



*Bringing Water  
Together*

# Making Every Drop Count: Improving Bay-Delta Water Accounting

Wednesday, December 3

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December 3, 2025

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Senior Fellow



**ACWA 2025 Fall Conference**



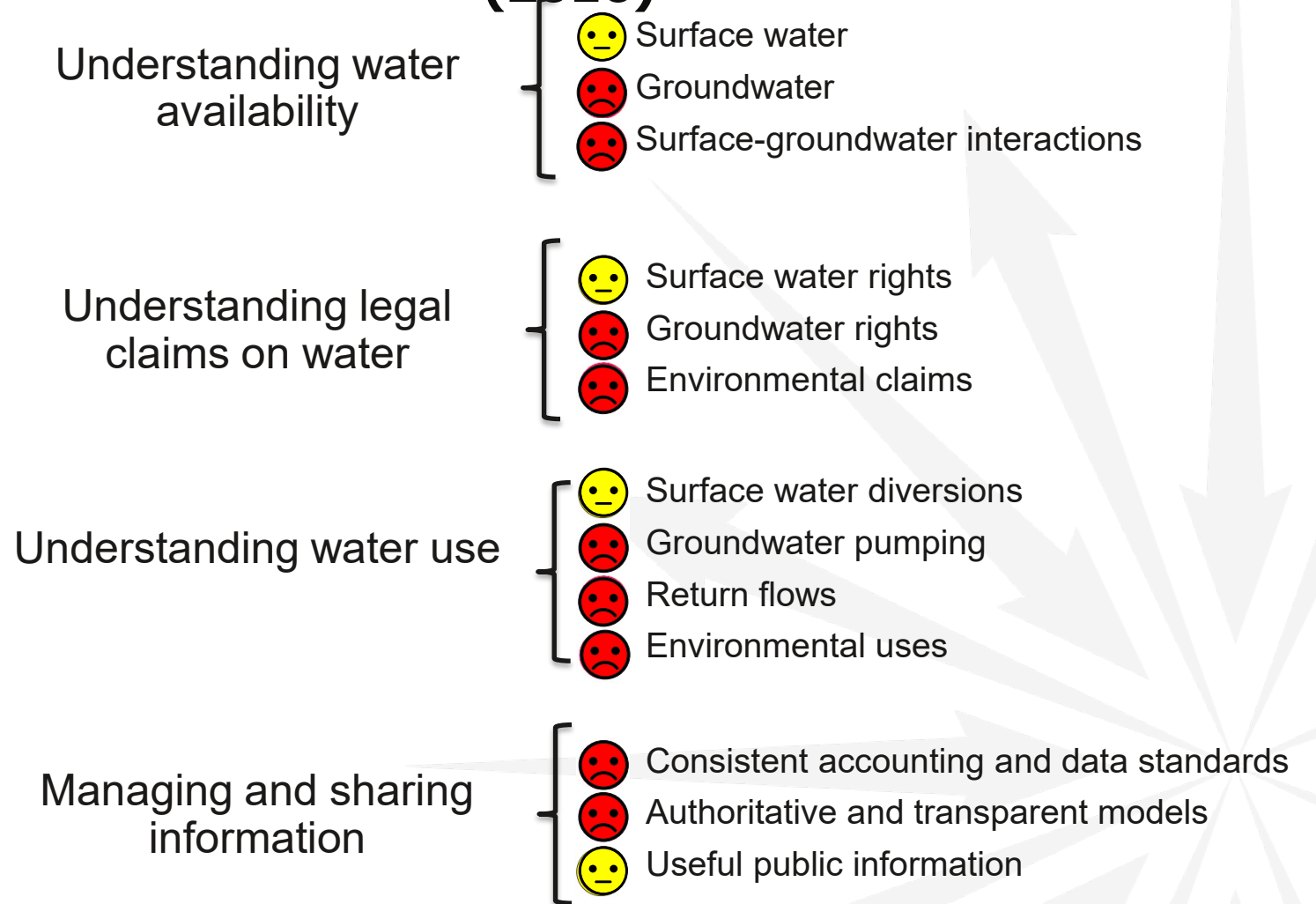
**PPIC**

PUBLIC POLICY  
INSTITUTE OF CALIFORNIA

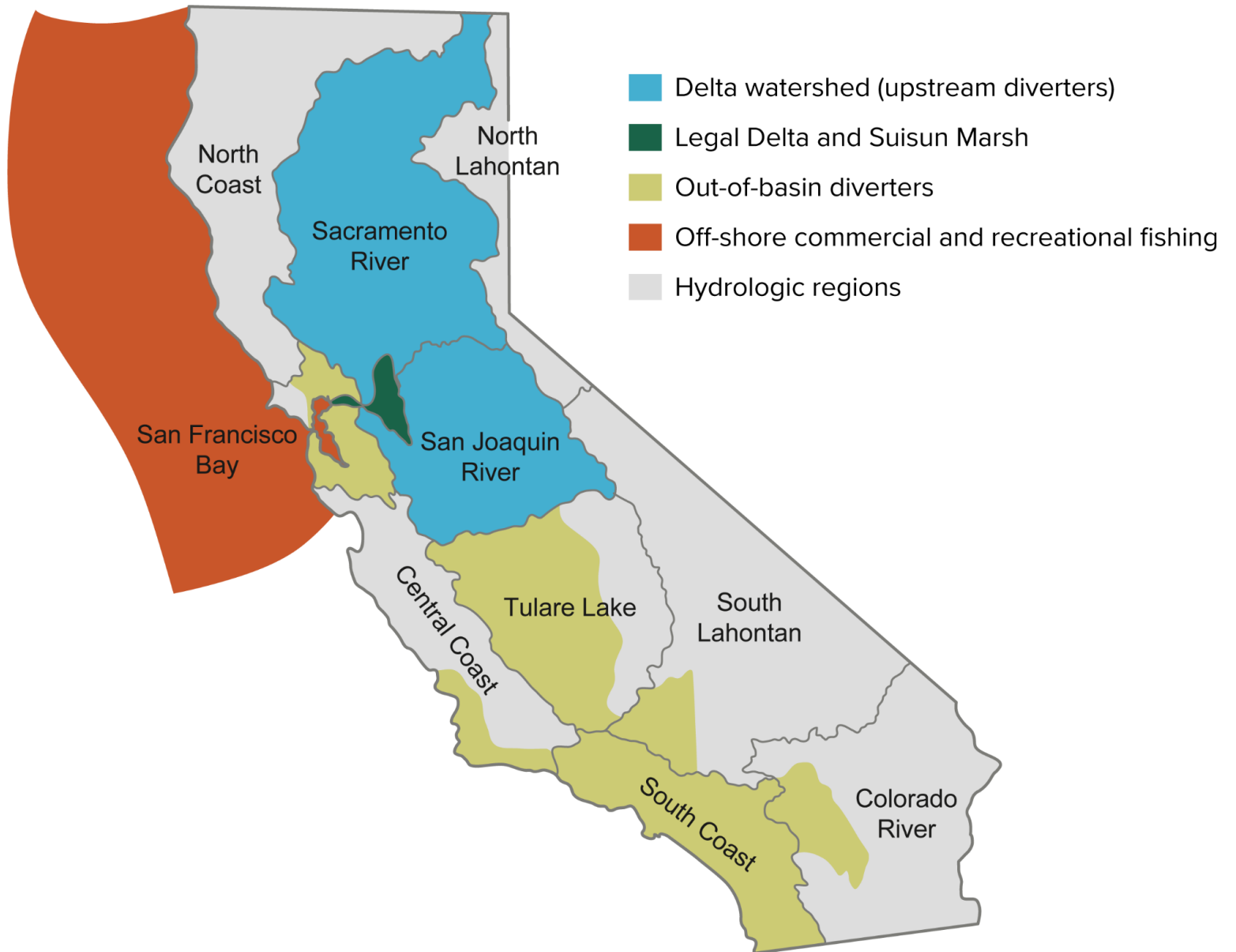
**PPIC WATER POLICY CENTER**

# California lacks a modern water accounting system

## California's water accounting gaps (2016)



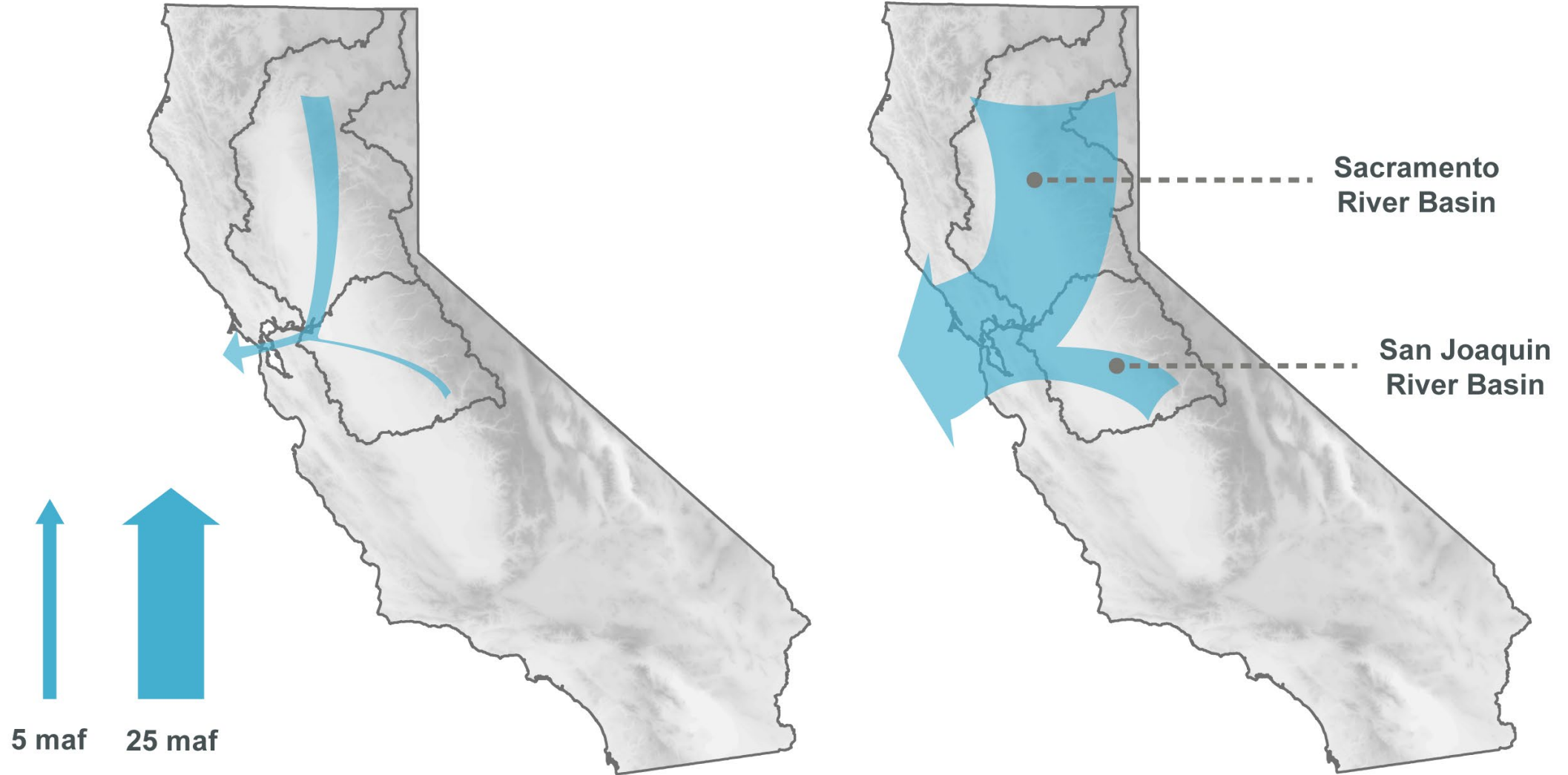
# Most Californians rely on resources from the Delta and its watershed



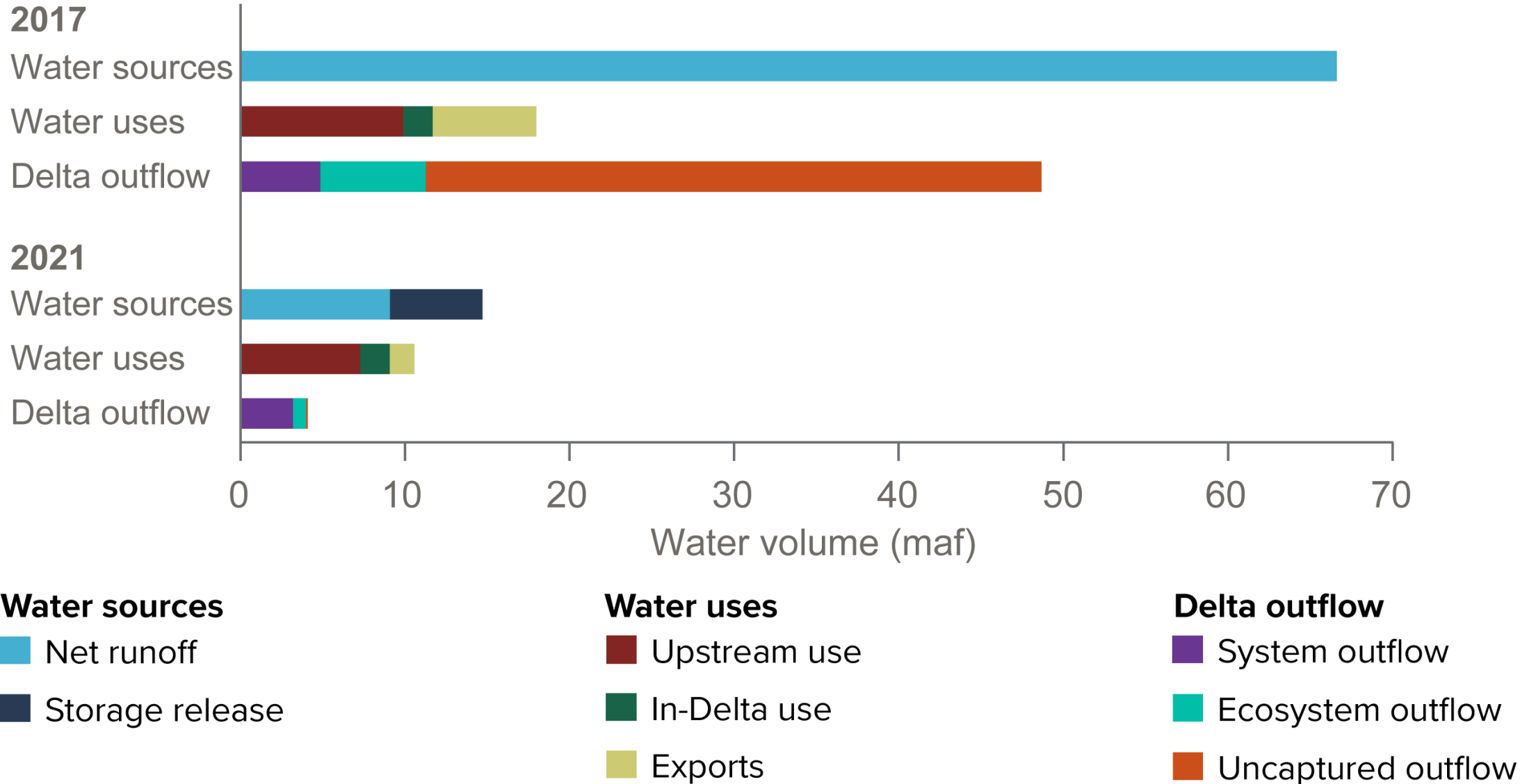
# Water sources and outflow from the Delta

Dry year (2021)

Wet year (2017)

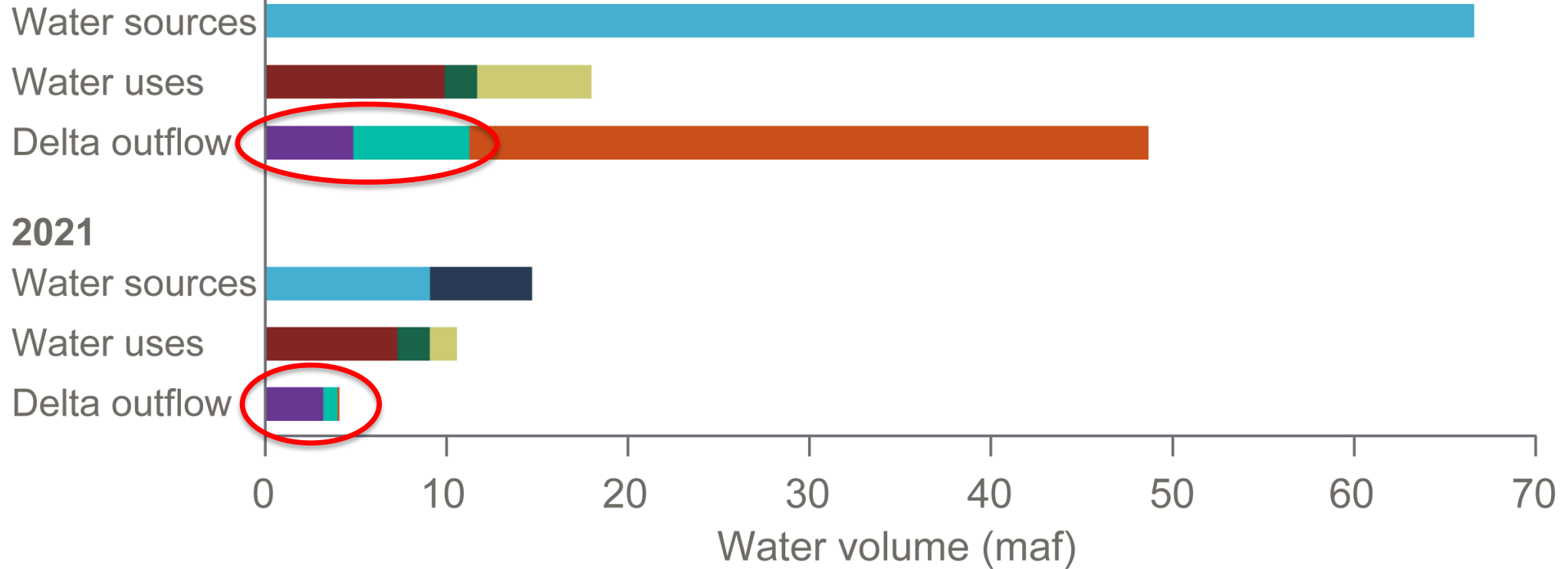


# Where water goes in the Delta watershed

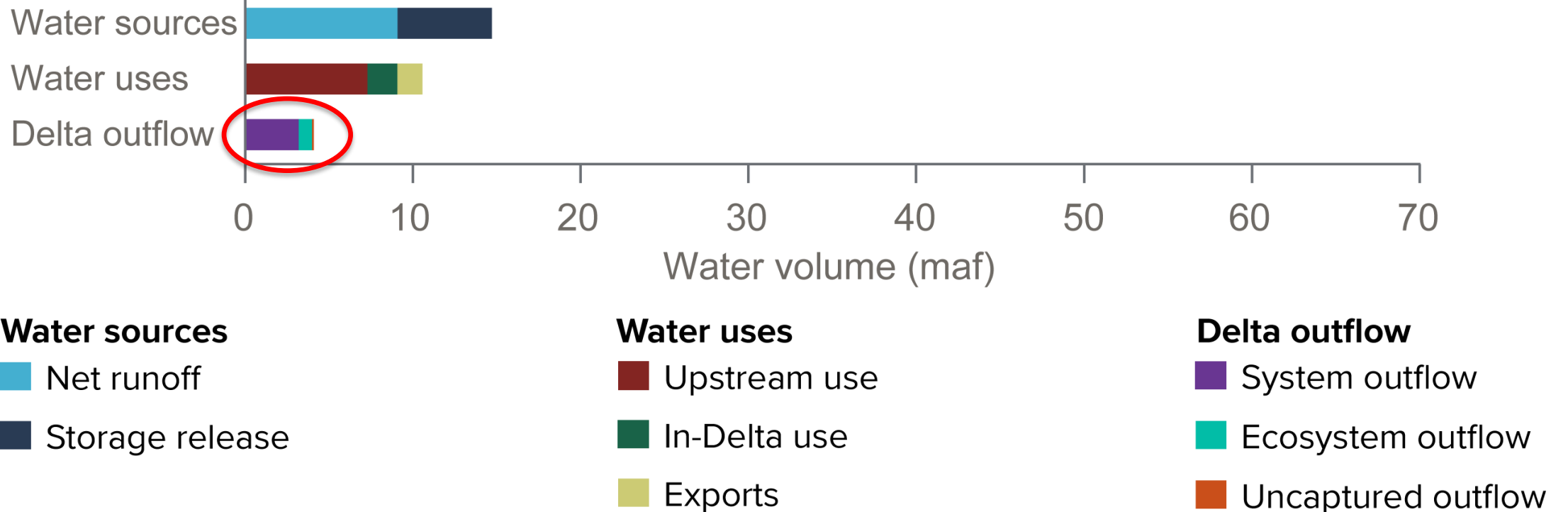


# Where water goes in the Delta watershed

2017



2021



## Water sources

- Net runoff
- Storage release

## Water uses

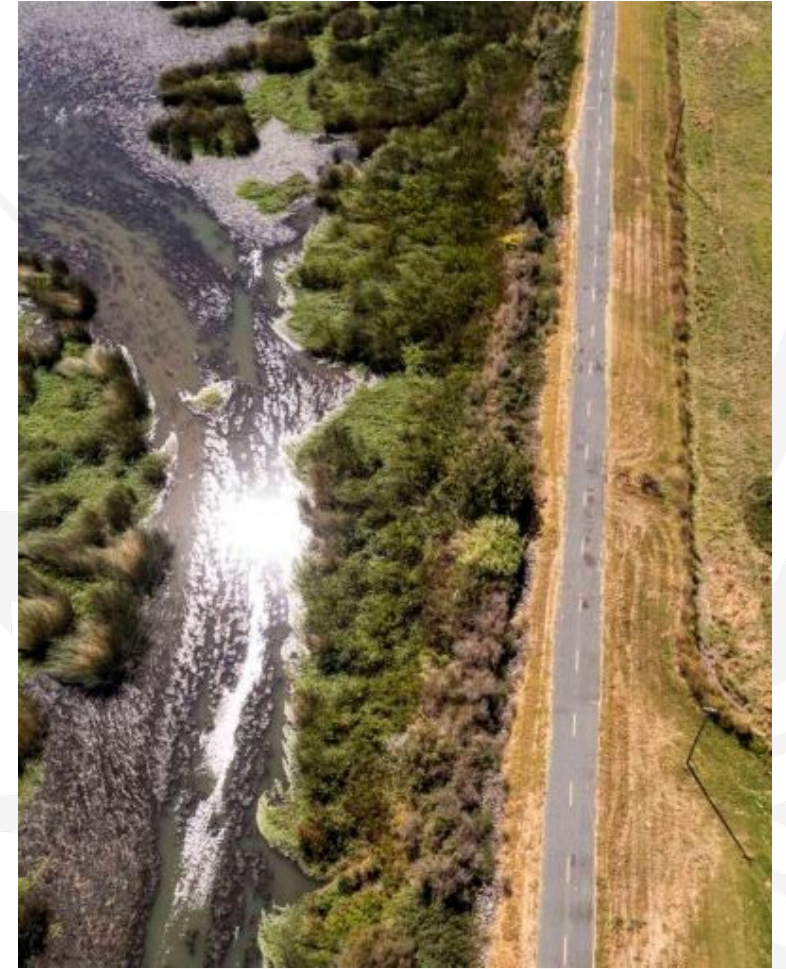
- Upstream use
- In-Delta use
- Exports

## Delta outflow

- System outflow
- Ecosystem outflow
- Uncaptured outflow

# Modernizing Water Accounting for California

- New PPIC project with California Water Data Consortium, and UC Davis:
  - Assess value of modernizing our system
  - Recommend a roadmap to modernize, including Delta case study
- Advance all 4 aspects of water accounting:
  1. Water availability
  2. Claims on the water
  3. Water use
  4. information systems



# Thank you



# About these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.



# Water Accounting in the Bay – Delta Watershed

## State Water Contractors Perspective

Chandra Chilmakuri, Ph.D., P.E.  
Assistant General Manager for Water Policy  
December 3, 2025



# State Water Project

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**34** storage facilities, reservoirs and lakes

**20** pumping plants ●

**4** pumping-generating plants ■

**5** hydroelectric power plants ▲

**701** miles of open canals and pipelines

Construction began in the 1960s



Water Delivery For:  
**27 Million People**

**750,000 Acres of  
Farmland**

**SERVING:**

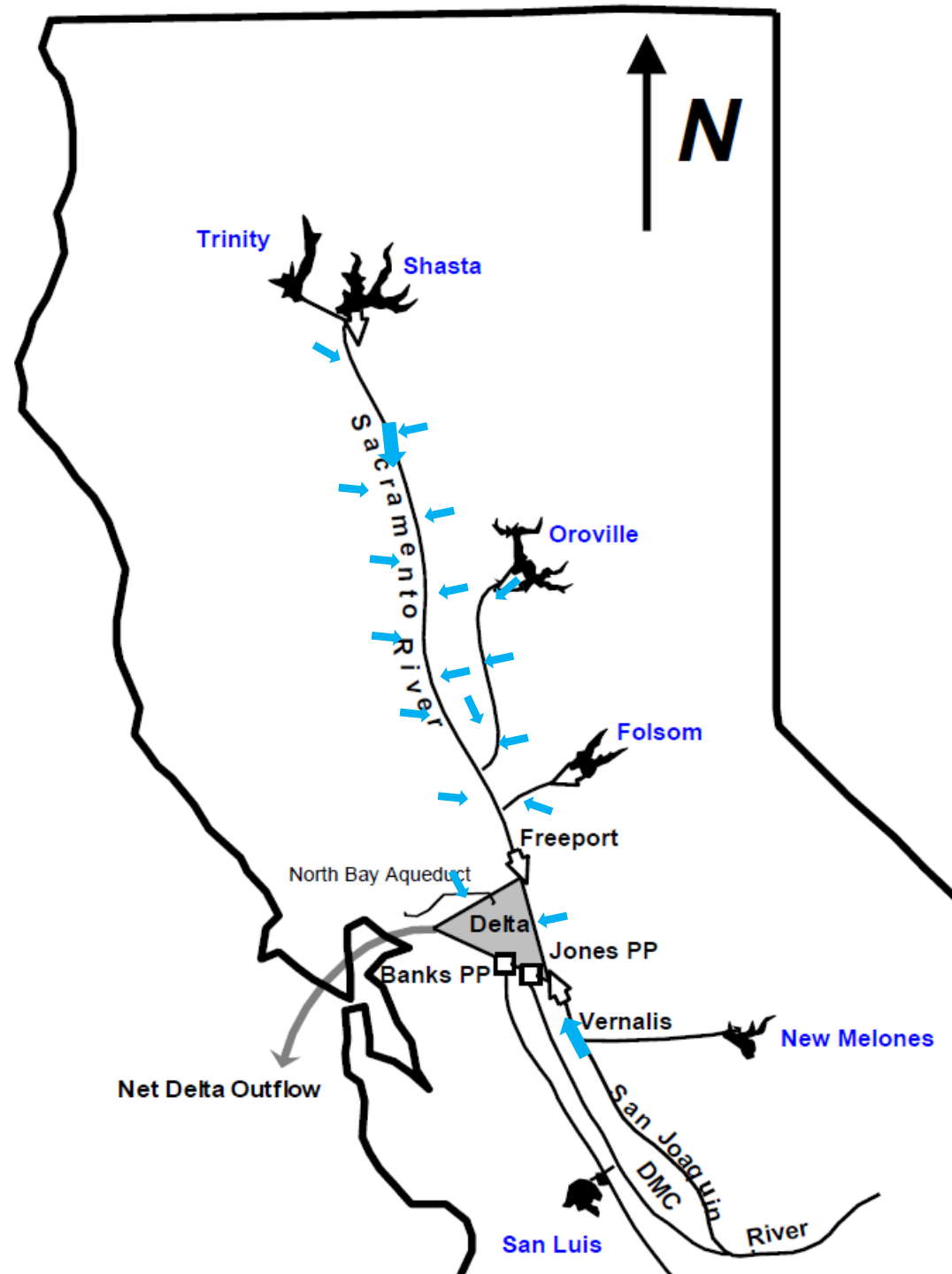
**BAY AREA    SAN JOAQUIN VALLEY**

**CENTRAL COAST    INLAND EMPIRE**

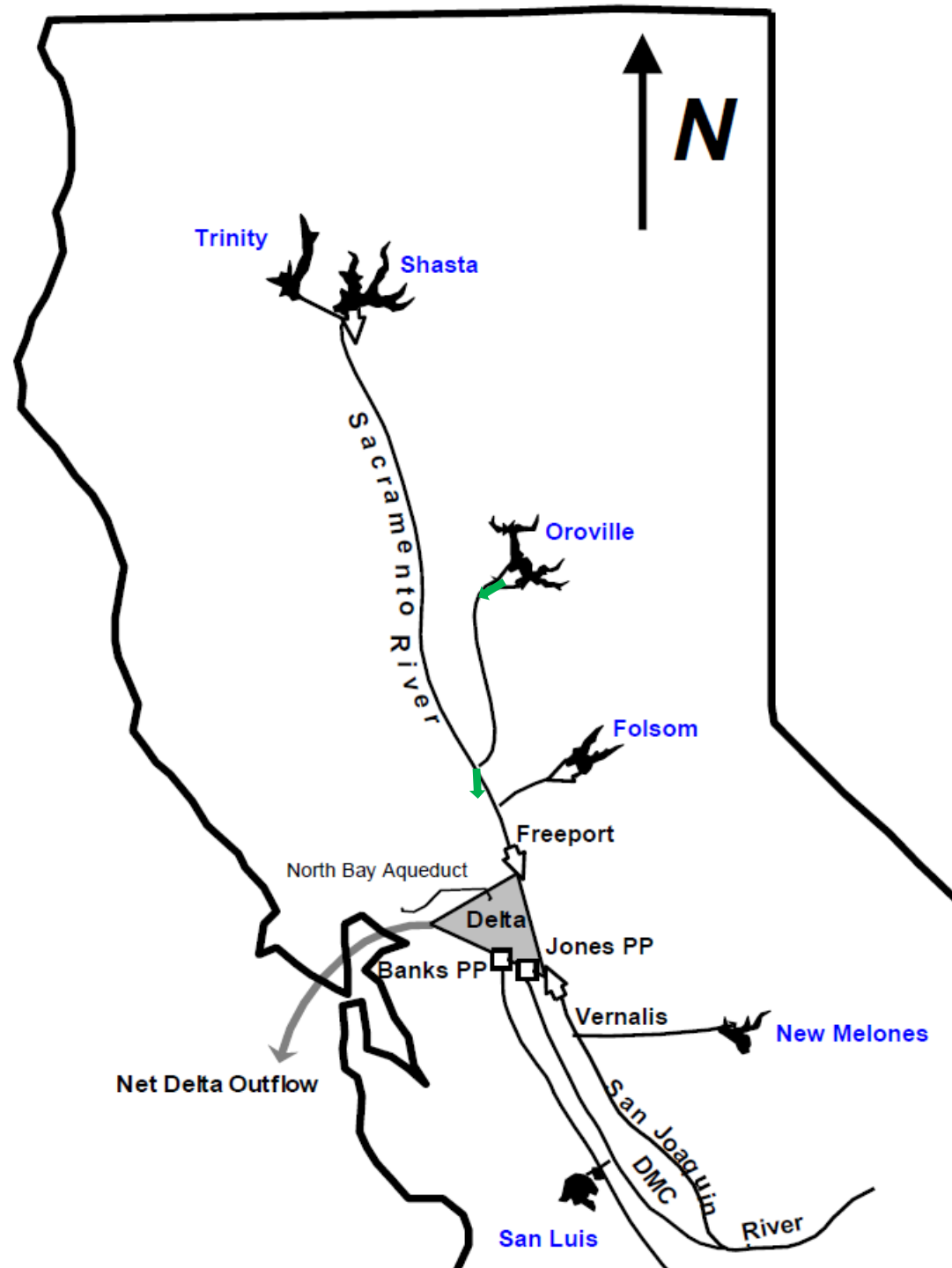
**DESERT    SOUTHERN CALIFORNIA**



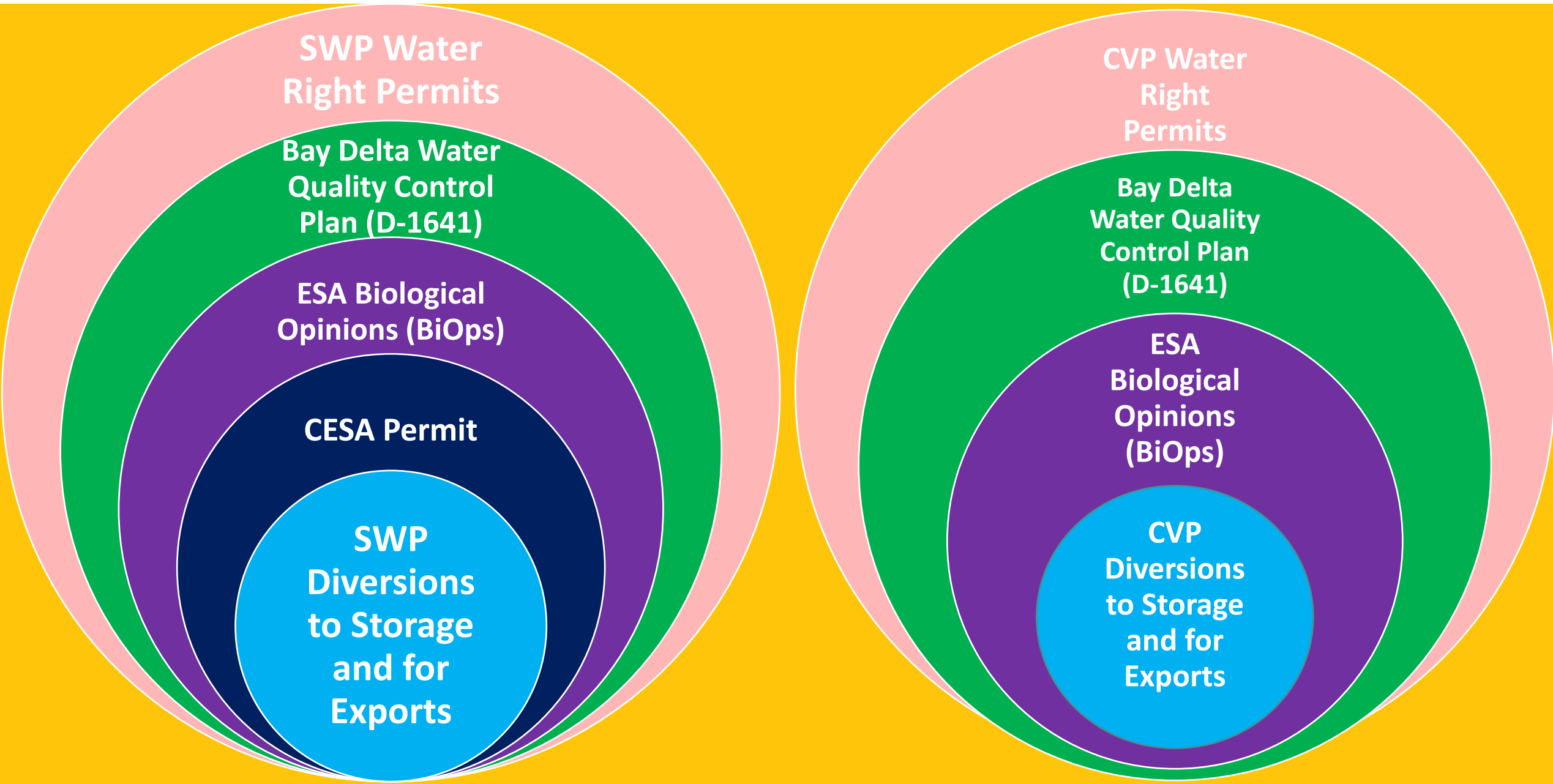
# Typical Source of SWP Exports in November to May



## Typical Source of SWP Exports in June to October



# Major Regulatory Limits for SWP and CVP



## Water Accounting Importance for SWP

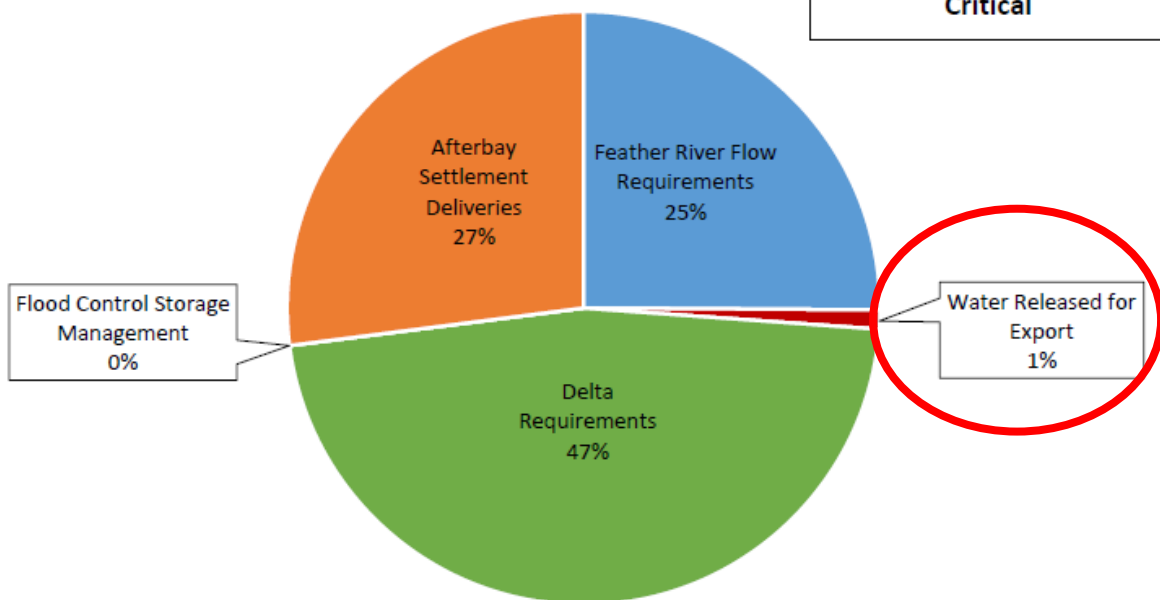
- Stems from responsibility to meet Bay-Delta Water Quality Control plan assigned under Decision-1641
  - Backstop for Delta requirements irrespective of SWP and CVP Water Rights priority
- Water Quality Control Plan Update
  - Protecting environmental flows
- Water available for new water supply projects (e.g. Sites, flood diversion, groundwater recharge)
- Ultimately, lack of accounting impacts SWP water supply

# SWP Public Water Agencies Responsible for SWP Capital and O&M Costs

Primary Reasons for Lake Oroville Releases (2022)

Total Release: 2.4 MAF

SVI Water Type:  
Critical

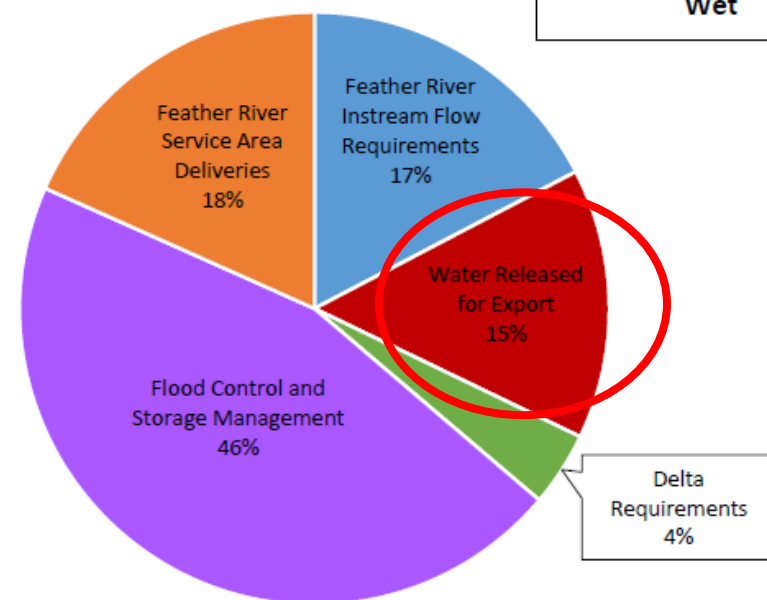


PRELIMINARY - SUBJECT TO REVISION

Primary Reasons for Lake Oroville Releases (2023)

Total Release: 5.1 MAF

SVI Water Type:  
Wet



PRELIMINARY - SUBJECT TO REVISION