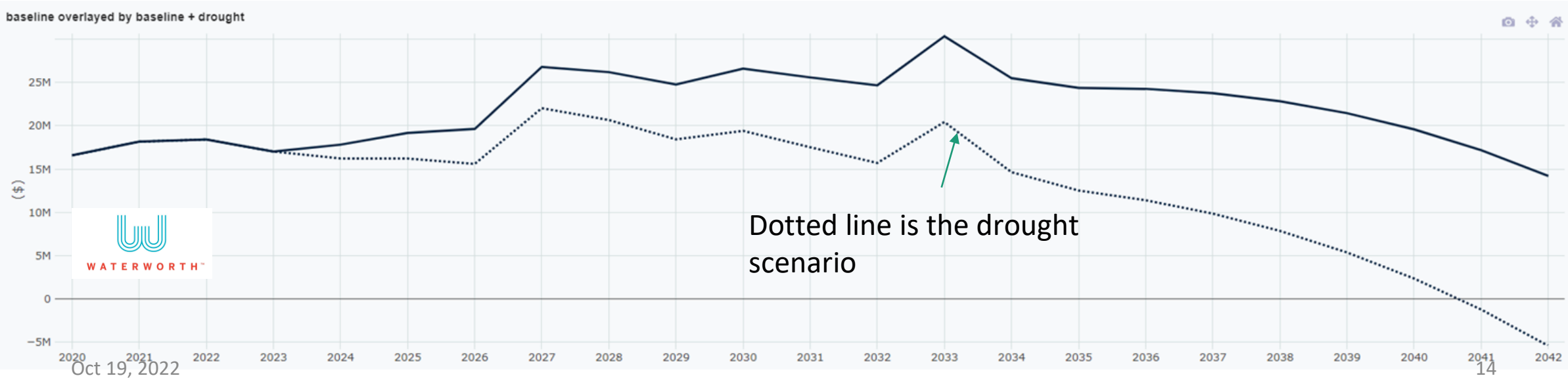
Comparison of Revenues and Ending Cash Balance



Comparing Baseline Commodity Revenue with Drought Scenario

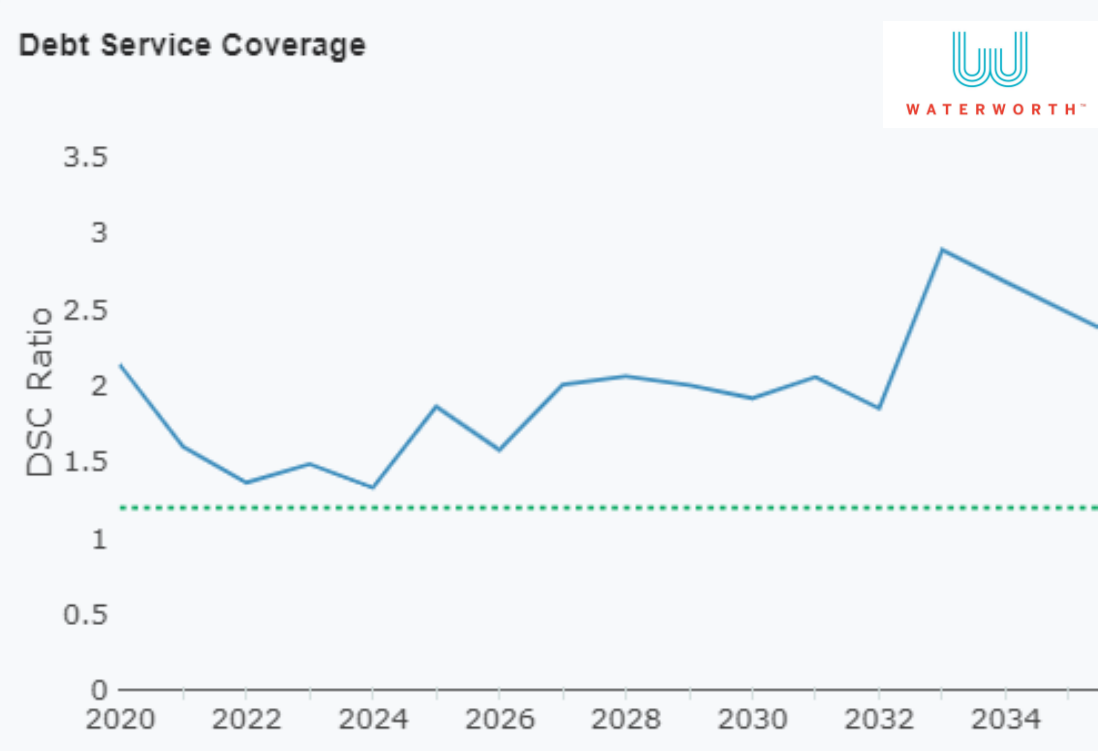


Comparing Baseline Cash Position with Drought Scenario

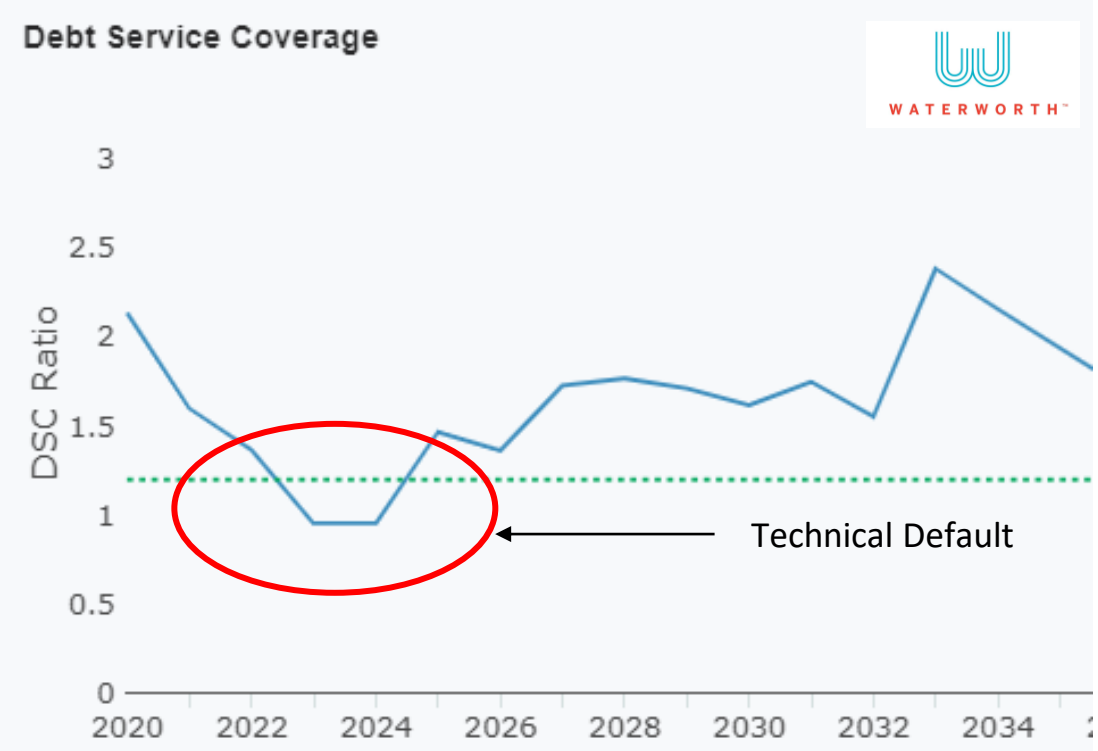


Pay Close Attention to your Debt Service Coverage Ratio

Baseline Scenario



Drought Scenario



Financial Health Indicators

Healthy Reserves

- Operating Reserve – results from positive cash flow
  - Cash flow approach: Examine the timing of revenues and expenses
  - Benchmarks: % of operating expense or days of O&M (0-180 days)
- CIP Reserves – Can award contracts quickly and speed up projects if necessary
  - 2-3% of fixed assets or net book value; or
  - Based on years of capital projects or depreciation expense
- Rate Stabilization – funds used during periods of revenue shortages
  - Such as a drought
  - Can use probability analysis to determine reserve levels
- Emergency – funds available in case of asset failure
  - Critical asset replacement analysis used to set reserve level

Financial Health Indicators

Debt Service Coverage Ratio

- Examines the cash flow of net income (Revenues – O&M Expense) / Debt service
  - Coverage Ratio target range from 1.1x to 1.5x
  - Some agencies target above the Official Statement requirements
    - Example: 2.0X
    - Assist in providing cash to fund either CIP projects or reserves

Fixed Cost Recovered on the Core Sale of Water

- Determine reliable water sales by customer class
  - Multiple methods available: efficiency standards, sustainable use or conservation goals
- Develop rates based on these reliable sales

Emergency Rates

- Temporary surcharge rates put in place under emergency circumstances
  - Drought
  - COVID / global pandemic
  - Natural disaster
- Tie emergency rates with water supply contingency plan and the associated stages
  - Each stage would have its own surcharge
- Good tool to have in the toolbox given constraints of Prop 218

- Challenging Message: During a crisis we are increasing rates

Strategy to Develop Fixed Sources of Revenue

- Water agencies typically have three major cost:
  - Capital needs
  - Operating cost
  - Water Supply Programs, which includes purchase, development of new sources and conservation programs

- Financial Utopia
  - Capital needs are fixed source of revenue, such as on the property roll
  - Operating cost is covered on the fixed meter charge
  - Water supply programs are covered on the commodity charge

Challenge with Rate Utopia

- Rate Utopia will create winners and losers
  - Rate shock to certain customers
- How do we deal with affordability concerns?
- As we shift towards more fixed revenues the commodity rate will go down
  - Messaging challenge as we go in and out of drought conditions and promoting water stewardship

Potential solution: Transition towards having capital charge on the property roll.

Do incremental increase that equals the additional revenue needed

Cost of service study is required

Garnering Support from Stakeholders

- This takes longer than you think
- Identify your Stakeholders
  - Board Members
  - Business owners / Advocacy group
  - If possible, provide lunch
- Start communicating your needs ASAP
- Be visible and vocal in your community
  - Do site visits
- Develop a financial model that shows visual impact

Water Resources Economics

PROMOTING THE VALUE AND PRICE OF WATER SERVICE

Thank You!

Sanjay Gaur

Principal Consultant

Water Resources Economics

sgaur@water-economics.com

Financial Resiliency

Strategies at Las Virgenes Municipal Water District

Presented by: Donald Patterson, Director of Finance & Administration

District Overview

- Provide Potable Water, Recycled Water, and Sanitation Services to unincorporated western Los Angeles County and the cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village.
- Serve approximately 70,000.
- 100% dependent on imported water.
- $60 million/year operating budget
- 125 positions.

District Challenges

- Infrastructure Funding
- Addressing Reduced Water Sales
- Labor Demands
- Unfunded Liabilities

Tools for Financial Resiliency

- Reserve Policy
- Increased Financial Certainty
- Annual Passthrough of Wholesale Water Cost
- Pay Go philosophy
- Financial Modeling

Tools for Financial Resiliency

- Budget Based Rates
  - Focus on "*Water efficiency as a way of life.*"
  - Ensures lowest cost water is provided for efficient indoor use.
  - Continuously provides a price signal for inefficient and wasteful use.
  - Prioritizes aridification and climate change vs. "drought"

Other Strategies

- Established OPEB Trust
- Focus on Reducing Future Liabilities
- Increased percentage of fixed cost recovered through fixed fees

Thank You

Financial Resiliency

Strategies at Alameda County Water District

Presenter: Jonathan Wunderlich, Director of Finance & Administration

Overview

Alameda County Water District

- Special District providing water service to the cities of Fremont, Newark, and Union City in the East Bay
- Serve about 345,000 people through 87,000 connections
- Budgeted expenditures of $175.8 million in FYE 23
  - 244 full-time employees
- Water supplies include local watershed runoff in Alameda Creek (40%), State Water Project (40%), and San Francisco Regional Water System (20%)
- Independent rate-setting authority within the framework of Proposition 218

Overview

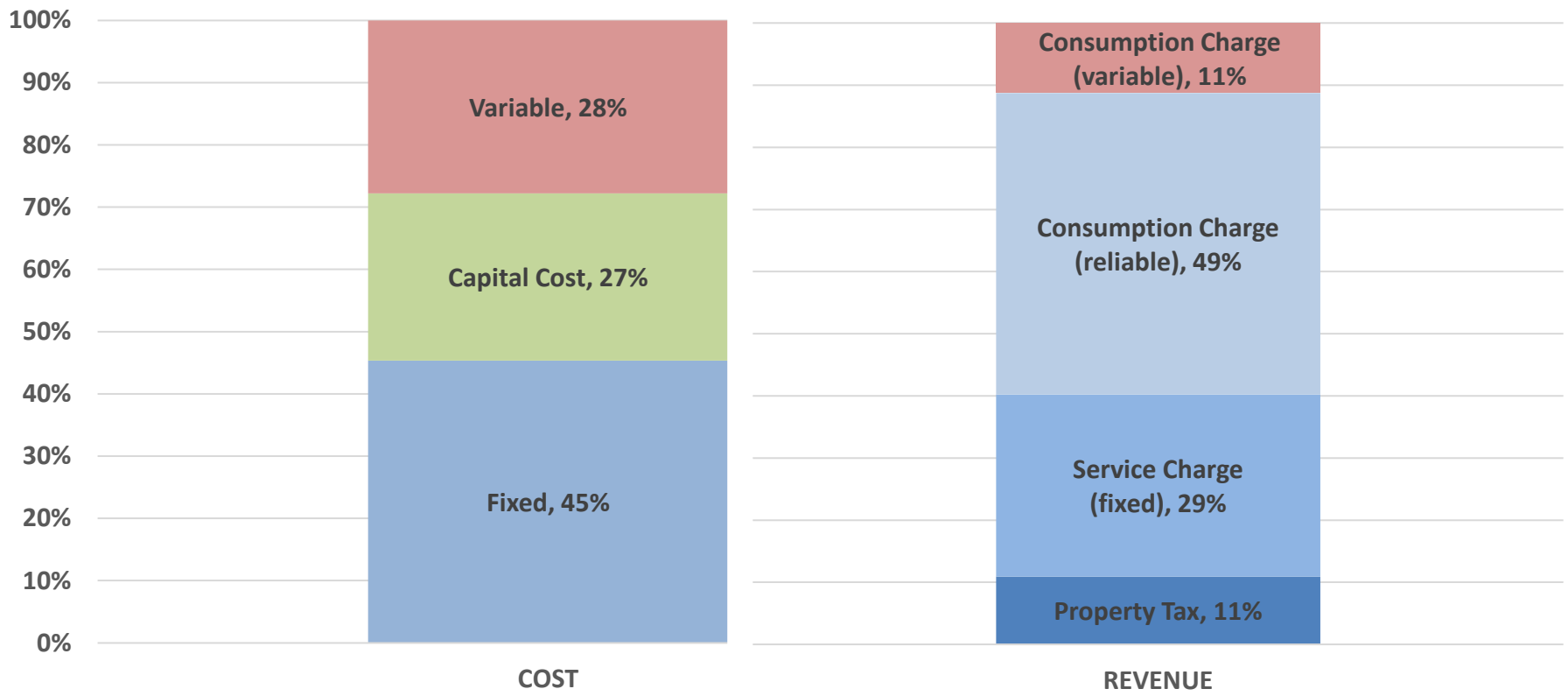
Alignment of Financial Mechanisms with Broader Organizational Objectives/Policies

- Financial policies should be developed in consideration with broader objectives. For example, for ACWD:
  - It is ACWD's mission to provide a reliable supply of water at a reasonable price
  - A current Board priority is affordability and that goes beyond our program for the lowest income customers
  - Our Strategic Plan identifies five key organizational goals

Overview

- Alameda County Water District has implemented the following strategies to maintain financial stability in the face of uncertainty:
  - *Adequate revenue recovery from fixed and 'reliable' sources as compared to our cost structure*
  - *Special drought rates to provide revenue stability*
  - Robust reserve targets
  - Minimal reliance on development activity
  - Conservative financial forecasts
  - Limiting long-term obligations
- All strategies have been discussed with our Board and have their support

Revenue Recovery
Cost and Revenue Structure - FY 2021/22



*Consumption at the level of our lowest year is considered reliable

Drought Rates

- Droughts are a major cause of uncertainty for the District:
  - Revenue will go down
  - Costs to secure water supply may increase
  - May not be practical to defer capital projects or implement other cost reductions
- The District implemented drought surcharges effective March 1, 2022 to achieve revenue stability/neutrality
  - Charged based on water consumption – promotes conservation
  - Customers who conserve the requested amount will see their water bill stay about the same
  - Structured so the amount goes up/down if the drought situation changes (with 30-day customer notification for increases). Full table included in Proposition 218 customer notice

Drought Rates

- Implemented a fixed charge increase at the same time as the Drought Rates in 2022
  - Received 68 online protests: 47 due to the service charge increase; 16 due to the drought rates; and 5 for 'Other' reasons

	Scenario		
	No Drought	Drought w/ Conservation	Drought w/o conservation
Consumption (HCF*)	16	13.6	16
Service Charge	$ 58.94	$ 58.94	$ 58.94
Consumption Charges	$ 73.54	$ 62.51	$ 73.54
Drought Surcharge	$ -	$ 10.70	$ 12.59
Total	$ 132.48	$ 132.15	$ 145.07
*HCF is 100 cubic feet or about 748 gallons			

*The District bills bimonthly and 16 HCF is typical residential consumption

Financial Resiliency

Questions?