

Integrating Water Supply & Financial Planning: A Collaborative Process



Water Advisory Committee
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Joint TAC/SCWA Presentation

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**NORTH MARIN
WATER DISTRICT**

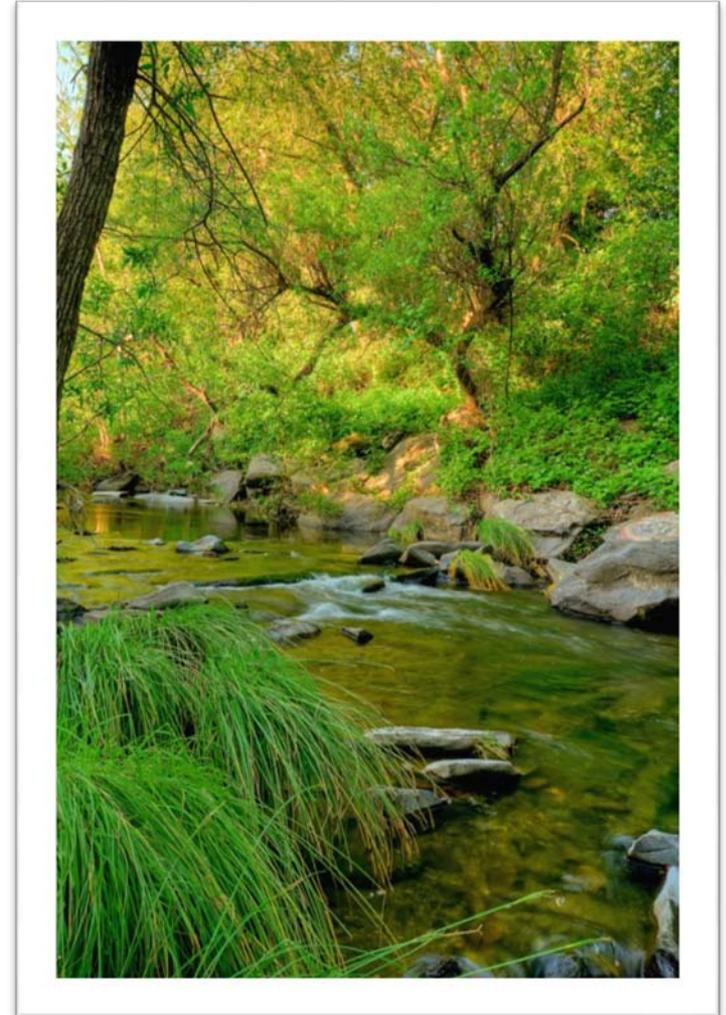


**MARIN MUNICIPAL
WATER DISTRICT**



Overview

- Goals/Purpose
- Linking Water Supply & Financial Planning
- Long-Range Financial Model
- Example Application of Model
 - Evaluate Potential Water Supply Scenarios for Dry Creek
- Next Steps/Future Activities

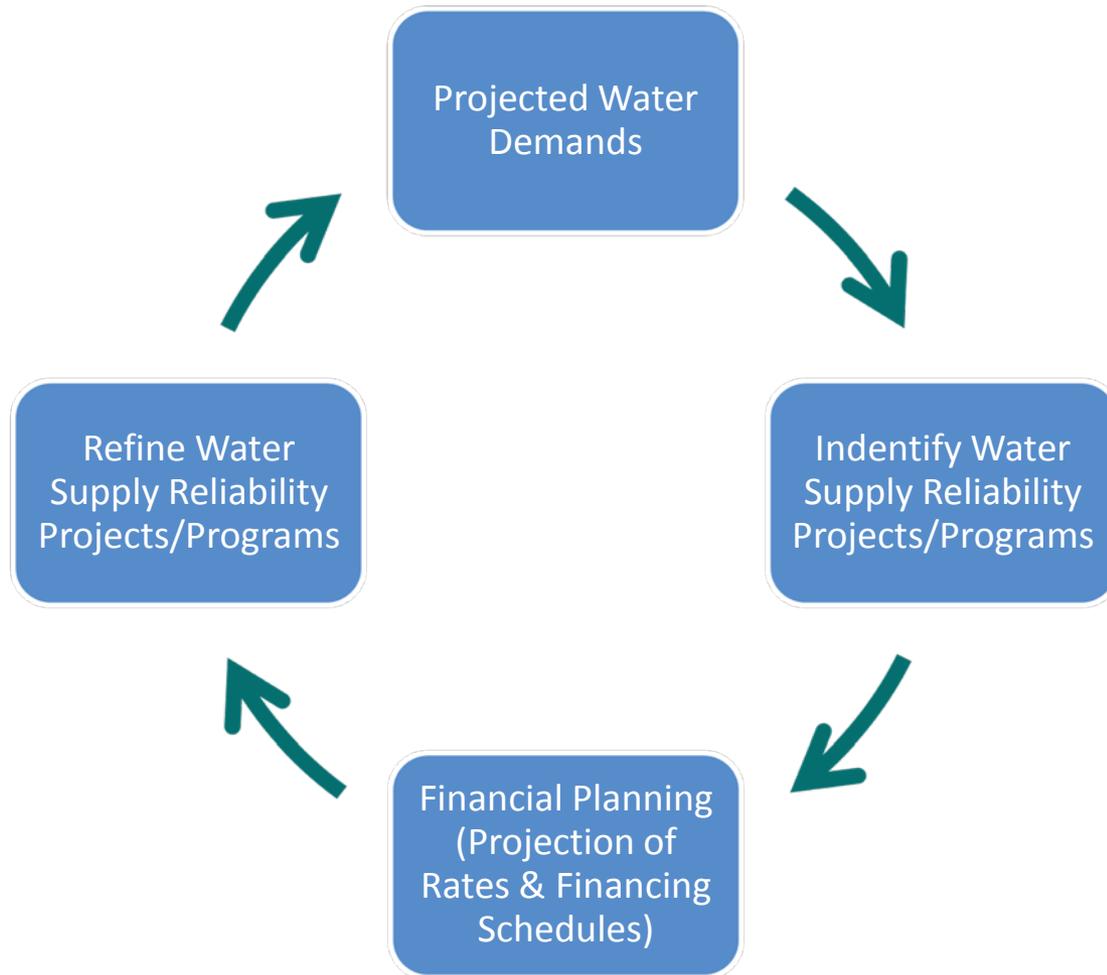


Goals

- Integrate financial planning into water supply planning processes
- Coordinate planning activities between Water Contractors & Water Agency to improve rate stability
- Assist in developing cost-effective programs to meet current and projected water supply needs



Linkage Between Water Supply & Financial Planning



Long Range Financial Model

- Applies only to Water Agency wholesale rates
- Evaluate “if, then” scenarios
- Cash flow, financing, debt service, and water rates by aqueduct
- Up to 30 year horizon



Near and Long-Term Planning

1 Year

5 Years

30 Years

Budget

Forecast

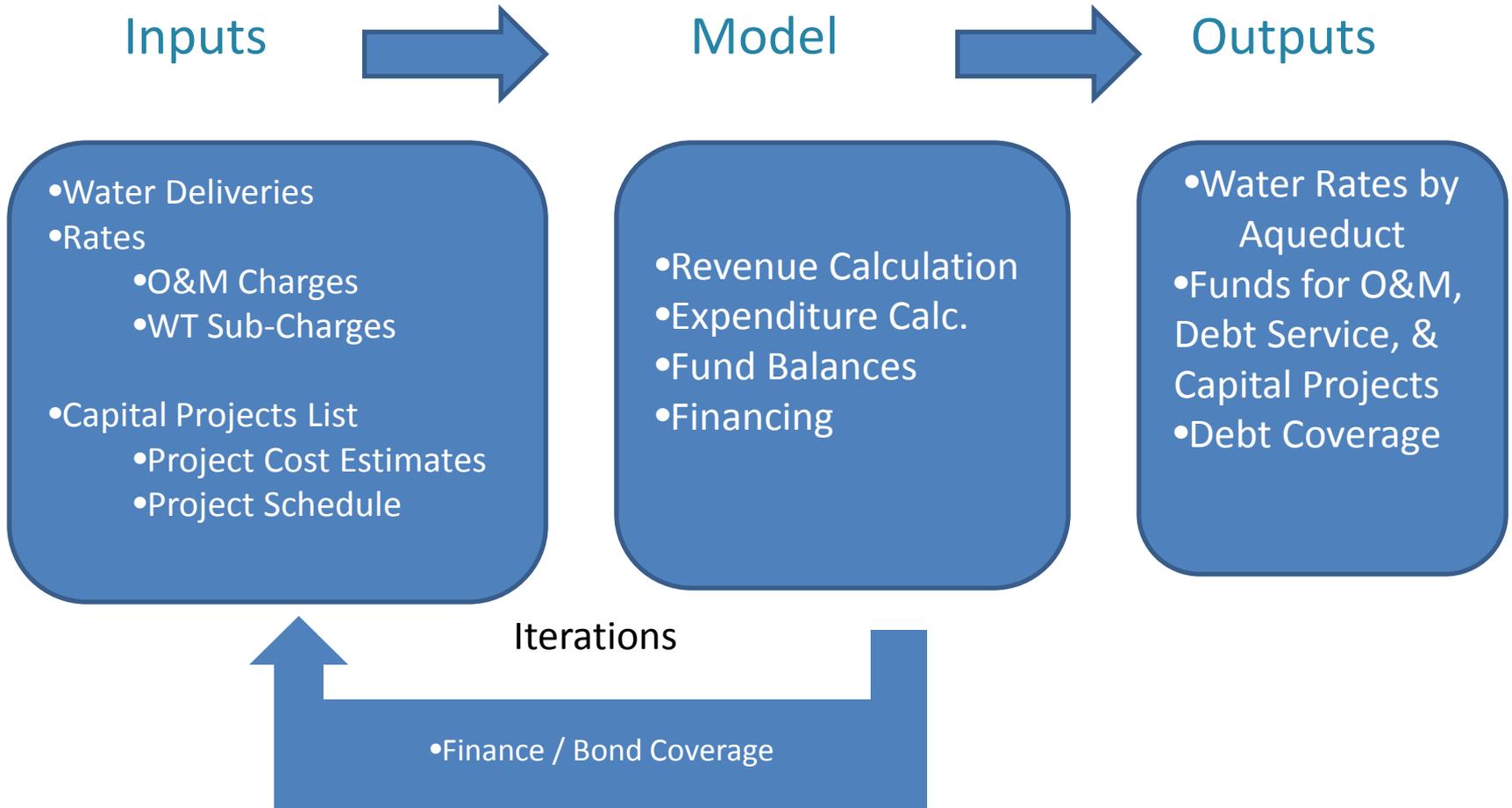
UWMP
Planning
Estimates



Model Uses

- The model is a planning tool, NOT a budgeting tool
- Helpful in making relative comparisons of potential future scenarios
- Allows sensitivity analysis of inputs' effects on estimated rates (such as different growth projections)
- Model output can be used for contractors' retail rate models

How the Model Works



Key Model Assumptions

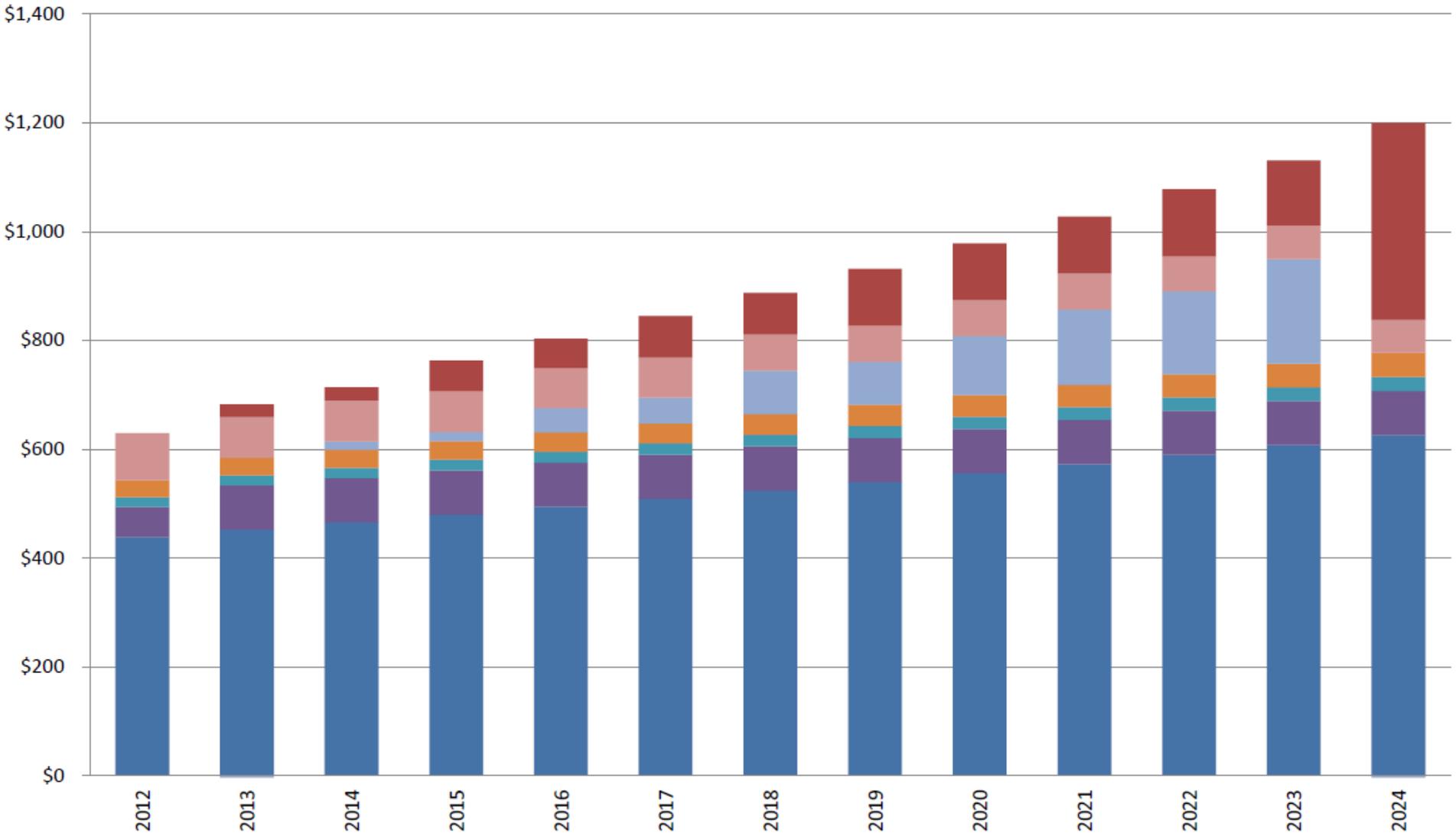
- Water delivery projections
- Rate of O & M & costs escalation
- Large list of potential projects (over 60) - turned “on” or “off” in the model
- Includes all existing debt
- Debt service coverage is maintained
- Prudent reserves are maintained
- Part 4 of the Restructured Agreement is used to calculate all charges

Rate Components

- O&M Charge (largest rate component)
- Water Transmission Subfunds:
 - Watershed Planning & Restoration (Biological Opinion)
 - Conservation
 - Local Supply & Recycled Water
 - Water Management Planning
- Aqueduct Facilities Charges (Pay-Go)
 - Reliability Projects (Operational & Natural Hazard)
 - Demand Driven Projects
- Debt Service - Bond & Loan Charges
- Available for New Financing of Facilities

Example Rate Component Chart

- O&M Charge
- Water Conservation
- Available for Aq. Fac. & New Bonds
- Watershed Plan/Restoration
- Total Aq. Facilities Capital (Pay-Go)
- Recycled Water & Local
- Total Bond & Loan Charges



Example of How the Model Can Be Used - Evaluation of Dry Creek Scenarios

Scenario A - Habitat Enhancement Successful

- 6 miles with COE funding

Scenario B - Habitat Enhancement Successful

- 6 miles without COE funding

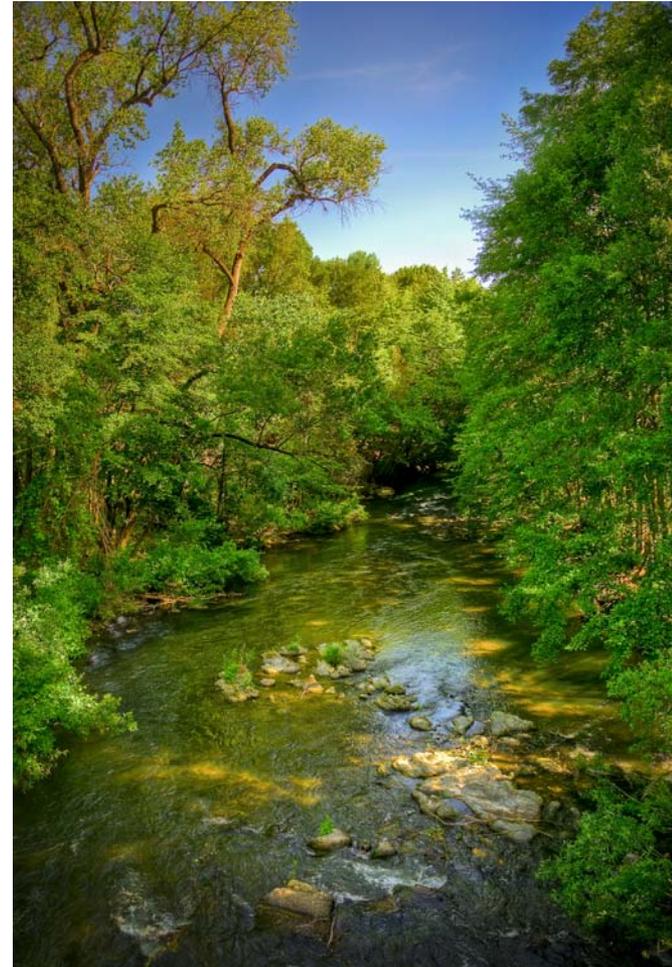
Scenario C - Habitat Enhancement Not Successful

- 3 miles habitat enhancement
- Bypass pipeline constructed

* All scenarios include O&M, BO, reliability projects, & demand driven capital projects

A Fourth Scenario

- What if we assume habitat enhancement will work - and plan accordingly - but find out in 2018 that it doesn't work?
- Scenario D - Intended to represent "reasonable worst case":
 - Do not pre-fund bypass pipeline
 - Need to fund bypass pipeline starting 2018/19 without benefit of prefunding



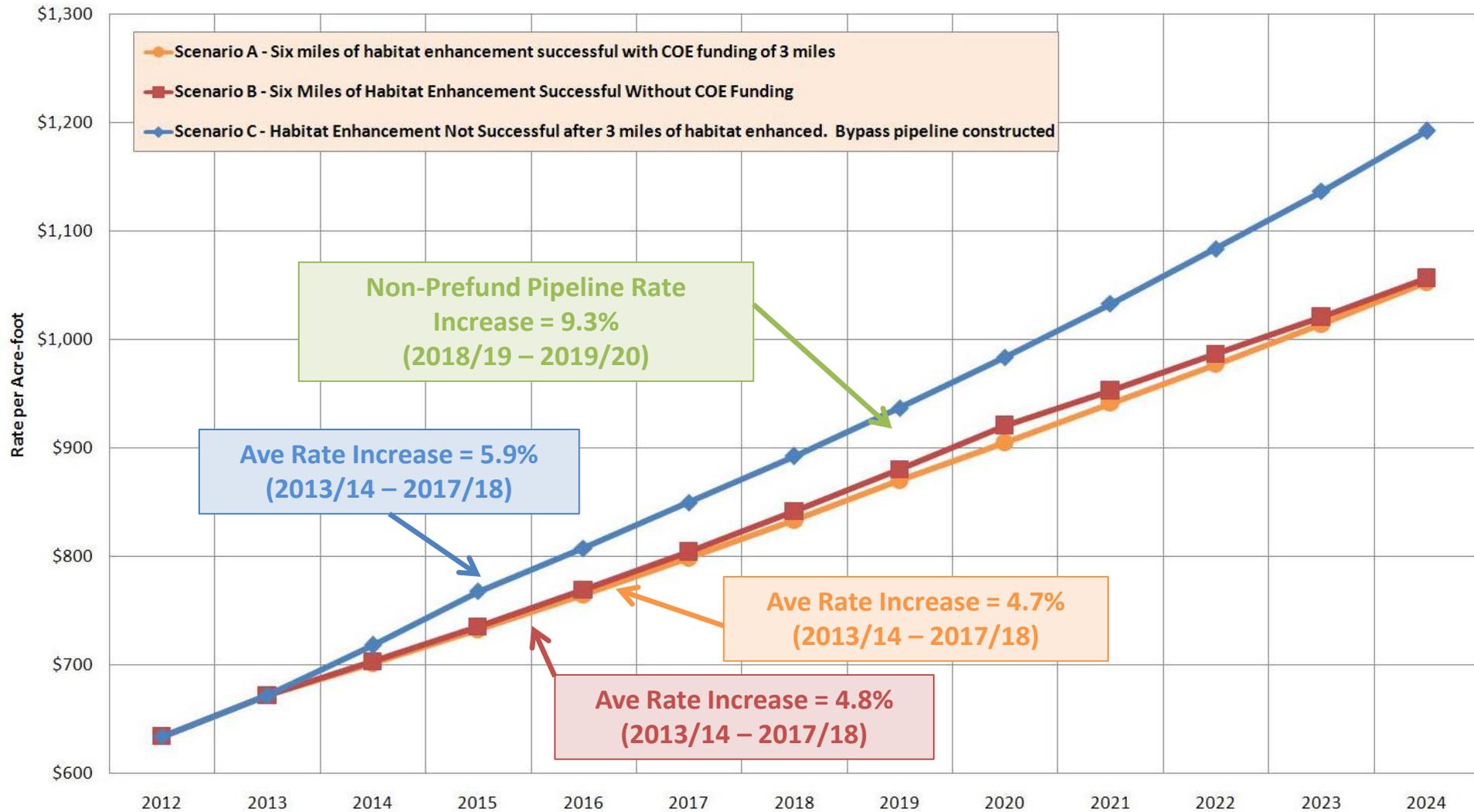
What if Pre-Fund Bypass Pipeline but its Not Needed?

- Funds collected for bypass pipeline will be in restricted aqueduct capital fund
- Could be used to fund new projects that will be developed in the future that are not currently considered in model scenarios
- Potential examples include: Mirabel inflatable dam replacement, replacement of existing aqueducts pending results of condition assessments, groundwater banking, etc.

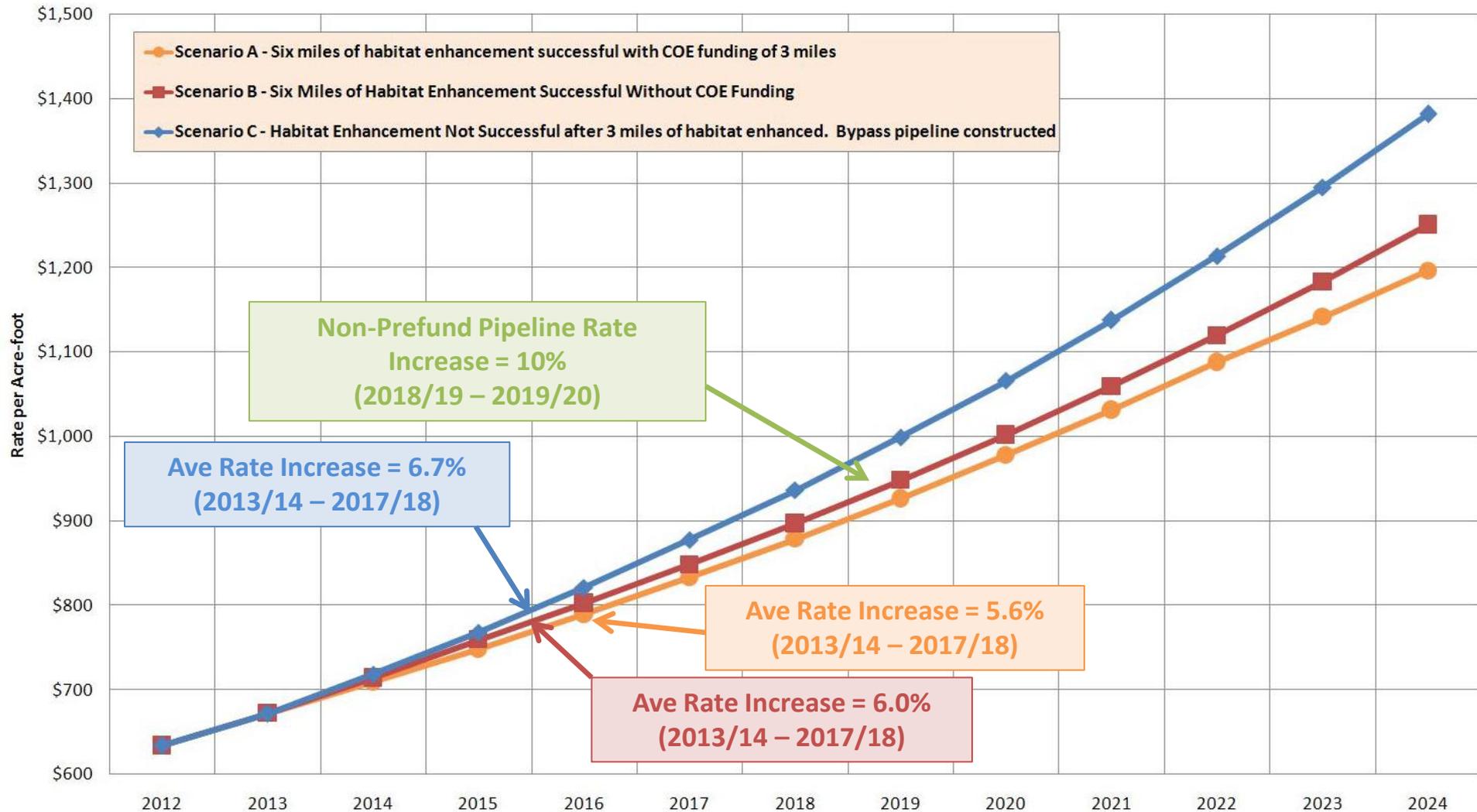
Summary: Dry Creek Scenarios

	Scenario A	Scenario B	Scenario C	Scenario D
Rate of Water Demand Growth	0% until 2021, then UWMP rate	0% until 2021, then UWMP rate	0% until 2021, then UWMP rate	0% until 2021, then UWMP rate
Reliability Projects	Yes	Yes	Yes	Yes
Habitat Restoration	6 miles (with COE partial funding)	6 miles (without COE funding)	3 miles (without COE funding)	3 miles (without COE funding)
Dry Creek Pipeline	No	No	Yes	Yes – No prefunding of pipeline to 2018 then Catch Up Rates
Assumed Annual O&M Rate Component Increase	3%	3%	3%	3%
Total Estimated Financing Through 2035 (Millions \$)	\$275	\$315	\$480	\$465

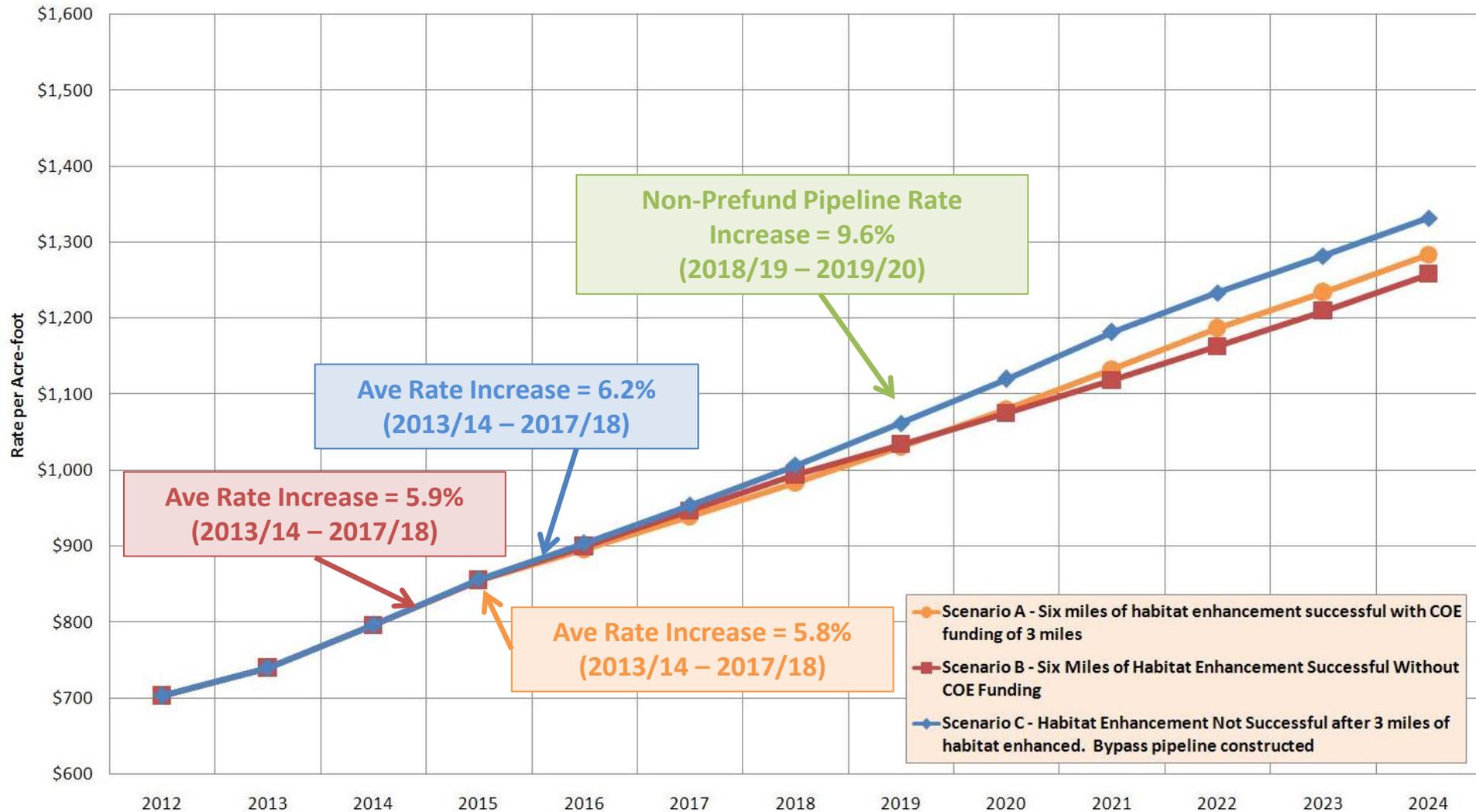
Example Santa Rosa AQ Rate Comparison By Scenario



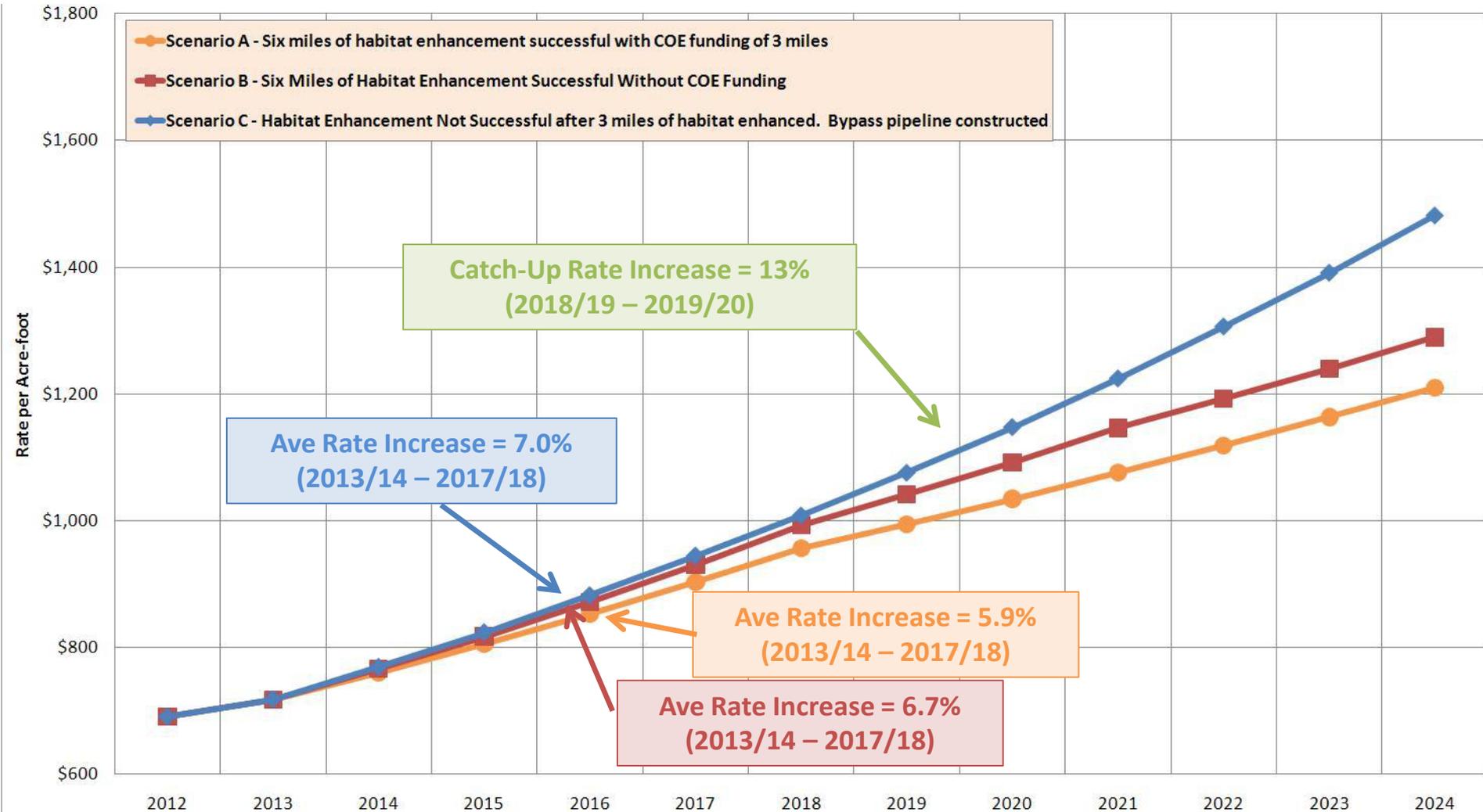
Example Petaluma AQ Rate Comparison By Scenario



Example Sonoma AQ Rate Comparison By Scenario



Example North Marin Rate Comparison By Scenario



Observations - Dry Creek Analysis

- Dry Creek projects are required & not demand driven
- Habitat enhancement: favorable costs vs. bypass pipeline
- Contractors & Water Agency continue pursuing COE funding to support habitat enhancement
- Pre-funding stabilizes rates
- Higher demand forecasts could move other projects forward in time, affecting rates and/or amount of debt incurred

Moving Forward - Continued Updating & Refinement

- As new information becomes available update:
 - Demand projections
 - Capital project costs
 - Capital project schedules
 - Additional necessary projects
- TAC & Water Agency continue developing additional projects

Continue to Coordinate Annual Water Supply & Financial Planning Activities

- Update Water Supply Strategy Action Plan
- Annually review actual water demands & compare to prior projections
- Update long-term financial modeling
- Financial modeling informs development of annual budget

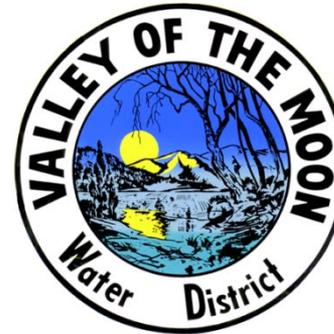


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Questions?

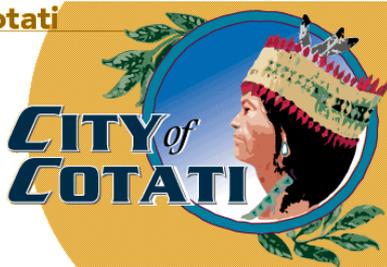


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