

**American River Watershed Resilience Pilot Study
Watershed Network Meeting**

Date: May 19, 2025
Project name: American River Watershed Resilience Pilot Study
Project no: W8Y34200

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Attendees

Project Team

Name	Organization/Role
Ryan Ojakian	RWA
Jim Peifer	RWA
Trevor Joseph	RWA
Grace Kaufman	Valley Vision
Gretchen James	Valley Vision
Ibrahim Khadam	Khadam Consulting
Devyani Kar	Jacobs
Sirisha Nemani	Jacobs
Armin Munevar	Jacobs
Vijay Kesavan	Jacobs
Reed Thayer	Jacobs
Tapash Das	Jacobs
CJ Porter	Jacobs
Shannon Litchfield	Jacobs

Watershed Network

Name	Organization/Role
Anne Sanger	City of Sacramento
Austin Miller	Sacramento County
Brett Ewart	City of Sacramento
Brian Sanders	City of Sacramento
Christine Kohn	Water Forum
Denny Grossman	Conservation biologist/ecologist

Name	Organization/Role
Greg Zlotnick	San Juan Water District
Jereme Dutschke	Ione Band of Miwok Indians
Jon Money	El Dorado Irrigation District
Michael Saunders	Georgetown Divide Public Utility District
suareztribe@gmail.com	
Paul Helliker	San Juan Water District
Rebecca Guo	El Dorado Water Agency
Sean O'Brien	
Shelly Covert	Nevada City Rancheria
Ted Frink	Valley Foothills Watershed Collaborative
Tony Firenzi	Placer County Water Agency

Meeting Notes

Welcome & Introductions – *Jim Peifer, RWA*

News of the Watershed

Jim Peifer

Please provide any news you might have from around the watershed including project updates. Ted Frink and Denny, can you speak to what your organization does and how it could be helpful to the watershed

Ted Frink

- Valley Foothills Watershed Collaborative – Bear River to Cosumnes River. Exec Director
- Background with the California Department of Water Resources (DWR), 29 years, riverine stewardship
- Managed Cal Fed. Professional background as fisheries ecologist
- Working to pull folks together to make projects and programs happen locally across the watershed and working with Denny Grossman to develop the conservation assessment tool

Denny Grossman

- Conservation biologist/ecologist by trade working with Land Conservancy and other organizations
- Aiming to support regional conservation goals
- Placer County conservation authority work to come up with priorities for the region; looking to get involved and help where I can on this project

Ted Frink

if of interest, we would like to share our work and connect to offer our expertise and knowledge to leverage this, if it is a good match.

Project Overview – *Devyani Kar, Jacobs*

Roadmap

Devyani Kar

One of the feedback items we got at the last meeting was to help put the project into context, which is the intent of this roadmap. We are now in the heart of working on the vulnerability and risk assessment. Next, we will work to develop the adaptation plan.

Project Boundary & Vision Recap – *Ryan Ojakian, RWA*

Ryan Ojakian

Project area includes American, Cosumnes, and Bear watersheds. The development of the watershed network remains a living engagement. At the last watershed network meeting, we developed the vision statement we have today.

Embedding Equity into Planning – *Ryan Ojakian, RWA*

Ryan Ojakian

One of the goals is bringing equity to the watershed. This comes from the Greenlining Institute. We are aiming to follow these four points by embedding equity into the vision statement and building equity into the process. When we get to the final work product, we want to ensure that equity is a priority. We are off to a good start on incorporating equity but want to ensure this is a priority throughout.

Interactive Poll #1 – *Valley Vision*

Top priority in poll 1 is funding.

Denny Grossman

Priority 1 is progress being made on the adaptation strategies.

Greg

I agree with the progress being made on the adaptation strategies.

Ted Frink

I agree with 6 as another good aspect.

[see Mentimeter results for responses]

Ryan Ojakian

We did have DWR, the provider of the grant, show their interest in some of these same things, including bringing people together to support their funding of projects.

Denny Grossman

Have an online presence to see the information and what has been done. Information resources should be available for all of the network.

Sonoma Water Example – Armin Munevar, Jacobs

Devyani Kar

Next Armin is going to talk about the Climate Adaptation Plan (CAP) by Sonoma Water.

Armin Munevar

This aims to be a concrete example for what we intend to see for the Watershed Resilience Plan. This plan worked towards adaptation strategies and looked at climate-related threats similar to those on the American River and mapped these climate threats on the systems of Sonoma Water. For the American River, we are looking at seven different water supply sectors. For the CAP, we went through a workshop process to narrow down adaptation strategies for different sectors. We had anchor projects and supporting projects, with anchor projects being those that had a large impact on the project area. We worked through enabling processes to link strategies to implementation approaches. This was meant to give you an idea of where we are planning to go for the American River Watershed.

Where is this now?

Armin Munevar

Sonoma Water has leveraged Federal Emergency Management Agency funding and has had annual updates for this.

Ted Frink

Was low impact infrastructure considered?

Armin Munevar

Yes, green infrastructure and low impact were considered.

Project Progress (Rearview Analysis)

Gap Analysis – Vijay Kesavan

Vijay Kesavan

We've shared this previously, but we wanted to share this and remind folks that we have reviewed over 70 studies. We identified that there is a lot of information available; however, there are some gaps including cross-sectoral and equity focused work across all areas of the watershed.

Denny Grossman

When you identified data gaps, did you rank these by priority and is there a component of the project that will work to fill these gaps?

Jim Peifer

There is not a prioritization of existing studies. With respect to the future work and gaps, these will be prioritized due to funding availability for this pilot project.

Ibrahim Kesavan

Part of the gap analysis allows us to move forward with the vulnerability assessment.

Devyani Kar

We will also look at adaptation measures later in the presentation.

Water Budget – CJ Porter

CJ Porter

We are looking at how different hydrologic changes are impacting the watershed. This work uses the non-model approach of DWR's water budget development handbook. This figure overlays the systems that we are considering. The water budget looks at HUC8 watershed as well as subwatersheds. The preliminary results show the distribution of the different inflows and outflows of the system. We are also looking into assessing the inflows and outflows as well as the change in storage. We are also comparing between data sets and comparing with the model used by the Groundwater Sustainability Plans (GSPs).

Historical Hazards – Vijay Kesavan

Vijay Kesavan

We have looked into the severity and types of extreme weather events that have occurred historically across the watershed. We looked at flooding, atmospheric storms, severe drought, and wildfires (such as the Mosquito, Caldor fires).

Greg

How is widespread flooding defined?

Vijay Kesavan

There is greater vulnerability in the Sacramento region.

Michael Saunders

The other side of the extreme flooding is the extreme snow impacts with people snowed in.

Vijay Kesavan

Right, thank you. And this same snowpack can contribute to rapid snowmelt due to changing temperatures. This graphic shows swings within the past 10 years of the climate whiplash.

Ted Frink

Were there any thoughts to additional projections for future climate?

Tapash Das

We will be talking about how we are looking forward with climate projections.

Greg Zlotnick

Major flooding at Cosumnes River – this indicates the importance of not making blanket statements and to specify where we're talking about.

Rebecca Guo

2023 floods were not only in Sacramento County but were also throughout the watershed.

Interactive Poll #2 – Valley Vision

Gretchen James

We are conducting this live poll so that you all can have a direct input in the project. Thank you for participating in this process. Would anyone like to share why any of these are in your top 5 concerns?

Michael Saunders

Wildfire is my top concern in terms of effect on forest health as well as the long-term effects on the soil health, erosion, flooding, etc.

Greg Zionick

Can't do anything without water.

[Q: Are there any additional hazards that aren't reflected]

Ted Frink

Continued development and urban densities contribute to some of these threats as well as a threat itself – an impact that augments the hazards.

Denny

So far, all we have talked about are impacts to people. How are the impacts of other species and ecosystems being considered?

Jim Peifer

Thank you for the question. The American River Basin has a long history of considering environmental and fisheries considerations including work by the Water Forum. Great comment – let us take that end and consider how to address this.

Ted Frink

The watershed not only includes the people but also the ecosystems and natural systems.

Armin Munevar

As we progress today, we will discuss water sectors including ecosystems and water quality.

Ibrahim Khadam

There are hazards outside of climate hazard including regulatory hazards.

[see mentimeter results for responses]

Vulnerability Indicators & Metrics – Tapash Das, Jacobs

Tapash Das

We have described the rear view, now we are working to develop future climate scenarios from various climate models. We are using these data to confirm the vulnerability and risk assessment that looks into seven water resource sectors. All of these will work to inform the vulnerability across the watershed. Equity will be embedded in the plan throughout.

- Indicators are the observable aspects of our water resource sectors and metrics are the quantitative measurement of the indicator
- **Surface Water Supply** – some indicators include monthly and annual flow, water supply reliability, and reservoir conditions.
- **Groundwater** – indicators include groundwater level change.
- **Flood Management** – flood stage, population exposure, asset exposure, and reservoir conditions.
- **Ecosystem** – indicators include natural/ecological flows, wildfire threat, water quality impairments, and habitat conditions.
- **Water Quality** – indicators include drinking water impairments.
- **Recreation** – indicators include recreation uses, tourism, and water quality impairments.
- **Hydropower** – indicators include hydropower generation. Sample metrics include changes in runoff timing affecting reservoir storage.
- **Equity** – indicators include population exposure to risks. Sample metrics include change in population exposure to risks.

Interactive Poll #3 – Valley Vision

[Q: What water sectors do you feel are most vulnerable to changes in climate?]

Ecosystems/surface water supply leading poll

[Q: What additional indicators or metrics would be useful in describing vulnerability?]

Denny

There are indicator species and habitats for endangered species. Ecosystems is a less specific category than the other sectors.

Michael

How can we find out the more peripheral water management changes that may have impacts to the watershed on the regulation and policy side?

Next Steps – Ryan Ojakian, RWA

Ryan Ojakian

We are in the process of developing an interactive portal and conducting our vulnerability and risk assessments. We would like your continued feedback.

Greg

When do we expect to see this online?

Armin Munevar

In the next week or two. This is our beta version of the American River Resilience program site and will allow you all to engage. We are building in resources and data to be able to be interactive.

Ted Frink

Step 4 seems to be the bulk of the work; is there more work that will be done in this step?

Devyani Kar

Yes, the majority of this summer will be spent on this task including the climate modeling.

Ted Frink

This may be the step that Denny and I can offer our input into, to incorporate our work into the project.

Denny Grossman

I would be happy to share what we've done, and I agree with Ted that I appreciate the work that this team is doing. We may be able to support the biological components and ecosystem impacts.

Ted Frink

The work that Denny and I have collaborated on may be able to bring forward the outcomes for ecosystems.

Meeting Recording

[Watershed Network Meeting Recording – 5/19](#)