

Russian River Watershed Resilience Pilot



Watershed Network Meeting 6
March 24, 2026

Funding for this project has been provided in full or in part from the Budget Act of 2022 and through an agreement with the State Department of Water Resources.

News from around the Watershed

- While we wait for folks to join, please post any news from around the watershed in the chat
- News could include:
 - Achieving project milestone.
 - Citing of an interesting bird, mammal or amphibian.
 - Funding news
 - Celebration of a community member
 - Anything else you'd like to share.

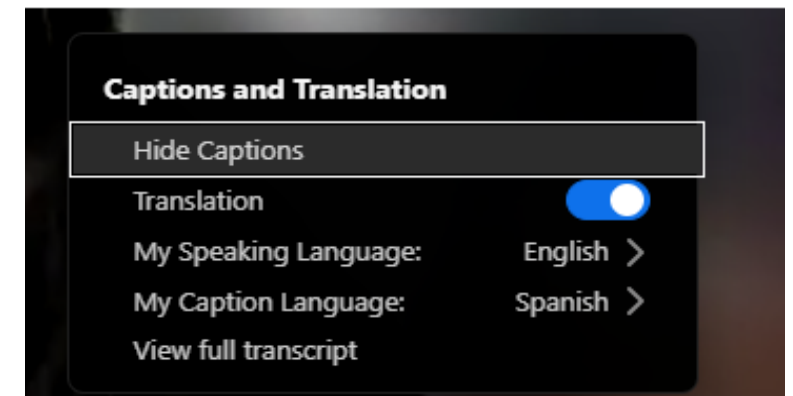
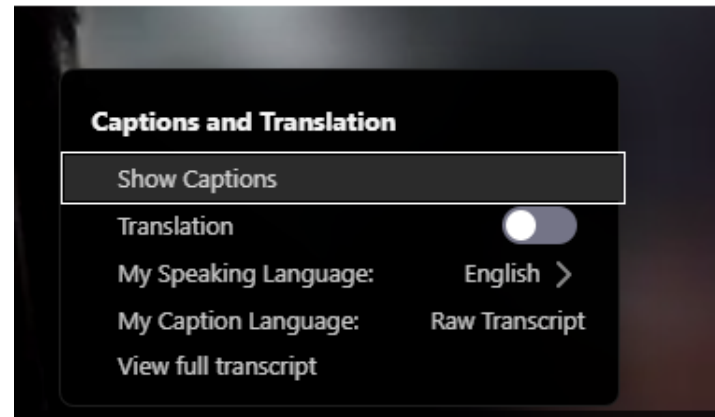
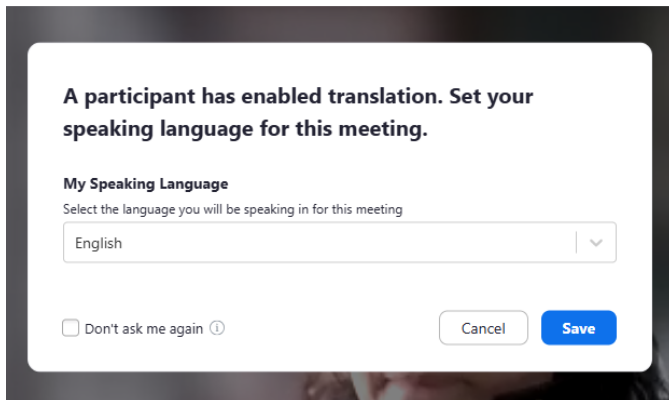


Interpretation Captioning

- Elegir su idioma en la caja que parece después de unir la reunión. Haga clic “save”
- Select your speaking language on the dialog box that appears after you join, hit save

- Apague capciones por navegar al botón en la pantalla, elige “show captions”
- Now turn on captions by going to the CC button on the Zoom toolbar and choosing “show captions”

- En el menú que aparece, prenda traducción
- In the menu that appears, turn on translation
- Al lado do “my caption language”, abra el menú para elegir su idioma preferida
- Next to “My caption language”, open the menu to select your preferred language



Meeting Guidelines

1. We welcome all questions and perspectives. Please use the raise hand function and we will call on you to ensure we have one voice at a time or use the chat function.
2. Engage with curiosity.
3. Speak from your or your organizations perspective.
4. Please remain on mute when not speaking. We appreciate your patience in allowing space for others to share.



Today's Agenda

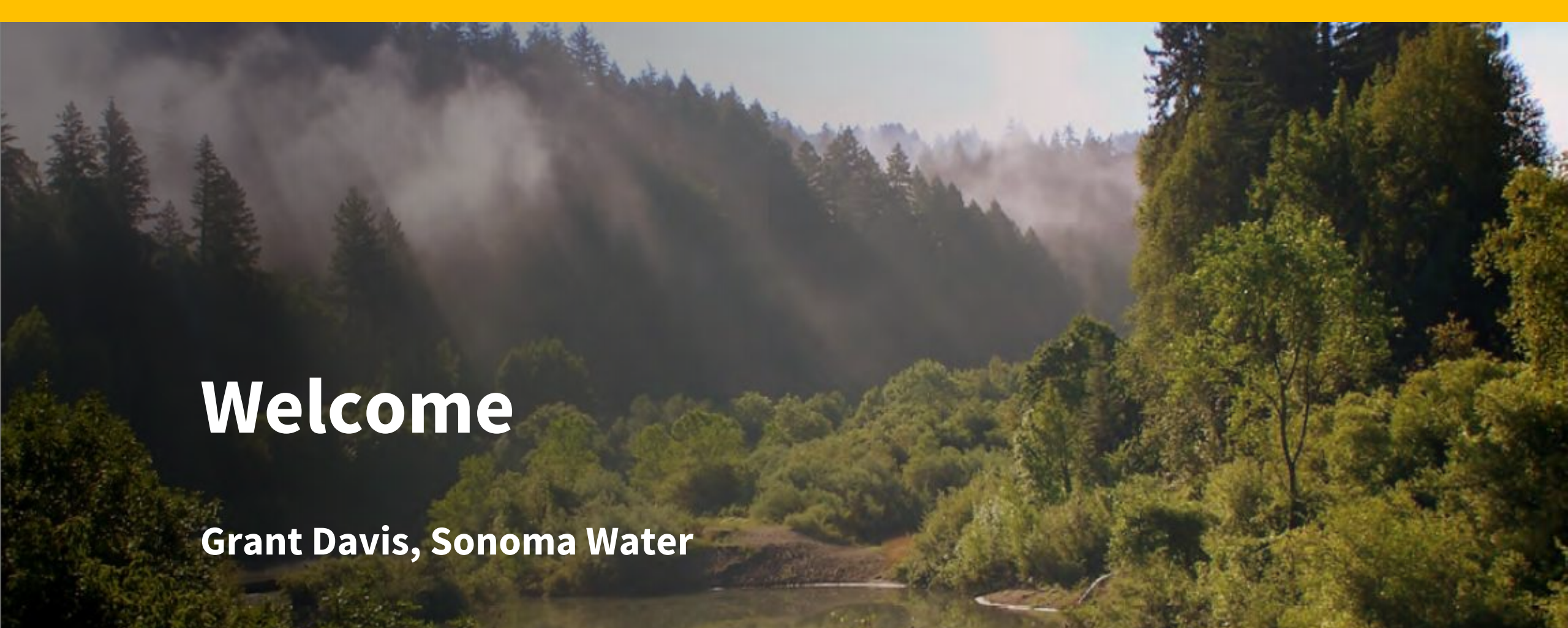
- **Welcome** – Grant Davis, Sonoma Water
- **Updates to Adaptation Strategies** – Armin Munevar, Jacobs
- **Implementation Strategies & Recommendations** – Laura Harnish, Armin Munevar Jacobs
- **Plan Review Process & Next Steps** – Laura Harnish, Jacobs
- **DWR Watershed Resilience Program Next Steps** – Art Hinojosa & Ann Marie Ore, DWR
- **Closing** – Chris Delaney, Sonoma Water



Meeting Objectives

1. Present Updates on Adaptation Strategies
2. Discuss Implementation Strategies
3. Receive Input on Recommendations
4. Provide Instructions for Reviewing the Draft Watershed Resilience Plan



A scenic landscape photograph of a forested valley. In the foreground, a river flows through a lush green forest. The middle ground shows dense foliage and trees. In the background, misty mountains rise, with sunlight filtering through the clouds, creating a dramatic effect. The sky is a mix of blue and white, suggesting a clear day with some clouds.

Welcome

Grant Davis, Sonoma Water

Project Timeline and Milestones

- **Watershed Network Meetings:**

- February - Completed
- May- Completed
- September, November 2025
- January, March 2026

- **Draft Watershed Resilience Plan:**

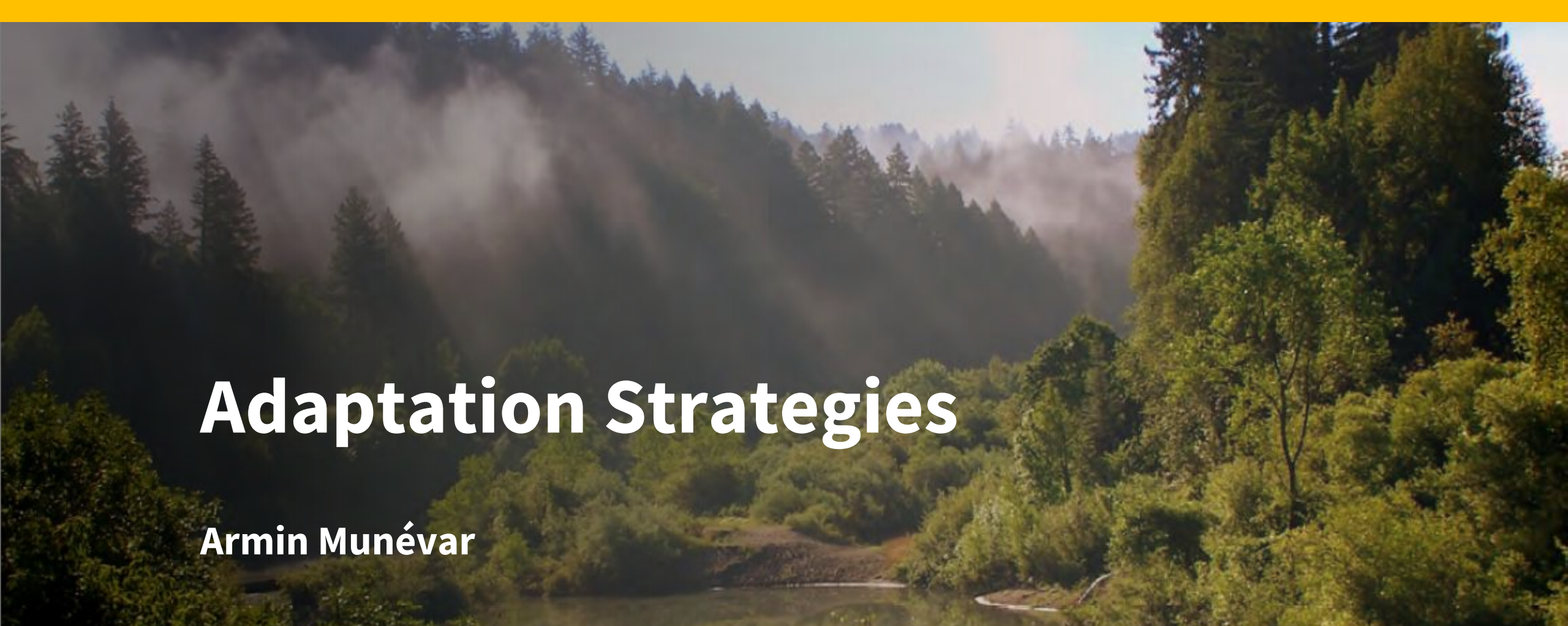
- March 2026

- **Final Watershed Resilience Plan:**

- April 2026

Meeting	WRP Stage	Goals	Preparatory Work/Meeting Material
#1 FEB 26 2025	1. Setting the Stage	Introduce plan; review goals and vision; review/confirm watershed boundary; initiate goals and vision	Project fact sheet GIS mapping of boundary Draft Vision
#2 MAY 6 2025	2. Explore Hazards 3. Assess Vulnerabilities and Risks	Review hazards; identify and describe historical events and impacts; describe future hazards; gap analysis Framing of vulnerability and risk assessment	Historical hazard summary Projections of change Gap analysis Draft vulnerability metrics
#3 SEPT 16 2025	3. Assess Vulnerabilities and risks	Review of vulnerability and risk assessment Integrate Network Members observations of vulnerabilities across water resource sectors	Draft vulnerability and risks assessment results
#4 DEC 10 2025	3. Assess Vulnerabilities and risks 4. Develop Adaptation strategies	Review refined vulnerability assessment Identify adaptation strategies for consideration	Vulnerability and risk assessment results Initial framing and identification of adaptation strategies
#5 FEB 24 2026	4. Adaptation Strategies	Review evaluation of adaptation strategies	Draft adaptation strategy list and evaluation
#6 MAR 24 2026	5. Implement & Monitor	Identify possible implementation paths; recommendations for plan	Draft implementation paths for strategies Draft recommendations for plan



A scenic landscape photograph of a forested valley. In the foreground, a river flows through a lush green forest. The middle ground shows dense foliage and trees. In the background, misty mountains rise, with sunlight filtering through the clouds, creating a dramatic effect. The overall tone is natural and serene.

Adaptation Strategies

Armin Munévar

Major Steps in Watershed Resilience Pilot



1. Set the Stage



2. Explore Hazards



3. Assess Vulnerabilities & Risks



4. Develop Adaptation Strategies

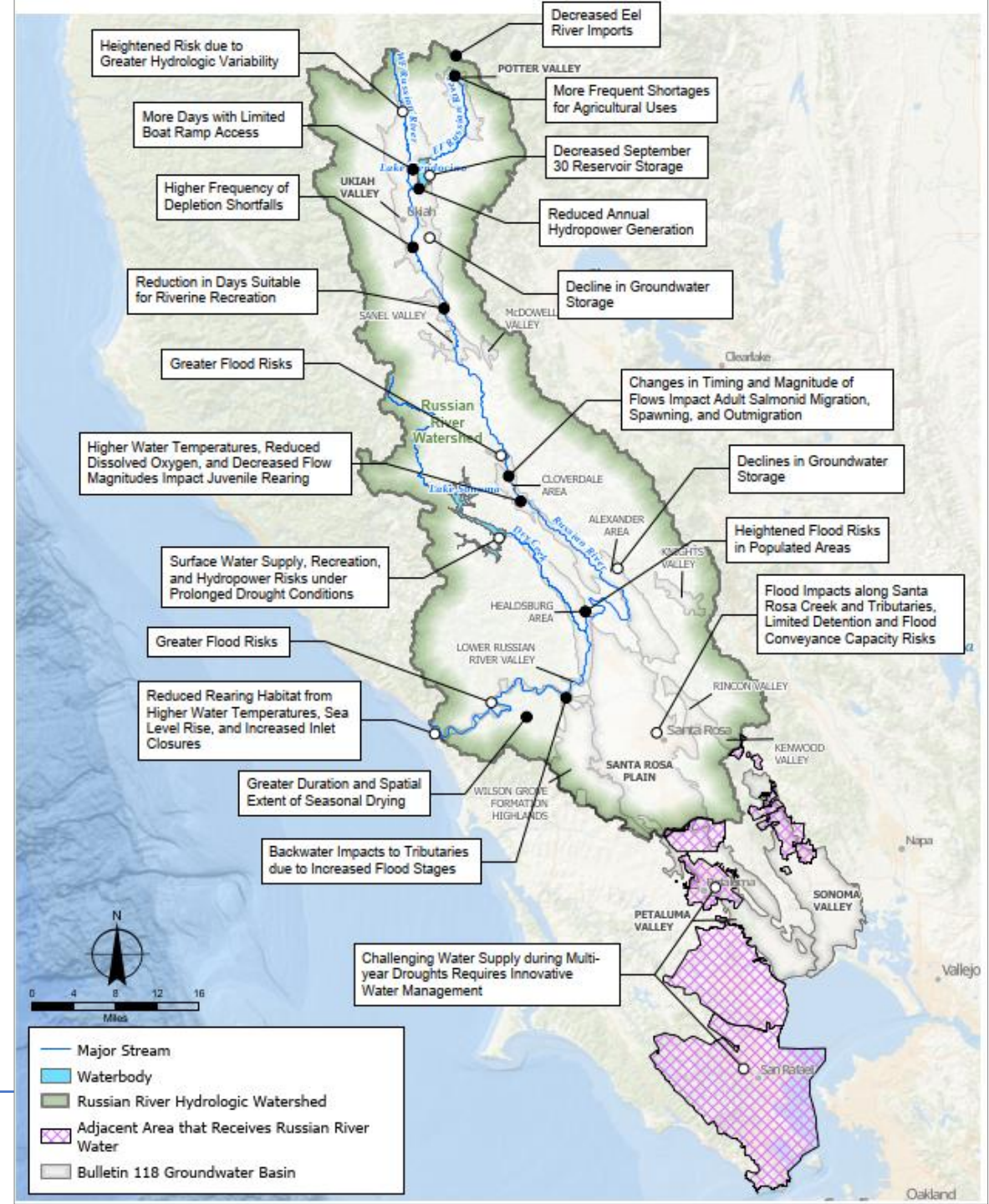


5. Implement & Monitor

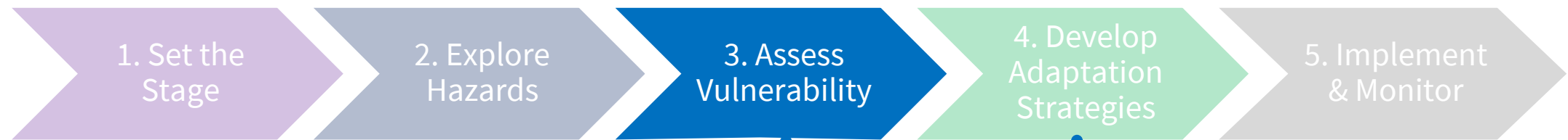


Characterizing Climate Vulnerabilities

- 7 water resource sectors
- 4 planning areas
- ~20 key vulnerabilities
- Strong interdependencies
 - Surface water-groundwater supply-recreation-hydropower
 - Flood management-ecosystems-water quality
 - Flood management-surface water-groundwater
 - Geography and systems matter



From Vulnerability Assessment to Adaptation Strategies



1. Systematically identify & evaluate the vulnerabilities of watershed resources to climate hazards.
2. Highlight critical vulnerabilities for additional focus.
3. Inform development of targeted adaptation strategies for long-term resilience.

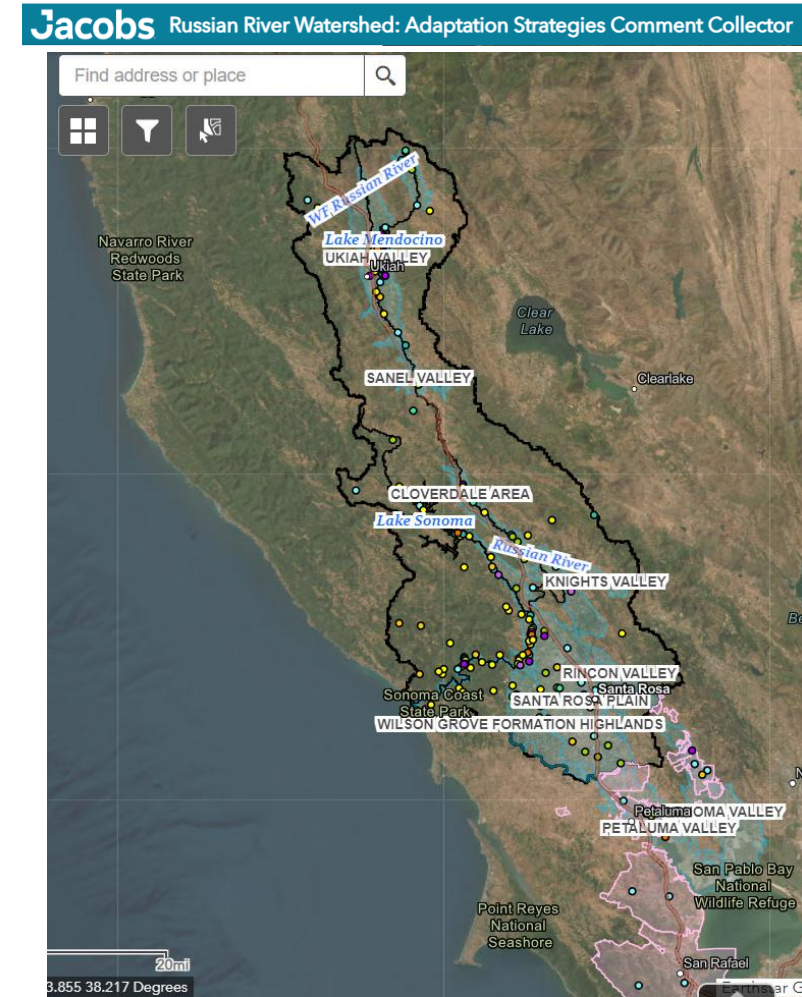
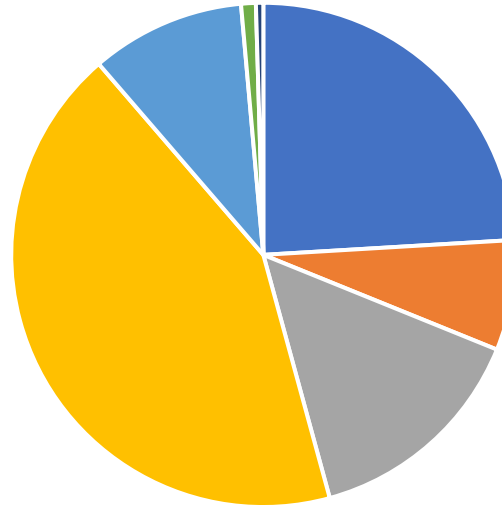
1. Prioritize areas of highest vulnerability
2. Frame breadth of potential strategies
3. Solicit input on potential strategies
4. Synthesize input and develop conceptual strategies
5. Evaluation strategies



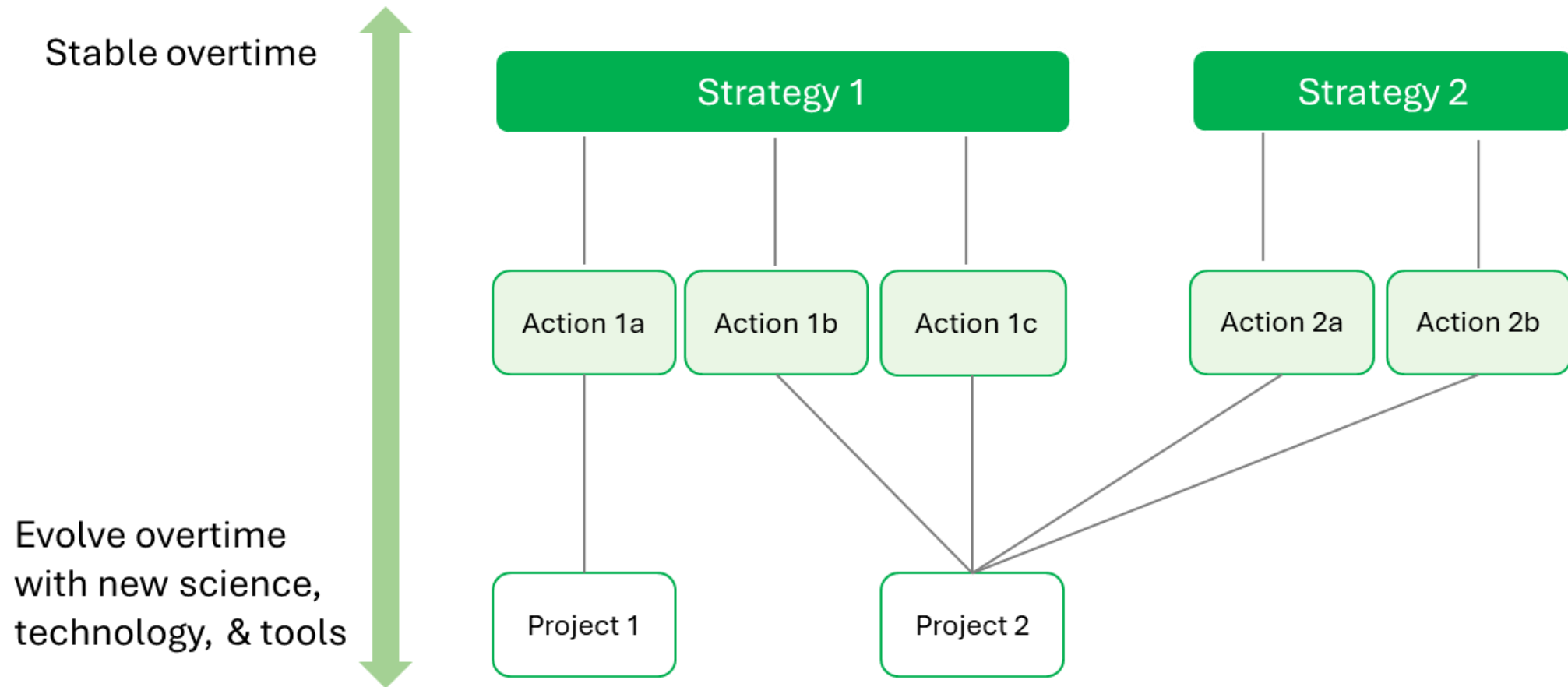
Summary of Adaptation Strategy Input Compiled

- Over 200 adaptation concepts compiled
- Addressing all water resource sectors
- Distributed across the watershed
- Strong response for concepts in Lower River, Water Supply, Ecosystems, and Flood Management

Distribution of Adaptation Concepts Compiled

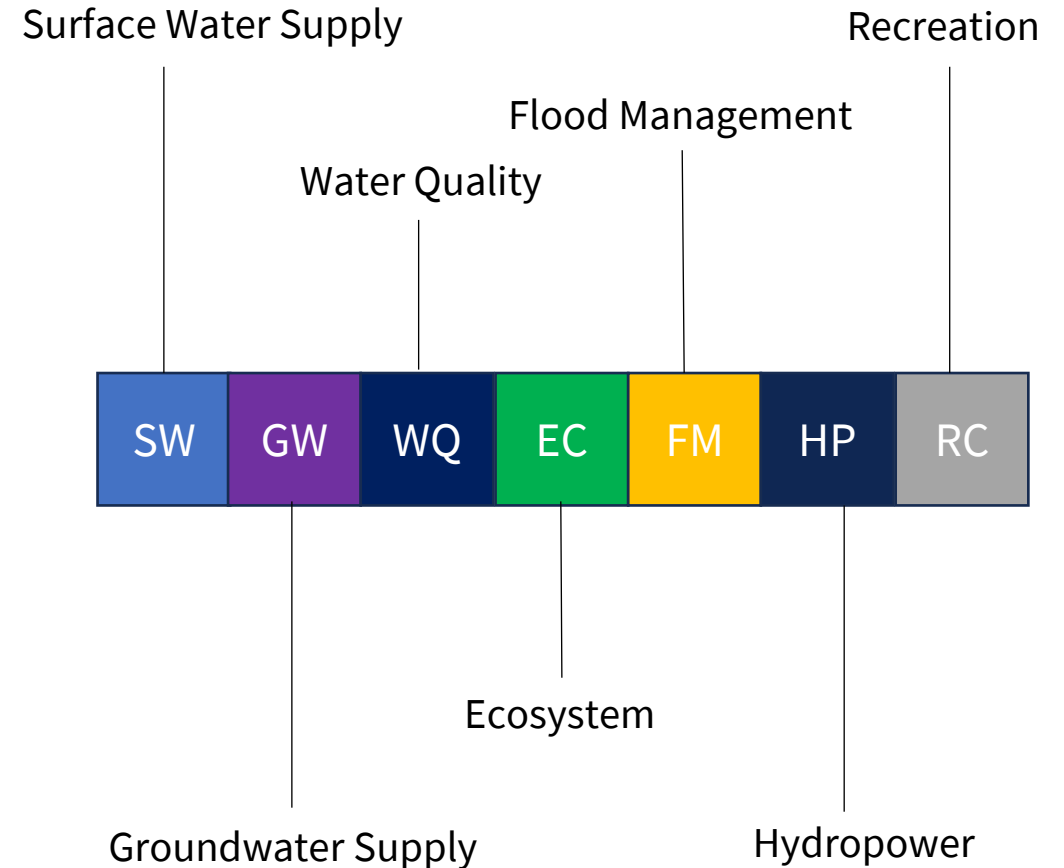


Organizing Strategies, Actions, and Projects



Important Characteristics of Strategies and Actions

- Strategies and actions have the potential to address various water sector vulnerabilities
- Interdependency of vulnerabilities means that strategies and actions are often integrated in their performance
- Systems approach to integrated water resource planning



Draft Climate Adaptation Strategies

SW GW WQ EC FM HP RC

Climate Adaptation Strategy	Water Resource Sectors
1. Increase Resilience to Changes in Upper River and Eel River Transfers	
2. Increase Water Supply Resilience to Drought	
3. Increase Water Conservation and Water Use Efficiency	
4. Expand Conjunctive Use of Surface Water and Groundwater	
5. Improve Forecasts and Forecast-Based Operations	
6. Reduce Flood Risk to Communities and Infrastructure	
7. Support Forest Health and Wildfire Resilience	
8. Manage Sustainable Headwaters	
9. Promote Land Stewardship Measures to Restore Watershed Function	
10. Restore Floodplains and Connectivity	
11. Restore Hydrological Function, Habitat, and Thermal Refugia in Tributaries	
12. Adapt Russian River Estuary to Future Conditions	
13. Support Flexible and Adaptive Policy for Resilient Watershed Management	
14. Enhance Tool, Monitoring, and Water Accounting Methods	
15. Improve Understanding of Historical Geomorphology, Land Use, and Sediment	

Interconnectivity of Strategies

- WRP Adaptation Strategies are Not Isolated
- Strategies are Collectively an Organized, Focused Resilience Portfolio
- Leverage Related Programs by Others
- Danger is to be Everything to Everyone!!



Resilient Russian River Watershed

Water Supply & Drought Resilience

1. Resilience to Changes in Upper River & Eel River Transfers
2. Water Supply Drought Resilience
3. Conservation & Water Use Efficiency
4. Surface & Groundwater Conjunctive Use

Watershed & Ecosystem Health

8. Manage Sustainable Headwaters
9. Land Stewardship-Watershed Function
10. Restore Floodplains & Connectivity
11. Restore Habitat & Thermal Refugia
12. Adapt Estuary to Future Conditions

Community Safety & Climate Risk

6. Reduce Flood Risk to Communities & Infrastructure
7. Forest Health & Wildfire Resilience
15. Understand Geomorphology, Land Use & Sediment

Governance & Management Tools

13. Flexible & Adaptive Policy
14. Tools, Monitoring & Water Accounting
5. Forecasts & Forecast-Based Operations

Multi-Year Funding Strategy

Outcomes Focused Implementation Plan

Partnerships & Organizational Capacity

Strategy #1 – Increase Resilience to Changes in Upper River & Eel River Transfers

Action	Type	Vulnerabilities Addressed
		SW GW WQ EC FM HP RC
1. Increase Surface and/or Groundwater Storage in Upper River	Water Infrastructure	
2. Improve Water Demand Management	Governance, Management	
3. Implement Managed Aquifer Storage	Management and Operations	
4. Maximize Flexibility through Forecast-Based Operations at Lake Mendocino	Forecast, Science, Management	
5. Manage Immediate Risk due to Planned PVP Decommissioning	Policy, Infrastructure	



Strategy #6 – Reduce Flood Risk to Communities & Infrastructure

Action	Type	Vulnerabilities Addressed
		SW GW WQ EC FM HP RC
1. Improve Regional Coordination on Flood Risk Management	Restoration, Land Use	
2. Increase Flood Resilience	Governance, Management	
3. Acquire Conservation Easements over Existing Floodplain	Policy	
4. Improve Flood Management Infrastructure for Central Sonoma Watershed Project	Management, Operations	
5. Update Flood Management Design Guidance	Policy	



Strategy #10 – Restore Floodplains & Connectivity

Action	Type	Vulnerabilities Addressed
		SW GW WQ EC FM HP RC
1. Implement Floodplain Restoration at Former Gravel Pits on Russian River	Restoration, Land Use	
2. Protect Instream Flows & Restoration Projects in Critical Coho Watersheds	Governance, Management	
3. Implement Restoration Concepts from Laguna Restoration Plan	Restoration	
4. Improve Modeling of Riparian, Floodplain, & Flood Dynamics	Forecast, Science, Management	
5. Acquire & Protect Undeveloped Lands at Tributary Mouths	Policy, Governance	



Strategy #13 – Support Flexible and Adaptive Policy for Resilient Watershed Management

Action	Type	Vulnerabilities Addressed
		SW GW WQ EC FM HP RC
1. Support Flexible and Adaptive Regulations	Restoration, Land Use	
2. Acquire Conservation Easements to Support Watershed Resilience	Governance, Management	
3. Support Action Plan to Address Water Quality Impairments	Restoration	
4. Develop Resources and Education for Landowners to Implement Watershed Conservation Practices	Forecast, Science, Management	
5. Improve Integration of Flood and Land Management	Policy, Governance	





Questions?
Hay algunas preguntas?

A scenic landscape photograph of a forested valley. In the foreground, a river flows through a lush green forest. The middle ground shows dense foliage and trees. In the background, misty mountains rise, with sunlight filtering through the clouds, creating a dramatic effect. The overall tone is serene and natural.

Resilience Strategy Implementation

Laura Harnish

Three Main Aspects of Implementation



Resilient Russian River Watershed

Water Supply & Drought Resilience

1. Resilience to Changes in Upper River & Eel River Transfers
2. Water Supply Drought Resilience
3. Conservation & Water Use Efficiency
4. Surface & Groundwater Conjunctive Use

Watershed & Ecosystem Health

8. Manage Sustainable Headwaters
9. Land Stewardship-Watershed Function
10. Restore Floodplains & Connectivity
11. Restore Habitat & Thermal Refugia
12. Adapt Estuary to Future Conditions

Community Safety & Climate Risk

6. Reduce Flood Risk to Communities & Infrastructure
7. Forest Health & Wildfire Resilience
15. Understand Geomorphology, Land Use & Sediment

Governance & Management Tools

13. Flexible & Adaptive Policy
14. Tools, Monitoring & Water Accounting
5. Forecasts & Forecast-Based Operations

Multi-Year Funding Strategy

Outcomes Focused Implementation Plan

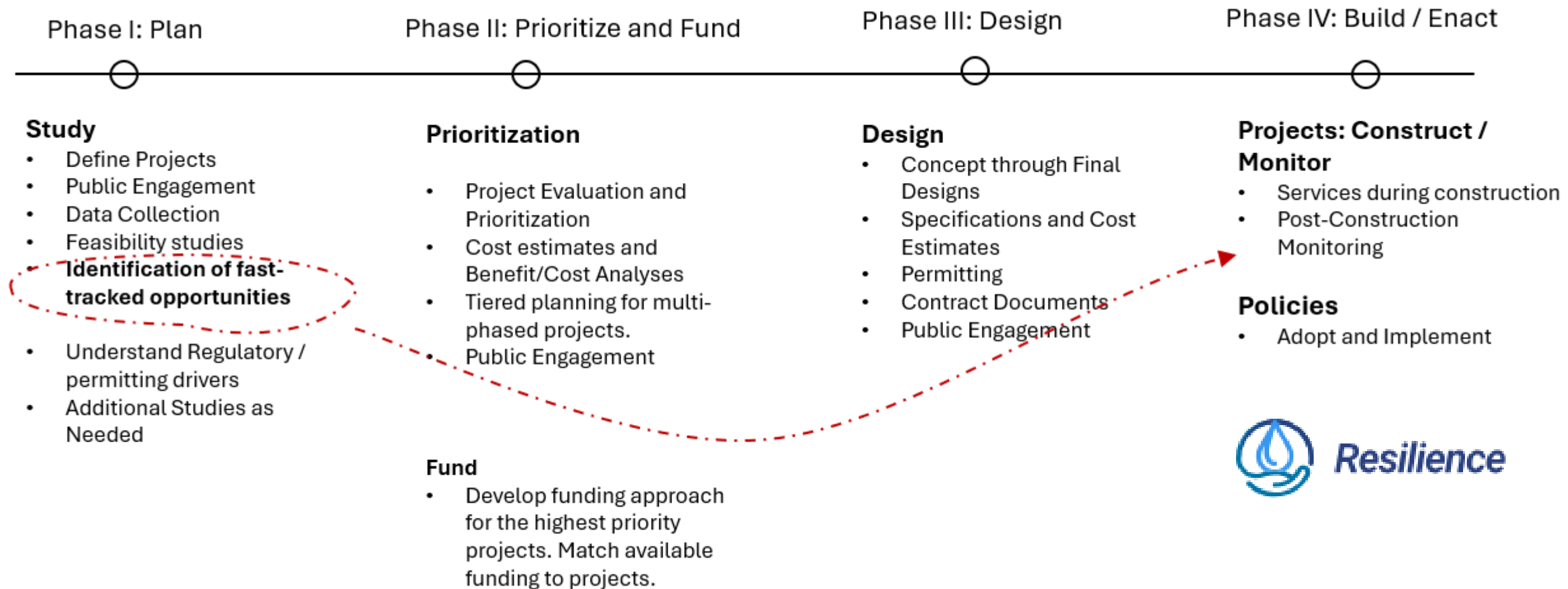
Partnerships & Organizational Capacity

Partnerships and Organizational Capacity

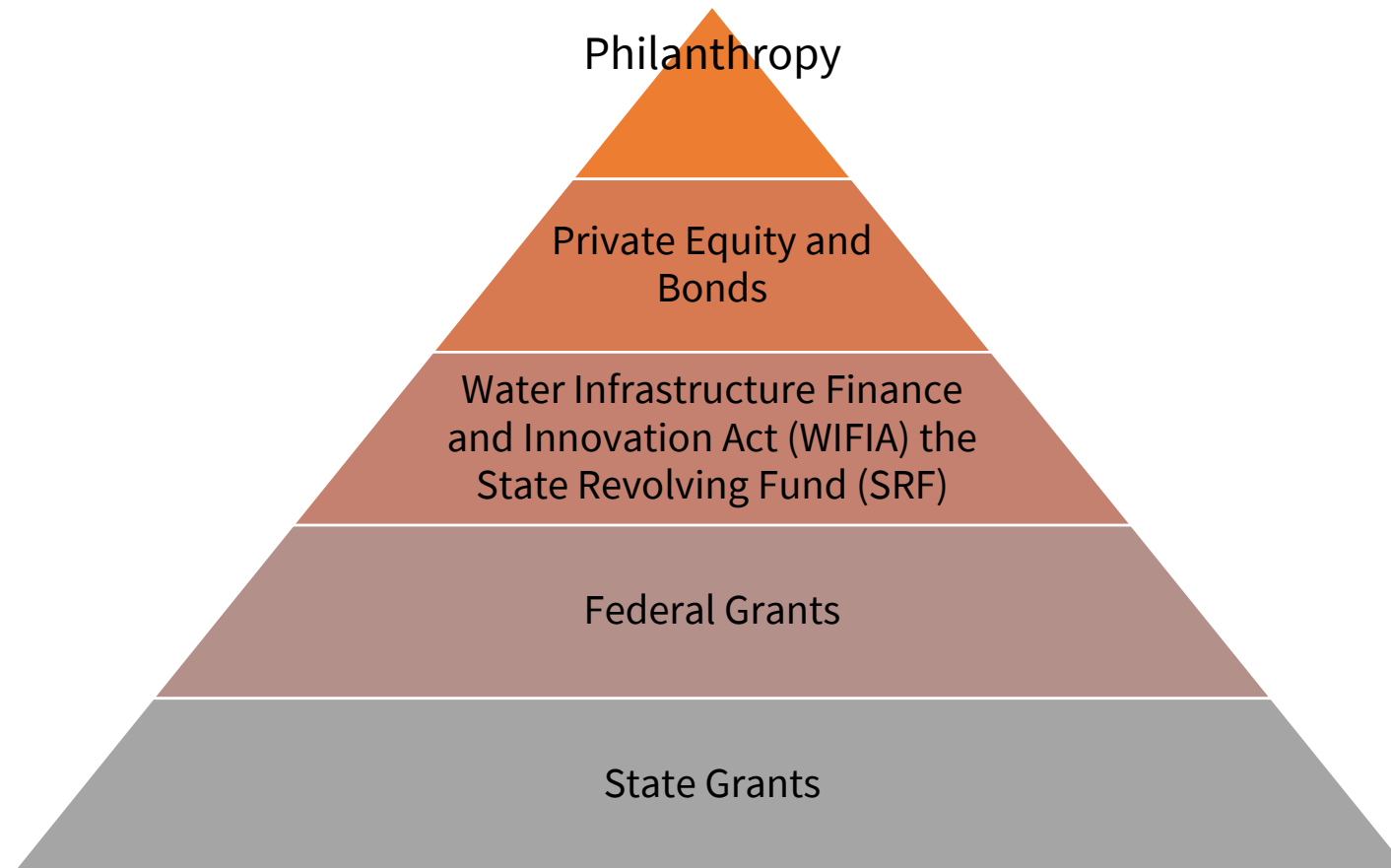
- Network Reconvenes in Summer
- Focus on Defining Projects within Adaptation Strategies & Actions
- Consider New Information on DWR Funding ... Informs Network Needs
- Adapt/Adopt Prioritization Framework



Outcomes Focused Implementation Plan

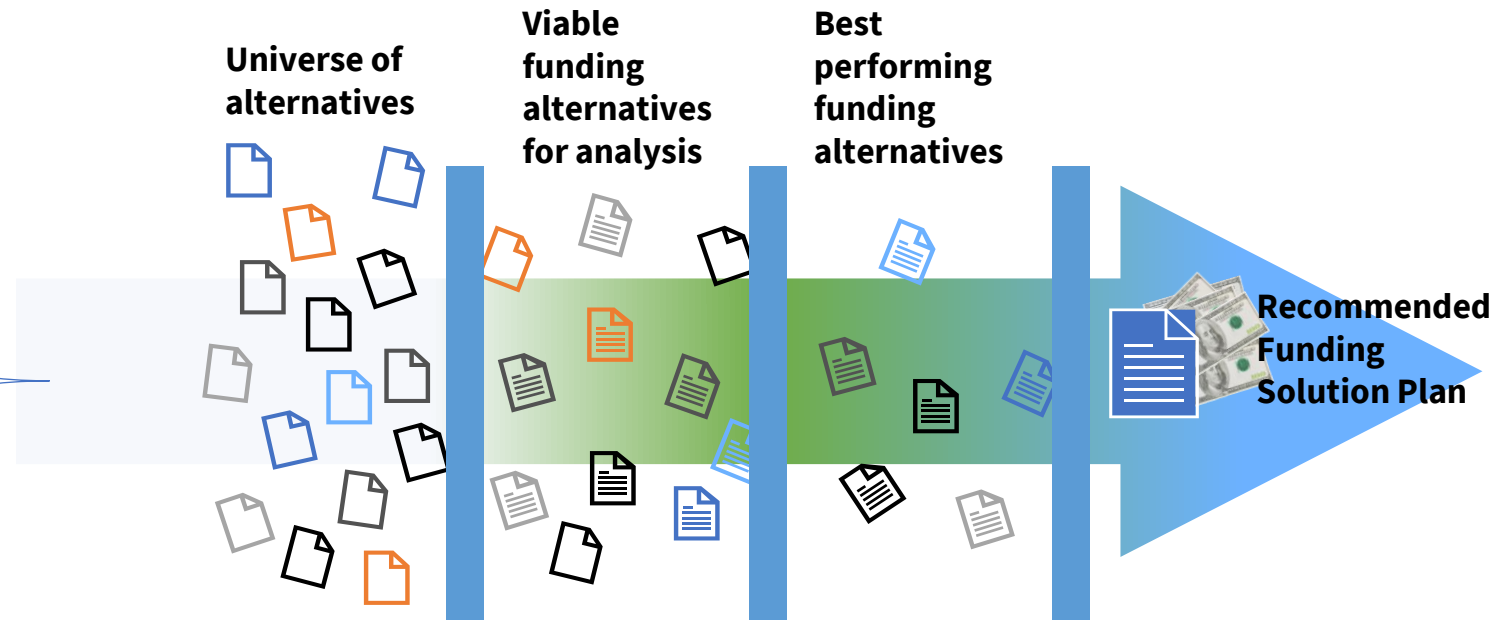


Multi Year Funding Strategy: Leveraging Portfolio of Funding Types



Build an Application Pipeline

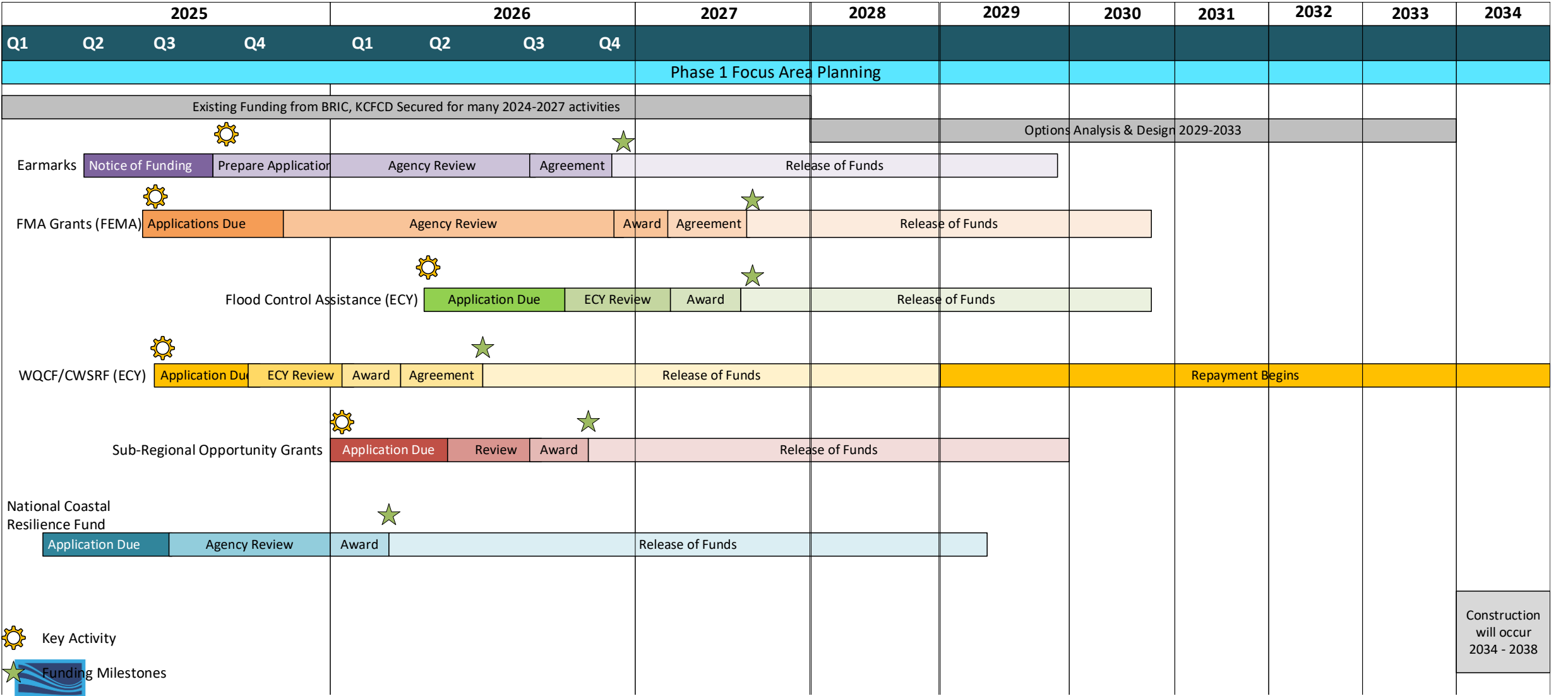
- Begin tackling readiness to proceed milestones, initiate tasks
- Develop and refine scope(s), budget(s)
- Begin preparing funding applications to multiple projects well in advance
- Finalize when Notice of Funding Opportunity is released
- Submit applications ahead of schedule to build in a buffer
- Increase efficiency and accuracy
- Rinse and Repeat



Fiscal Year

Repeat process each fiscal year – Pipeline should always be flowing!

Example– Strategic Funding Timeline



Funding Opportunity Leader Board





Questions?
Hay algunas preguntas?



Recommendations

Input from the Watershed Network

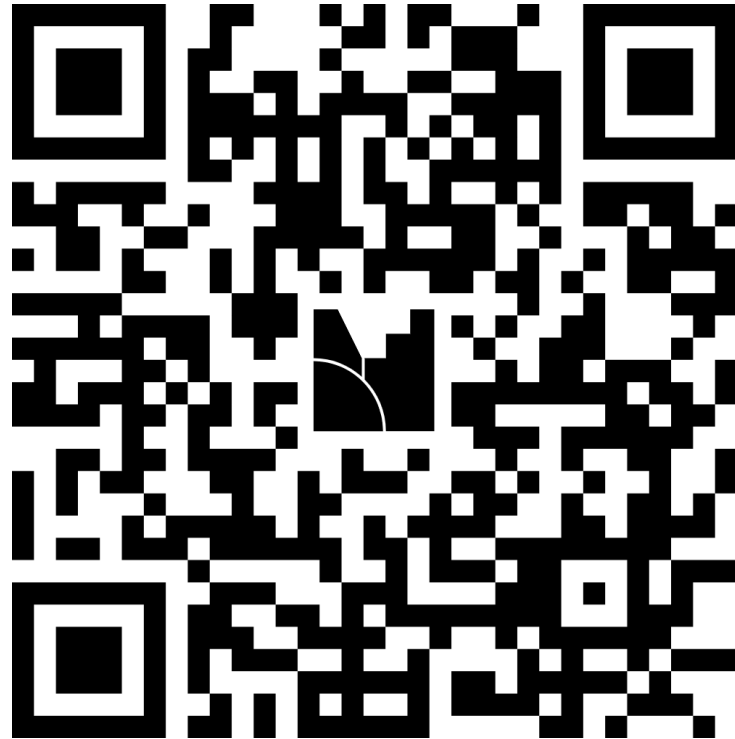
Looking Forward: Getting your Input on Recommendations and Next Steps

- Watershed Network
 - Example Rec: The Network should be funded to continue the work of the Pilot and implement projects.
- Vulnerability Assessment
 - Additional studies needed to better understand climate risks
- Adaptation Strategies:
 - Advance the Adaptation Strategies to specific projects.
 - Prioritize projects using a prioritization framework.
- Implementation Strategies
 - Develop a “Living Plan”
 - Look for innovative approaches to permitting to “streamline” permitting for the large magnitude of projects planned. .



Mentimeter Poll

- <https://www.menti.com/alr13n3wp8kb>





Questions?
Hay algunas preguntas?



Plan Review Process & Next Steps

Laura Harnish & Armin Munevar, Jacobs



Review Process

- Go to the website – to this Link: [website here](#)
- Open Individual Documents
- Provide your comments in the form: [Feedback Form](#)
- NOTE: We are Looking For:
 - Things that are MISSING
 - Things that we got WRONG
 - Focus on contentPlease be as specific as possible.



Draft Russian River Watershed Resilience Plan

A Draft of the Russian River Watershed Resilience Plan (WRP) is available for Watershed Network review. The Russian River WRP is currently provided by individual chapters and appendices in the table below. Please note that this version is a review draft and we ask that focus on content and avoid editorial edits. We are primarily seeking your input to identify any incorrect content or content that is missing.

Please use this [form](#) in conjunction with each chapter. Feedback is due April 7th.

Thank you again. Please be as specific as possible so we can address your comment. You can provide general feedback on the Plan and feedback that is specific to each chapter. If you have questions, please reach out to **Chris Delaney** chris.delaney@scwa.ca.gov and **Armin Munevar** armin.munevar@jacobs.com.

Document	Name	Download
Executive Summary	Executive Summary	Available in April
Chapter 1	Watershed Resilience Program and Pilot Overview	Download PDF
Chapter 2	Russian River Watershed and Study Area	Download PDF
Chapter 3	Building Resilience with a Watershed Network	Download PDF
Chapter 4	Climate Change in the Watershed	Download PDF
Chapter 5	Water Resource Vulnerabilities	Download PDF
Chapter 6	Adaptation Strategies to Increase Resilience	Coming soon
Chapter 7	Implementation Strategies	Coming soon
Chapter 8	Recommendations	Available in April
Chapter 9	References	Coming soon

Comment Form for Draft Russian River Watershed Resilience Plan

Thank you for your participation in the Watershed Network. This form is how you will submit feedback on the Plan. Please use this form in conjunction with each chapter. Feedback is **due April 7th**. Thank you again.

When providing feedback, please focus on content and avoid editorial edits. We are primarily seeking your input to identify any incorrect content or content that is missing. Please be as specific as possible so we can address your comment. You can provide general feedback on the Plan and feedback that is specific to each chapter in the sections below.

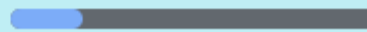
If you have questions, please reach out to Chris Delaney (chris.delaney@scwa.ca.gov) and Armin Munevar (armin.munevar@jacobs.com).

dodmoe@gmail.com [Switch account](#)



The name, email, and photo associated with your Google account will be recorded when you upload files and submit this form

Next



Page 1 of 5

[Clear form](#)



Russian River WRP Documents for Network Review

Plan Section	Date Available on Website for Review
Letter from Network and Acknowledgements	Available Soon
Executive Summary	Available 4/13
1. Watershed Resilience Program and Pilot Overview	Available Now
2. Russian River Watershed Characteristics	Available Now
3. Building Resilience with a Watershed Network	Available Now
4. Climate Change in the Watershed (Historical and Future)	Available Now
5. Water Sector Vulnerabilities and Risks	Available Now
6. Adaptation Strategies to Increase Resilience	Available Friday 3/27
7. Implementation Strategies	Available Friday 3/27
8. Recommendations	Available 4/13



Appendices

Plan Section	Date Available on Website for Review
A. Watershed Network Participants and Charter	Available Now
B. Russian River Watershed Climate & Hydrology	Available Now
C. Vulnerability Assessment	Available Soon
D. Adaptation Strategies and Actions	Available 3/27
E. Watershed Water Budget	Available Now
F. Study Area Delineation	Available Now
G. Historical Weather-Related Hazards	Available Now



A scenic landscape photograph of a forested valley. In the foreground, a river flows through a lush green forest. The middle ground shows dense foliage and trees. In the background, misty mountains rise, with sunlight filtering through the clouds, creating a dramatic effect. The sky is a mix of blue and white, suggesting a clear day with some cloud cover.

What's Next?

Armin Munevar

Watershed Network Next Steps



Resilience

Russian River Watershed

[Program](#)

[Network](#)

[Resilience](#)

[News](#)

[Connect](#)

[Plan](#)

[Coming Soon](#)

Building Resilience Together: The Future of the Russian River Watershed

Welcome to the Russian River Watershed Resilience site — your hub for collaboration, innovation, and action. Here, we're working together to address climate challenges, protect vital water resources, and create a sustainable future for our communities and ecosystems.



Resilience

Russian River Watershed

Next Steps and Opportunities for Input on Plan

- Plan Review
 - Now Through–April 7: Draft Report Available for Review
 - April 21: Comments Addressed and Plan Finalized
 - April 30: DWR Grant Closeout
- Reconvene Watershed Network
 - Summer 2026
 - Updates on Program and Plan (Living Plan)
 - Move Towards Implementation



Questions?
Hay algunas preguntas?



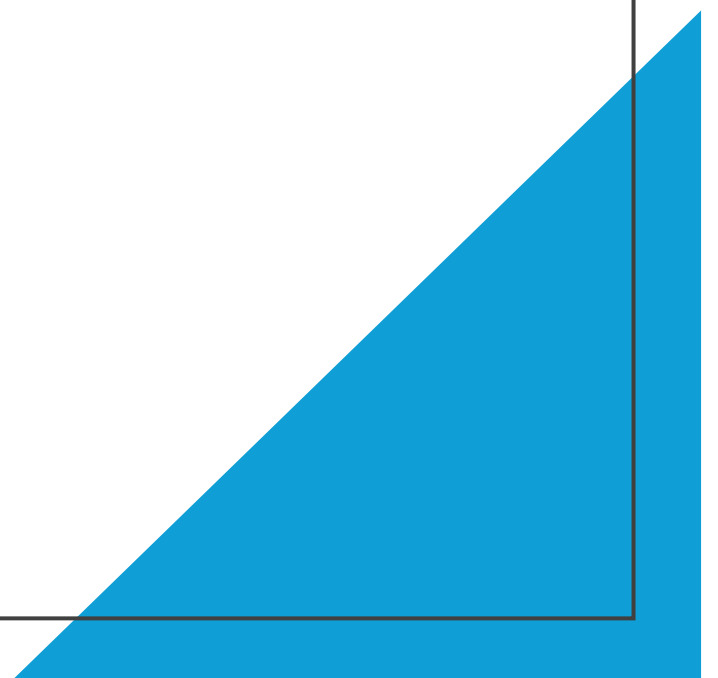
DWR Watershed Resilience Program Next Steps

Art Hinojosa & Ann Marie Ore, DWR

Proposition 4: Overview

Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024

March 2026



Proposition 4 Overview

- \$10B dollars in funding
- Provides statewide bond funding for climate, water, and resilience



Watershed Resilience Program

Program will combine:

- \$100M for projects related to integrated regional water management to improve climate resilience on a watershed basis
- \$65M for projects that increase water conservation in agricultural and urban areas.

After bond/state costs, \$152M available for grants.

Watershed Resilience Program Focus

- Increase Climate Resiliency
- Equity Considerations
- Watershed Scale

Per the bond language a priority will be given for leveraging funds and California Conservation Corp use.

Two Solicitations

1. Early Action Implementation

- Open to collaborative groups (RWMG, Watershed Networks, GSAs, etc)
- Implementation projects

2. Watershed Resilience Plans

- Fund development of new plans and watersheds

Public Engagement Opportunities

- Save the Date: April 30, 2026, 9am-12pm
 - Joint Virtual Webinar on Proposition 4 Watershed Resilience and Sustainable Groundwater Management Grant Programs
- Watershed Resilience Survey for early input- closed March 6
 - Currently analyzing some 300+ responses

DWR Grant Programs

Competitive Grant Programs	Amount
Sustainable Groundwater Grant Program	~\$300M
Brackish Desalinization	\$57.6M
Watershed Resilience	\$152M
Stream Gages	\$6M
Small Communities Flood Risk Reduction Program	\$46.5M
Dam Safety and Climate Resilience	\$464M
Riverine Stewardship	\$47M

Active Grant Programs

- Wildlife Conservation Board - accepting applications
 - <https://wcb.ca.gov/grants>
- CalFire Forest Health -open for concept proposals: Due March 30th
 - <https://www.fire.ca.gov/what-we-do/grants/forest-health>
- CalFire Regional Wildfire & Landscape Resilience Grant Guidelines
 - <https://www.fire.ca.gov/what-we-do/grants>
 - Comments on draft Guidelines due April 13th

Ongoing Solicitation Updates

- Email Notification Lists:
 - <https://public.govdelivery.com/accounts/CNRA/signup/31790>
- Grants Portal – Upcoming and Open Solicitations
 - <https://www.grants.ca.gov/>
- Information about any of DWRs Funding Opportunities:
 - Email to: Funding@water.ca.gov



CALIFORNIA DEPARTMENT OF WATER RESOURCES

All Topics

Email *

name@example.com

- ☐ DWR News Releases and Media Advisories
- ☐ DWR California Water Plan eNews
- ☐ DWR Water News
- ☐ DWR Delta eNews
- ☐ DWR Tribal Communication
- ☐ DWR SB552 Drought Planning
- ☐ DWR Flood News
- ☐ DWR Urban Water Management Plan
- ☐ DWR Sustainable Groundwater Planning Grant Program
- ☐ DWR Urban Funding and Grants
- ☐ DWR Water Desalination Grant Program
- ☐ DWR Sustainable Groundwater Management
- ☐ DWR California Statewide Groundwater Elevation Monitoring (CASGEM)
- ☐ DWR Water Grants
- ☐ CVFPP E-Newsletter
- ☐ DWR Urban Streams Restoration Program
- ☐ Big Notch Project





Closing - Thank You

Chris Delaney, Sonoma Water
chris.delaney@scwa.ca.gov

Laura Harnish, Watershed Network, Jacobs
Laura.Harnish@jacobs.com

Armin Munevar, Jacobs
armin.munevar@jacobs.com

Jessica Martini-Lamb, Tribal Engagement
jessica.martinilamb@scwa.ca.gov