The meeting teleconference will begin shortly

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Please use the chat feature in the Zoom toolbar to let the moderator know that you would like to make a comment during the meeting or use the digital "raise hand" function in Zoom.

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Call to Order

Board of Directors Workshop - Resources
Thursday, May 19, 2022

Chairperson – Director Hayes
Vice-Chair – Director Harrison

Introductions

Following the introduction of Directors and District staff, participants may use this time to state their name and agency/affiliation in order to be included in the formal record of attendees.

Public Comment

Any person may address the Board on matters within its jurisdiction.

- *Please use the chat feature on the Zoom toolbar or digitally raise your hand to let the moderator know you would like to make a comment.*

Summary of Previous Meeting

Board of Directors' Workshop - Resources – April 7, 2022

Discussion Item 4.1

Heather Dyer, MS, MBA – Chief Executive Officer/General Manager

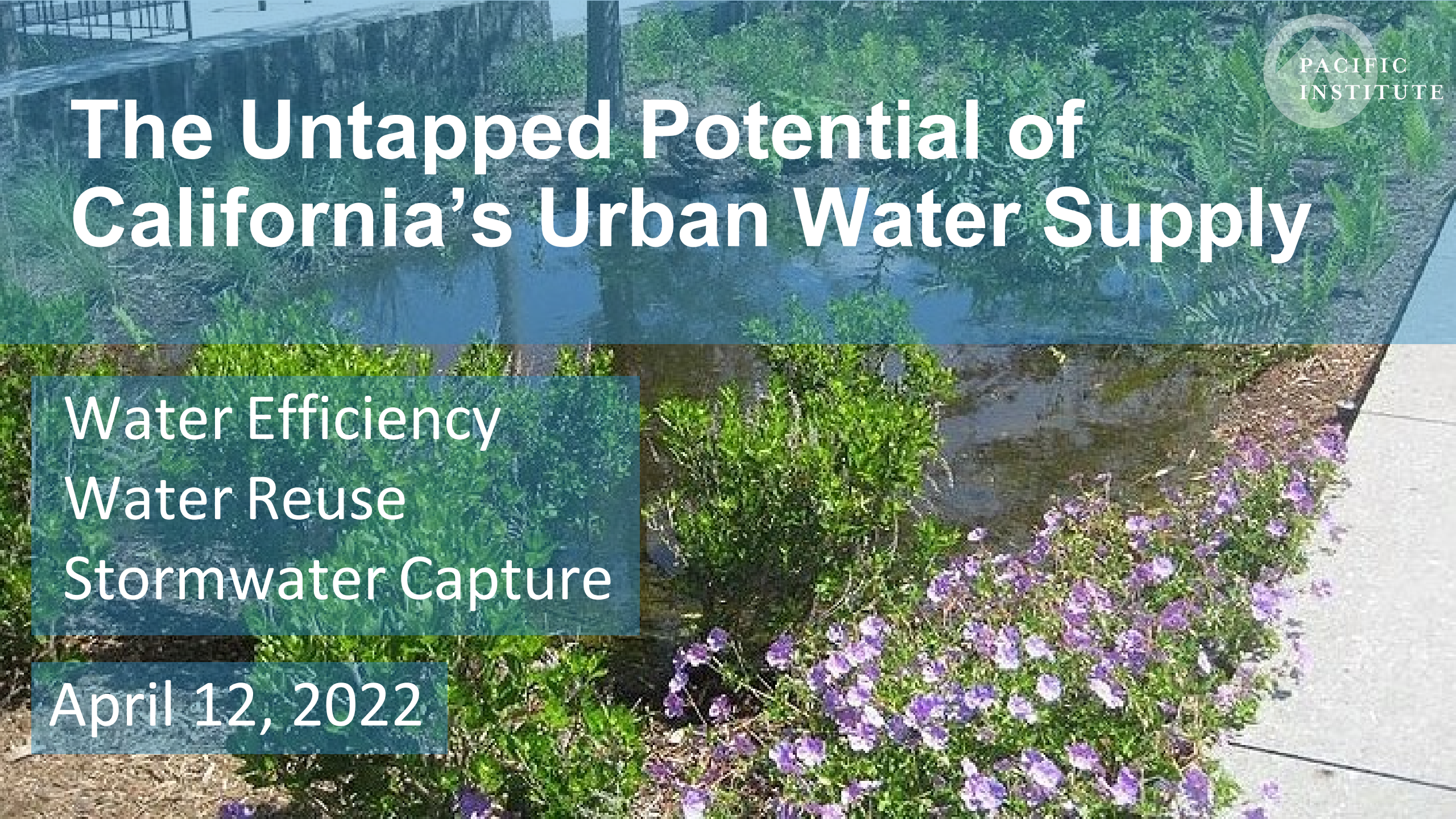
Staff Review of "Untapped Potential of California's Urban Water Supply: Water Efficiency, Water Reuse, and Stormwater Capture" by the Pacific Institute

Staff Recommendation

Receive and File

About the Pacific Institute

- **The Pacific Institute** is an independent, non-partisan global water think tank, founded in 1987 and based in Oakland, California, with staff around the world.
- **Mission:** to create and advance solutions to the world's most pressing water challenges.
- **2030 organizational goal:** to catalyze the transformation to water resilience in the face of climate change.
  - **Water Resilience:** "The ability of water systems to function so that nature and people, including those on the frontlines and disproportionately impacted, thrive under shocks, stresses, and change."



The Untapped Potential of California's Urban Water Supply

Water Efficiency
Water Reuse
Stormwater Capture

April 12, 2022

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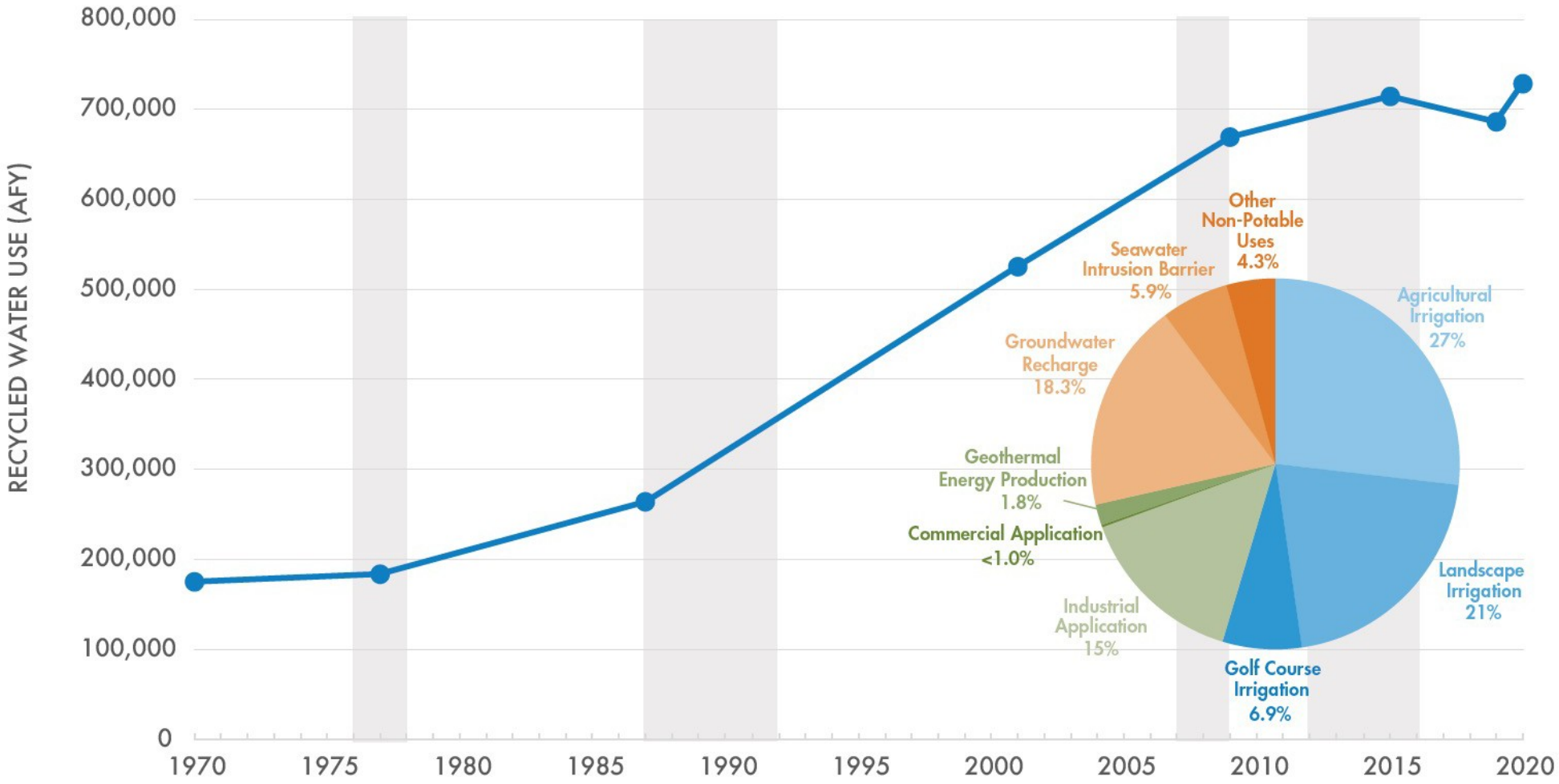
Recycled Water Potential

Recycled Water Has Increased



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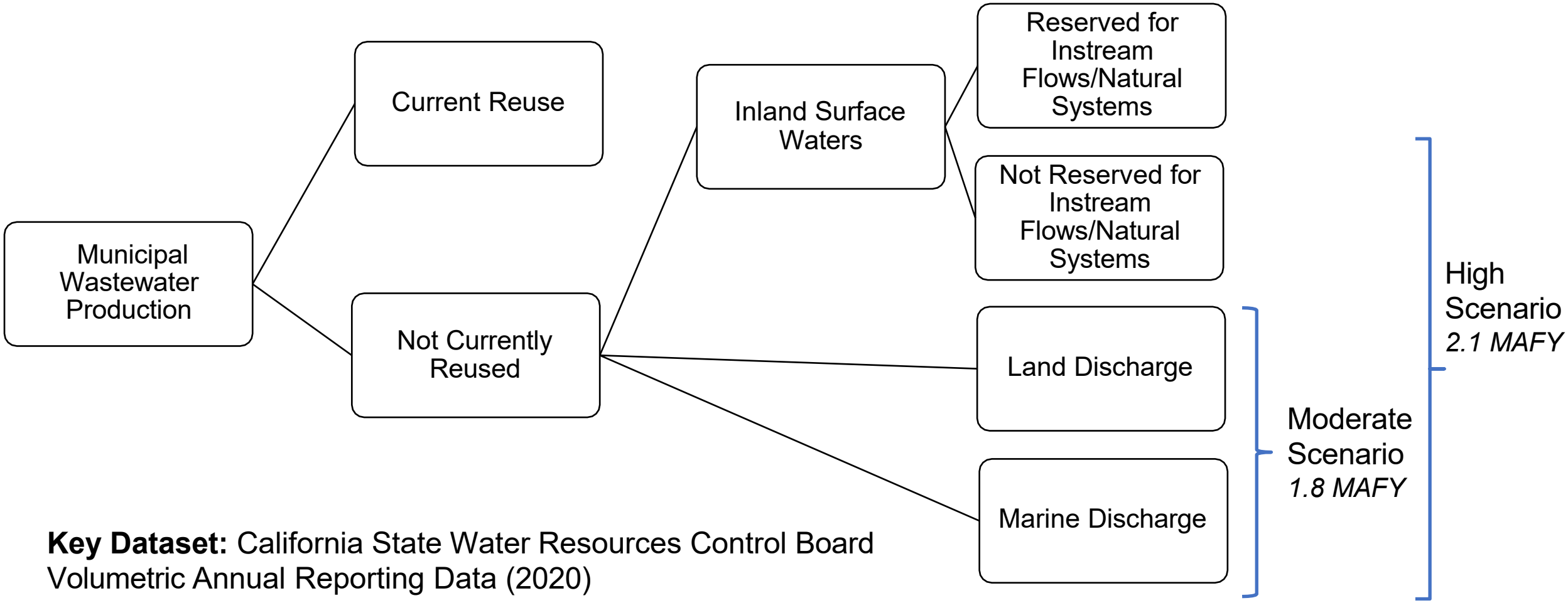
Identifying/Estimating Water Reuse Potential



Key Dataset: California State Water Resources Control Board Volumetric Annual Reporting Data (2020)

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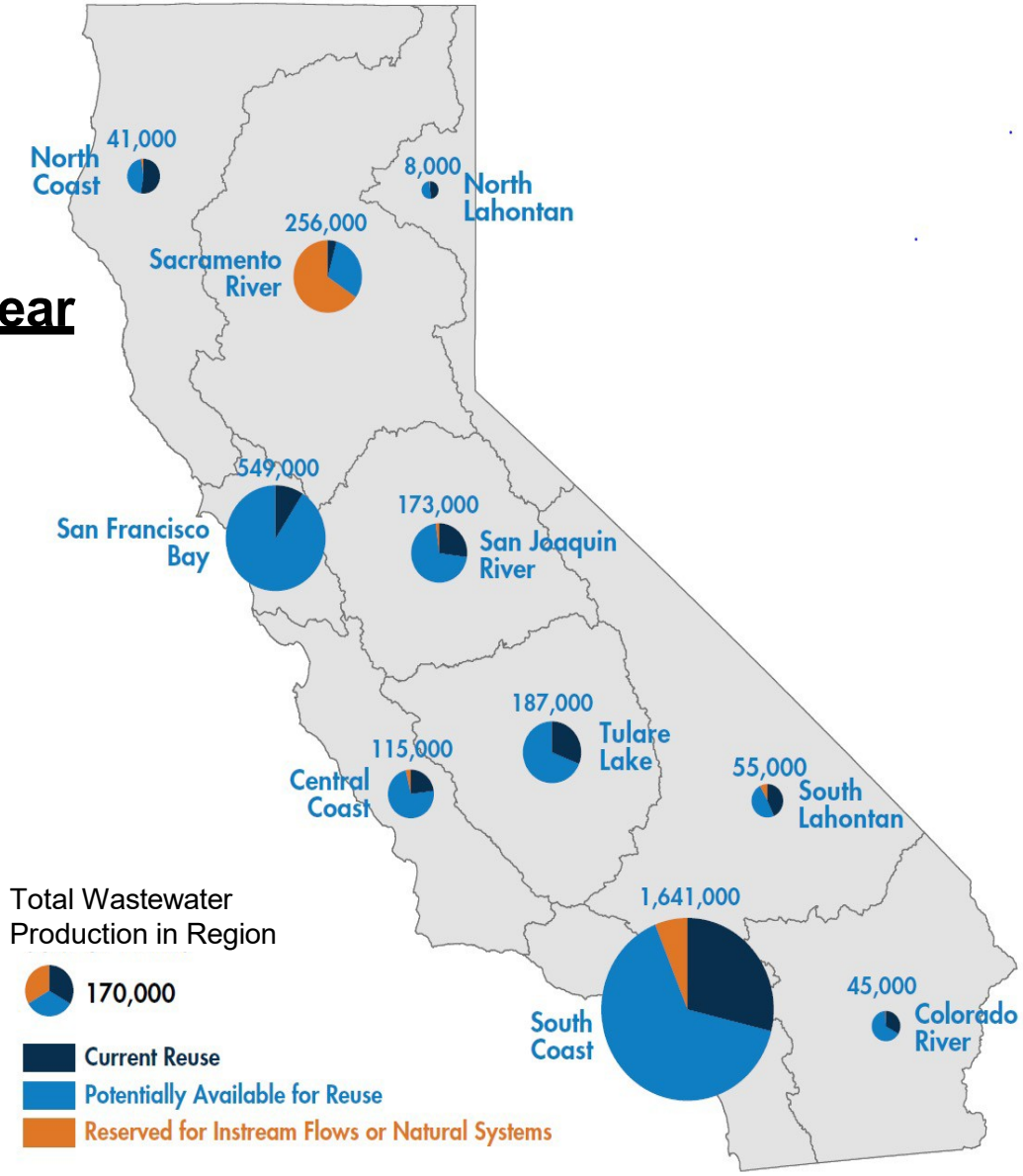
Water Reuse Potential by Region

Statewide potential: 1.8 million to 2.1 million acre-feet per year

Hydrologic Region	Currently Reused (AFY)	Effluent Reserved for Instream Flows or Natural Systems (AFY)	Potentially Available for Reuse (AFY)	TOTAL Effluent (AFY)	Currently Reused (%)	Potentially Available for Reuse (%)
Central Coast	26,000	4,000	84,000	**115,000**	23	73
Colorado River	15,000	0	30,000	**45,000**	33	66
North Coast	21,000	1,000	18,000	**41,000**	52	45
North Lahontan	4,000	0	4,000	**8,000**	48	51
Sacramento River	11,000	168,000	78,000	**256,000**	4	30
San Francisco Bay	49,000	3,000	497,000	**549,000**	9	90
San Joaquin River	47,000	4,000	123,000	**173,000**	27	71
South Coast	473,000	101,000	1,067,000	**1,641,000**	29	65
South Lahontan	24,000	4,000	27,000	**55,000**	43	49
Tulare Lake	58,000	0	129,000	**187,000**	31	69
TOTAL	**729,000**	**285,000**	**2,057,000**	**3,071,000**	**24**	**67**

Notes: Not available for reuse is defined as water allocated to instream flows or natural systems. Value of total effluent in this table differs from Figure 12 because of reporting discrepancies between water supplied to recycled water producers and the quantity of water recycled water producers reported reusing.



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Considerations – Recycled Water

Evaluation of Need

- Existing water supplies
- Planned water supplies

Evaluation of Cost

- Cost of recycled water vs. planned water supplies

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[Urban] Stormwater Capture Potential

[Urban] Stormwater Capture Potential by Region

Hydrologic Region	Urban Stormwater Capture Potential (AFY)		
	Low Precipitation	Medium Precipitation	High Precipitation
Central Coast	20,000	89,000	140,000
Colorado River	11,000	11,000	36,000
North Coast	31,000	82,000	130,000
North Lahontan	3,000	7,000	10,000
Sacramento River	84,000	250,000	350,000
San Francisco Bay	85,000	300,000	460,000
San Joaquin River	40,000	110,000	170,000
South Coast	260,000	620,000	1,400,000
South Lahontan	12,000	23,000	63,000
Tulare Lake	34,000	90,000	180,000
Total	**580,000**	**1,600,000**	**3,000,000**

Notes: Numbers are rounded to two significant figures. Totals may not equal column sums due to rounding.

Considerations – Stormwater Capture

1. Evaluation of Need
2. Evaluation of strategy(s) to collect stormwater
3. Evaluation of Potential
4. Cost of stormwater capture vs. other potential supplies

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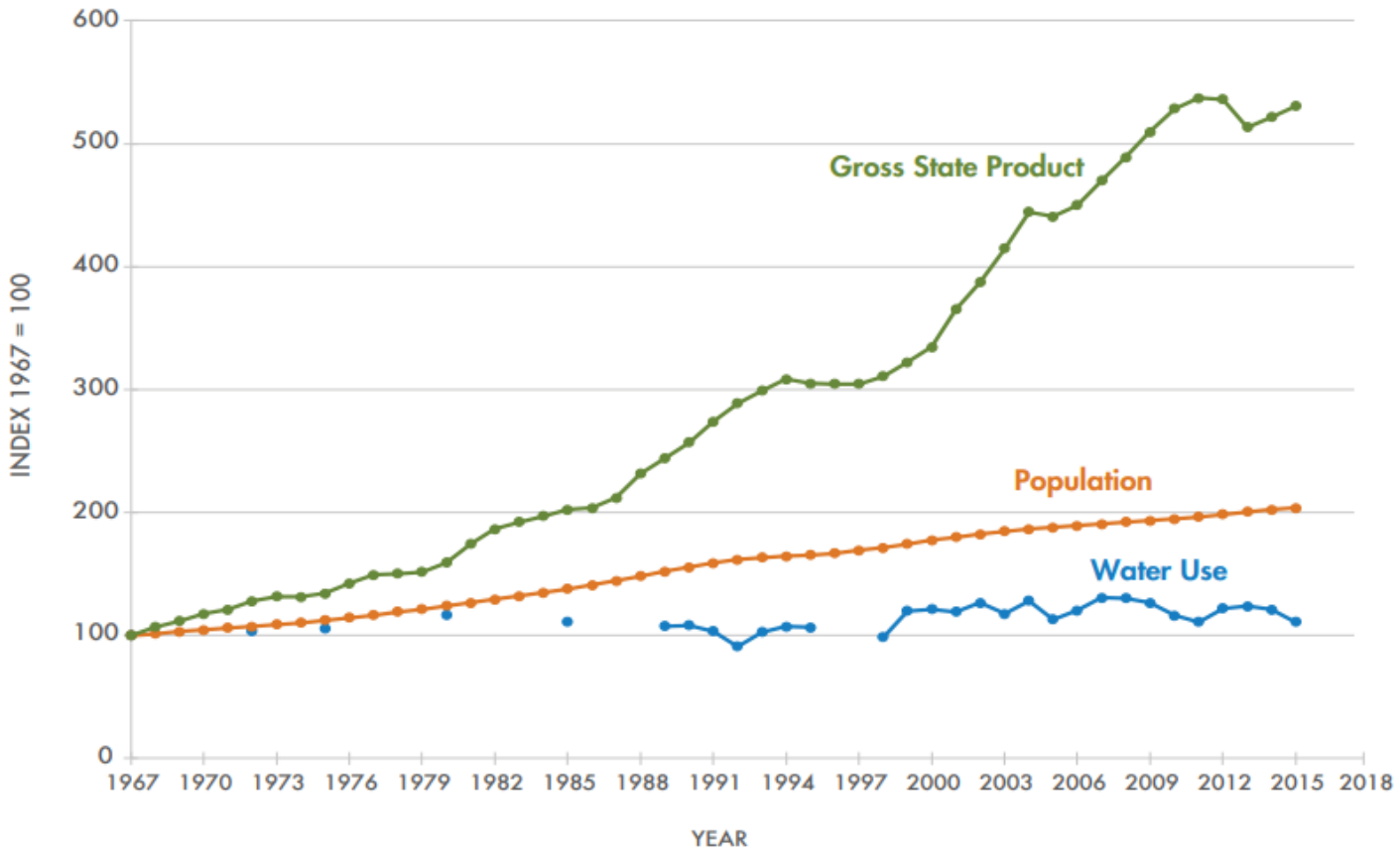
Water Use Efficiency

CA has made great progress toward efficient water use

Figure 1. California Population, Gross State Product, and Water Use Indices, 1967-2016



Note: All values are indexed to their 1967 values to allow for comparison. Statewide water use data are not yet available for 2017 through the present.
Data sources: Water use data from California Department of Water Resources (DWR) 1964; 1970; 2018a; 2019b. Population data from California Department of Finance 2018. Gross state product from United States Bureau of Economic Analysis 2019.

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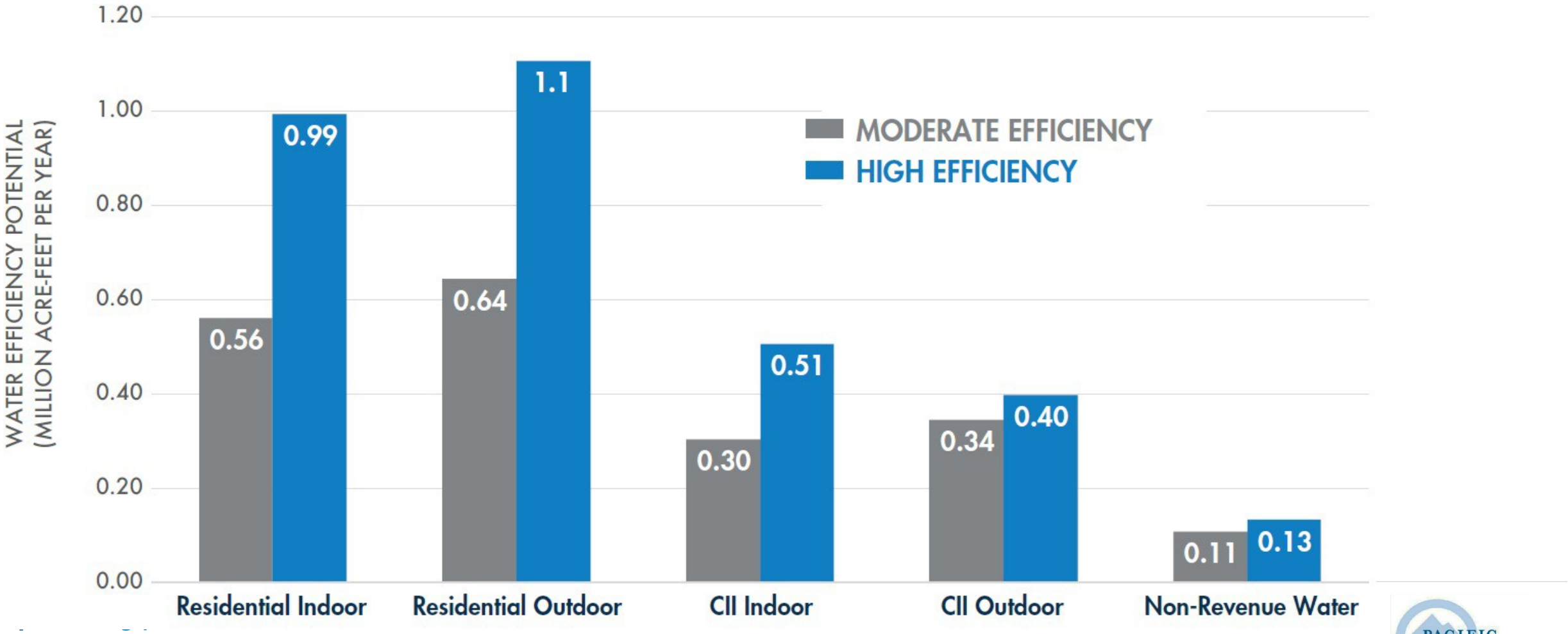
Estimating Water Efficiency Potential

- The **current water use baseline** was developed from the **Electronic Annual Reports (EARs)** submitted by water agencies for 2017 to 2019.
- Two water-savings scenarios were developed:
  - **Moderate efficiency** based on full compliance with current standards for appliances and fixtures (SB 407), landscapes (MWELO), and distribution leaks (SB 555).
  - **High efficiency** based on ***available*** leading-edge technologies and practices that use less water than current standards.

Water Efficiency Potential by Sector

Statewide potential: 2.0 million to 3.1 million acre-feet per year



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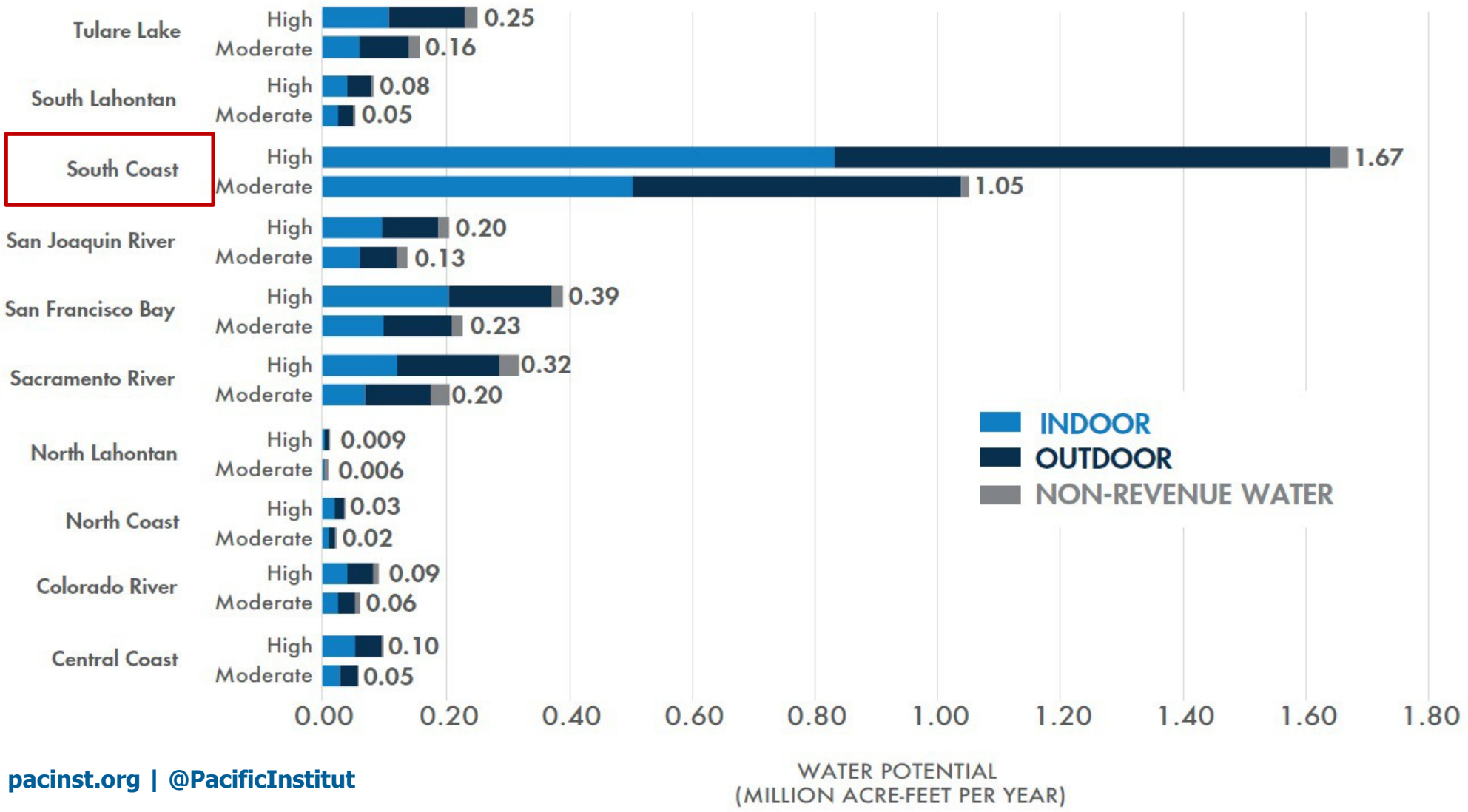
Water Efficiency Potential by Region



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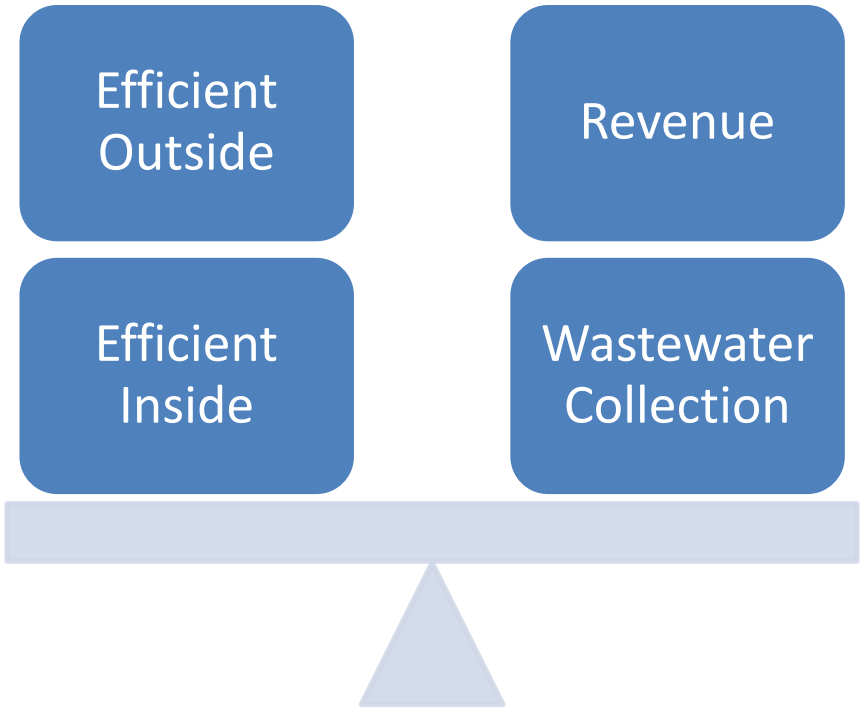
Other Considerations – Water Use Efficiency (WUE)

1. Evaluation of WUE potential (finding the “Sweet Spot”)
   a. Reduction in water use can have impacts on the wastewater collection system
   b. Reduction in water use reduces operating revenue
2. Evaluation of WUE strategies
3. Evaluation of non-revenue water (leaks)
   1. Not all leaks represent water loss



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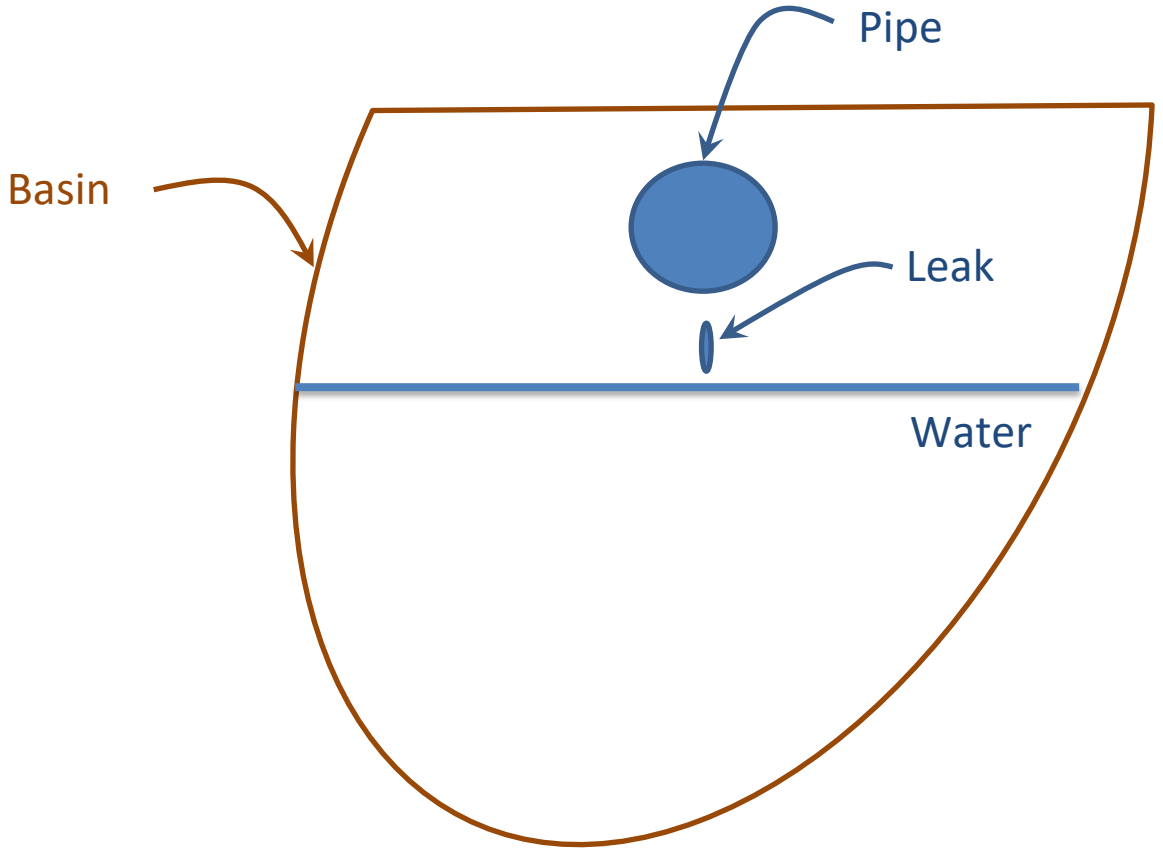
Consideration - Leaks



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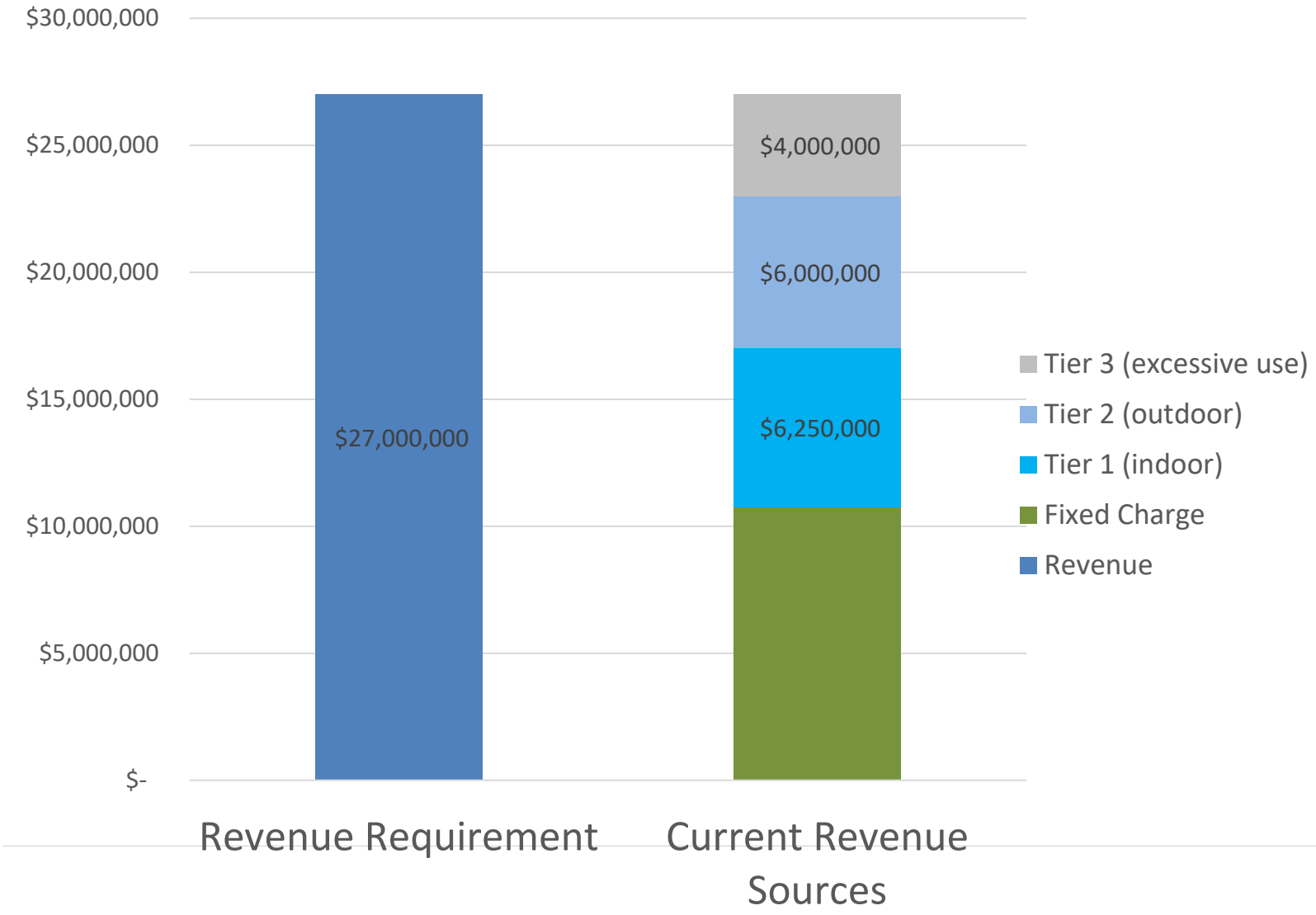
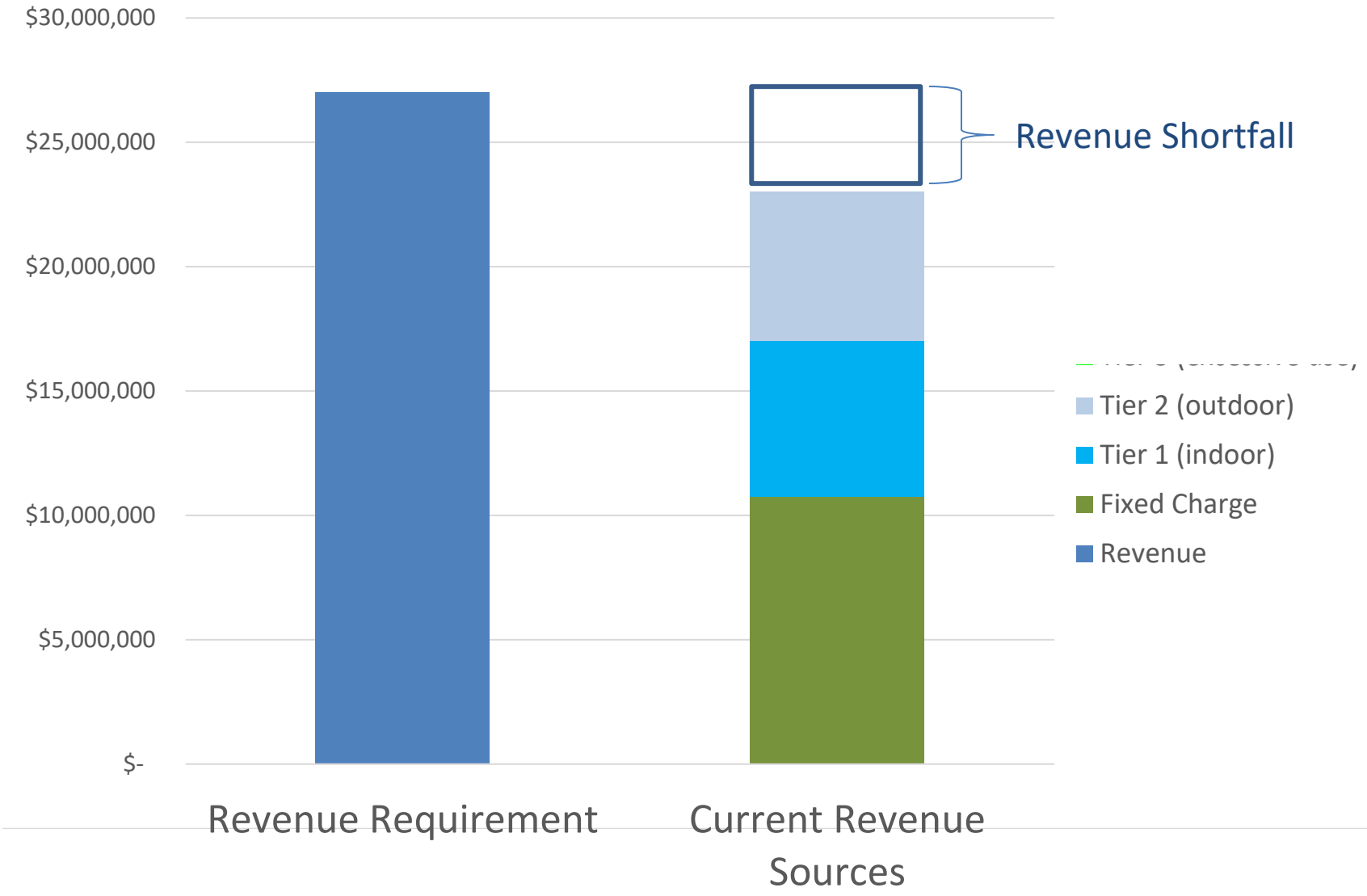
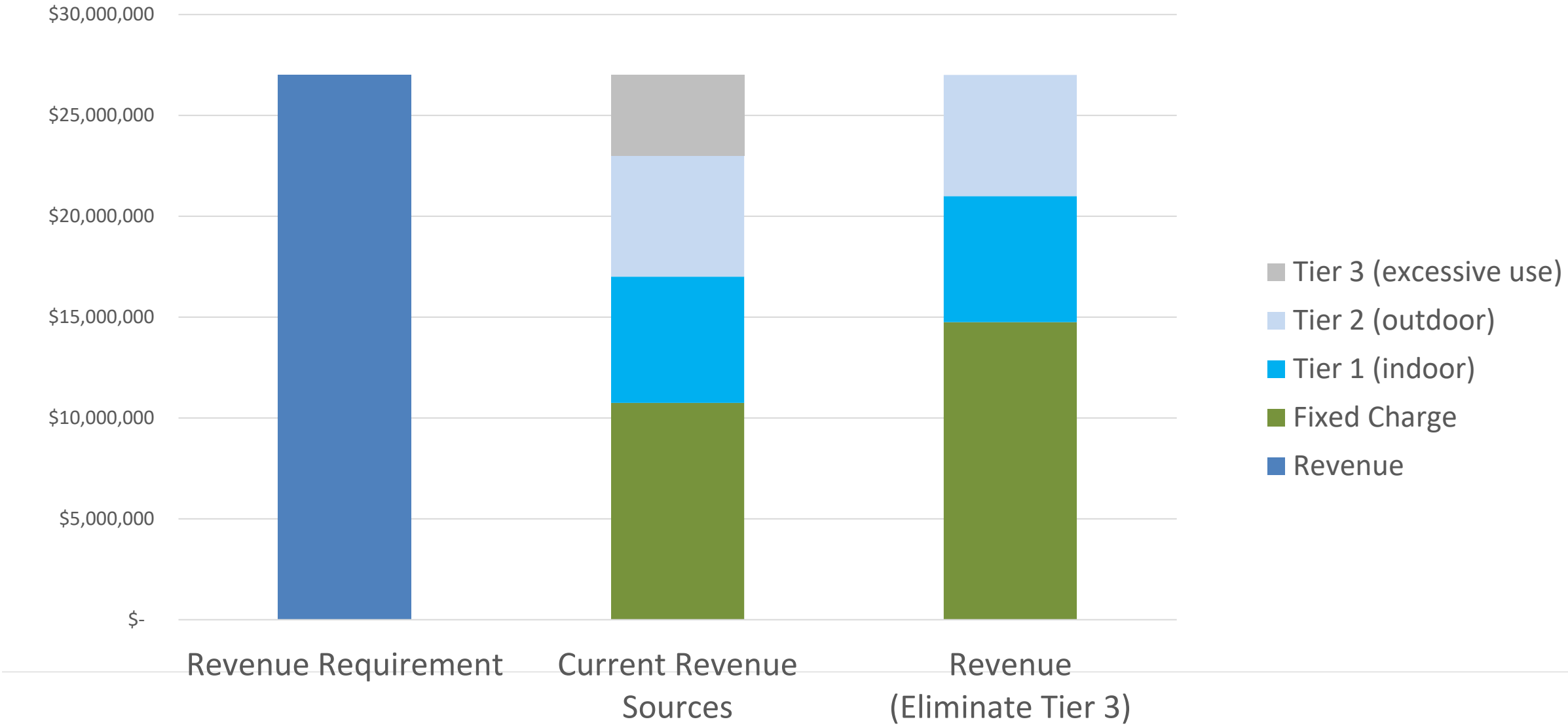
Revenue Sources for a Retail Water Agency



Revenue Impact of Eliminating Tier 3 Through Water Use Efficiency



Net Effect: Revenue Shortfall Passed on to All Customers Including Efficient Customers



Conclusions

- ✓ The report provides high-level estimates of statewide potential for water reuse, stormwater capture and water use efficiency.
- ✓ Each region needs to evaluate these strategies based upon their unique water supply conditions
- ✓ Our region's water supply plan, the Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan (IRUWMP) includes all of these strategies
- ✓ Our region has evaluated these strategies and is developing them based upon need, cost-effectiveness and other factors

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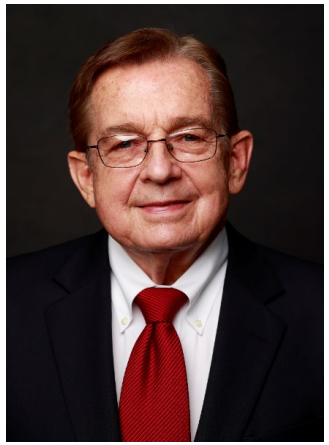
Director Comments and Discussion

Paul Kielhold
President

June Hayes
Vice President



T. Milford Harrison
Treasurer

Gil J. Botello
Director

Susan Longville
Director

Staff Recommendation

Receive and File

Discussion Item 4.2

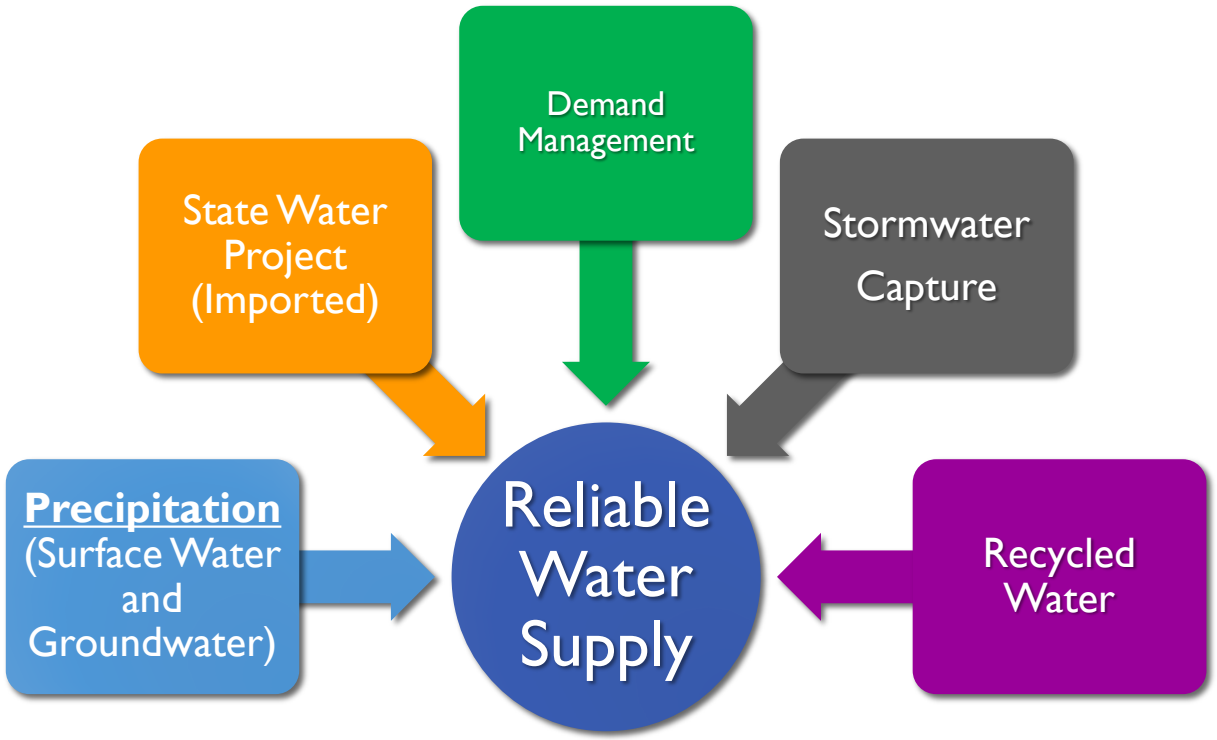
Heather Dyer, MS, MBA – Chief Executive Officer/General Manager

Consider Purchasing Up to 5,000 Acre-Feet of Water Through a Demand Management/Water Conservation Program in Fiscal Year 2022-23

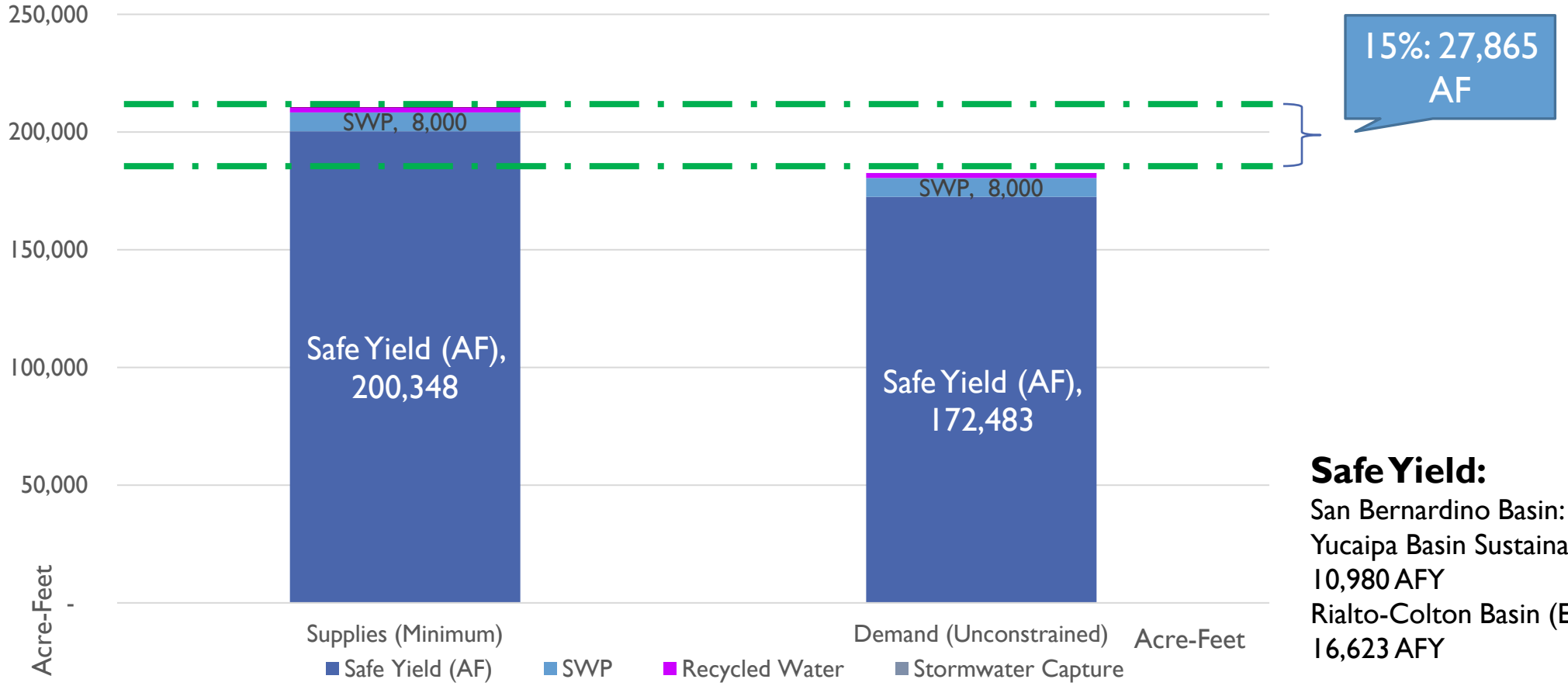
Staff Recommendation

Authorize staff to budget $895,000 in the Fiscal Year 2022-23 General Fund Budget to purchase up to 5,000 acre-feet through a Valley District Demand Management/Water Conservation Program.

Water Supply Reliability through Demand Management



Water Supply and Demand (Water Budget 2022-2023)



Safe Yield:

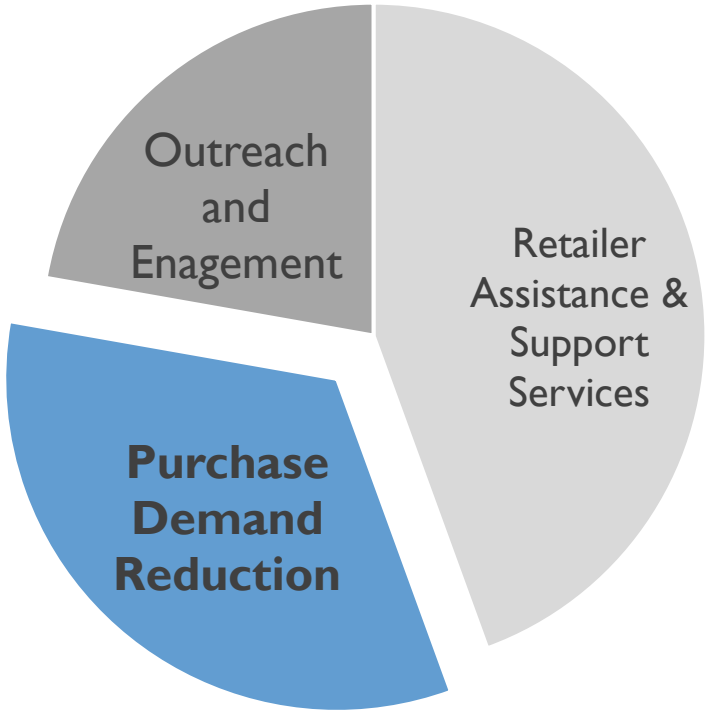
San Bernardino Basin: 172,745 AFY
Yucaipa Basin Sustainable Yield: 10,980 AFY
Rialto-Colton Basin (Estimated): 16,623 AFY

Valley Districts Demand Management Goals and Purpose

- Stretch supplemental water and groundwater supplies further through demand reduction
- Help retail agencies achieve their efficiency goals and state conservation regulations
  - Provide resources and technical assistance
  - Assist with program evaluation and analysis
  - Facilitate outreach and engagement efforts
- Build partnerships
- Design new programs and refine existing programs to achieve water savings

Demand Management Program

- **Purchase demand reduction**
  - Incentives
- **Retailer Assistance & Support Services**
  - Technical Assistance
  - Develop and implement new programs
  - Program evaluation
- **Outreach and Engagement**
  - Community Events and Sponsorships
  - Water conservation education
  - Partnerships
  - Engagement



Purchase Demand Reduction

- Purchase demand reduction for $179/AF (consistent with LRIP)
- Choice – Retail agencies may use incentive dollars any way that they choose.
  - Examples:
    - Device rebates
    - Education and outreach
    - Funding match for grants
    - Direct Install programs
    - Pilot projects
    - Professional development
    - Innovative projects
    - Smart metering
    - Water loss and leak detection
- Staff provides assistance, as needed

Purchase Demand Reduction Budget Request

- Purchase Demand Reduction – up to 5,000 AF at a total cost of $895,000
- More than double last year's budget
- Staff feels this is a realistic goal and a good use of funds, given the continued drought conditions both in Northern California (Year 2) and locally (Year 24)

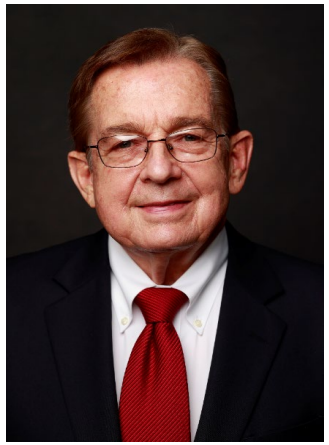
Aligning with our Strategic Plan

- Investing Strategically
  - Collaborative
  - Resourceful
  - Sustainable
  - Diverse
  - Innovative
  - Trustworthy
  - Cost Effective

Director Comments and Discussion

Paul Kielhold
President

June Hayes
Vice President



T. Milford Harrison
Treasurer

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Director

Staff Recommendation

Authorize staff to budget $895,000 in the Fiscal Year 2022-23 General Fund Budget to purchase up to 5,000 acre-feet through the Valley District Water Conservation Program.

Future Business

Adjournment