California

DRIP Collaborative

2025 Workgroup: Water Infrastructure and Planning

Drought Resilience Interagency & Partners (DRIP) Collaborative

Thursday, April 3, 2025
2-3:30PM PT
Remote Participation (via Zoom)

Facilitated by Workgroup Point of Contact: Anthony Navasero (Anthony.Navasero@water.ca.gov)

California Department of Water Resources – Drought Coordinator

Co-led by John Andrew, DWR and Emily Rooney, Ag Council of California

Meeting Information

1. This meeting is being recorded.
2. This meeting must adhere to the Bagley Keene Open Meeting Act rules. The workgroup quorum is required (5 out of the 9 on the workgroup). If we don't meet quorum, we will offer this time and this space for an informal discussion about Water Infrastructure and Planning.
3. DRIP Collaborative workgroup members must keep their cameras on during the meeting. You must notify the group if you turn off your camera and state why.
4. Members of the public and other DRIP Collaborative members are welcome to listen. A public comment session is included later in the meeting.
5. Please practice virtual meeting courtesy and mute when not speaking.

Meeting Purpose and Agenda

Objective: Discuss the scope of the Water Infrastructure and Planning focus area and define a problem statement to be presented at the Spring 2025 DRIP Collaborative meeting..

Meeting Agenda

2:00pm	Welcome, Roll Call, and Vision Setting
2:10pm	Process Review
2:15pm	Scope and Problem Statement
3:10pm	Workgroup Next Steps
3:25pm	Public Comment
3:30pm	Adjourn

WORKGROUP PARTICIPANTS

(Quorum= 5 DRIP members)

1. **Emily Rooney**, Agricultural Council of California
2. **Jason Colombini,** Jay Colombini Ranch, Inc.
3. **Tim Worley,** California Association of Mutual Water Companies
4. **Kyle Jones,** Community Water Center
5. **Alvar Escriva-Bou,** University of California Davis
6. **Laura Ramos,** California Water Institute at Fresno State
7. **Suzanne Pecci,** Public Member
8. **Katie Ruby,** California Urban Water Agencies
9. **Carolina Hernandez,** Los Angeles County Public Works

VISION SETTING

The 2022 California Water Supply Strategy lists actions to improve water supply infrastructure and sets achievement goals for 2030 and 2040. The strategy focuses on four key areas:

- Development of New Water Supplies
- Expansion of Water Storage Capacity Above and Below Ground
- Reducing Demand
- Improving Forecasting, Data, and Management, including Water Rights Modernization

→ What **water supply infrastructure action**, either identified or not in the Strategy, would be **most successful** in the next 5 to 15 years in **advancing towards drought resilience**?

Workgroup Members: Please share your thoughts in the chat.

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PROCESS OVERVIEW (REVIEW)

5 MINUTES

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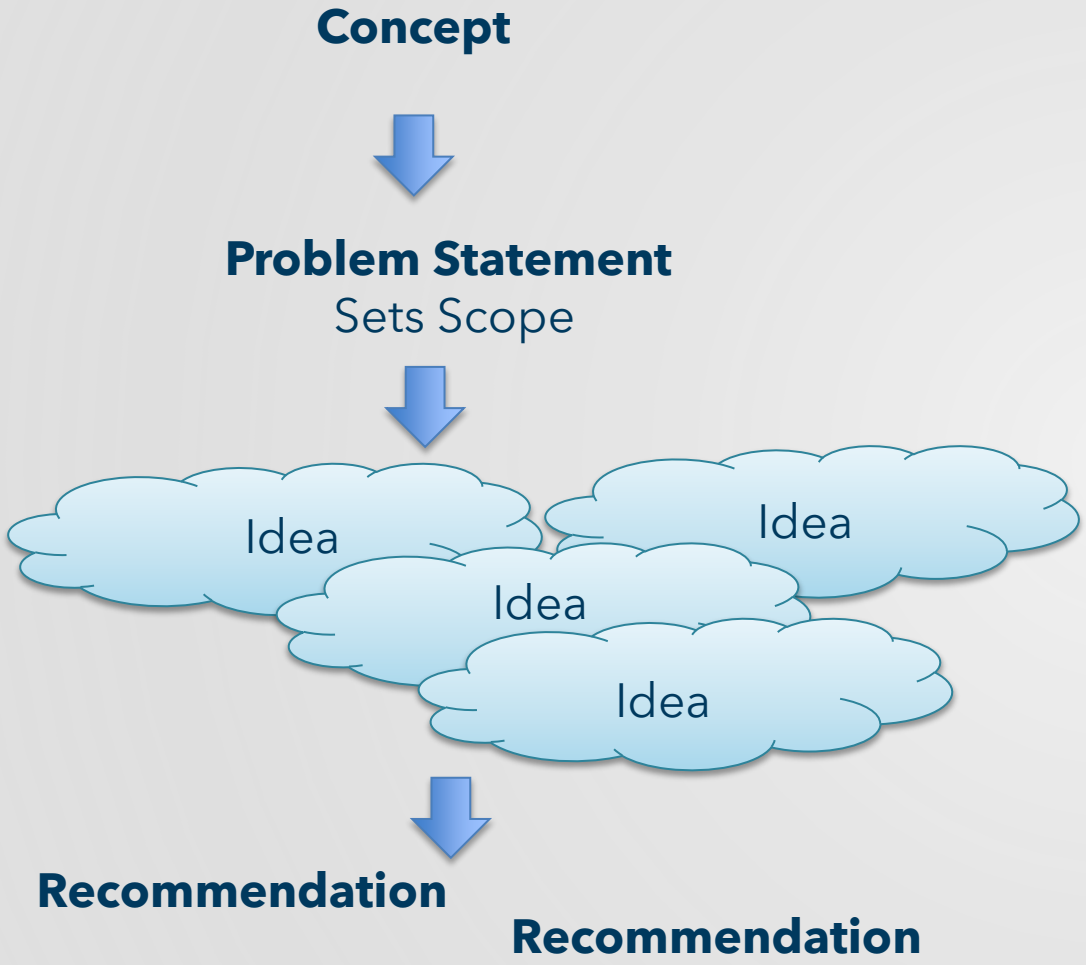
Focus Areas, Problem Statements, and Recommendations

Focus Area	Problem Statement	Recommendation
Focus Areas are ideas, opportunities, and aspirations that DRIP Members have identified as important to improved California drought resiliency. These were captured on the Reference List and are sequenced and prioritized based on feedback during in-person and virtual meetings.	A Problem Statement is a concise description of the issue or challenge faced by a Focus Area. Developed by DRIP Members, Problem Statements seek to capture the essential problems within each Focus Area, including identification of key sub-topics within each focus area.	A DRIP Recommendation is a thoughtful, formal suggestion that addresses the issue or challenge described in a Problem Statement, providing solutions that are specific and actionable related to the preparation of, responding to, and recovering from periods of extreme water shortages and drought.

Recommendation Process



Mar – Apr Virtual Meetings: Refine 2025 Focus Area problem statement

Meeting #1 (May): Ideate on potential 2025 recommendations

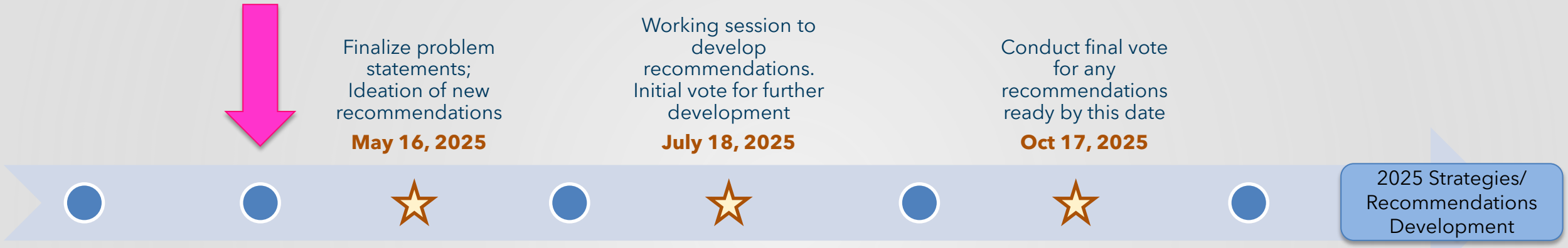
May - Jun Virtual Meetings: Develop recommendations

Meeting #2 (July): Working session to refine recommendations. Initial votes

Aug - Sep Virtual Meetings: Complete recommendations templates; Prepare for Oct vote

Meeting #3 (Oct): Final vote on recs that may be ready. Decide on which recs may need until April 2026

2025 Proposed DRIP Collaborative Timeline



Feb 2025
Launch 2025 process. Select State and Non-State leads. Align on roles

Mar/Apr 2025
Conduct virtual discussions for focus area problem statements

May/Jun 2025
Align on recs, begin populating rec templates

Aug/Sep 2025
Complete rec templates (where possible)

Nov/Dec 2025
Write DRIP Report and plan for 2026

In-Person Meeting

Virtual Meeting

**Note: The timeline for each focus area/workgroup will vary and may extend beyond the proposed 2025 timeline.*

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SCOPE OF WORKGROUP

40-55 MINUTES

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EXAMPLES OF CURRENT WATER INFRASTRUCTURE AND PLANNING

Presentations

- SWP Long-term Drought Contingency Plan, Andrew Schwarz – SWP Climate Action Manager
  - Guide operational decision making and develop SWP water supply allocations
- San Joaquin Flood-MAR Watershed Studies, Jim Wieking – Division of Planning
  - Integrate water management strategies (e.g., use of high flows for managed aquifer recharge, flood control, and environmental benefits)

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SWP Long-Term Drought Plan

Released March 2024

Summary

- First comprehensive public facing SWP Long-Term Drought Plan
- Auditor findings:
  - No analysis of increasing drought risk from climate change
  - Wanted clear triggers---if this than we will do X
  - Lack of clear documentation of the long-term actions to prepare for drought
- Drought Plan serves to aggregate, organize, and summarize information from different SWP planning and operational processes and programs.

What's in the Plan

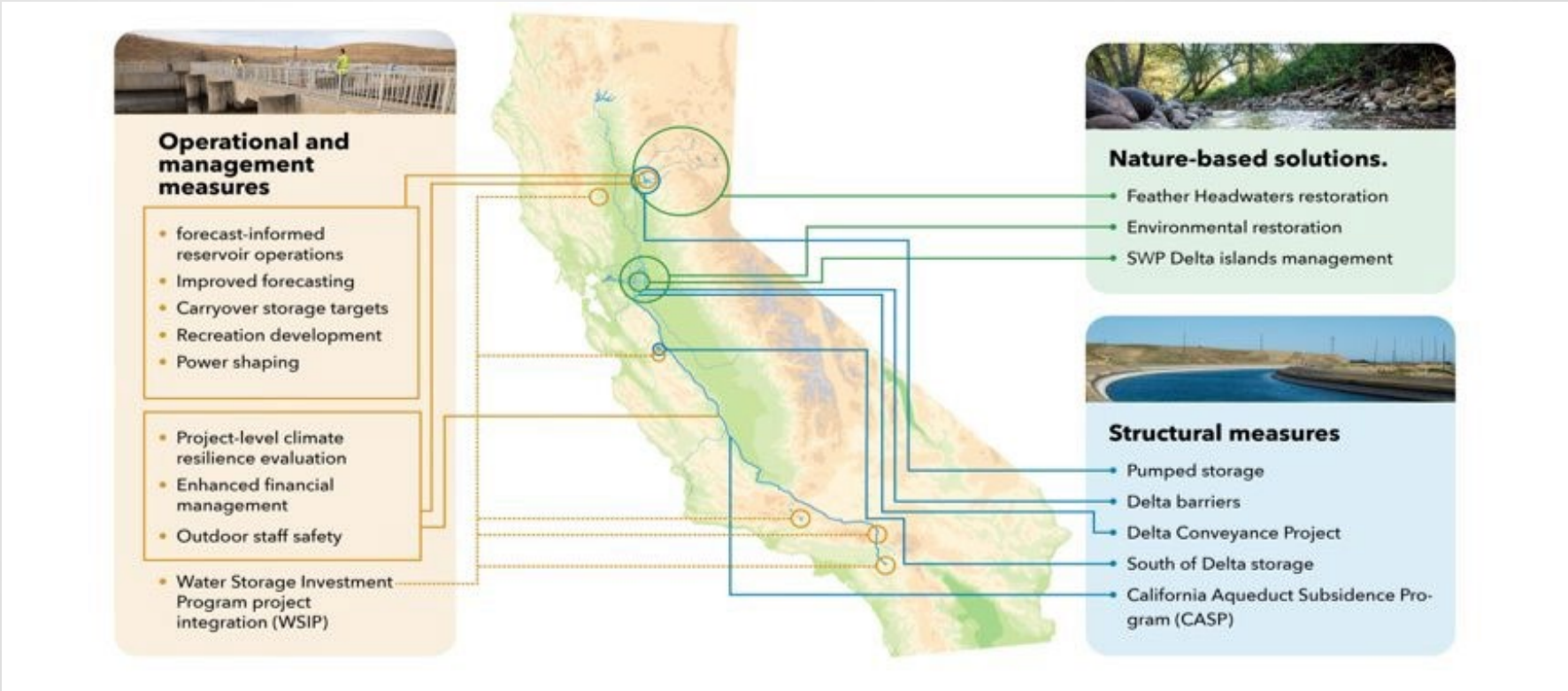
- General descriptions of allocation decision making, forecasting, and drought decision making
- SWP objectives (wholesale water provider)
- California climate, historical droughts, and analysis of potential future droughts
- Lessons learned from the 2020-2022 drought

13 Actions to Improve long-term Drought resilience

- DCP
- CASP
- FIRO

- Storage investigations
- Evaluation of Oroville Carryover storage

- Infrastructure maintenance
- SWP Climate adaptation Plan
- Communications (DCR+)



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Additional Resources:

https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Files/Long-Term-Drought-Action-Plan_Final.pdf

https://drought.ca.gov

California Water Watch

DWRs CA Drought Monitor

https://cww.water.ca.gov/

Andrew Schwarz
Climate Action Manager
State Water Project
California Department of Water Resources

Andrew.schwarz@water.ca.gov

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San Joaquin Flood-MAR Watershed Studies

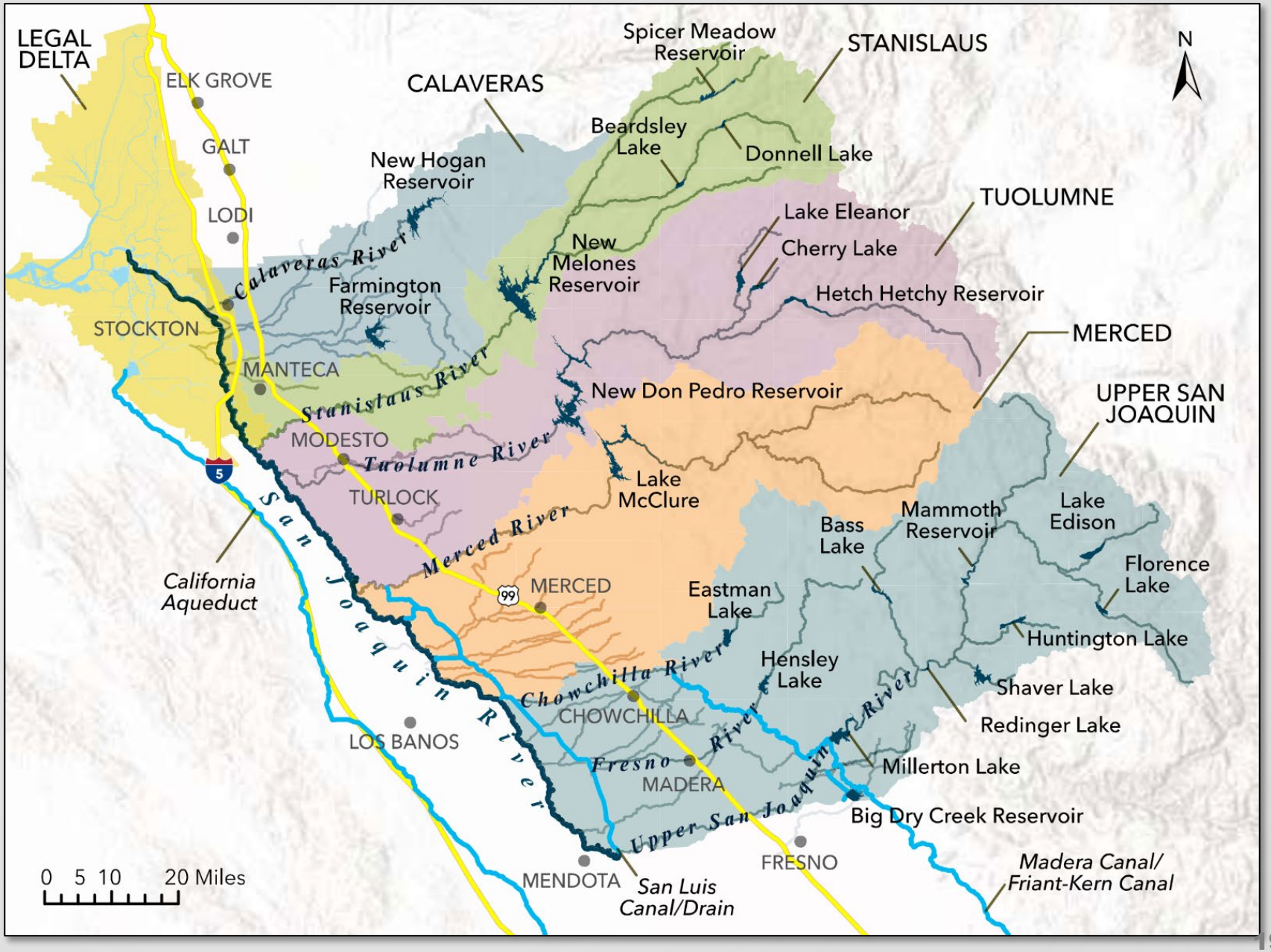
TO DRIP COLLABORATIVE, WATER INFRASTRUCTURE AND PLANNING SUB-GROUP

APRIL 3, 2025

JIM WIEKING

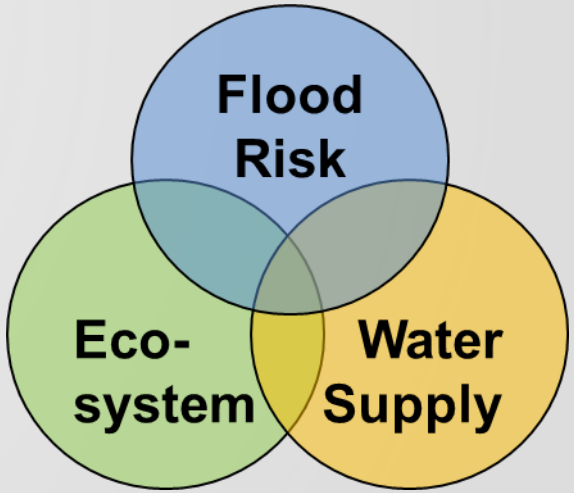
San Joaquin Flood-MAR Watershed Studies

- Calaveras
- Stanislaus
- Tuolumne
- Merced
- Upper SJ



Core Objectives of the Watershed Studies

- Report at the Watershed-scale
- Assess and Quantify Vulnerability to Climate Change
- Assess and Quantify Flood-MAR Adaptation Performance
- Provide a Foundation to Support Flood-MAR Implementation



Watershed Studies Overview

Status Quo

No Action

Declining Performance with Climate Change

Recharge Using High Flows

- Local Irrigation Districts and Farmers
- GSAs

MAR-90/20

Water Supply Benefits

+ Reoperate Reservoirs

+ Flood Managers
+ Ecosystem Managers

I-FIRM

Flood & Ecosystems & Water Supply Benefits

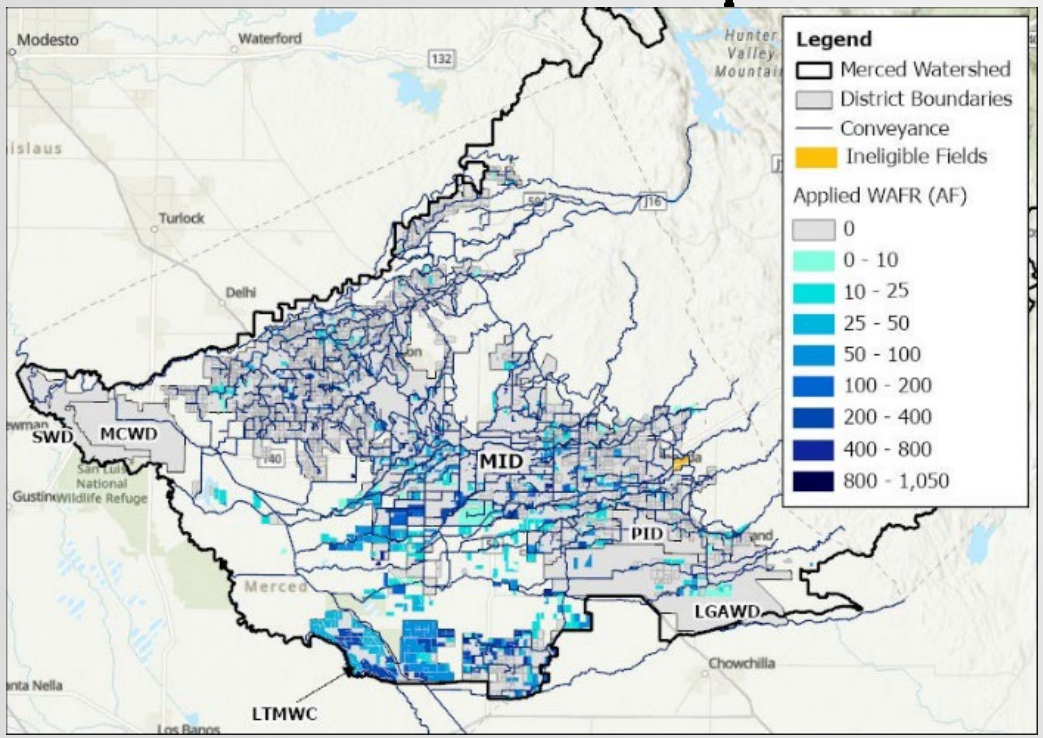
Flood-MAR Adaptation Strategy Overview

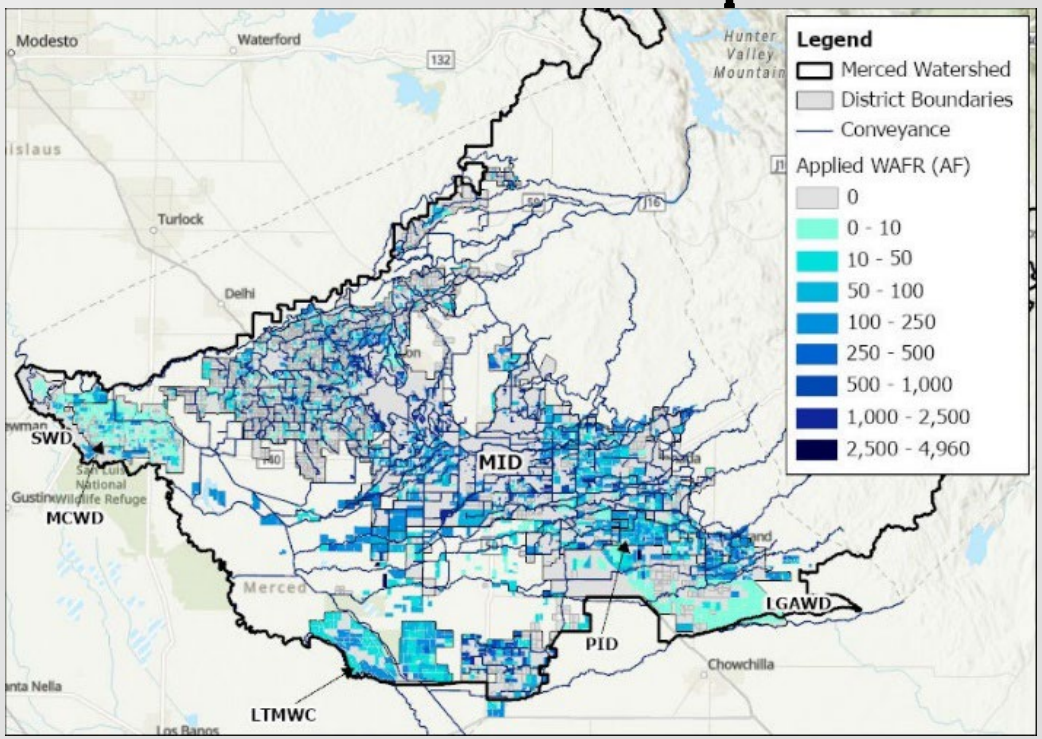
	MAR 90/20	I-FIRM
Recharge	Derived from Streamlined Permitting	+ Flexibility + Forecast Informed Reservoir Operations
Directed Recharge	Retention, Disadvantaged Communities, Groundwater Dependent Ecosystems, Subsidence Mitigation	Retention, Disadvantaged Communities, Groundwater Dependent Ecosystems, Subsidence Mitigation
Supplemental Fishery Flows		Yes
Fishery Habitat		Yes
Additional Infrastructure		Yes
Shorebird Habitat		Yes
Creeks – Flow Through Basins		Yes

Adaptation Performance: Recharge - Merced

MAR 90/20 provides 30 TAF of average annual recharge, using up to 51,000 acres of ag land; I-FIRM provides 4.5 times that amount of recharge using up to 26% more ag land

	MAR 90/20	I-FIRM
Long-term Average Annual Recharge:	*30 TAF per year*	*134 TAF per year*
Maximum Annual Recharge:	**283 TAF**	**698 TAF**
Used Acreage:	**51,200 Ac (47%)**	**69,040 Ac (53%)**



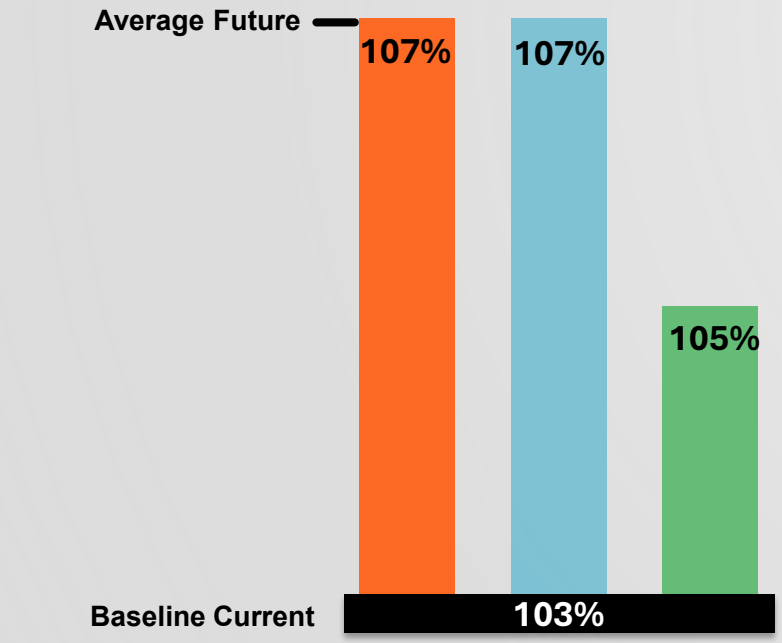


Adaptation Performance: Flood Risk - Tuolumne

MAR 90/20 has minor effect on flood risk. I-FIRM decreases flood space encroachment, maximum flow at Modesto and occurrence of exceeding operational threshold.

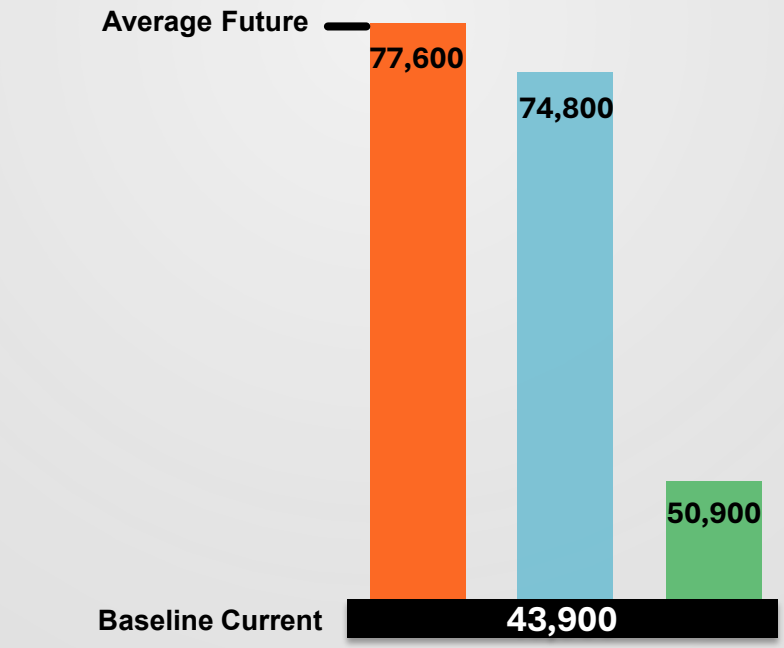
Maximum New Don Pedro Flood Space Encroachment

	No Action	MAR 90/20	I-FIRM
Probability of Increase:	99%	99%	71%



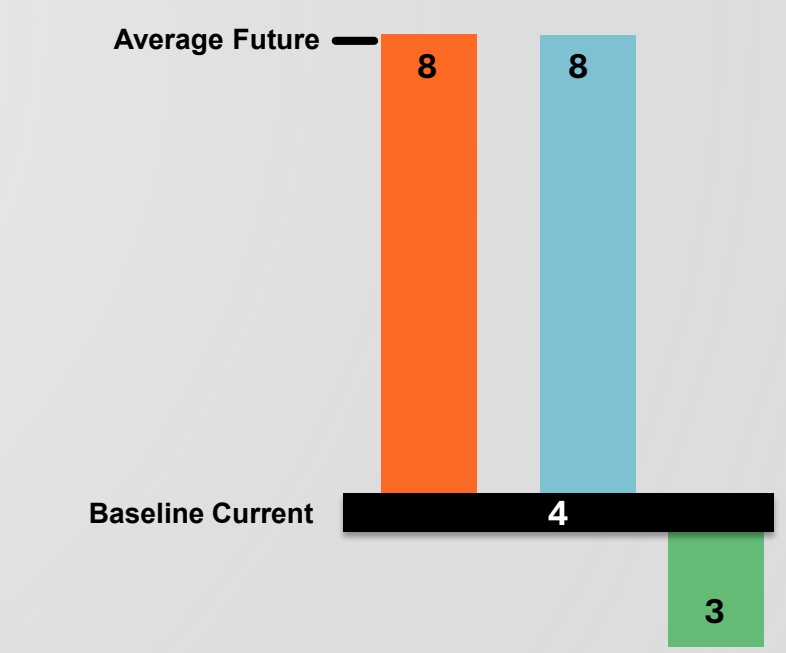
Maximum Flow at Modesto

	No Action	MAR 90/20	I-FIRM
Probability of Increase:	>99%	99%	68%



Number of Years Flow Exceeds Operational Threshold (9,000 cfs)

	No Action	MAR 90/20	I-FIRM
Probability of Increase:	>99%	>99%	37%



* Draft Results – Subject to Change

Next Steps

- Documentation
  - Publish Five Watershed Study Reports - Fall 2025
- Data
  - Data visualization tool in development
- Contact: James.Wieking@water.ca.gov

SCOPE OF WORKGROUP

Spectrum of Water Infrastructure and Planning

TYPE: Collection, storage, treatment, distribution, management

PURPOSE: Increase water supply, protect water supply, develop new water supply, improve water supply use efficiency, compliance with regulations on water supply

SCALE: Statewide, regional, local

FRAMEWORK: Grey and/or green infrastructure

For Group Discussion:

1. What do we mean when we say "infrastructure"?
2. What is the scope of this workgroup?

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POTENTIAL SUBTOPICS TO NARROW SCOPE

Subtopics mentioned during past DRIP Collaborative meetings

- **Develop additional storage**, both surface water storage and underground aquifers
- **Increase groundwater recharge opportunities**, from flood waters and optimized reservoir operations
- **Improve system flexibility**, interconnections, integrate/conjunctive water resource management, and water transfers (inter- and intra-basin)
- **Implement green infrastructure**, where applicable i
- Identify **alternative water supplies**
- **Evaluate further small water system consolidation** (physical consolidation)

INITIAL STATEMENT

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INITIAL STATEMENT

California's aging water infrastructure is not well adapted to rapidly changing climate conditions which will require new and rehabilitated infrastructure as well as reoperation. This is particularly true in how we address the extreme weather whiplash of floods and droughts and how that affects our drought resilience at state, regional, and local levels. Because extreme weather occurrences are projected to increase, California water supply and its infrastructure will be increasingly challenged to meet economic and societal demands, while still needing to address non-water supply issues such as water quality, environmental, and power production needs.

For Group Discussion:

1. Given this initial statement, what should be modified to inform the focus of the workgroup and opportunities for recommendations?

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NEXT STEPS- GETTING READY FOR THE DRIP COLLABORATIVE MAY MEETING

10 MINUTES

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What's Next

APRIL: Co-leads will assist DWR Development Team Contacts to inform breakout discussions during the May meeting

MAY 16: DRIP Collaborative meeting (in-person)

- Finalize problem statements and begin ideation process for new recommendations

PUBLIC COMMENT

5 MINUTES

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Adjourn

Thank you!

INFORMAL DISCUSSION ON WATER INFRASTRUCTURE AND PLANNING

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