

Department of Resources Watershed Resilience Pilot



March 14, 2024

Agenda

1. Watershed Resilience Program
2. Pilot Program: DWR proposed scope of work
3. Ad Hoc Committee Membership and Feedback
4. RWA Proposed Pilot Objectives
5. Proposed Next Steps



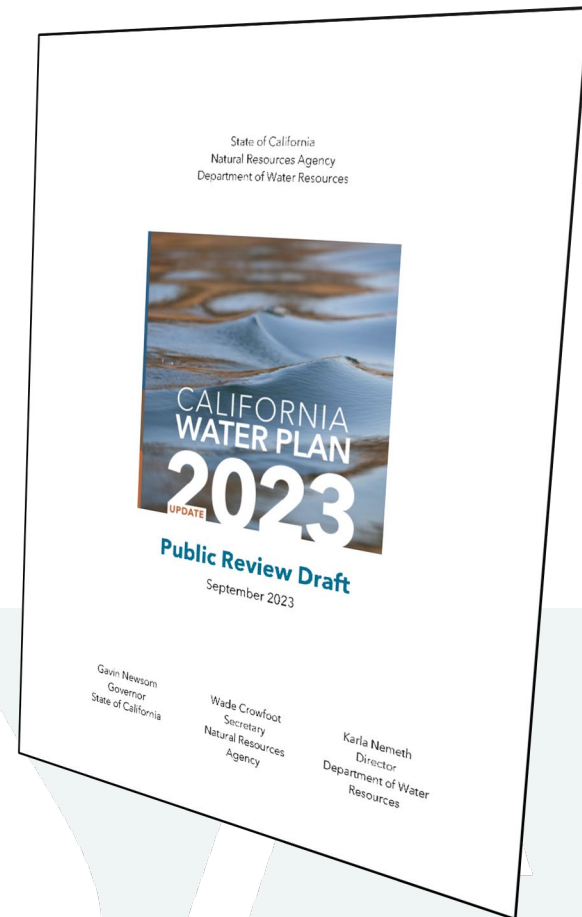
Watershed Resilience Program Rationale



- Water managers struggling to keep pace with climate change
- Need for watershed scale approaches and holistic solutions
- Alignment with state policies and plans (e.g., Water Resiliency Portfolio, Water Supply Strategy, CWP 2023)

Watershed Resilience Program - Pilot Details

- ✓ Introduced in California Water Plan Update 2023
- ✓ Seeks to build upon 20+ year successful IRWM Program
- ✓ Adds multi-sector, climate resilience planning
- ✓ Focuses on inclusive collaboration and equity
- ✓ New DWR competitive grant program, funding in draft bond proposals



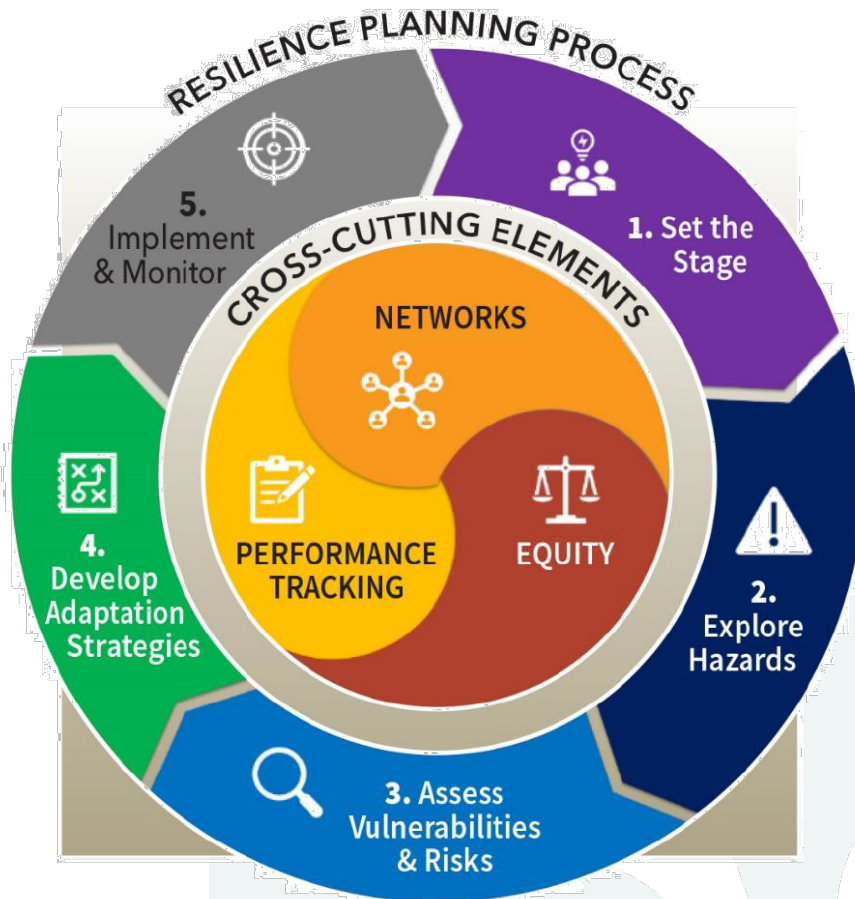
Watershed Resilience Program - Pilot Details (cont.)



- ✓ Potentially 4-5 pilots funded, based on diverse:
 - ✓ geography
 - ✓ institutional capacity
 - ✓ climate resilience planning
- ✓ Informs development of full-scale grant program
- ✓ RWA selected for \$2M through April 2026
- ✓ Positions WaterFuture's Supershed to influence next long-term integrated water program

Watershed Resilience Program - Pilot Details (cont.)

Figure 5-2 Watershed Resilience Planning Framework Provides a Shared Process

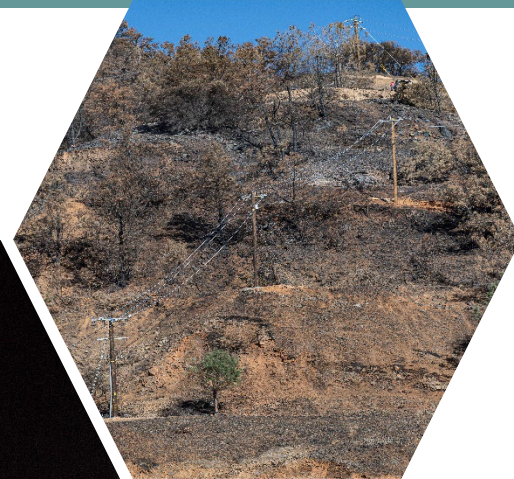


- ✓ Resilience Planning Framework provides process for climate vulnerability assessment
- ✓ WaterFuture provides body of work to build from and test later steps of Resilience Planning Framework

Figure 5-2 Note: A Watershed Resilience Framework document, including guidance, case studies, and an interactive toolkit, is being prepared to support watersheds in achieving robust resilience.

Multi-sector water management:

1. Forest and Wildfire Management
2. Hydropower
3. Ecosystems
4. Groundwater
5. Water Supply
6. Flood Management
7. Water Quality
8. Recreation



Watershed Resilience Pilot Goals



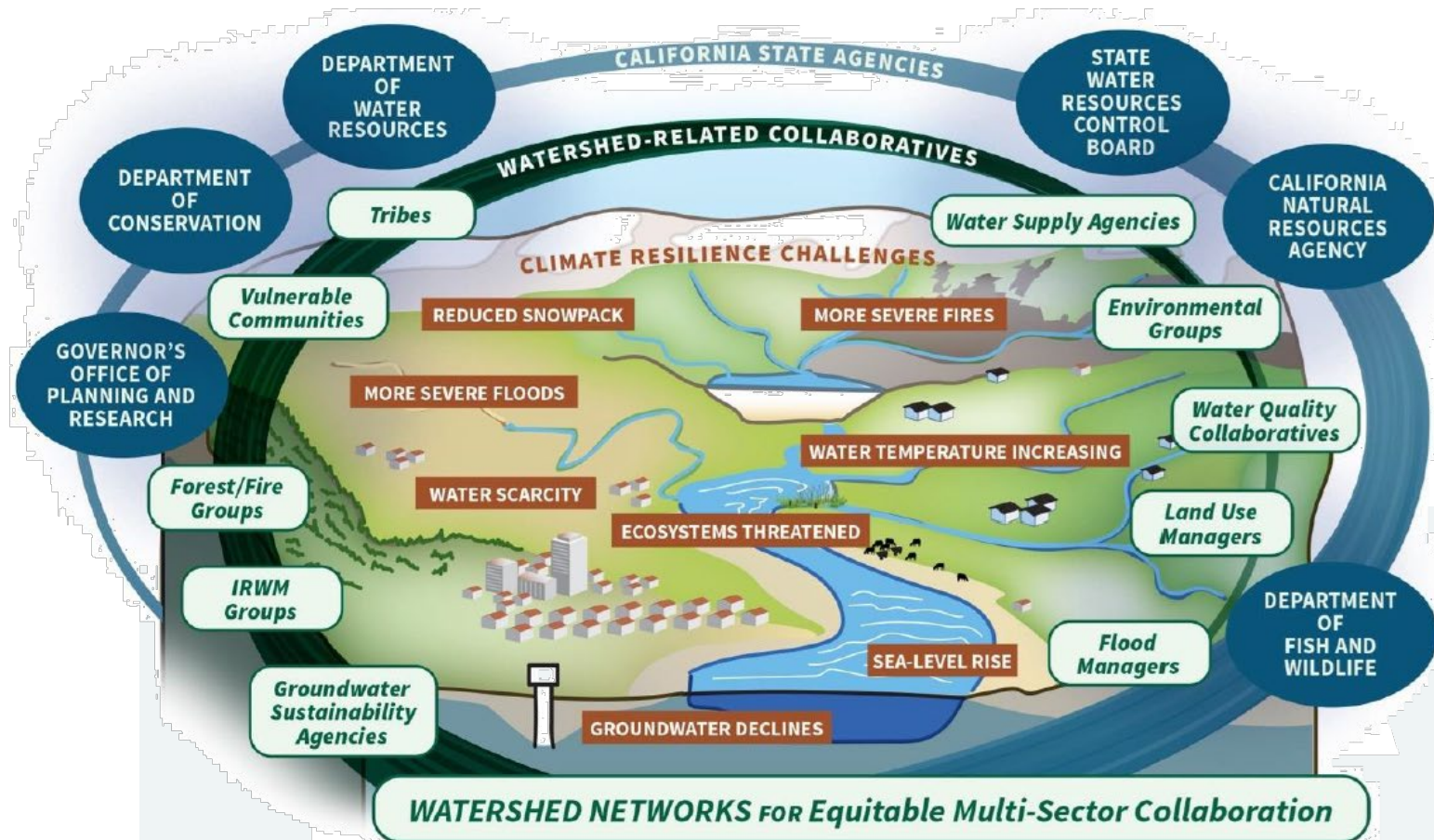
Test the watershed resilience approach and inform establishment of the future program.

The pilot will:

- (1) build on previous regional planning efforts to understand and plan for climate change at a watershed scale
- (2) assess local climate variabilities and risks
- (3) further develop adaptation strategies with collaborative and inclusive input from the broader community that will culminate in a Watershed Resilience Plan

Watershed Resilience Networks

Figure 5-1 Networks are an Integral Part of Supporting Watershed Resilience



DWR's Watershed Pilot Tasks

Step A

Building a stronger plan through collaboration and Inclusion

(Frontline Community and Water Agency Engagement & Input)

- Task 3 - Identify and Assess Existing Regional Networks
- Task 4 – Develop Watershed Network
- Task 5 – Delineate Watershed Area
- Task 6 – Watershed Resilience Vision

Task 1 – Project Management
Task 2 – Reporting

Step B

Applying best available climate science and analysis

(Updating and Synthesizing New and Existing Watershed Analysis)

- Task 7 – Assess Climate Vulnerability and State of Watershed
- Task 8 – Assess Vulnerabilities and Risk

Step C

Focusing on Implementation and Progress

(Advance Adaptation Strategies & Implement Measures)

- Task 9 – Develop Adaptation Strategies
- Task 10 – Develop Implementation Strategies
- Task 11 – Performance Tracking
- Task 12 – Watershed Resilience Plan

DRAFT Work Plan - Subject to Change

DWR's Watershed Pilot Tasks



Building a stronger plan through collaboration and Inclusion
(Frontline Community and Water Agency Engagement & Input)

Step A

Task 3 - Identify and Assess Existing Regional Networks

- Assessment of existing regional networks and engagement efforts
- Identify and engage underrepresented communities, vulnerable communities, and Tribes

Task 4 – Develop Watershed Network

- Summarize process and development of watershed network, including participants and roles, included in the quarterly progress report
- Develop policies for advisory and decision-making structure including policies and procedures for ensuring equitable inclusion of underrepresented communities and Tribes

Task 5 – Delineate Watershed Area

- Delineate a hydrologically-based watershed planning area considering headwaters to outlet, groundwater basins, water-related systems, sources of climate risk, and potential systemwide adaptation opportunities.
- Define and map the watershed area, considering critical influences from adjacent watersheds.

Task 6 – Watershed Resilience Vision

- Develop watershed-specific resilience problem statements
- Develop watershed-specific resilience vision and goals

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Applying best available climate science and analysis (Updating and Synthesizing New and Existing Watershed Analysis)

Step B

Task 7 – Assess Climate Vulnerability and State of Watershed

- Compile existing climate vulnerability assessments
- Document climate drivers (i.e. historical trends and projected changes in temperature, precipitation, sea level, floods, drought, wildfire, and other climate-driven processes)
- Describe key climate challenges and opportunities for increasing future resilience

Task 8 – Assess Vulnerabilities and Risk

- Develop vulnerability metrics and thresholds for major water sectors, preparing an updated historical watershed water budget, assessing and organizing modeling tools, conducting qualitative and quantitative vulnerability assessments, and eventually identifying and prioritizing critical risks
- Develop watershed water budget
- Develop vulnerability and risk assessment report

Focusing on Implementation and Progress

(Advance Adaptation Strategies & Implement Measures)

Step C

Task 9 – Develop Adaptation Strategies

- Identify priority risk areas, developing and evaluating adaptation strategies, and recommending actions for improvement
- Document a set of recommended adaptation strategies, inclusive of benefits and costs

Task 10 – Develop Implementation Strategies

- Develop implementation plan for each of the recommended adaptation strategies
- Develop, reviewed, and approved Implementation strategies in open public forums

Task 11 –Performance Tracking

- Review DWR developed draft indicators and metrics and recommend additional watershed-specific performance tracking indicators that support watershed resilience
- Document of identified indicators and metrics, supporting data, and availability

Task 12 – Watershed Resilience Plan

- Develop draft and final Watershed Resilience Plan including the assessments and key findings identified

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AD Hoc Committee Membership



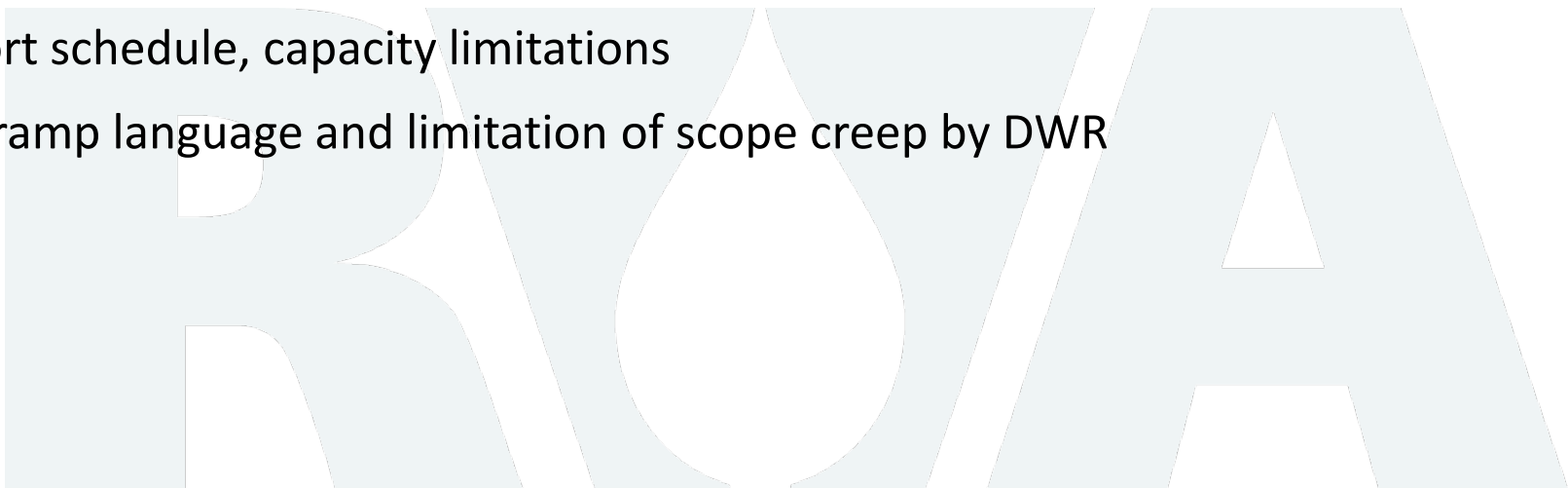
Representatives from RWA's Supershed Ten (10) individuals appointed:

1. Headwaters: Rebecca Guo (El Dorado Water Agency)
2. American River Watershed: Tony Firenzi (Placer County Water Agency)
3. Yuba & Bear River Watersheds: Greg Jones (Nevada Irrigation District)
4. Cosumnes River Watershed: Austin Miller (Sacramento County Water Agency)
5. Fisheries: Mike Tognolini or designee (East Bay Municipal Utilities District)
6. Environmental representative: Clyde MacDonald (Save the American River Association)
7. Environmental representative: Ted Rauh (Environmental Council of Sacramento)
8. Groundwater: Brett Ewart (City of Sacramento)
9. Flood: Gary Bardini (Sacramento Area Flood Control Agency)
10. Water Quality: Sean Bigley (City of Roseville)

Regional liaisons:

- American River Basin: Kerry Schmitz (Sacramento County Water Agency)
- Lower American River: Jessica Law or delegate (Water Forum)
- Underrepresented/Front Line Communities: Valley Vision

- RWA staff provided Backgrounder and Charter to ad hoc committee in advance of meeting
- Representatives from RWA's Supershed (the ad hoc committee) met on March 6 to discuss their potential role in this opportunity
- The following input was provided:
 - Interested in definition of Supershed boundary
 - Hope that the focus is on Steps A and C, and leveraging work already accomplished in Step B
 - Short schedule, capacity limitations
 - Offramp language and limitation of scope creep by DWR



RWA Proposed Pilot Objectives

- RWA staff to further brief RWA Board and seek approval on Pilot opportunity and DWR grant agreement (March 14)
- RWA to execute Pilot Grant agreement pending RWA Board approval
- RWA to set Committee Meetings (bimonthly suggested)
- Committee to review Pilot information (i.e. presentation, backgrounder, and charter) and provide feedback to RWA no later than March 16

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