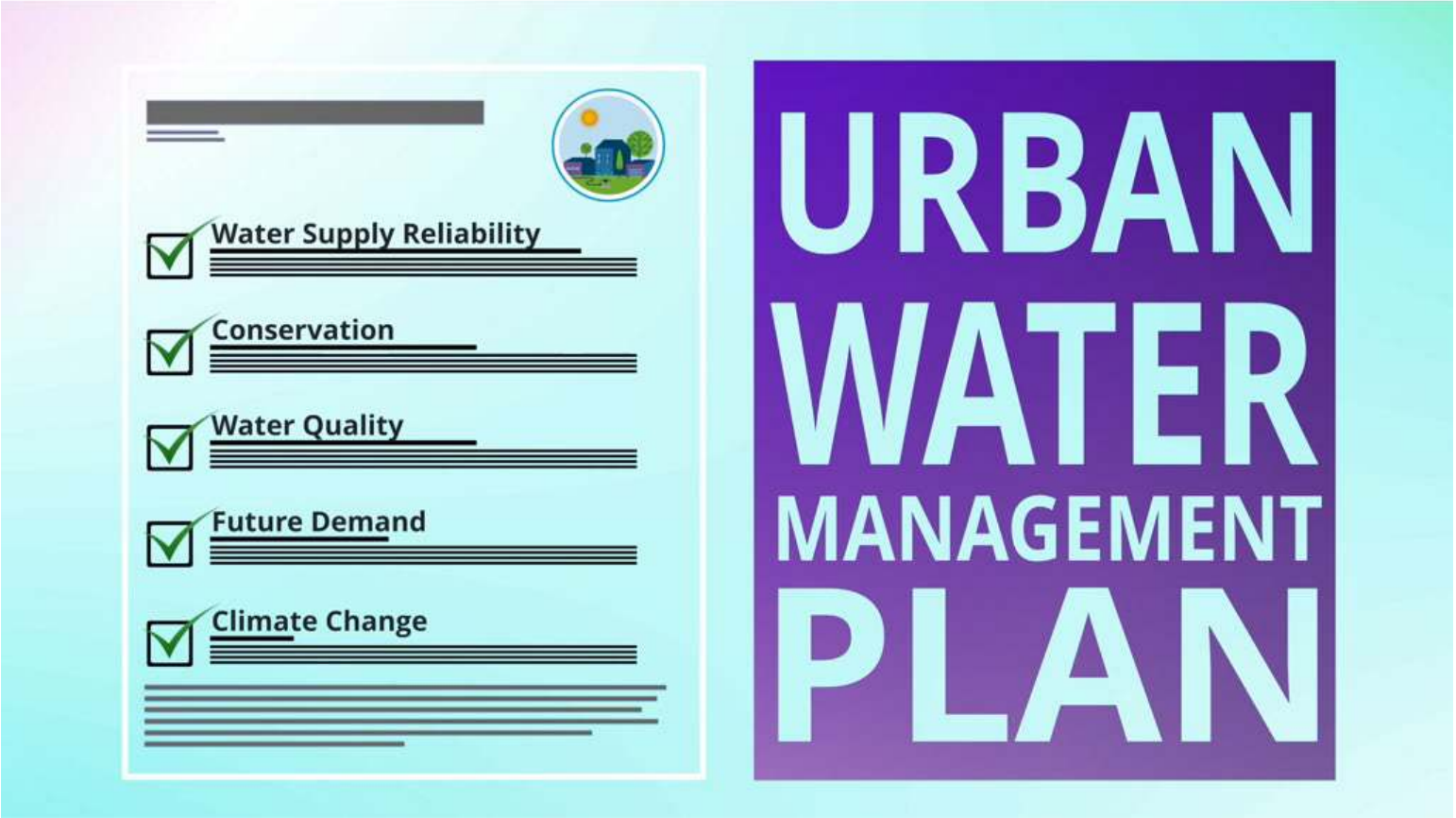
SCV WATER

Urban Water Management Plan

Public Workshop

March 22, 2021

Video: Intro to the Urban Water Management Plan Update



This public workshop is being recorded and will be posted on the website: www.yourSCVwater.com

Go to:
Planning Efforts & Projects Dashboard to Learn More

Agenda

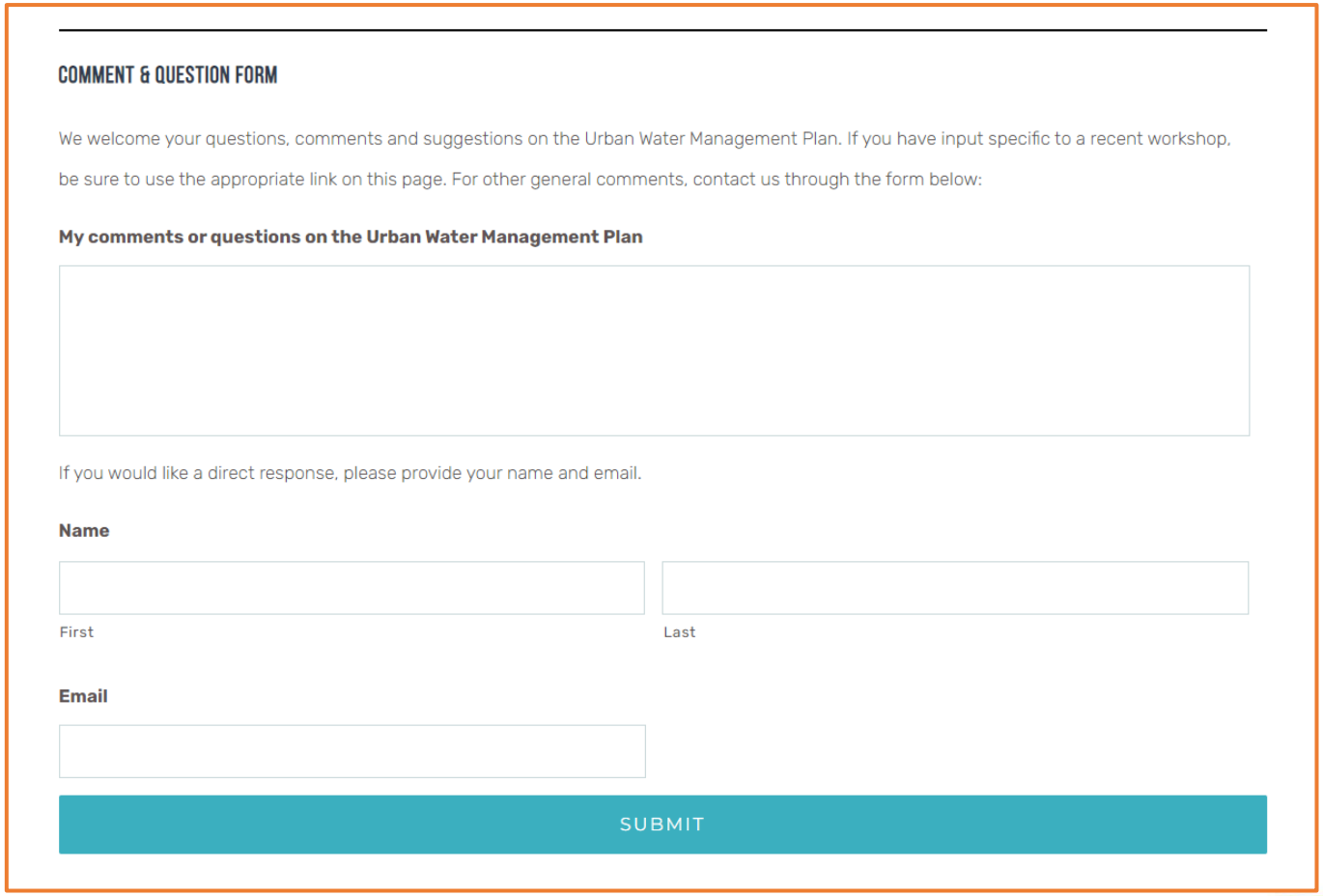
1. Welcome
2. Presentations and Discussion
   - Water Supply Reliability ★
   - Reliability Analysis ★
   - Seismic Risk Analysis and Mitigation Plan ★
3. Wrap Up

★ Q&A/Discussion

We need your input!

www.yourSCVwater.com/uwmp

Comment & Question Form



COMMENT & QUESTION FORM

We welcome your questions, comments and suggestions on the Urban Water Management Plan. If you have input specific to a recent workshop, be sure to use the appropriate link on this page. For other general comments, contact us through the form below:

My comments or questions on the Urban Water Management Plan

If you would like a direct response, please provide your name and email.

Name

First

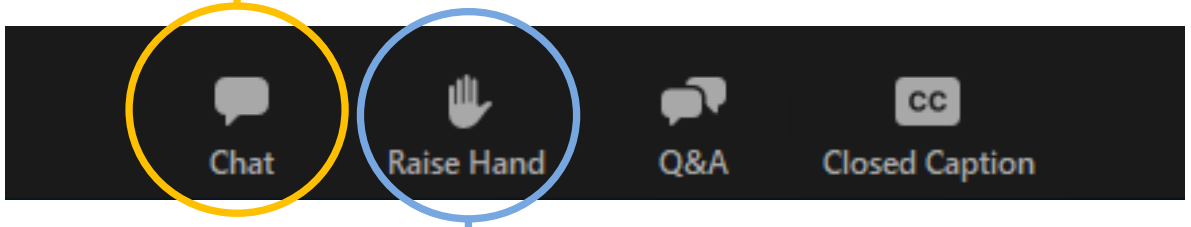
Last

Email

SUBMIT

For Q&A/Discussion

We recommend using the chat for questions and comments.



Use the Raise Hand function if you would like to clarify your question.

If on phone, push *9 to raise hand.

Welcome | Introductions

Sarah Fleury
SCV Water

Najwa Pitois
Geosyntec

David Cleary
Kennedy Jenks

Joan Isaacson
Kearns & West

Welcome | Introductions

A&N Technical Services Inc.

KEARNS WEST

Kennedy Jenks

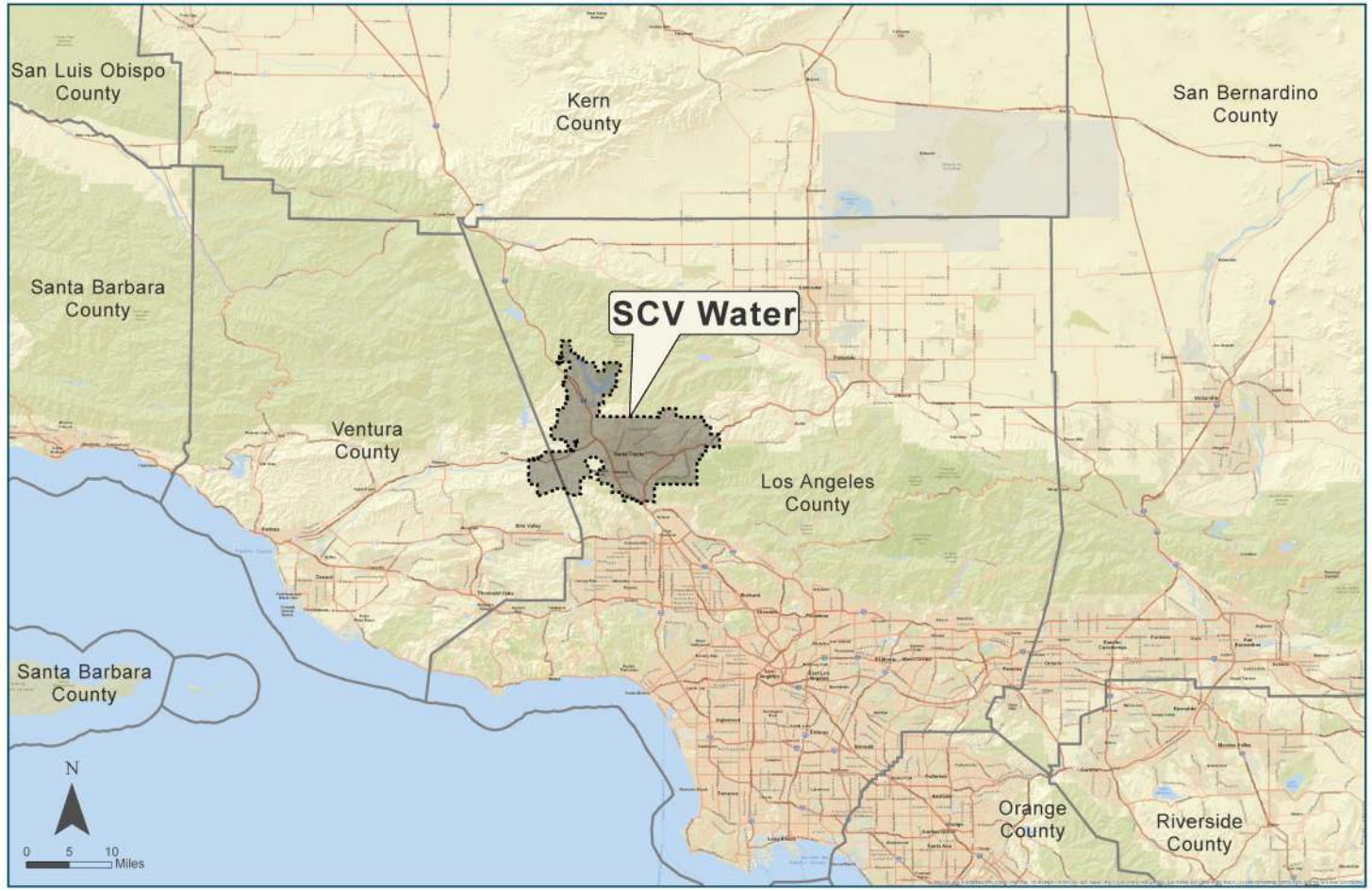
Luhdorff & Scalmanini
Consulting Engineers

Maddaus Water Management Inc.

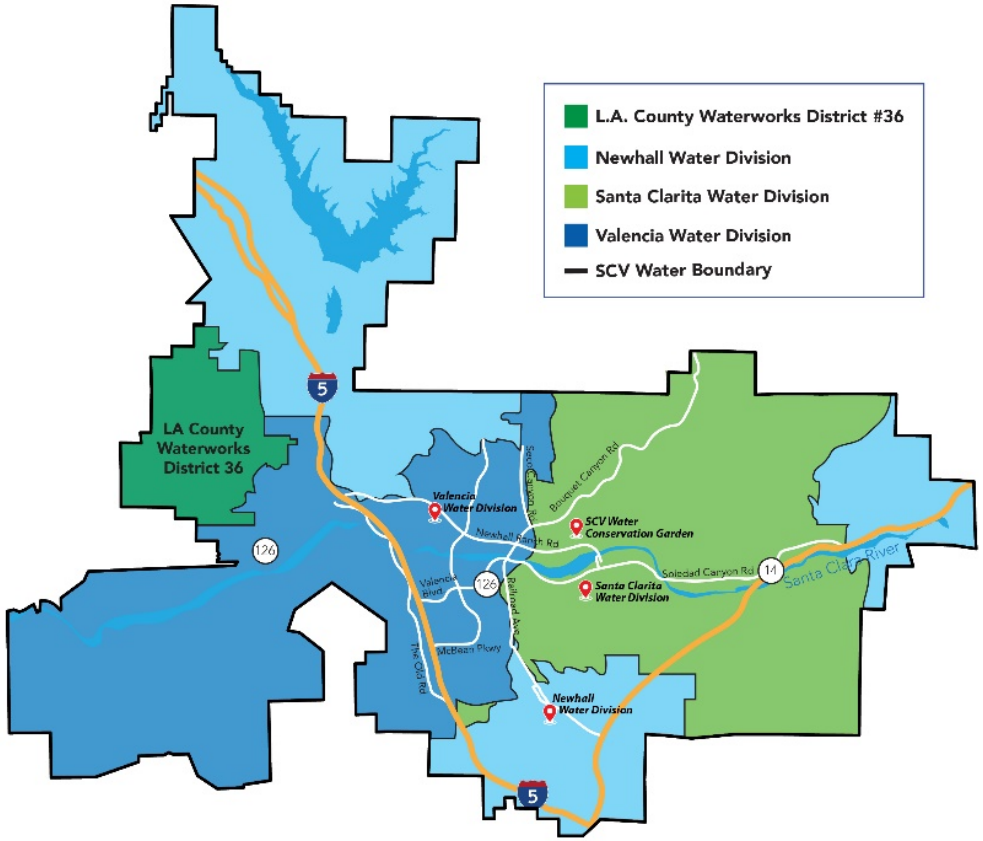
Geosyntec consultants
engineers | scientists | innovators

BBK
BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

SCV Water | Who We Are



SCV Water | Who We Are



A full-service regional water agency located in the Santa Clarita Valley

- 195 square miles
- 74,000 retail customers
- 273,000 population served

Formed on January 1, 2018 by an act of the State Legislature (SB 634)

SCV WATER PLANNING EFFORTS & PROJECTS

Water for Today & Tomorrow

Groundwater Sustainability Plan

Urban Water Management Plan

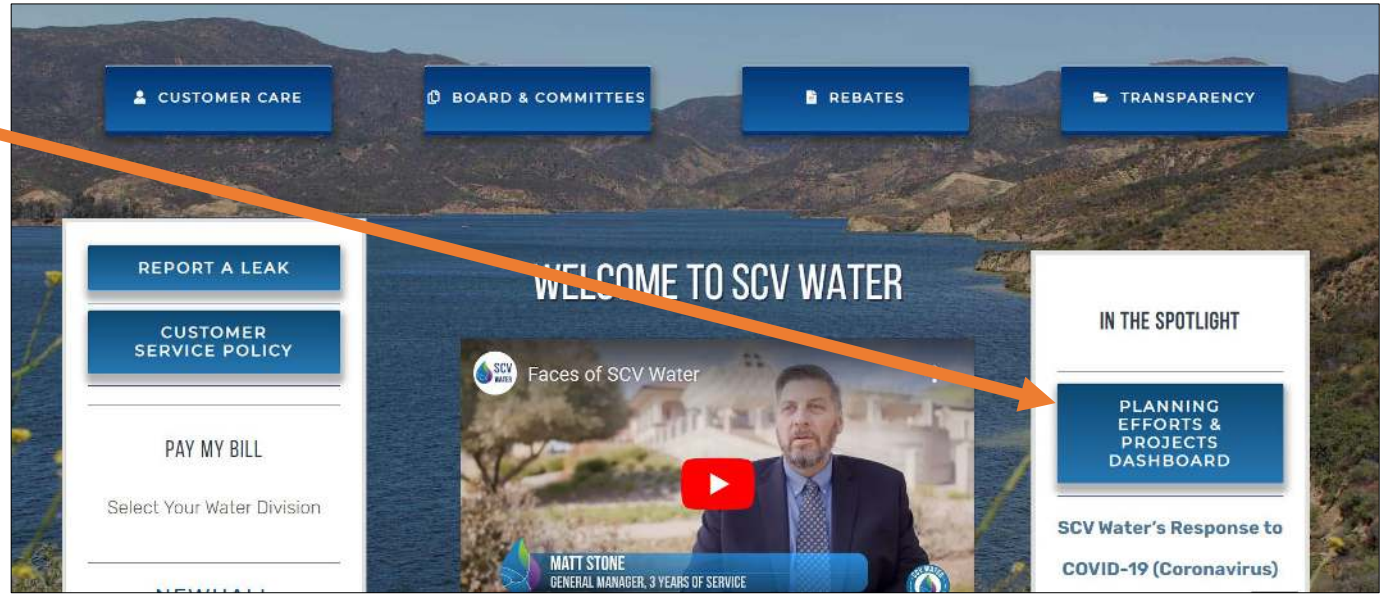
Water Shortage Contingency Plan

Recycled Water Planning

Rate Case Planning

PFAS

To learn more visit: www.yourSCVwater.com/planning



www.yourSCVwater.com

What is an Urban Water Management Plan?

A long-term resource planning document in which urban water suppliers evaluate their supplies and demands to ensure that adequate water supplies are available to meet existing and future water needs, in a sustainable manner

Urban Water Management Plan

TIMELINE & MILESTONES:

PLANNING, ANALYSIS & PUBLIC INVOLVEMENT (Nov 2020–June 2021)

Why a 2020 Urban Water Management Plan Update?

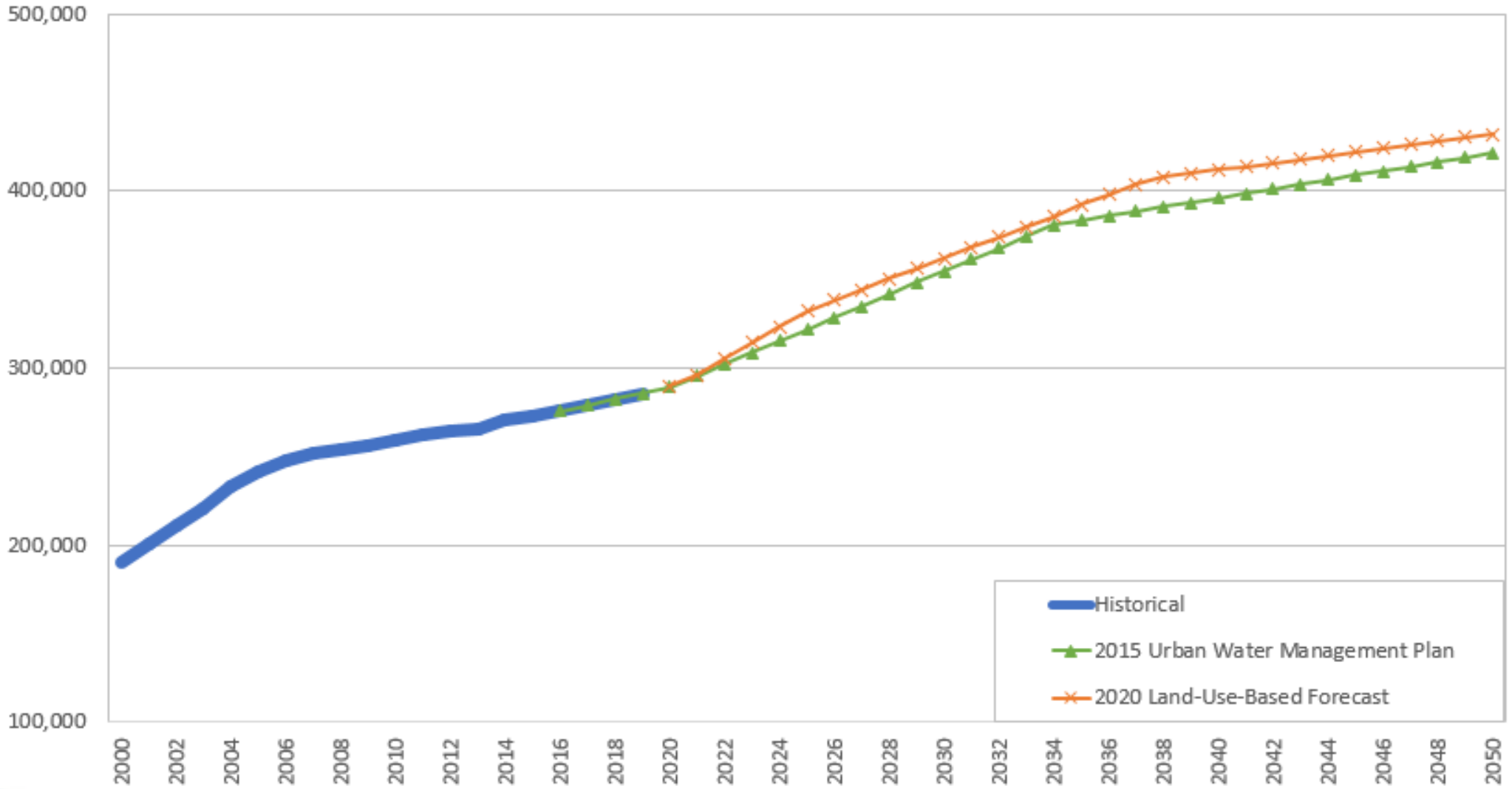
- Required by UWMP Act and subsequent legislation
- Required every five years
- Develops a guidance framework to evaluate and enhance the availability, reliability and quality of water supplies
- Identifies gaps between supply and demand through time (20-year analysis required)
- **Due to State of California by July 1, 2021**

Public Workshop 1 and 2 Recap

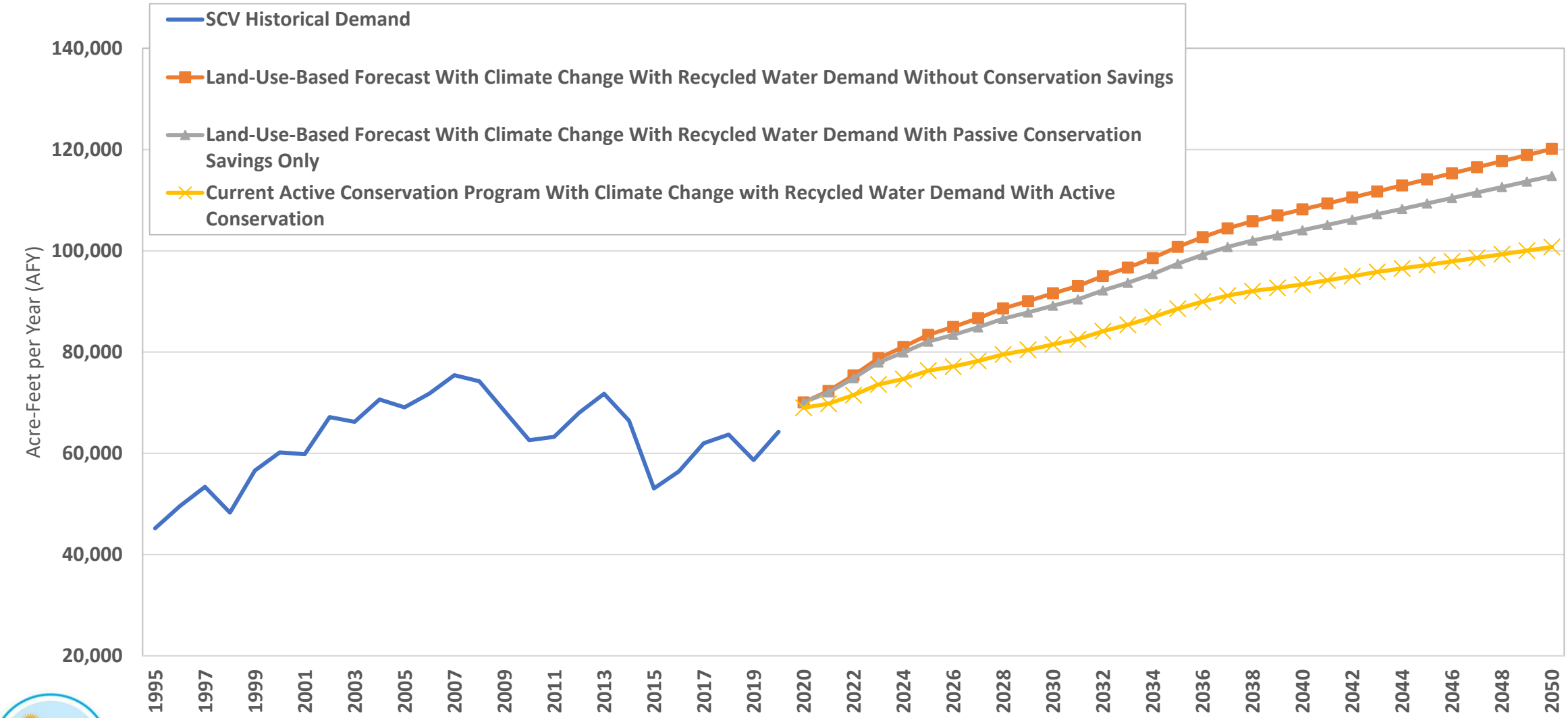
- Dates: November 18, 2020 and February 17, 2021
- Topics:
  - What is an Urban Water Management Plan
  - Water Supply Characteristics
  - Climate Change Considerations
  - UWMP Compliance with Conservation Targets
  - Population and Demand Forecasts
  - Drought Risk Assessment
- Visit: www.yourSCVwater.com/uwmp

Water Supply Reliability

Valleywide Future Population Projections



Valleywide Potable and Recycled Water Demand Forecast Results



Water Supplies

Existing

- Local
  - Groundwater
  - Recycled Water
- Imported
  - State Water Project
  - 2 Banking Programs
  - BVRRB – Firm Water Transfer
  - Water Transfers

Planned

- Restored Alluvial Wells
- Restored Saugus Well
- New Recycled Water
- Newhall Land Agricultural to Municipal Use

Potential Resiliency Programs

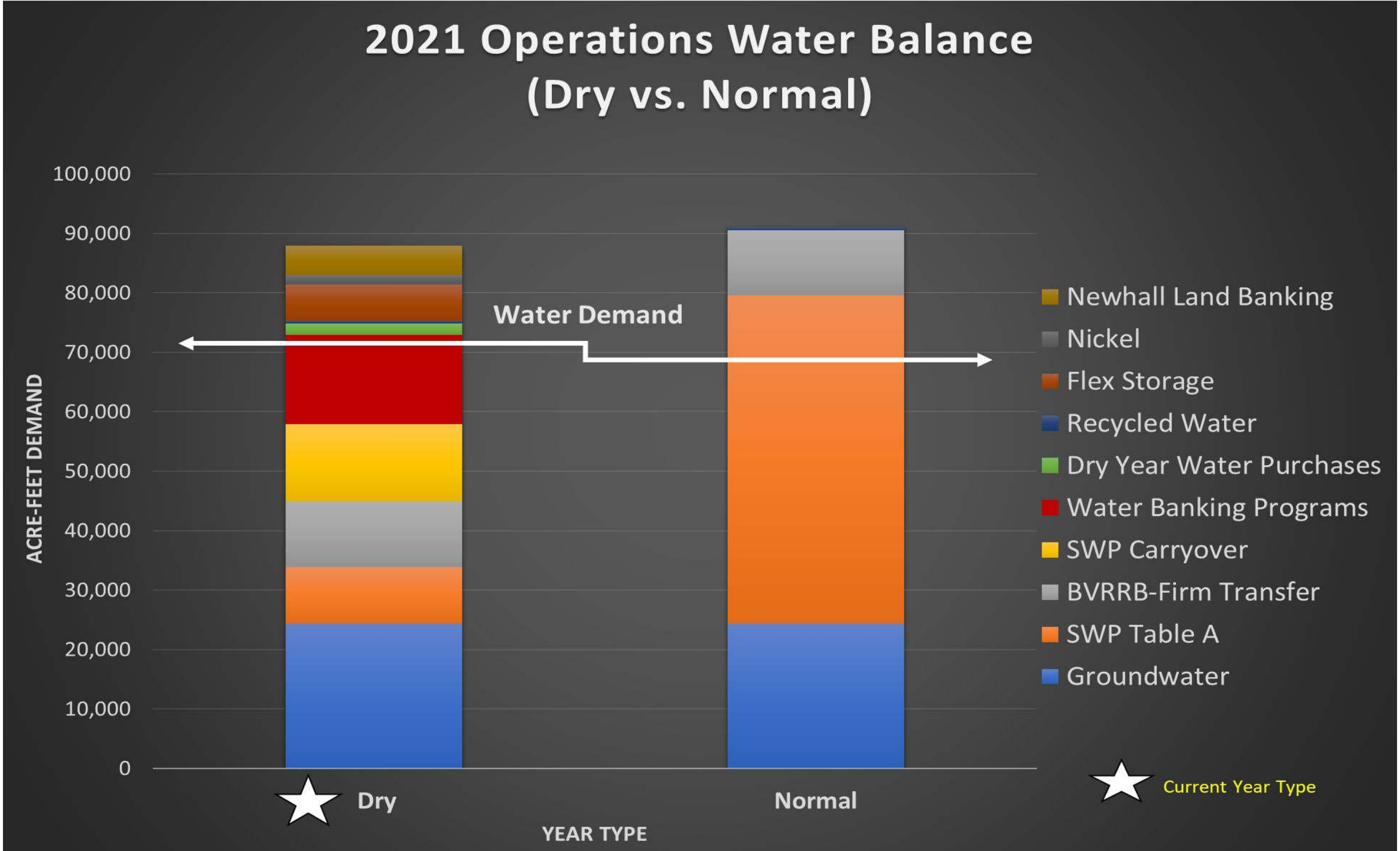
- Dry Year Saugus Wells
- Additional Rosedale Recovery
- AVEK Water Bank
- Aquaterra Water Bank
- Sites Reservoir

Water Year Types

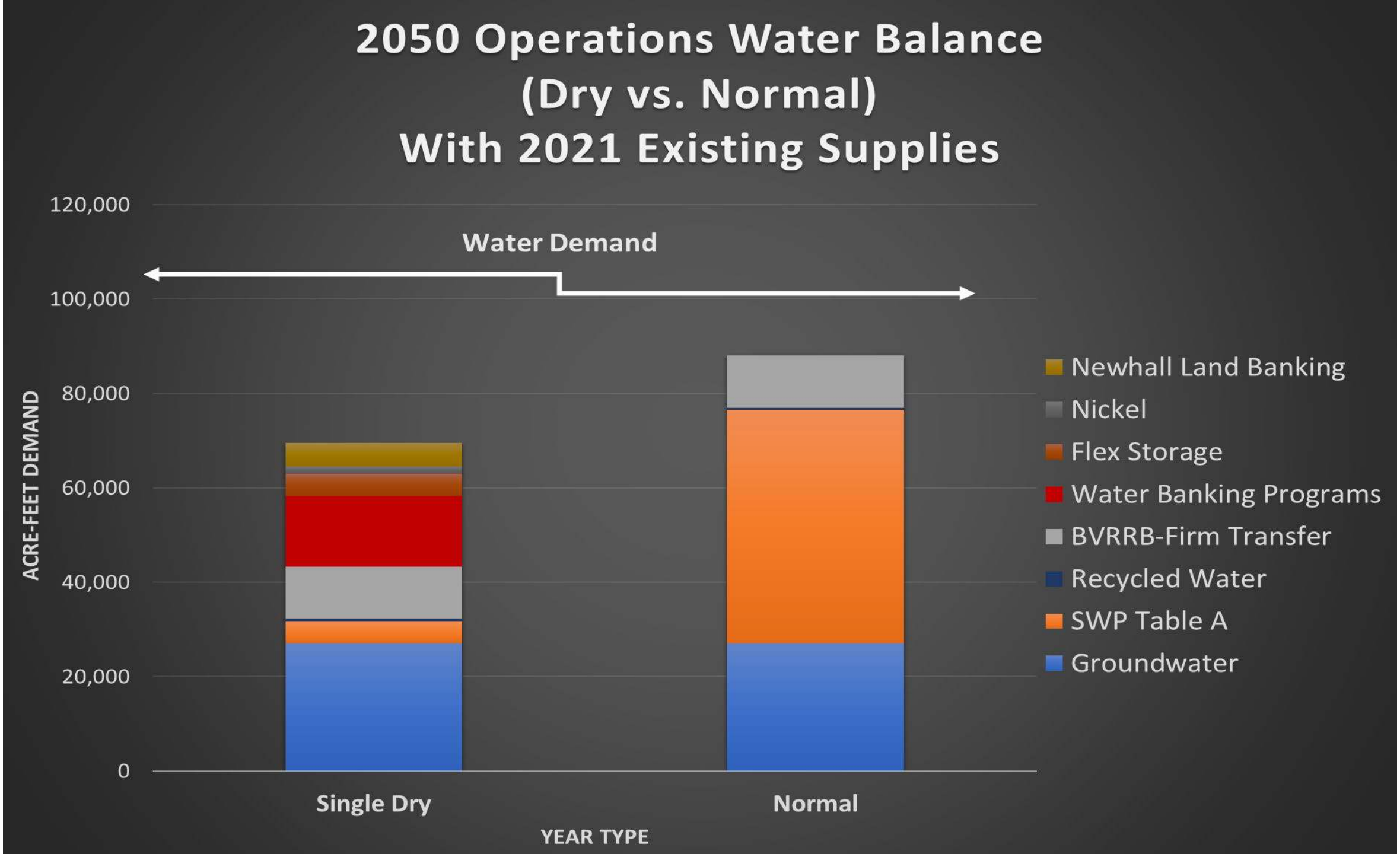
Wet

Normal

Dry

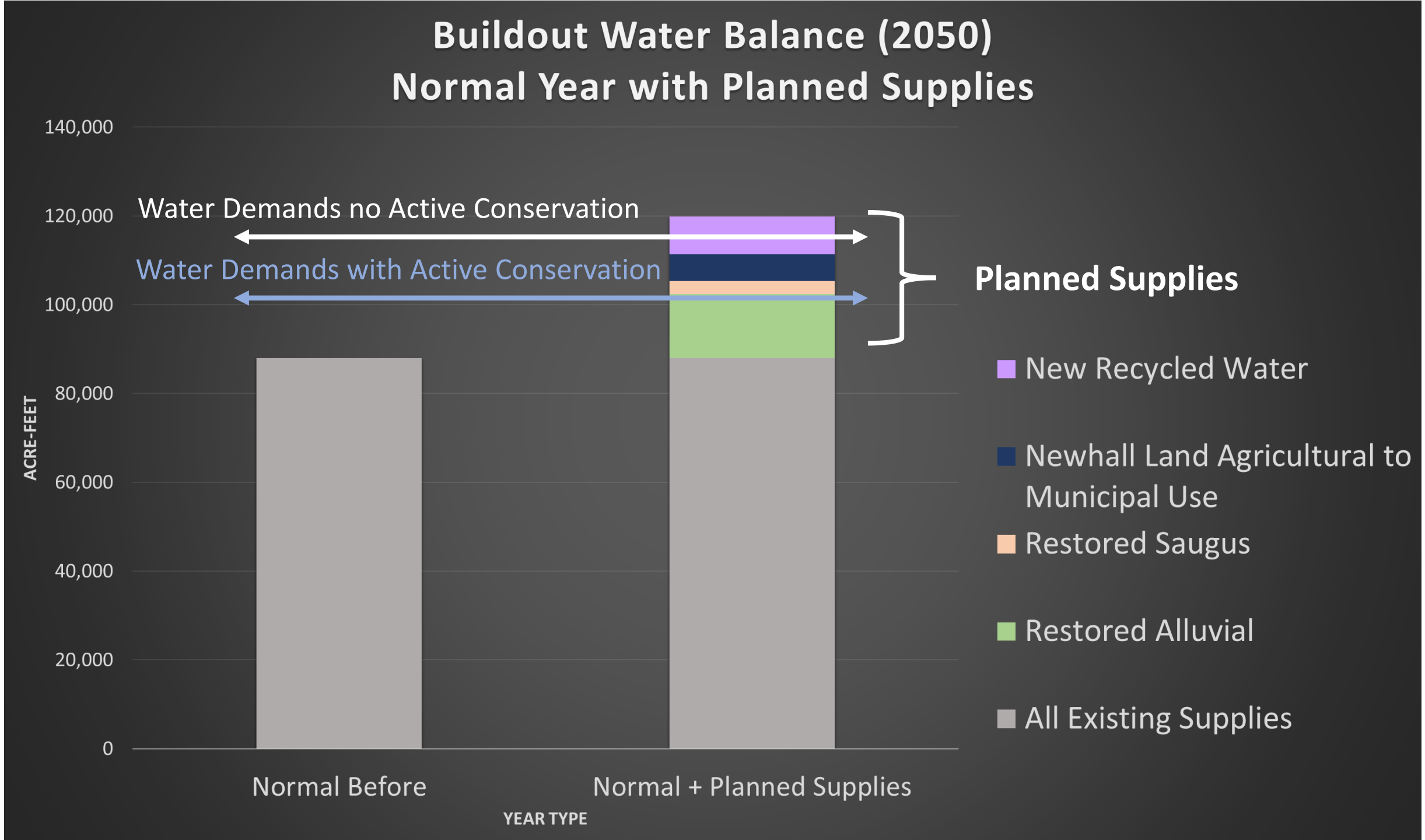

2021 Operations Water Balance
(Dry vs. Normal)
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
ACRE-FEET DEMAND
Water Demand
Newhall Land Banking
Nickel
Flex Storage
Recycled Water
Dry Year Water Purchases
Water Banking Programs
SWP Carryover
BVRRB-Firm Transfer
SWP Table A
Groundwater
Dry
Normal
YEAR TYPE
Current Year Type

2050 Operations Water Balance (Dry vs. Normal) With 2021 Existing Supplies

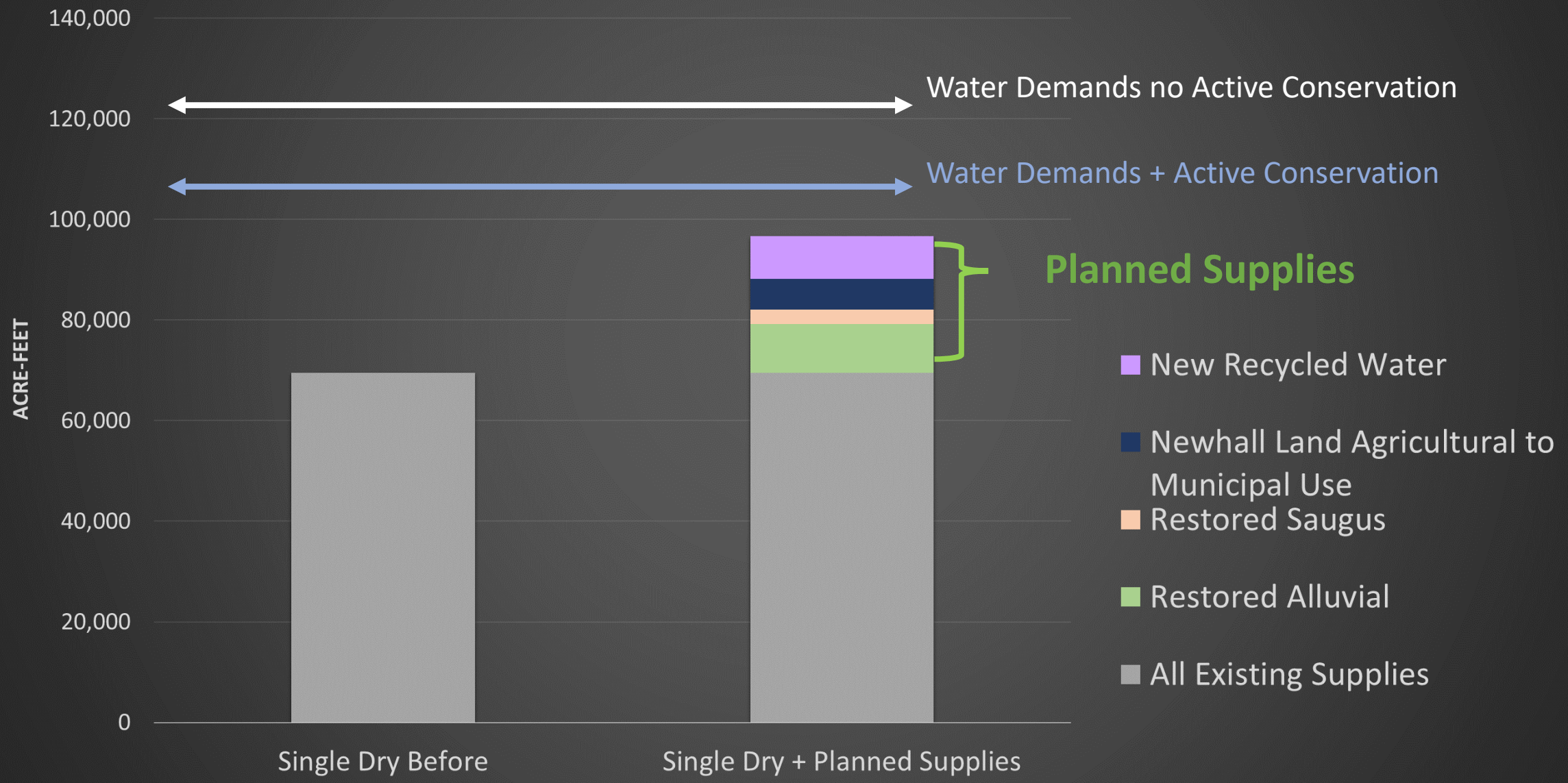


Planned Water Supplies

- Local
  - Restored Alluvial Wells
  - Restored Saugus Well
  - Increased Recycled Water
  - Newhall Land Agricultural to Municipal Water Use


Buildout Water Balance (2050)
Normal Year with Planned Supplies
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
ACRE-FEET
Water Demands no Active Conservation
Water Demands with Active Conservation
Planned Supplies
New Recycled Water
Newhall Land Agricultural to Municipal Use
Restored Saugus
Restored Alluvial
All Existing Supplies
Normal Before
Normal + Planned Supplies
YEAR TYPE

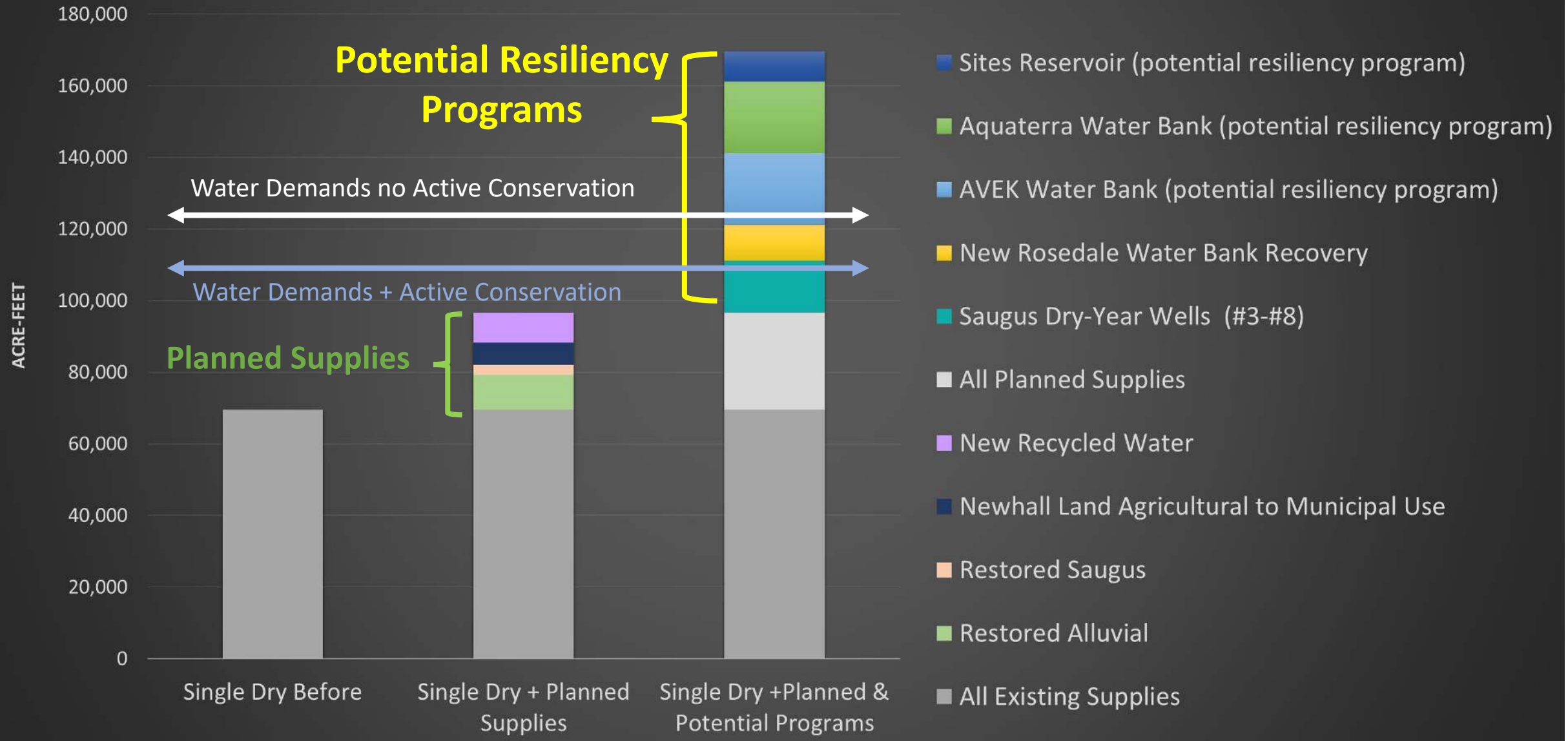
Buildout Water Balance (2050)
Single Dry Year with Planned Supplies



Potential Resiliency Programs

- Local
  - Saugus Dry Year Wells (6 additional wells)
- Imported
  - New Rosedale Water Bank Recovery
  - AVEK Water Bank
  - Aquaterra Water Bank
  - Sites Reservoir Participant

Buildout Water Balance (2050)
Dry Year with Planned and Potential Programs



Conclusion

- Sufficient water to support buildout demands in normal years
- Active conservation programs have the potential to make a significant impact on our future demands
- Additional resiliency programs are needed to support dry year demands and provide reliability

Questions? Ideas? Feedback?

Reliability Analysis

Reliability Analysis

- Long-term strategy for adapting to uncertainty and changing conditions
- Robust portfolio of diverse supplies and measures
- Various scenarios to ensure resilience and reliability under various conditions

Methodology

- The approach used assesses how different **supplies are used to meet demand over wet and dry year sequences**, instead of looking at a single year in isolation

- The analysis simulates the wet and dry year sequences based on the same **82 years of historic hydrologic record** used in CalSim

- These hydrologic sequences are run for the entire study period of **2021-2050**

Methodology

- Demands assume **active conservation**
- **Climate change** is taken into consideration by using:
  - Projected **demands** with climate change
  - **State Water Project allocations** for future conditions
  - **Groundwater** supplies identified in the Groundwater Sustainability Plan that take into account climate change

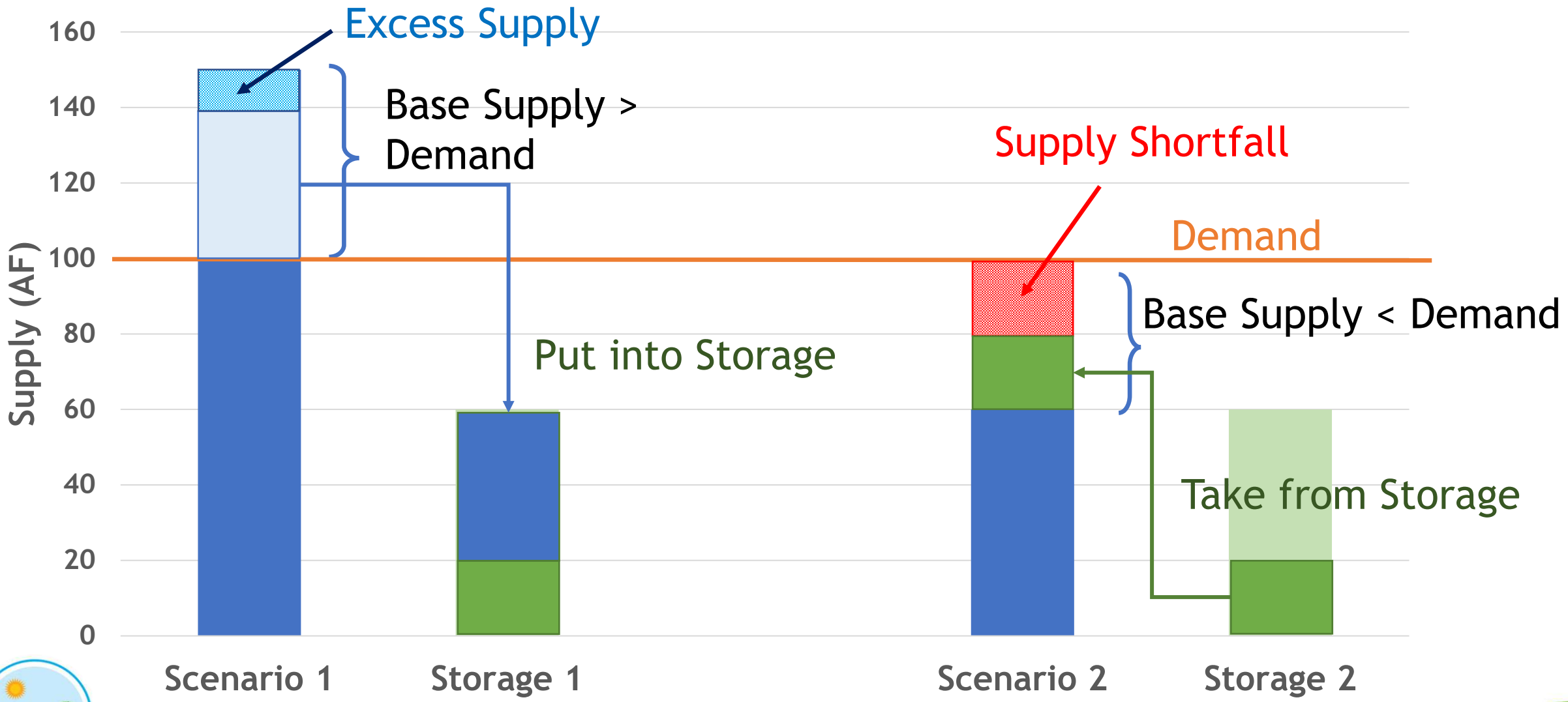
Methodology

- For each hydrologic trace, the model steps through each year of the study period, comparing annual supplies to demands and operating storage and exchange programs as needed

  - In years when **supplies are greater than demands**, water is **added** to storage programs

  - In years when **supplies are less than demands**, water is **taken** from storage

Water Operations in a Single Year

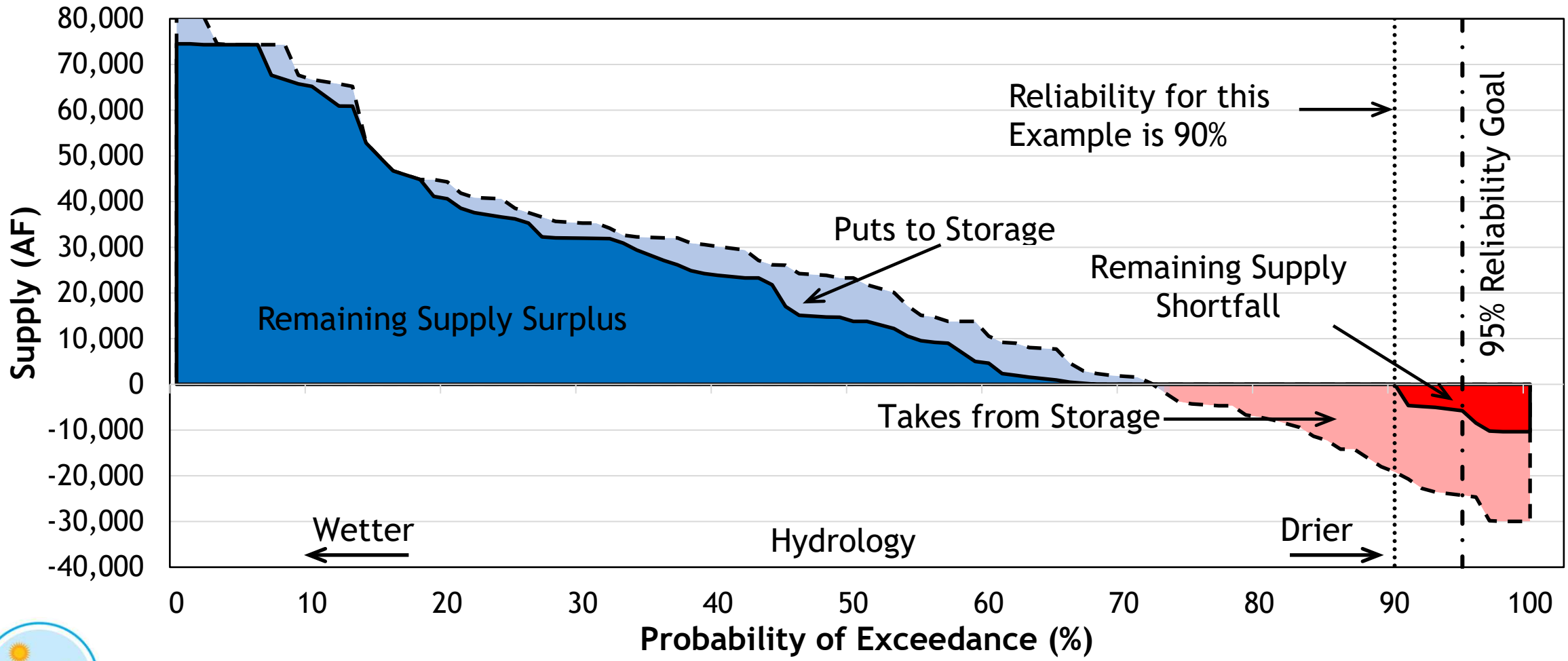


Methodology

- Study period results from the 82 hydrologic traces are summarized to provide a statistical assessment of the reliability of SCV Water's supplies and storage programs

- The analysis determines how different combinations of supplies can meet the **Reliability Goal of 95%**

Example of a Portfolio's Performance



Scenarios

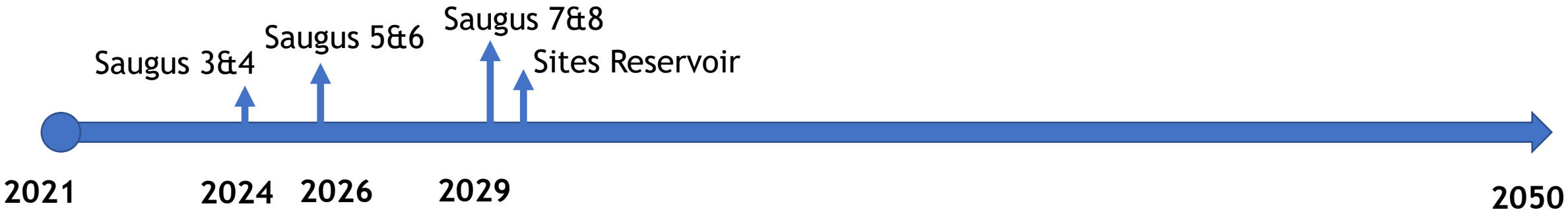
- Scenarios developed to identify alternative pathways to reliability
- The analysis integrates operation of subject programs
- Analysis can identify when projects are needed
- Evaluated how substituting supplies with other programs performs, in case certain supplies don't develop as anticipated in the future

Scenarios Analyzed

Criteria	Scenario 1 (2015 UWMP)	Scenario 2	Scenario 3	Scenario 4
Updated Demands w/ Conservation				
Existing and Restored Groundwater (Per GSA)				
SWP Table A & Terminal Reservoir and BVRRB				
SCVWA and NLF Semitropic and Rosedale Banks				
Near-term exchanges and purchases				
Saugus Dry-Year Wells (Saugus 3 & 4)				
Saugus Dry-Year Wells (Saugus 5-8)				
Additional Rosedale Recovery Capacity				
Sites Reservoir				
AVEK/AquaTerra Groundwater Bank				

Scenario 1: Invest in Some Resilience/Dry Year Programs (Saugus Wells 3-8 and Increased RRB Take Capacity)

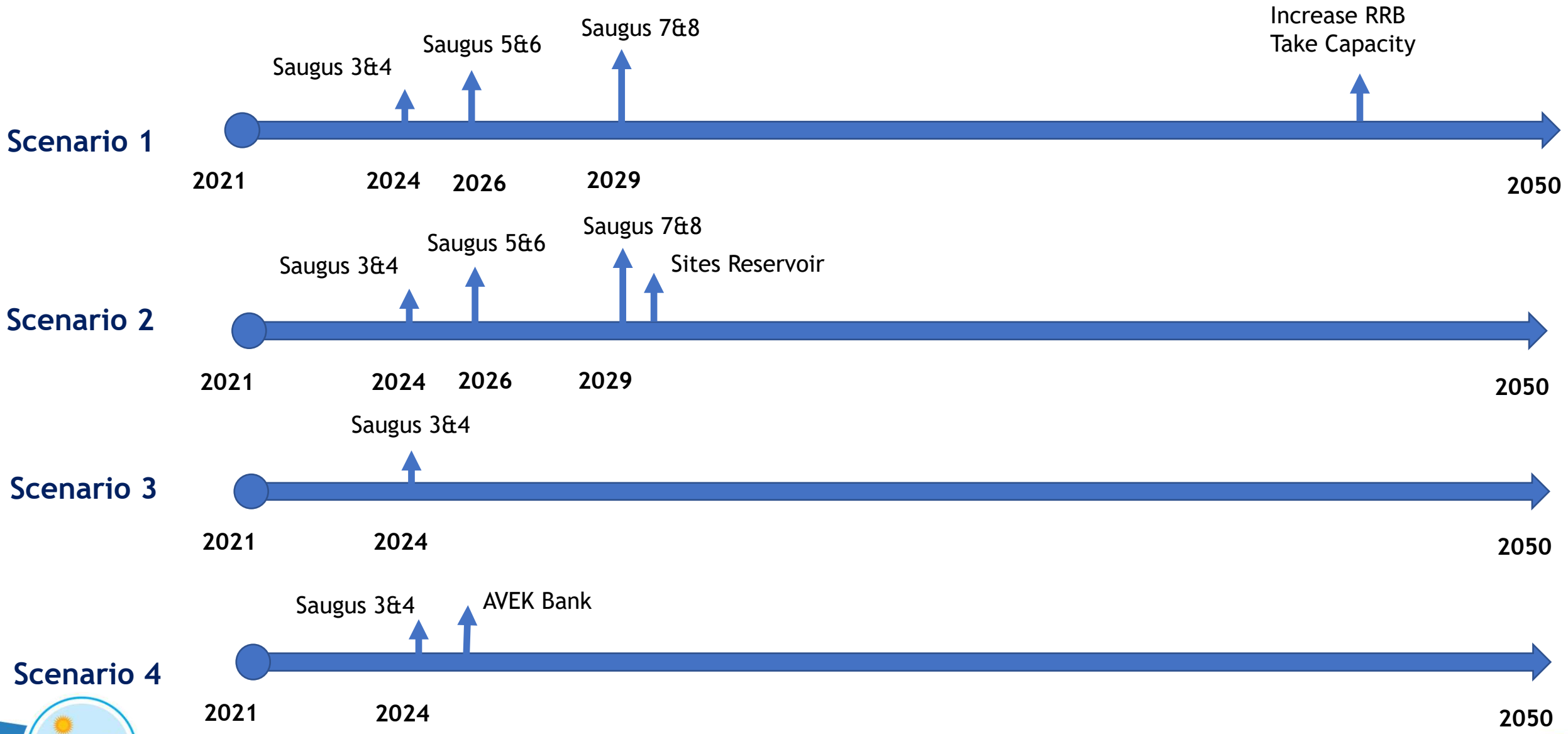
Scenario 2: Invest in Other Resilience/Dry Programs (Saugus Wells 3-8 and Sites Reservoir)



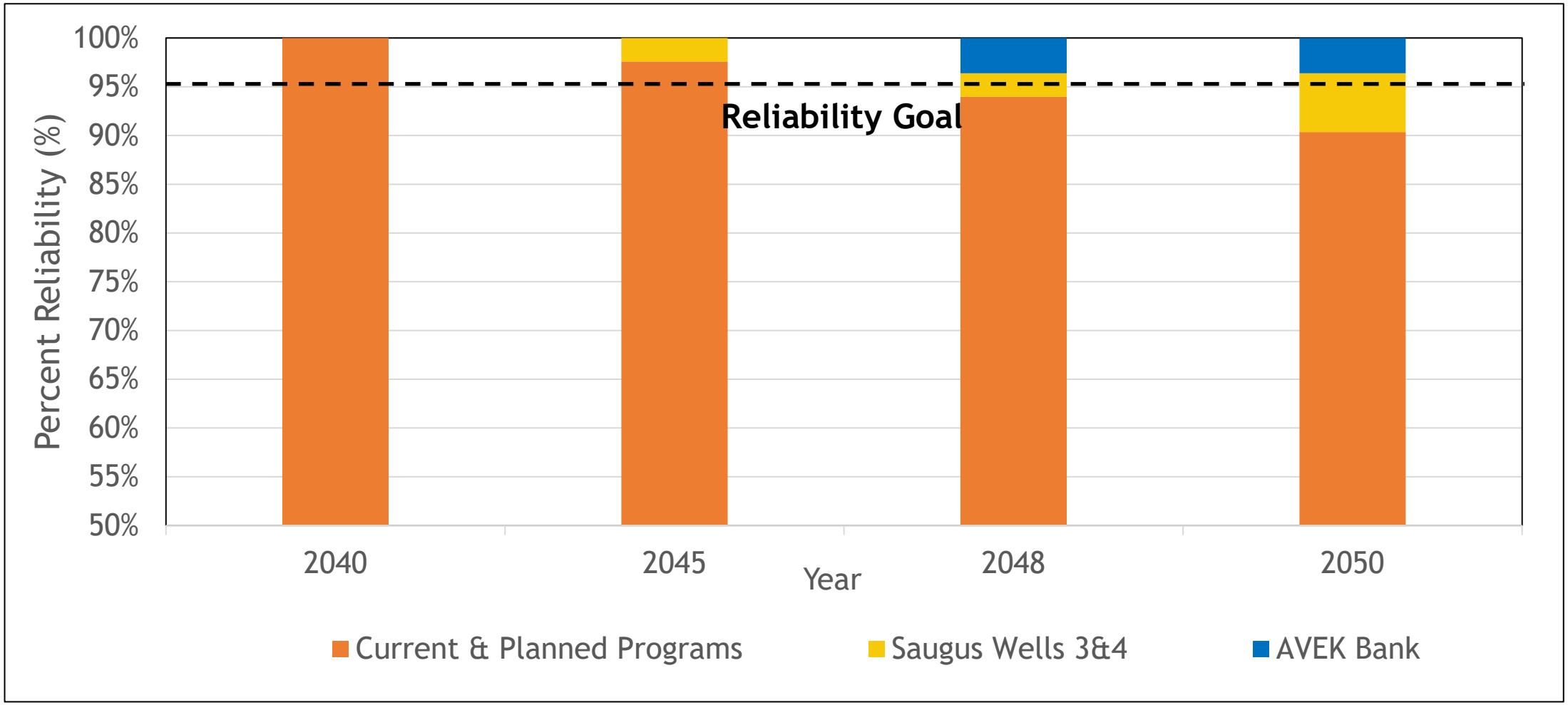
Scenario 3: Examine Portfolio in the Near-Term (Only Saugus Wells 3&4)

Scenario 4: Invest in Dry Year Program (Only Saugus Wells 3&4 and AVEK Bank)

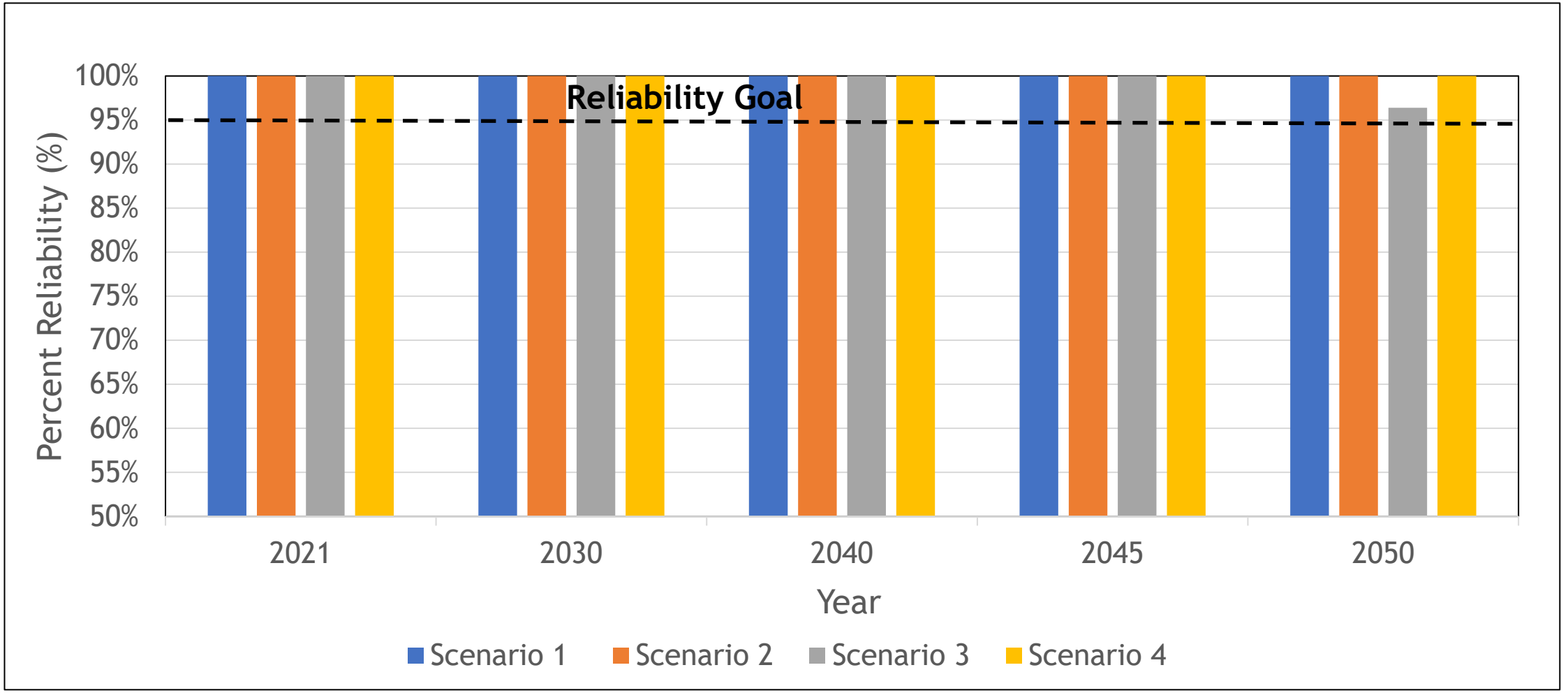
Multiple Pathways To Achieve Reliability



Detailed Reliability of Scenario 4



Final Reliability of All Scenarios Tested



Questions? Ideas? Feedback?

Seismic Risk Assessment and Mitigation Plan

Senate Bill 664

- Requires urban water suppliers to include within its Urban Water Management Plan/Water Shortage Contingency Plan
  - Assess the vulnerability of each of the facilities of the water system
  - Provide mitigation for identified vulnerabilities
  - Update the analysis every 5-years with the UWMP cycle

Purpose

Damage from the 1994 Northridge Earthquake

Approach

- Kennedy Jenks has been performing an initial analysis of the facilities to identify the most vulnerable assets
- Due to the extent of SCV Water's facilities, a detailed analysis of all of the facilities is not feasible at this time
- SCV Water will identify the most critical facilities required for operation post earthquake
- SCV Water and Kennedy Jenks will then identify the highest priority facilities for mitigation

Initial Analysis

- SCV Water has provided Kennedy Jenks with the available construction documents for hundreds of facilities
- These facilities were constructed by four different agencies between 1960 and the present
- Water Storage Reservoirs
  - Most are not anchored to the foundations
  - Most do have sufficient clearance between the roof structure and the water to allow sloshing during and earthquake
- Well Sites
  - Generally resilient to earthquakes
  - Site visits will be needed to identify specify vulnerabilities

Initial Analysis

- Water Storage Reservoirs
  - Most are not anchored to the foundations
  - Most do have sufficient clearance between the roof structure and the water to allow sloshing during and earthquake

Initial Analysis

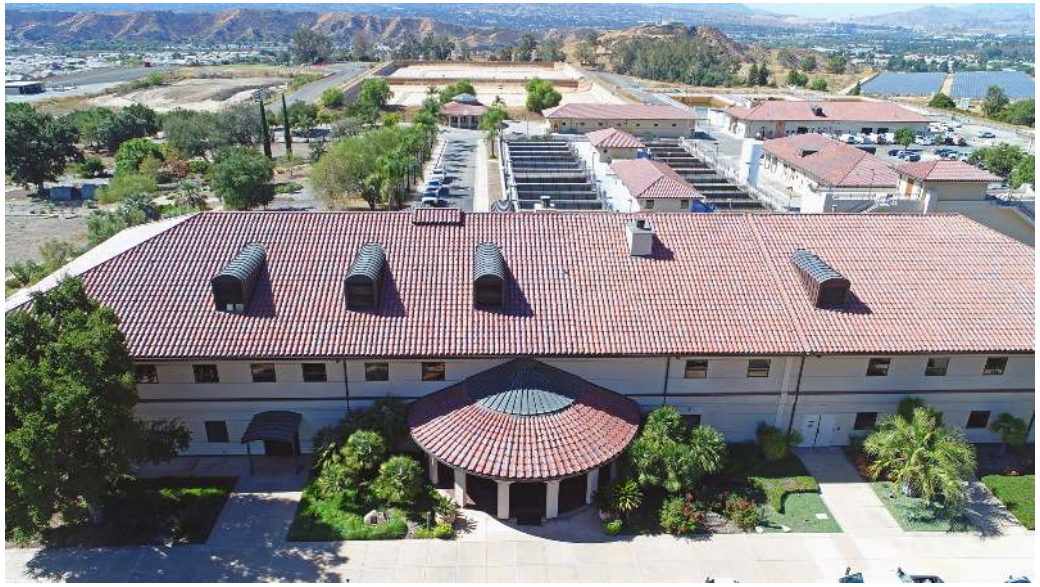
- Well Sites
  - Generally resilient to earthquakes
  - Unreinforced or lightly reinforced masonry walls may fail
  - Unanchored equipment and piping is common at older sites
  - Site visits will be needed to identify specific vulnerabilities

Initial Analysis

- Booster Pump Station
  - Generally resilient to earthquakes
  - Potential for unanchored equipment and pipe supports
  - Site visits will be needed to identify specific vulnerabilities

Desk Top Study

- Treatment Plants
  - Earl Schmidt Filtration Plant
  - Rio Vista Treatment Plant
  - Repairs and upgrades were constructed following the Northridge Earthquake
  - Generally resilient to earthquakes



Mitigation Planning

- Storage Tanks
  - Reduction of the operation capacity
  - Installing anchors
- Pump Stations and Well Sites
  - Verify walls are adequately reinforced
  - Verify equipment is adequately anchored
  - Upgrade well sites as PFAS treatment systems are installed
- Treatment Plants
  - Highly dependent on the structural systems and equipment type

Questions? Ideas? Feedback?

Wrap Up

Urban Water Management Plan

TIMELINE & MILESTONES:

PLANNING, ANALYSIS & PUBLIC INVOLVEMENT (Nov 2020–June 2021)

Participate in the Public Review Period

- Public comment period will begin in April 2021
- Provide comments on any portion of Draft Plan, especially:
  - Feedback on recommendations
- Ways to provide comment during public review:

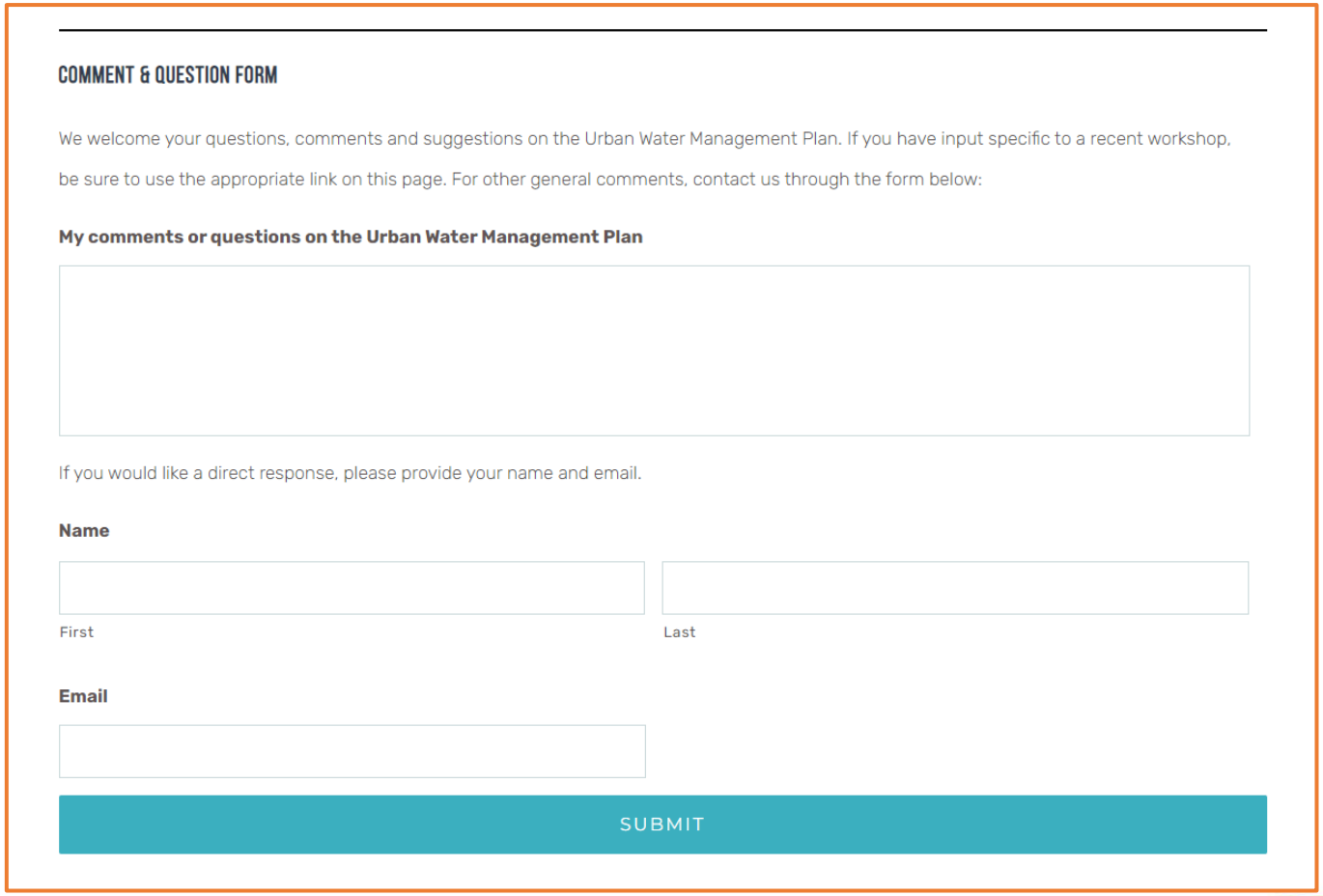
Online Comment Form	**Email**	**Hard Copy via U.S. Mail**
Submit directly on website: yourscvwater.com/uwmp	Sarah Fleury, Project Manager SCV Water uwmp@scvwa.org	Sarah Fleury, Project Manager 26521 Summit Circle Santa Clarita, CA 91350

Include "Urban Water Management Plan Comment" in the subject line of your email or letter

We need your input!

www.yourSCVwater.com/uwmp

Comment & Question Form



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My comments or questions on the Urban Water Management Plan

If you would like a direct response, please provide your name and email.

Name

First

Last

Email

SUBMIT

Thank You

Online Comment & Question Form
Public Comment and Hearing
Stay Engaged & Share the Information

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