Pajaro River Watershed Resilience Program

Network Workshop #4

Prioritize Adaptation Strategies

November 6th 2025 / 1:00 – 4:00 pm

Welcome from Kanyon Sayers-Roods

Indian Canyon Mutsun Band of Costonoan Ohlone

Welcome to Workshop 4:
Prioritizing Adaptation Strategies in the Pajaro River Watershed

This program is funded in full or in part from the Budget Acts of 2022 and through an agreement with the State Department of Water Resources (DWR).

Welcome from Department of Water Resources

Use this QR code to learn more about DWR's Watershed Resilience Program.

Use this QR code to sign up for updates on Proposition 4 (scroll to bottom of the page)

Workshop Speakers

Brian Lockwood,
PV Water

Kanyon Sayers-Roods,
Costanoan Ohlone

Jordi Vasquez,
Department of Water Resources

Ellen Cross,
Network Strategy

Kiernan Brtalik,
Project Manager

Adam Witt,
Hydrologic & Ecological Sciences Lead

Reema Shakra,
Principal in Charge

Poster Session Facilitators

Poster Session Facilitators

Reema Shakra
PRWRP Team
Goal F

Marcus Mendiola
PV Water
Goal B

Bridget Childs
PRWRP Team
Goal E

Ellen Cross
PRWRP Team
Goal G

Adam Witt
PRWRP Team
Goal A

Kiernan Brtalik,
PRWRP Team
Goal C

Cameron Tana
PRWRP Team
Goal D

Workshop Agenda

WELCOME

- Goals for the Day

COMMUNICATION & ENGAGEMENT UPDATE

- Communications & Engagement
- Workshop #3 Survey Results

PRWRP UPDATE & BACKGROUND

- Recent Work Completed and Schedule Update
- Revisit PRWRP objectives, vision, and goals

PRIORITIZING ADAPTATION STRATEGIES

- Addressing Climate Vulnerabilities through Adaptation Strategies
- Adaptation Strategy Framework
- Adaptation Strategies and Implementation Actions

WORKSHOP ACTIVITIES

CLOSE OUT & SURVEY & NEXT STEPS

Goals for the Day

- Reflect on key insights **from climate vulnerability assessment and analysis** of gaps of existing adaptation strategies
- Explore **proposed adaptation strategies** and implementation actions
- Receive network input on how to **prioritize strategies** and actions through activities
- Identify **key priority implementation actions** tor long-term resilience

COMMUNICATION & ENGAGEMENT UPDATE

Communication & Engagement

Engaged the Network in the PRWRP Process

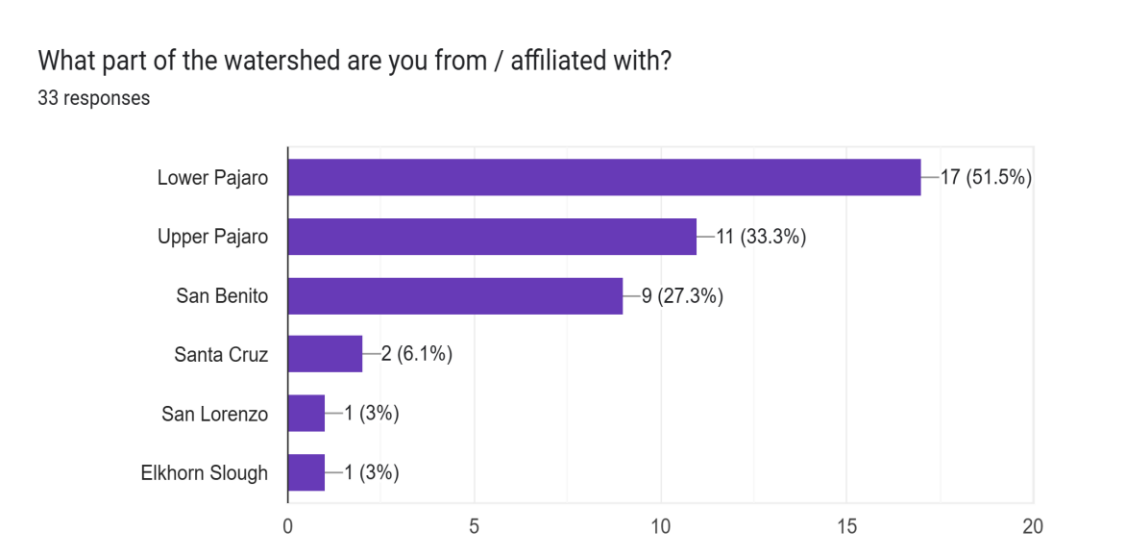
Workshops #1–3 built a shared watershed vision, assessed climate vulnerabilities, and co-developed draft adaptation strategies.

Identified & Documented Gaps and Specific Needs

- We hosted **Agriculture & Fire Focus Groups** (Oct 2025) to identify priorities related to natural and working lands.
- During **Día de los Árboles** (Oct 2025), partnered Watsonville Wetlands Watch and Regeneracion (150 people in attendance)

Initial Adaptation Strategies Workshop August 2025 - Survey Results

✓69 Attendees



Feedback Themes

1. Desire for more time and space to connect and network
2. Desire for in-person venue and interactive activities
3. Desire for simpler and shorter presentation

"More engagement with resources explaining scientific concepts… to bridge the gap of understanding for those who are not water experts."

"There were so many warm feelings, it felt so good after 3 hours—it was like people wanted to keep hanging."

"Maybe have more mingling before, or require people to say their position and organization."

PRWRP UPDATE & BACKGROUND

Recent Work to Craft Adaptation Strategies and Implementation Actions

Key Vulnerabilities

Synthesized results from more than **500 vulnerability assessment scores** to 12 watershed-wide Key Vulnerabilities.

Adaptation Strategies Gap Assessment

Reviewed **220 existing resources** (policies, programs, and projects) to understand constraints and barriers to climate resilience efforts across the watershed

Proposed Strategies and Actions

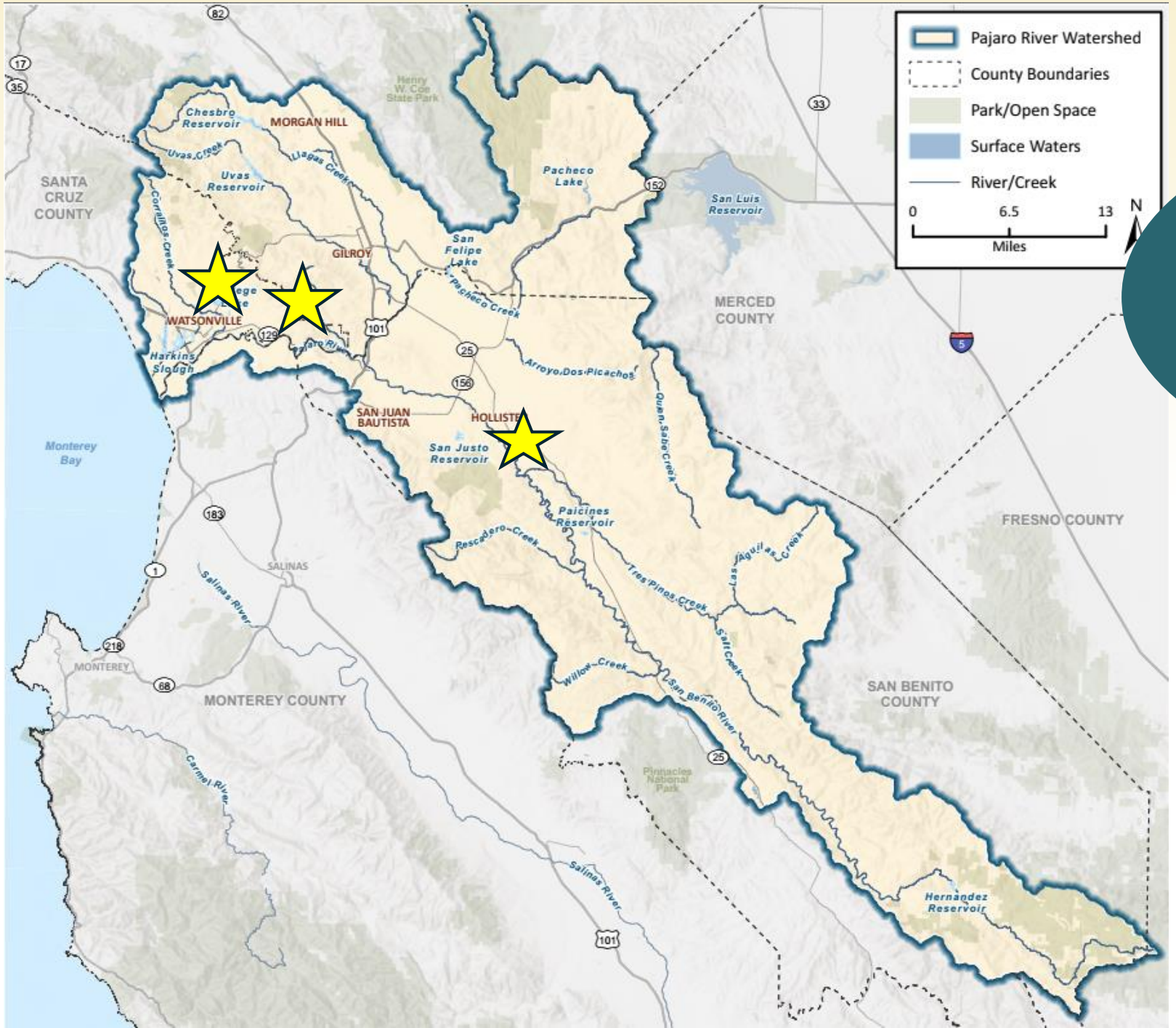
Built on the results of the vulnerability and gaps assessments to prepare adaptation strategies and actions. Actions filtered through screening criteria.

Schedule Update

Winter 2024/25	Spring 2025	Summer/Fall 2025	Fall/Winter 2025	Spring 2026
Set the Stage	Explore Climate Hazards	Assess Vulnerabilities & Risks	Develop Adaptation Strategies	Implement & Monitor
	Workshop #1 Visioning (In Person) March 10, 2025	**Workshop #2** Prioritizing Vulnerabilities (Virtual) June 10, 2025	**Workshop #3** Initial Adaptation Strategies (In-Person) August 19 2025	**Workshop #4** Prioritizing Adaptation Strategies (In-Person) November 6, 2025	Public Release of WRP (Virtual) February 2026

What will the Pajaro River Watershed Resilience Plan do?

- Holistically **study, plan, to manage** water resources at a watershed scale
- Integrate and prioritize **equity and inclusiveness**
- Develop a watershed **resilience vision**
- Enhance partnership among **non-traditional entities**
- Improve regional **competitiveness for funding**
- Identify climate change vulnerabilities and **prioritize adaptation strategies and projects**



Pajaro River Watershed

1,300 Square Miles

1,843 Stream Miles

4 Counties

Santa Cruz, Santa Clara, San Benito, Monterey

5 Cities

Gilroy, Hollister, Morgan Hill, San Juan Bautista, Watsonville

Climate Hazards Impact Water Resource Systems

Extreme Heat

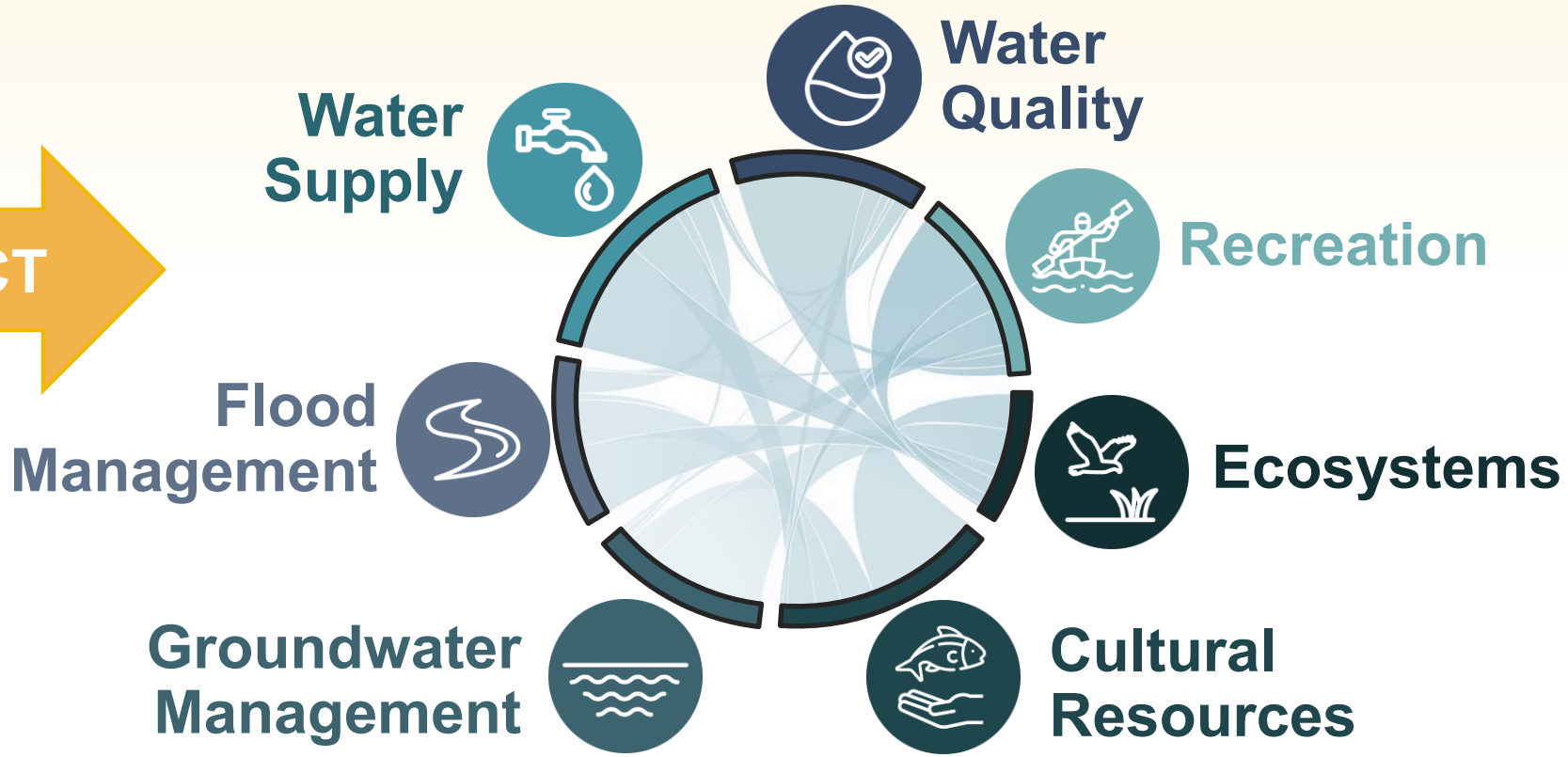
Extreme Precipitation

Wildfire

Drought

Sea Level Rise and Storm Surge

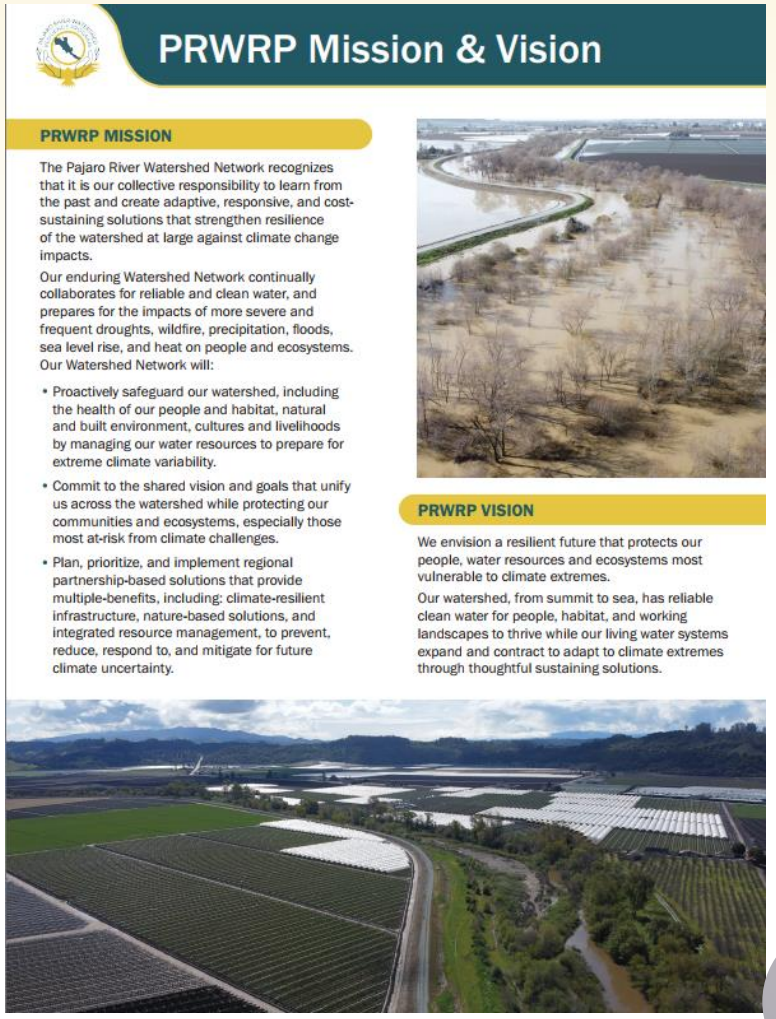
IMPACT



PRWRP VISION STATEMENT

We envision a resilient future that protects our people, water resources and ecosystems **most vulnerable** to climate extremes.

Our watershed, from summit to sea, has reliable clean water for people, habitat, and working landscapes to thrive while our living water systems expand and contract to **adapt to climate extremes** through thoughtful sustaining solutions.



PRWRP Mission & Vision

PRWRP MISSION

The Pajaro River Watershed Network recognizes that it is our collective responsibility to learn from the past and create adaptive, responsive, and cost-sustaining solutions that strengthen resilience of the watershed at large against climate change impacts.

Our enduring Watershed Network continually collaborates for reliable and clean water, and prepares for the impacts of more severe and frequent droughts, wildfire, precipitation, floods, sea level rise, and heat on people and ecosystems. Our Watershed Network will:

- Proactively safeguard our watershed, including the health of our people and habitat, natural and built environment, cultures and livelihoods by managing our water resources to prepare for extreme climate variability.
- Commit to the shared vision and goals that unify us across the watershed while protecting our communities and ecosystems, especially those most at-risk from climate challenges.
- Plan, prioritize, and implement regional partnership-based solutions that provide multiple-benefits, including: climate-resilient infrastructure, nature-based solutions, and integrated resource management, to prevent, reduce, respond to, and mitigate for future climate uncertainty.

PRWRP VISION

We envision a resilient future that protects our people, water resources and ecosystems most vulnerable to climate extremes.

Our watershed, from summit to sea, has reliable clean water for people, habitat, and working landscapes to thrive while our living water systems expand and contract to adapt to climate extremes through thoughtful sustaining solutions.

Proposed Adaptation Strategies by PRWRP Goal

Strategies and actions on the posters are intended to address key vulnerabilities and, if implemented, achieve the goals of the PRWRP:

1. Improve **water supply** reliability through water supply diversification
2. Enhance and protect **ecosystems and enhance agricultural lands**
3. Build **multi-benefit infrastructure**
4. Protect and improve **water quality**
5. Build and balance **connections between people, water and land**
6. Fund and implement **climate readiness**
7. Improve **community collaboration**

PRIORITIZING ADAPTATION STRATEGIES:

VULNERABILITY TO ACTION

KEY VULNERABILITIES

1. **Lower Pajaro water supply and sustainable groundwater management are threatened** by seawater intrusion, and regional droughts and extreme heat conditions will worsen conditions.

2. **Upper Pajaro Sub-Watersheds' local and imported water supply, water quality, and sustainable groundwater** management threatened by drought and extreme heat.

3. **Aging water and wastewater infrastructure threatened** by increasing intensity of extreme precipitation and heat events, lead to service disruptions and water quality risks.

4. The **Lower Pajaro Watershed's existing infrastructure, communities and land management practices are threatened by c**oastal flooding driven by sea level rise.

The Pajaro River, as it winds its way to the ocean.
Credit: Tarmo Hannula

Flooded Pajaro River area in Pajaro, Calif.
Credit: California Strawberry Commission via AP)

KEY VULNERABILITIES

5. **Aquatic, riparian, and coastal ecosystems degraded** by extended droughts, extreme temperature events, and shifting precipitation patterns, threatening native species and ecological functions.

6. **Native habitats, water quality, and infrastructure threatened by increasing frequency and intensity of wildfires**, while post-fire conditions heighten erosion and invasive species spread.

7. Climate **change threatens culturally significant species, landscapes, and practices,** compounding existing barriers to Tribal access and stewardship.

8. **Regional flood risks, runoff, and pollutant loading** are worsened by more frequent and intense precipitation when combined with soil hardening and wildfire burn scars.

Watsonville Slough Ecological Reserve. Credit: Brandon Beach

Uvas Creek at Bolsa Road ladder in March 2013. Credit: CDFW

KEY VULNERABILITIES

9. **Public access to safe, equitable, and enjoyable outdoor recreation spaces across the watershed** threatened by rising temperatures, drought, wildfire, and coastal flooding.

10. **Agricultural and ranching lands are increasingly vulnerable to soil degradation, reduced productivity, changing cropping patterns**, and land conversion pressures under intensifying drought, extreme heat, and wildfire conditions.

11. **Fragmented governance and limited coordination** across jurisdictions constrain the ability to plan and implement multi-benefit, watershed-scale resilience projects.

12. Agencies, Tribal governments, and community-based organizations **face persistent staffing, funding, and technical capacity limitations** that constrain proactive projects and investment, particularly in underserved communities.

Pajaro River Agricultural Preserve. Credit: Open Space Authority Santa Clara Valley.

School Planting Event at the Pajaro River Agricultural Preserve. Credit: Open Space Authority Santa Clara Valley.

Moving from Understanding Challenges to Identifying Solutions

Gaps Assessment of Climate Adaptation Strategies

1. Governance, Coordination, and Capacity
Limited funding and fragmented watershed governance
Disparate institutional capacity and program deployment between counties
Disparate emergency response and inequitable community protections

2. Water Supply Reliability and Operations
Dependence on imported water and constraints in demand management and conjunctive operations
Vulnerabilities in groundwater protection and small and rural systems

3. Infrastructure Resilience
Aging infrastructure, limited redundancy, and lack of climate-ready design

4. Natural and Distributed Solutions
Under-deployment of nature-based and distributed water management projects
Long-term funding and support gaps for soil health and conservation program providers

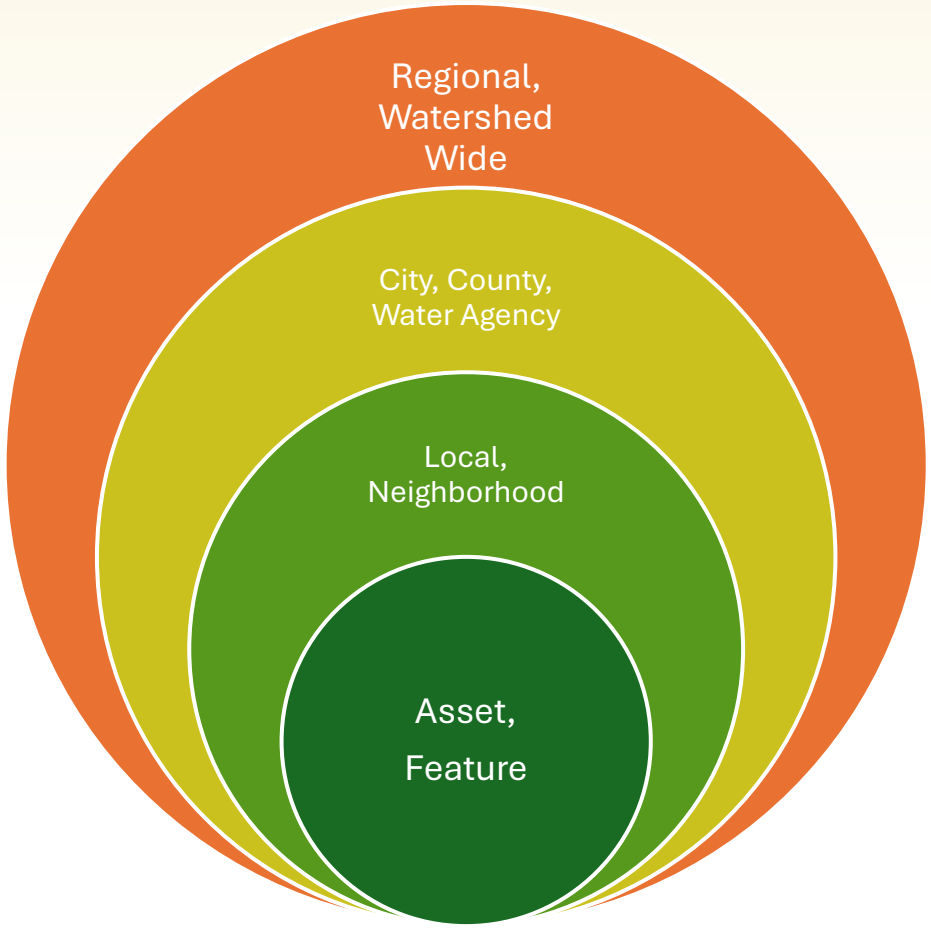
5. Data, Innovation, and Inclusion
Fragmented data, monitoring, modeling, and pilot innovation
Need to secure community and Tribal access to water resources

220
regional programs/ resources reviewed

Climate Adaptation Strategy Framework

Scale | Type | Schedule

Scale



Type

Adaptation Strategies & Actions

Adaptation Strategies describe the *approach or pathway* for achieving long-term resilience goals. They are **broad, directional**, and often integrate multiple disciplines. A strategy explains *what needs to be achieved and why*.

- ***Example:*** *"Enhance groundwater recharge and storage capacity to increase drought preparedness."*

Implementation Actions are specific, measurable steps taken **to implement** a strategy. They can identify *how* the strategy will be carried out.

- ***Example:*** *"Partner with PV Water to identify and acquire three priority parcels in the Lower Pajaro Subbasin to design and construct new MAR basins."*

PRWRP Adaptation Strategies and Implementation Actions (Sample Poster)

12

Key Vulnerabilities

23

Adaptation Strategies

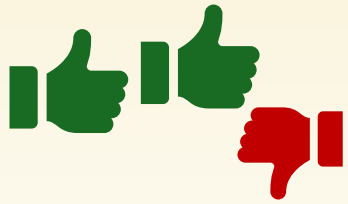
89

Implementation Actions

GOAL A: Improve Water Supply Reliability Through Water Supply Diversification

Expand local and regional water security by advancing recycled water and reuse systems, increasing storage of local and imported water, expanding recharge capabilities, and pursuing alternative water supplies.				Prioritization Criteria (Rate 1-3)				
Strategy	**#**	**Implementation Action**	**Do you support this action?**	**Investments provide strong community value**	**Permitting and policy barriers are manageable**	**Committed Leadership exists**	**Achieves multiple benefits**	**Adaptable to climate uncertainty**
#14 Improve water use efficiency in urban/ residential areas	14A	Develop neighborhood-scale or parcel-level greywater reuse regulations that support capture and treat laundry, sink, and shower water for landscape irrigation						
	14B	Adopt local ordinances requiring high-efficiency water fixtures, smart irrigation controllers, and drought-tolerant landscaping for new development and major retrofits						
	14C	Offer pilot programs that credit residents for directing roof runoff or yard runoff into infiltration feature						
#16 Maximize and scale recycled water and water reuse	16A	Partner with water agencies, irrigation districts, and growers to extend recycled water pipelines and delivery systems to agricultural users						
	16B	Assess feasibility and provide financial support to convert rural communities from septic systems to centralized sewer networks						
	16C	Plan and construct tertiary (advanced) treatment facilities that produce high-quality recycled water						
	16D	Implement managed aquifer recharge projects to advance groundwater banking. Emphasize use of advanced-treated recycled water to replenish groundwater basins						
	16E	Pursue direct portable reuse pilot projects that deliver purified recycled water directly into potable systems						
	16F	Develop a watershed-scale study to quantify opportunities and infrastructure requirements for direct potable reuse						
#17 Maximize local and imported water storage and distribution	17A	Plan, permit, and construct new or enlarged surface water reservoirs within the watershed						
	17B	Collaborate with regional and state partners to secure new Central Valley Project (CVP) and State Water Project (SWP) investments						
	17C	Coordinate with the U.S. Bureau of Reclamation and local partners to increase San Luis Reservoir storage capacity and optimize operational flexibility						
#18 Advance solutions that develop groundwater supplies and mitigate groundwater quality issues	18A	Accelerate production of indirect potable reuse supplies for delivery in lieu of groundwater pumping and to replenish groundwater through managed aquifer recharge						
	18B	Conduct a technical review and pilot testing of emerging desalination technologies to assess their feasibility for treating brackish groundwater and improving water quality across the watershed						
	18C	Build additional water transmission facilities between regions and agencies with excess wet season and wet year water supplies and areas that can support additional groundwater recharge, groundwater banking, or direct delivery in lieu of groundwater pumping						
Additional Ideas:								

Activity Overview



- **Activity 1 – Poster Stations: Explore & Vote**
  Visit posters by topic, learn about strategies and implementation actions, and use stickers to show support or add ideas.
- **Activity 2 – Tabletop Discussions: Prioritize Strategies and Actions**
  Join a small-group discussion to rank top actions using prioritization criteria and share highlights with the group.
- **Activity 3 – Investment Game: Invest in Actions**
  Spend money on the strategies you believe deserve the most investment; see which rise to the top.

Activity 1: Poster Stations – *40 minutes*
Explore and Vote

Goal:
Show your support for and share your ideas for adaptation strategies and implementation actions.

Questions for Consideration:

- Which implementation actions would provide the highest benefit to the watershed?
- Which implementation actions (or entire strategy) would not be a good use of limited resources?
- Are there any “big idea” actions that are missing and should be considered?

How It Works:

- Visit 7 poster stations, organized by PRWRP Goals. Reference the poster handout for more detail about the implementation actions and key vulnerabilities addressed
- Use stickers to give a “thumbs up” or “thumbs down” for each action.
- Each person receives 20 GREEN dots (Ignore the criteria for now)
- Write in any additional ideas or missing Adaptation Strategies and Implementation Actions directly on the posters.
- Rotate through all posters at your own pace (45 minutes total).

Activity 2: Tabletop Discussions – *45 Minutes*
Prioritize Strategies and Actions

Goal:
Dive deeper into which strategies and actions should be prioritized and why, using prioritization criteria and group discussion.

Question for Consideration:

Based on the prioritization criteria, how would you rank the top implementation actions?

What criteria seem most important to guide implementation?

How It Works:

- Choose poster area that matches your interest or expertise, move poster to nearby table.
- Review the poster and identify the **5 top-voted implementation actions** & incorporate any added actions.
- Rank those top actions using the prioritization criteria **(scale of 1-3)** and total those points.
- Advisory Group/Facilitators will guide the discussion and capture rankings and notes.
- Groups will share highlights with everyone at the end of the session.

How do we prioritize adaptation strategies and actions?

- **Funding Strategy-** Is the cost commensurate with the benefits? Does the investment provide value to the community?
- **Regulatory Complexity/Policy Alignment-** Are permitting, compliance, and regulatory processes manageable? Does the strategy align with evolving state and local policy direction?
- **Committed Leadership** – Is there a clear entity that can champion and implement the action?
- **Achieves Multiple Benefits** – Does this action achieve multiple benefits (e.g., improve hydrologic function, improve ecosystem/habitat health, reduce community health risks, strengthen local economies, provide a watershed-wide improvement)?
- **Adaptable to Climate Uncertainty** – Can this strategy adapt over time as climate conditions change?

Activity 2: Tabletop Discussions – Prioritize Implementation Actions

Report Out

What actions emerged as priorities and why?

Of the priorities, which actions will have the greatest impact watershed wide?

Which prioritization criteria felt most important?

Activity 3: Budgeting Game – Invest in Top Strategies and Actions *(15 minutes)*

Goal:
Identify the highest-value strategies and actions through a fun, interactive budgeting exercise.

Question for Consideration:

How would you invest your money among the top strategies and actions?

Is your money distributed equally or are you investing heavily in one action?

How It Works:

- Review the top strategies and actions prioritized from earlier activities
- You'll receive "**money**" ($50, $100, $500) to "invest" in the implementation actions.
- The consultant team will tally results and reveal the most supported strategies and actions overall.

TABLE OF TOP RANKED STRATEGIES/ ACTIONS (populated by PRWRP consultant team during break)

Activity 3: The Money Game – Invest in Top Strategies and Actions

BONUS TIME and MONEY!!

You have another 5 minutes to go place a **gold coin** in the adaptation strategy that you would like to bring more funding to.

How It Works:

- Place your coin in the implementation action bucket to increase funding!
- The consultant team will tally results and reveal the most supported strategies and actions overall.

Activity 3: The Money Game

Report Out

Which strategies received the most funding?

Why did you invest as you did?

How did your focus shift when you were provided additional funding?

Next Steps and Close Out

Next Steps

- Prioritized strategies and actions will be flagged in the Watershed Resilience Plan as our **'keystone actions'** reflecting alignment from the Watershed Network
- **Implementation leads** for strategies and actions will be determined in partnership with the Advisory Group
- **Metrics for measuring the success** of implementation will be added to each strategy

Upcoming Activities

- *Have thoughts on how this workshop went?* **Complete Exit Survey – thank you!**
- *Have an idea that wasn't captured?* Complete ***Adaptation Strategies and Implementation Actions by November 14th***
- Public review of Draft Pajaro River Watershed Resilience Plan- ***Mid February 2026***
- WRP Public Office Hours WRP - ***February 2026***
- WRP submittal date – ***March 31, 2026*** (DWR deadline)

Upcoming Activities

Have an idea that wasn't captured?

Take 4-question ***Adaptation Strategy and Action Survey***
here to provide written input here by ***November 14th***

ESPAÑOL

ENGLISH

Exit Survey

Thank you!!!