



**San Diego County
Water Authority**
Our Region's Trusted
Water Leader

Regional Conveyance System Study Alternatives Economic Session

October 27, 2020



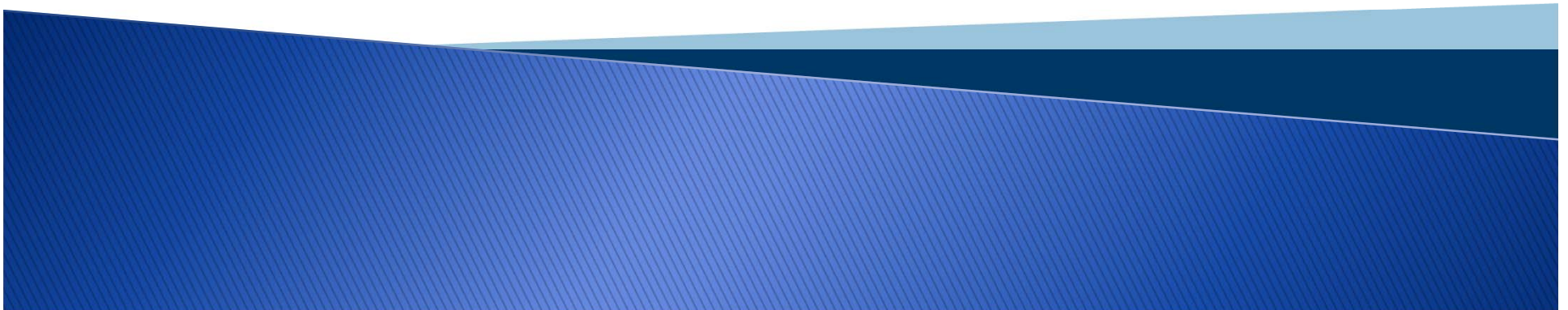
Introductions

- **Welcome:** Sandy Kerl, General Manager, San Diego County Water Authority 5 minutes
- **Overview:** Dan Denham, Deputy General Manager, San Diego County Water Authority 5 minutes
- **Economics:** Bob Campbell, Principal at Water Resource Consultants; Rodney T. Smith, Ph.D., President of Stratecon Inc. 50 minutes
- **Questions** 60 minutes



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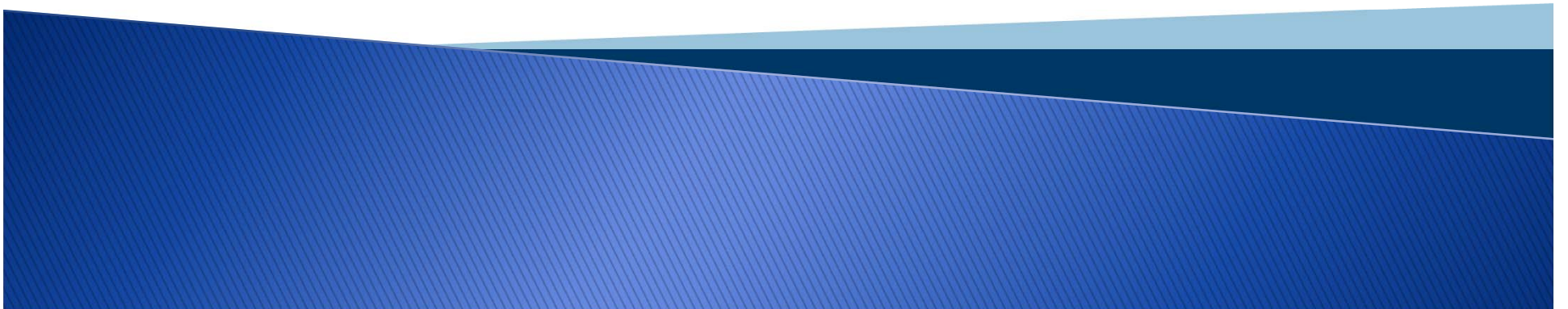
Welcome





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Background



QSA Conserved Water Sustains San Diego County



- More than half of county's water is from 2003 QSA conservation agreement
- Agreement helps sustainably manage Colorado River
- QSA supplies are complementary to local supplies; both are necessary
- QSA supplies are lowest-cost source and highly reliable

Water Authority Board Must Make Long-Term Decision

- IID conserved water transfer initial term ends in 2047 with potential extension
- Exchange Agreement with MWD ends in 2047
- Water Authority Board must decide now in order to be prepared for and protect future generations

What are the transportation alternatives?

Alternative 1: Pay MWD to deliver water

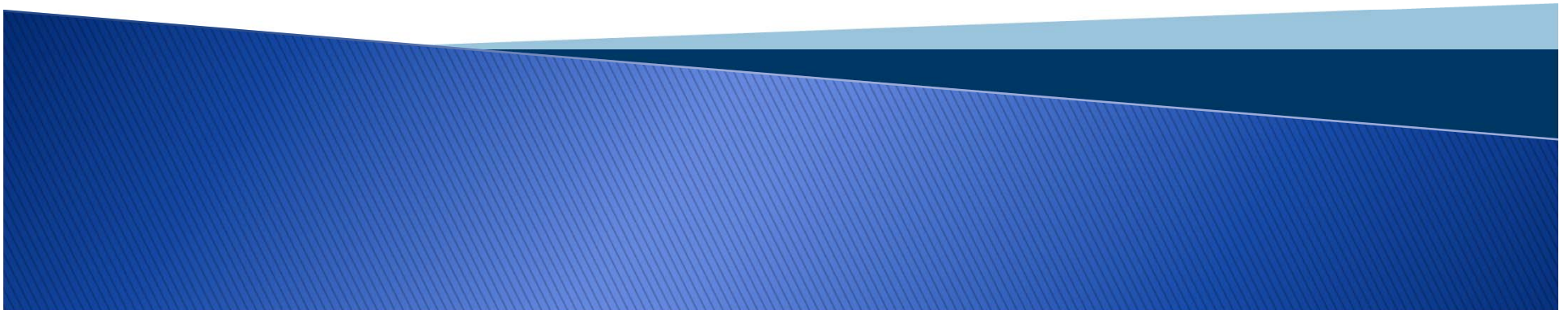
Alternative 2: Build and own facilities

The Regional Conveyance System Feasibility Study is analyzing and comparing these two alternatives for delivery of our QSA water supply



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Economic Considerations





Economic Analysis and Risk Assessment of Water Delivery Alternatives

BOB CAMPBELL, PRINCIPAL, WATER RESOURCE
CONSULTANTS, INC.

RODNEY T. SMITH, PH.D., PRESIDENT, STRATECON, INC.

THE ISSUE AND THE CHOICES

The Issue

- Should the Water Authority Board of Directors conduct a **feasibility study** of **alternatives** for future delivery of QSA Water?

The Choices

- ALTERNATIVE 1 - RENTAL AGREEMENT – Rent Conveyance from Metropolitan Water District of Southern California (MWD)
- OR
- ALTERNATIVE 2 – OWN - Construct and own a Regional Conveyance System (RCS)

Alternative 1: Rental Agreement with MWD

Subject to MWD unregulated rates and political dynamics

MWD Exchange Agreement costs have increased more than 30% in past four years

The Water Authority will pay rent of **\$27.6 Billion through 2112**

At end of term, Water Authority's only "asset" is more preferential rights in MWD

Alternative 2: Own a RCS

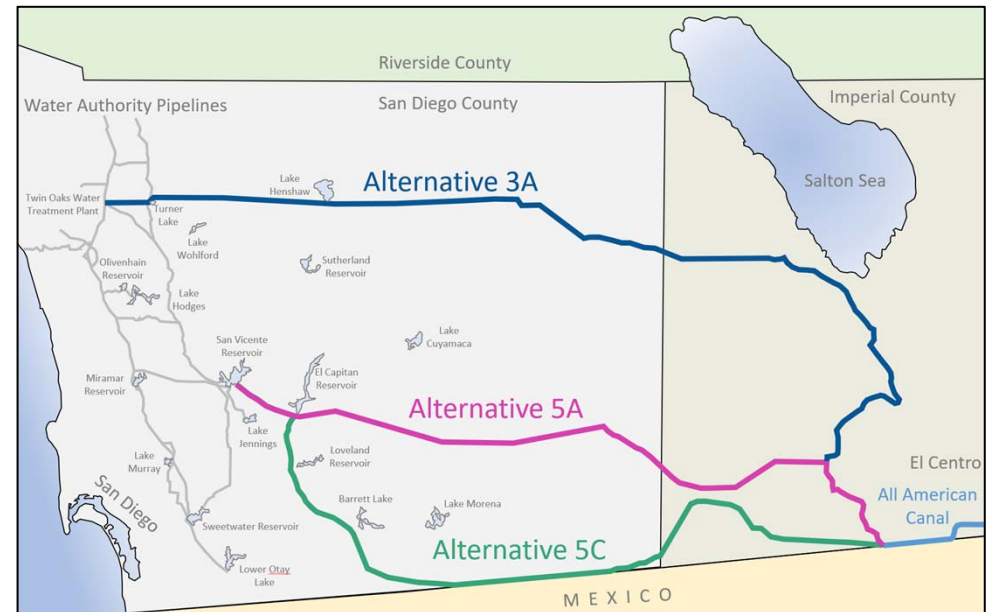
Build and own a conveyance, treatment, and storage delivery system

Provide local control

Facilitate broad regional multi-benefit opportunities with partners

Mitigate risk of cost uncertainty of MWD rates and charges

Water Authority owns delivery system and other assets at estimated cost of **\$25.6 Billion through 2112**



PHASE A CONCLUSIONS

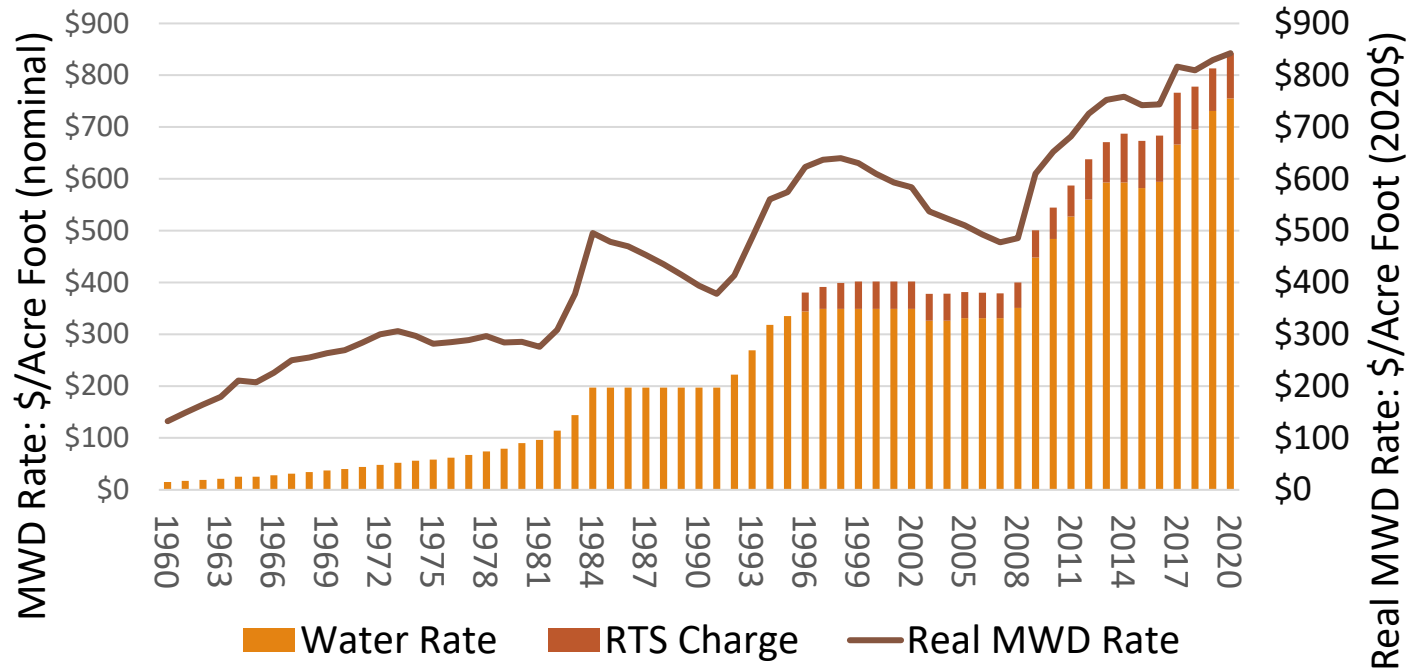
Phase A looked at technical aspects of project definition and costs, finding:

- QSA supplies are a low-cost base supply for the region
- IID Transfer Water and Canal Lining Water higher priority than MWD's Colorado River rights
- Alternative 2: Owning a RCS :
 - Project is viable and feasible
 - Economically competitive with other options with a potential for long-term savings
 - Several potential partnership opportunities

Comprehensive economic, financial, and risk analysis recommended for Phase B

MWD Rates Far Outpace Inflation

History of MWD Untreated Water Rates



Annual Increases in Metropolitan's Water Rate by Eras

Cumulative Annual Growth Rate	1960-1984	1985-2007	2008-2020	1960-2020
MWD Water Rate	11.3%	3.0%	6.4%	6.9%
Inflation	5.4%	3.0%	1.6%	3.7%
Real MWD Water Rate	5.7%	0.0%	4.7%	3.1%

KEY DRIVERS
THAT COULD
AFFECT
FUTURE
MWD RATES

Deteriorating MWD Yields from Colorado River and SWP

Extension of SWP Contract

Delta Conveyance project

SWP aqueduct land subsidence

MWD Regional Recycled Water Program

MWD and SWP asset management programs

MWD Local Resource Program

MWD reduced water demands

Disputes over MWD cost allocation

PHASE B ECONOMIC DUE DILIGENCE

Economic analysis and risk assessment of:

- Future MWD water rates and supply reliability
- Future SDCWA water rates and supply reliability
- Comparative analysis of SDCWA future with MWD conveyance (under Exchange Agreement or MWD proposal) versus RCS

Rigorous Analysis of Risk Factors

Use Risk Assessment and Control Framework to address uncertainty of future projections

Integrate findings into an RCS Decision Model

Risk Factor - MWD's Cost Structure

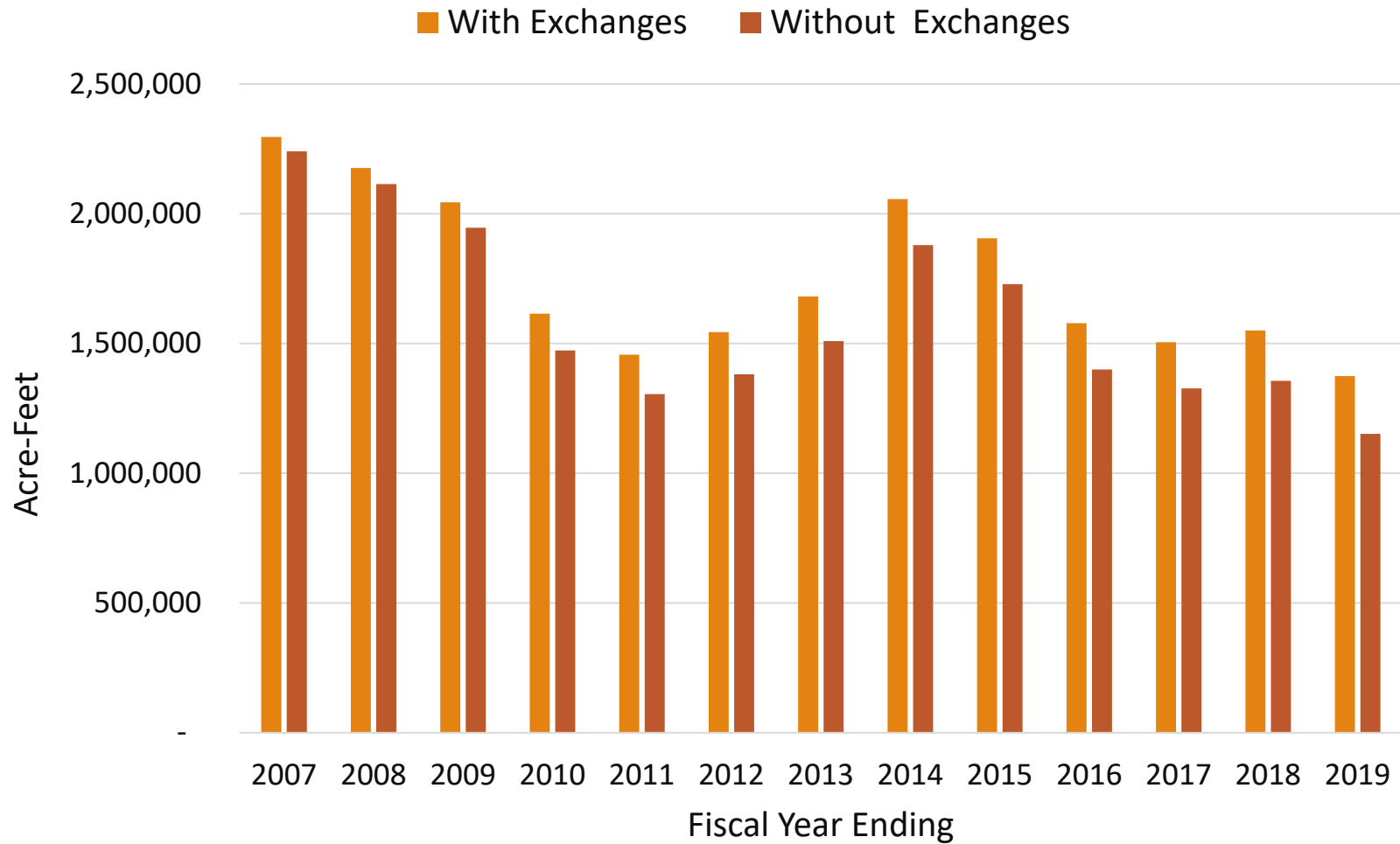
- Fixed costs
 - Cost escalation of existing assets
 - Asset replacement costs
 - Cost of new water supplies
 - Multi-billion-dollar regional supply program commitments
 - Delta Conveyance Project
 - State Water Project contract extension

- Variable costs
 - Energy intensity in escalating state market

Risk Factor - MWD's Demands

- Water sales
 - Member agency supply diversification
 - Recession
 - Declining demands driving unit costs up

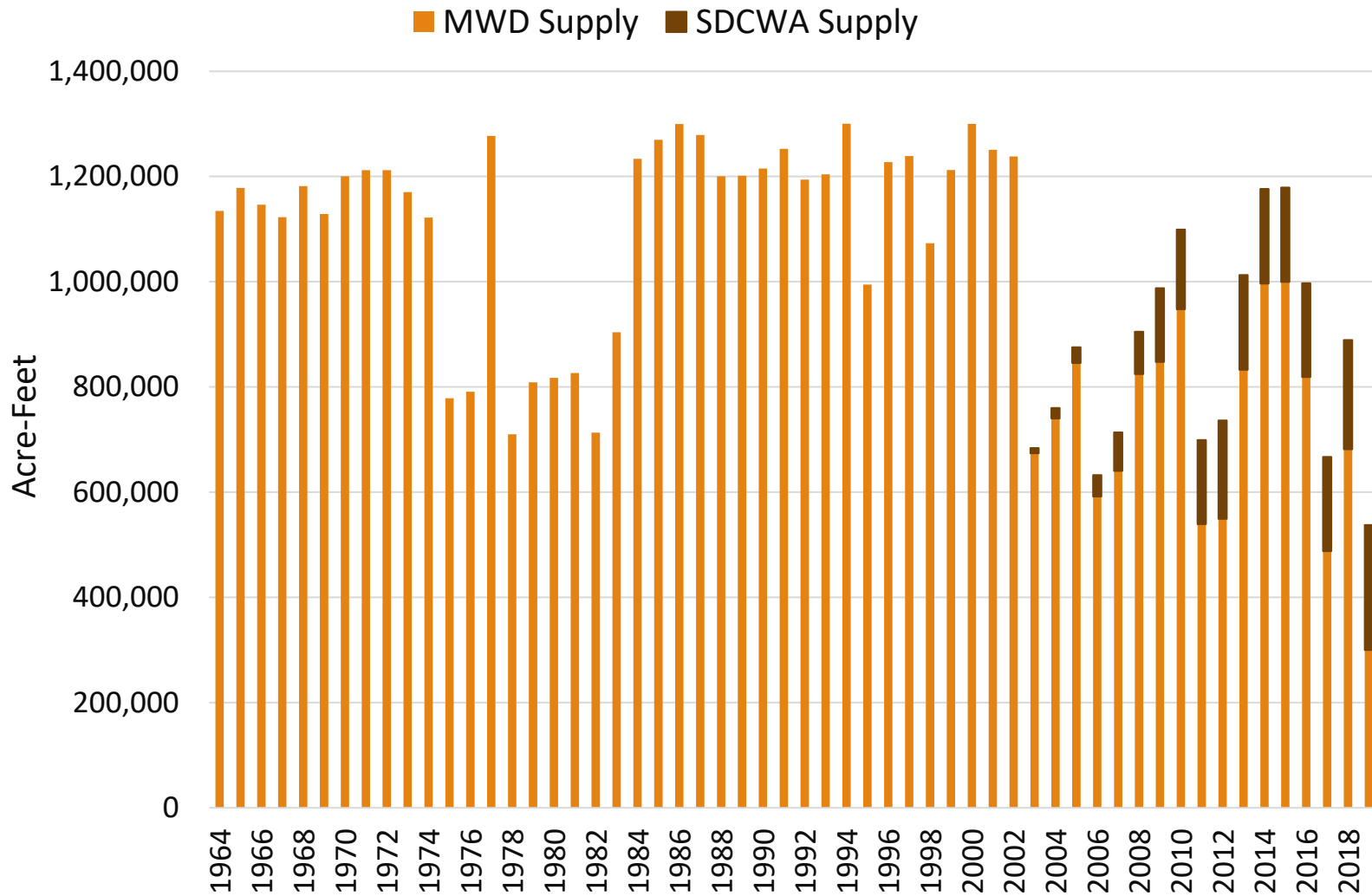
MWD Total Water Sales



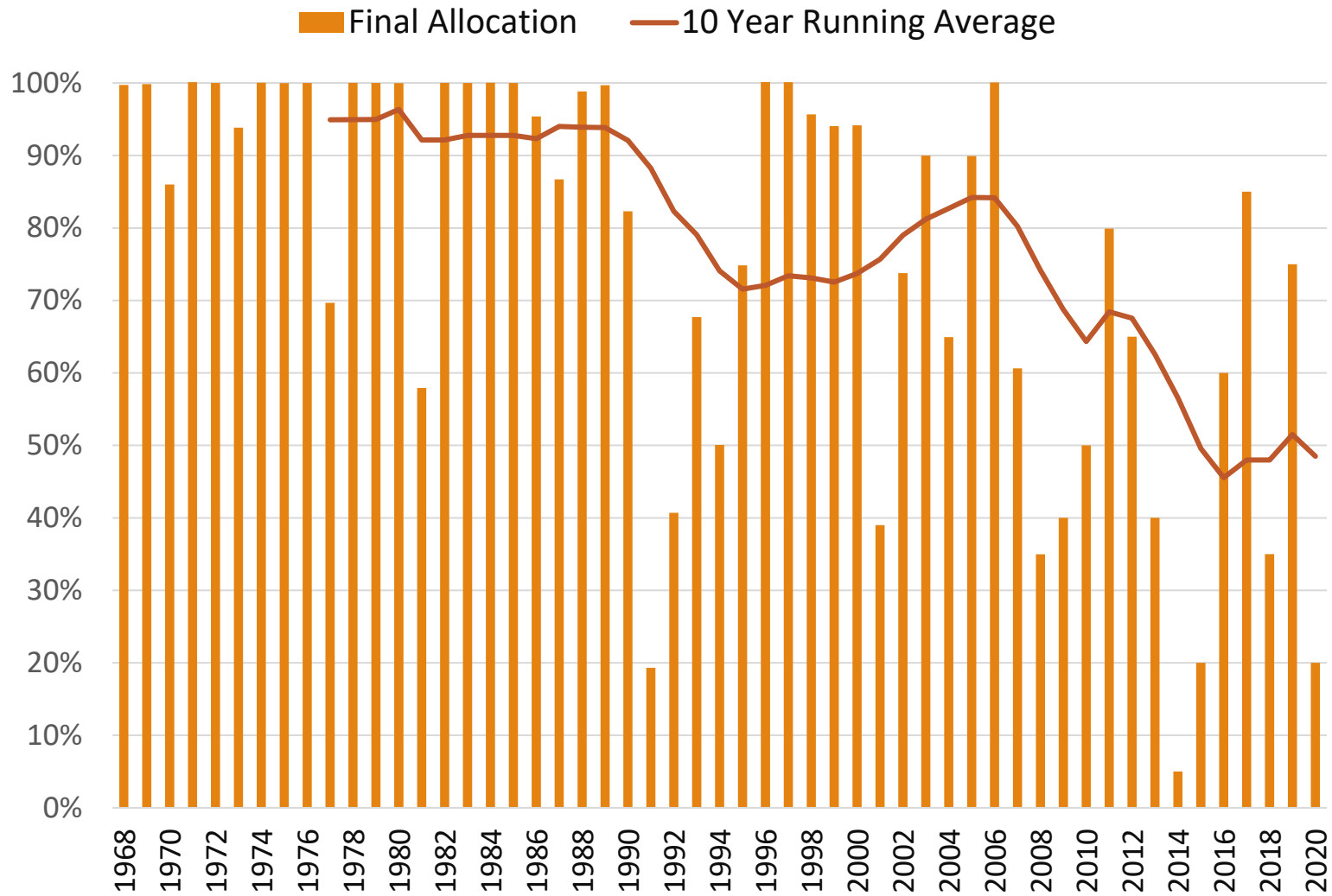
Risk Factor - MWD's Supply Reliability

- Reliability
 - Colorado River sustainability
 - Colorado River priority
 - Continued demands on Bay-Delta
 - Speed and magnitude of climate change

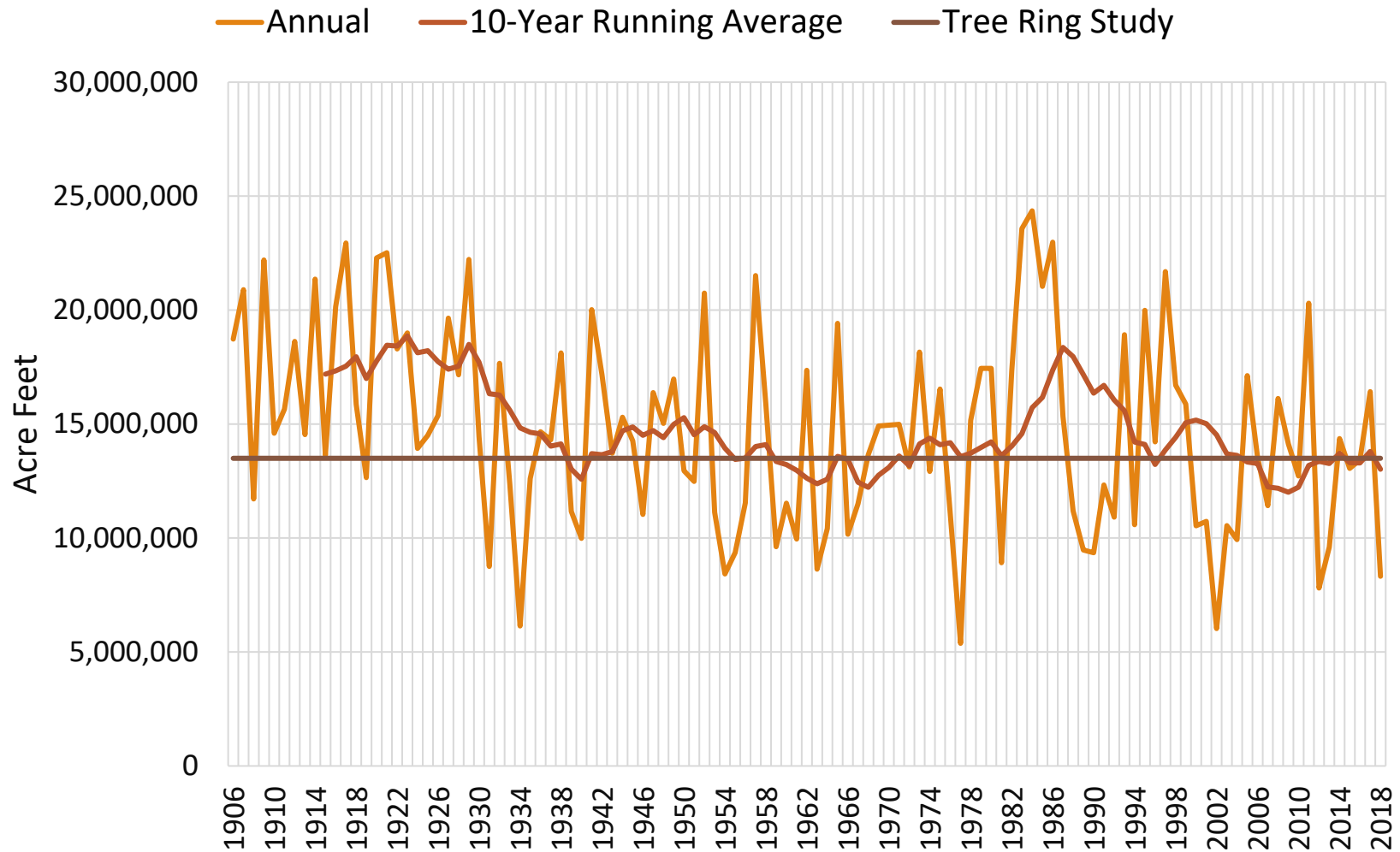
Colorado River Water Conveyed Through Colorado River Aqueduct



State Water Project Allocation History



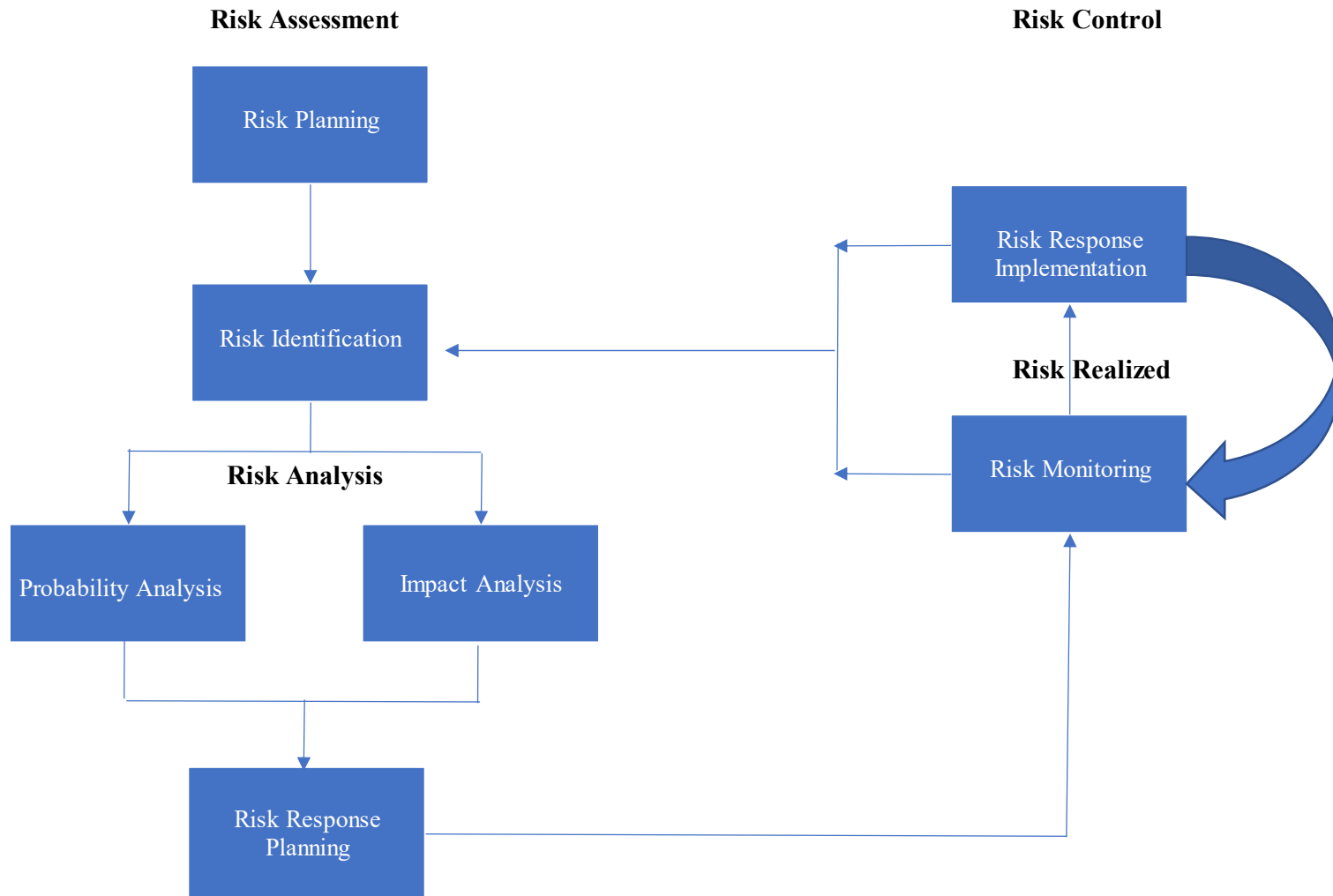
Annual Natural Flow of Colorado River Water at Lees Ferry



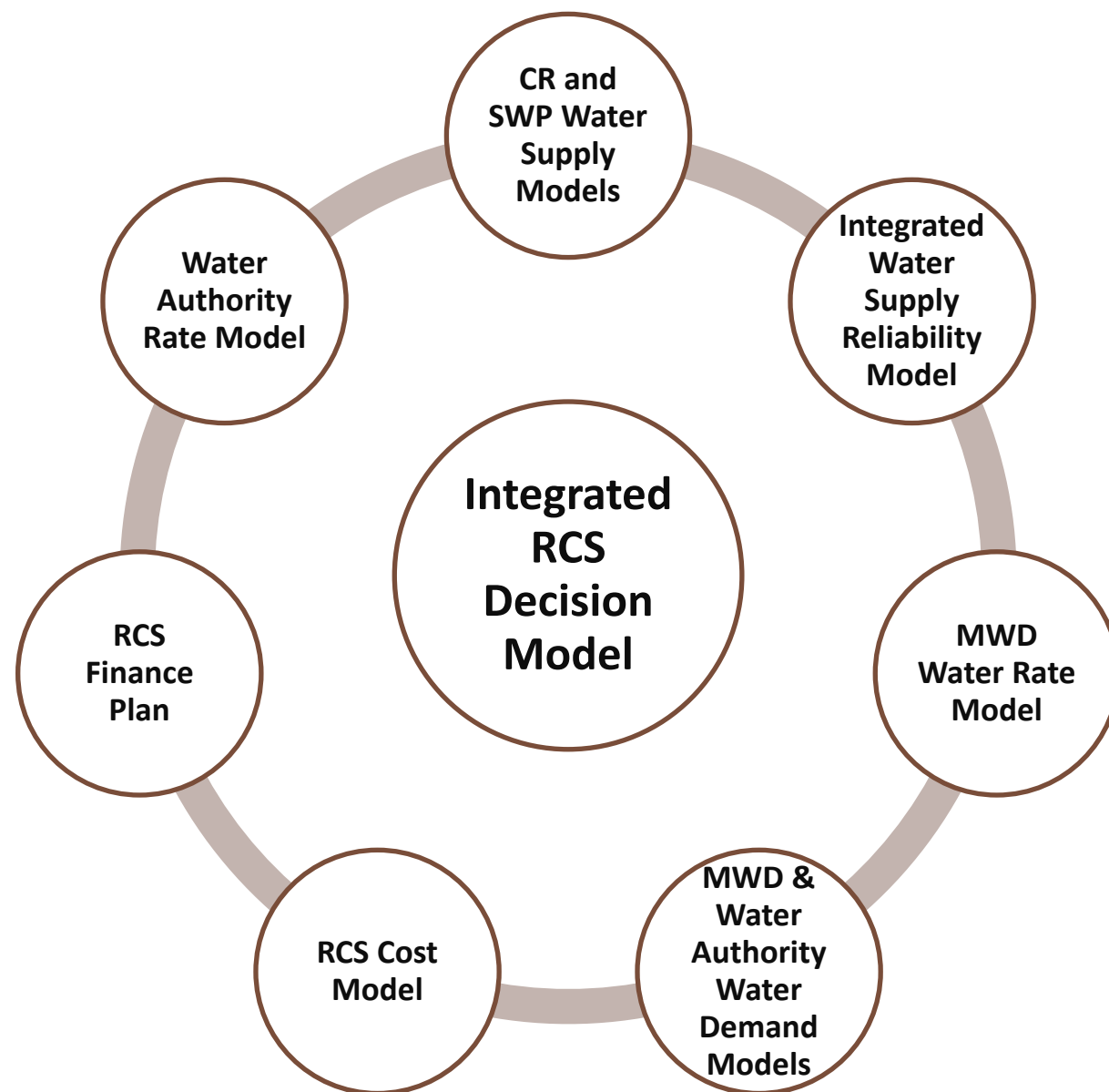
Risk Factor - MWD's Rate Structure

- Rate Structure
 - Use current MWD cost-of-service studies
 - Identify changes in principles
 - Rate restructuring probability and timing
 - Increased property taxes
 - Impact on member agencies

Risk Assessment and Control Framework



EACH
ALTERNATIVE
MUST BE
ADDRESSED
WITH THE
SAME RIGOR



IMPORTANT TO REMEMBER

The RCS is a feasibility study only

Phase A dealt with a limited number of issues

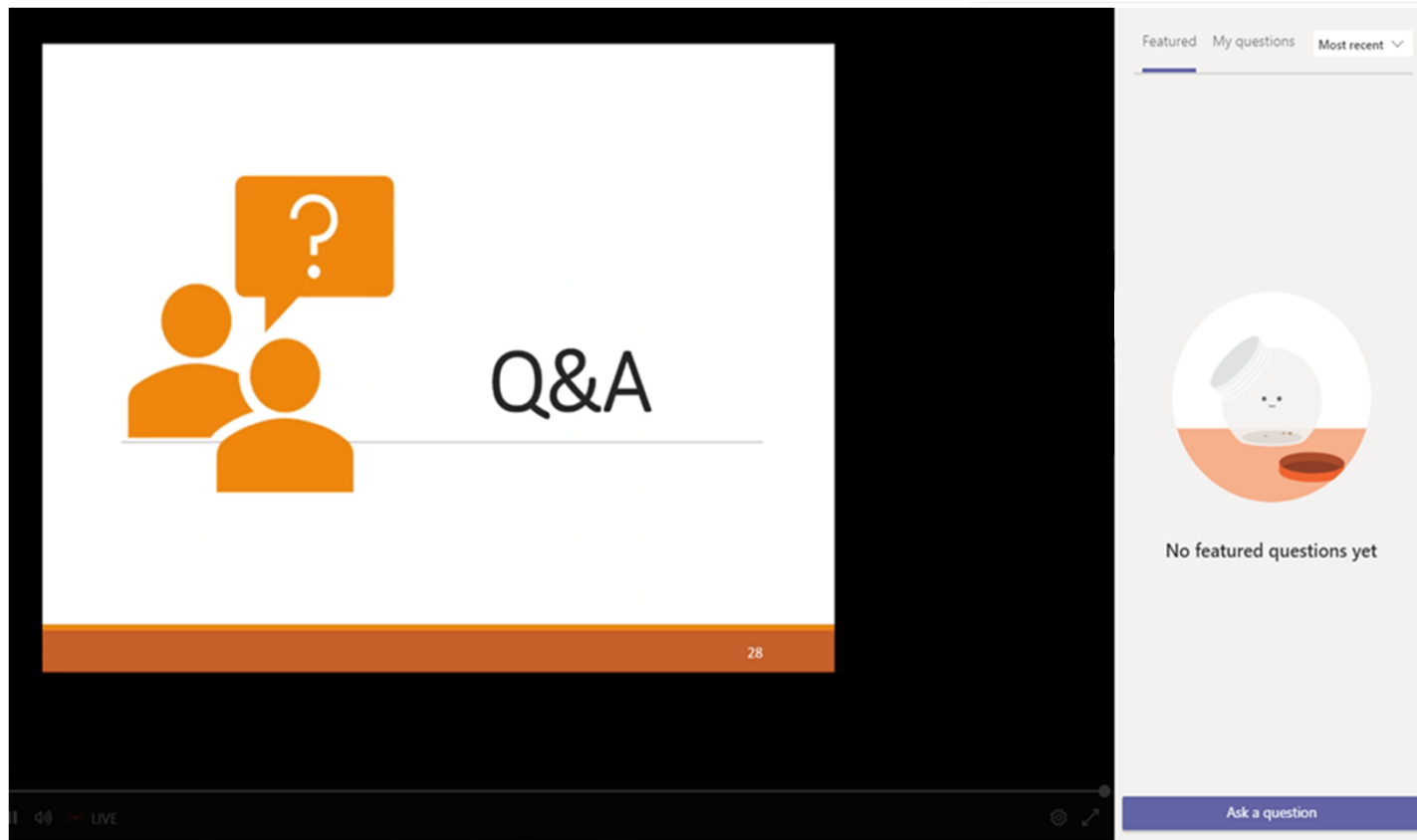
Phase B plans to include a complete economic analysis/risk assessment and comparison of the two alternatives

Approval of Phase B is not an approval of any project—it is merely board approval to proceed to Phase B because Phase A confirmed that a Regional Conveyance System Project may provide greater value and less risk for all San Diego ratepayers

A complete environmental review will be conducted at a later date should the board approve moving forward with the project

The board has a fiduciary obligation to ensure complete review of all alternatives

Live Event Q&A



Click the question mark icon at the top right of your screen

Click here to submit a question

Include your name and affiliation with questions.

You can also email questions to wateracademy@sdewa.org.