



2021 California Climate Adaptation Strategy San Joaquin Valley Regional Workshop Summary June 10, 2021

Welcome and Overview

Amanda Hansen, Deputy Secretary for Climate Change, California Natural Resources Agency (CNRA) and Nuin-Tara Key, Deputy Director for Climate Resilience, Governor's Office of Planning and Research (OPR), opened the meeting and provided an overview of the California Climate Adaptation Strategy (Strategy). The Strategy is updated every three years.

Goals of the 2021 Strategy are to:

- Set strategic direction and identify needed outcomes.
- Identify clear and co-equal priorities to guide state climate adaptation and resilience policy, programs, and investments.
- Unify efforts across all sectors and regions, outlining how key state agency efforts fit together and support collective action.
- Help all Californians understand and contribute to California's climate resilience.

This document is intended to provide a summary of all stakeholder input received during the San Joaquin Valley Workshop on June 10, 2021. Responses to the questions discussed below are organized into themes; the four most common themes identified in the workshop and illustrative individual responses are included to provide a snapshot of the range of responses received. When there were fewer than ten responses, all responses are included in the summary. A full list of all input received is provided in the appendix. For more information on the Strategy update process, please visit <https://resources.ca.gov/Initiatives/Building-Climate-Resilience/2021-State-Adaptation-Strategy-Update>.

Opening Questions

1. *What climate impacts are you most concerned about in your region?*

Common themes:

- Drought/water shortage
- Extreme heat and urban heat island effect
- Changes to precipitation
- Air Quality

2. *What are some of your region's unique challenges in adapting to climate change?*

Common themes:

- Lack of resources and capacity
- Water mismanagement and decreased water supply
- Lack of clear leadership, political will, and consensus among decision-makers
- Lack of education and public awareness

Illustrative responses:

- Loss of funding for University of California extension farm advisors
- Multi-year hydrologic variability
- Politics and status quo farming techniques
- Understanding the full impact

3. *What gives you hope about your region's ability to adapt to climate change?*

Responses:

- Environmental justice finally getting support from the state to address these issues. There is hope because we are now in the forefront.
- Cooperation among various stakeholders
- Different stakeholders beginning to talk to each other about how to build water resilience in the region
- Community advocacy
- Awareness of agriculture's role in climate mitigation
- Recognition and concern on the impact of Climate Changes
- Recognition that climate change is real
- Society starting to realize how critical this issue is in the San Joaquin Valley
- Legislative Leadership
- Putting agricultural land to work as carbon sinks

Summary of Draft Priority Alignment with Regional Priorities

Draft Statewide Priority – Strengthen protections for climate vulnerable communities

1. *How important is this priority for your region (high, medium, low, or not sure)?*

- High: 71% of respondents
- Medium: 29% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

2. *What actions are needed to achieve this priority?*

Common themes:

- Funding

- Community greening
- Resilience planning
- Water resilience

Illustrative responses:

- Joint efforts with governance to reduce emissions in agriculture
- Increase and maintain shade trees
- Fund water infrastructure
- Ensure safe and reliable water supply--both at home and at work

3. *How are you working to ensure equitable climate adaptation outcomes for this priority?*

Common themes:

- Meaningful community engagement in decision-making
- Coordination, partnerships, and collaboration
- Prioritize climate vulnerable communities
- Local business support

Illustrative responses:

- Participation in climate action groups
- Central Valley Salinity Alternatives for Long-Term Sustainability initiative (CV SALTS)
- By recognizing the communities most at risk and focusing roadside fuel breaks on the evacuation routes for those communities
- Finding solutions that work with the existing San Joaquin Valley businesses

Draft Statewide Priority – Advance public health and safety under a changing climate

1. *How important is this priority for your region (high, medium, low, or not sure)?*

- High: 71% of respondents
- Medium: 29% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

2. *What actions are needed to achieve this priority?*

Common themes:

- Prioritizing public health
- Service provision/resilience hubs
- Pollution reduction
- Worker protections

Illustrative responses:

- Access to medical centers
- Reduce air pollution
- Protection for farmworkers from wildfire smoke
- More support for active transportation

3. *How are you working to ensure equitable adaptation outcomes for this priority?*

Responses:

- Providing open space for recreation and public education including green corridors
- Partnered with environmental justice groups to create a Just Recovery Network that outlines more than a dozen recommendations to Legislature and Administration for equity investments emphasizing public health and safety
- Reaching out to organizations that advocate for Disadvantaged Communities, and individuals, in the region.
- We are working to create responsible forest management policy to reduce wildfire risk, improve water quality and water supply
- Research on cost effective water treatment at home and community levels

Draft Statewide Priority – Build a Climate Resilient Economy

1. *How important is this priority for your region (high, medium, low, not sure)?*

- High: 67% of respondents
- Medium: 33% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

2. *What actions are needed to achieve this priority?*

Common themes:

- Water resilience
- Workforce/economic development and high-road economic opportunities
- Funding
- Energy resilience

Illustrative responses:

- In the near term, additional support for the existing agricultural economic base through improved water supply reliability. In the long-term, the Valley needs improved economic diversification
- Job training for the careers of the future

- Government incentives for farmers to diversify crops/renewable energy. Incentives for workers to move away from fossil fuel economy
- Push for greater electrification, methane capture and water resiliency in agriculture practices

3. *How are you working to ensure equitable adaptation outcomes for this priority?*

Responses:

- De-stigmatize climate change and resilience through education
- Partnering with Central Valley leaders such as Valley LEAP on deep community outreach for granting opportunities
- Working with local community business leaders.
- Utilizing farming that uses less water
- Provide technical assistance to underserved communities at reduced rates to increase adoption of management strategies.
- Our organization is working to improve regional water supply reliability and advance policies to increase regional economic development
- Research, planning, and facilitation for water resource infrastructure to manage water throughout the region
- Working with climate corps

Draft Statewide Priority – Accelerate nature-based climate solutions

1. *How important is this priority for your region (high, medium, low, not sure)?*

- High: 60% of respondents
- Medium: 40% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

2. *What actions are needed to achieve this priority?*

Common themes:

- Funding
- Climate-smart agriculture
- Forest management
- Research and knowledge-sharing

Illustrative responses:

- Improved permitting process and funding
- ID best areas for groundwater recharge and best soils for agricultural production versus other uses (i.e., habitat, solar power)
- Use forest biomass (fuel reduction) to build soil health in foothills and valley

- Build/support marketplaces that reward producers/entities for utilizing practices that provide a climate benefit. Encourage experimentation through incentives that provide a “safety net” so a failure will not destroy a farm or business.

3. *How are you working to ensure equitable adaptation outcomes for this priority?*

Responses:

- Ecosystem restoration along the San Joaquin River that also provides access for tribal members and disadvantaged communities (DACs), plus others
- Participation in the restoration of the San Joaquin River.
- Formally link actions to beneficiaries, i.e., general public versus special interests versus disadvantaged communities (DACs)
- Remembering that many vulnerable communities most often are made up of workers and families that rely on agriculture for employment
- Developing a biomass program utilization (land applications) to also create job training for CA Conservation Corps and Local Conservation Corps, and tribes (through the Calaveras Healthy Impact Product Solutions program)
- Investing more than one million dollars in grants to promote urban forestry with heavy emphasis on uplifting DACs and low income communities (LICs), and supporting jobs in the green infrastructure space

Draft Statewide Priority – Make decisions based on the best available climate science

1. *How important is this priority for your region (high, medium, low, not sure)?*

- High: 100% of respondents
- Medium: 0% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

2. *What actions are needed to achieve this priority?*

Common themes:

- Research and knowledge sharing
- Climate science accessibility and utilization
- More effective governance and leadership
- Water resilience

Illustrative responses:

- Implementing policies to combat extreme heat as recommended by the California Department of Public Health, California Air Resources Board, CalFire, Resources, etc.
- Further research on Sierra runoff from Central and Southern Sierra

- Political will from Valley reps to prioritize and use best available climate science in decision making
- Promote & achieve integrated water management, to provide resilience & flexibility, something that has been elusive in the past

3. *How are you working to ensure equitable adaptation outcomes for this priority?*

Responses:

- Involved with collaborative groups that have found funding for UC Merced to do climatology and groundwater models
- Educating the public & decision makers on the link between actions and outcomes, risks, resilience
- Listening tours -- making sure the science and community needs have middle ground
- Funding community-based impact research
- Guest speaker at California State University, Fresno on Climate issues for the San Joaquin Valley
- Supporting FloodMAR planning project on the San Joaquin River near Fresno
- Groundwater recharge research.

Draft Statewide Priority – Leverage resources to build climate resilience through partnerships and collaboration

1. *How important is this priority for your region (high, medium, low, not sure)?*

- High: 80% of respondents
- Medium: 20% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

2. *What actions are needed to achieve this priority?*

Common themes:

- Coordination, partnerships, and collaboration
- Funding
- Technical assistance, guidance, and capacity building
- More effective governance and leadership

Illustrative responses:

- Continued collaboration through Uncommon Dialog, Water Blueprint, etc.
- Incentives for collaborative planning and implementation for adaption & water resilience, taking a whole-watershed perspective
- Boots on the ground technical assistance
- Leadership

3. *How are you working to ensure equitable adaptation outcomes for this priority?*

Responses:

- Introductions to programs and collaborative partners, technical assistance providers
- This is a major goal of the San Joaquin River Conservancy!
- Promoting transparency in decision making, including through better data & better sharing of those data

Are there any critical regional priorities not covered by one of the six we've outlined?

Responses:

- Environmental/Climate Justice
- Capacity building & better decision making for building resiliency to climate change
- Climate-resilient economy is not necessarily a climate-smart economy. Focus on electrification and clean energy jobs

Summary of Input on Cross-Cutting Questions

Following the discussion on the draft statewide priorities, attendees were asked to provide input on cross-cutting questions. Common themes and illustrative examples are included below.

1. *What actions are needed to mitigate the impacts of increasing temperature and extreme heat in your region?*

Responses:

- Create coordinated body of all state agencies operating in extreme heat space to increase collaboration
- Support to agriculture for workforce protections and heat tolerant crops
- Landlord air conditioning requirements for renter protections
- Reliable electricity supply
- Plant appropriate trees in urban and rural areas. Increased solar power on houses so that people can afford electricity for cooling.
- Climate & heat smart architecture & development
- Plant appropriate trees in urban and rural areas. Increased solar power on houses so that people can afford electricity for cooling.
- Strong investments in urban forestry (i.e., CAL FIRE's Urban and Community Forestry Program)
- High heat =high ozone, protections from this air pollution for most vulnerable communities

2. *As you consider all of the priorities, are there knowledge gaps or information needs that you need answered in order for you to accelerate your work across these priorities? Examples include research needs or data and tools you think would be helpful to advance your work.*

Common themes:

- Climate impact data
- Sector-specific research and data
- Economic and financial information/data
- Technical assistance and capacity-building

Illustrative responses:

- Better knowledge of extreme event flooding vulnerabilities, especially for DACs
- Lack of quantitative data and tools that can correlate reduced ambient temperature to reduced hospitalizations and mortality resulting from extreme heat. More research here needed.
- Need increased research on regional impacts that look at multiple factors involving climate change including economic impacts. See the Central Valley Water Blueprint as an example.
- Technical Assistance in the most general and pervasive sense

3. *How can the state support a regional approach to adaptation and resilience through the Strategy?*

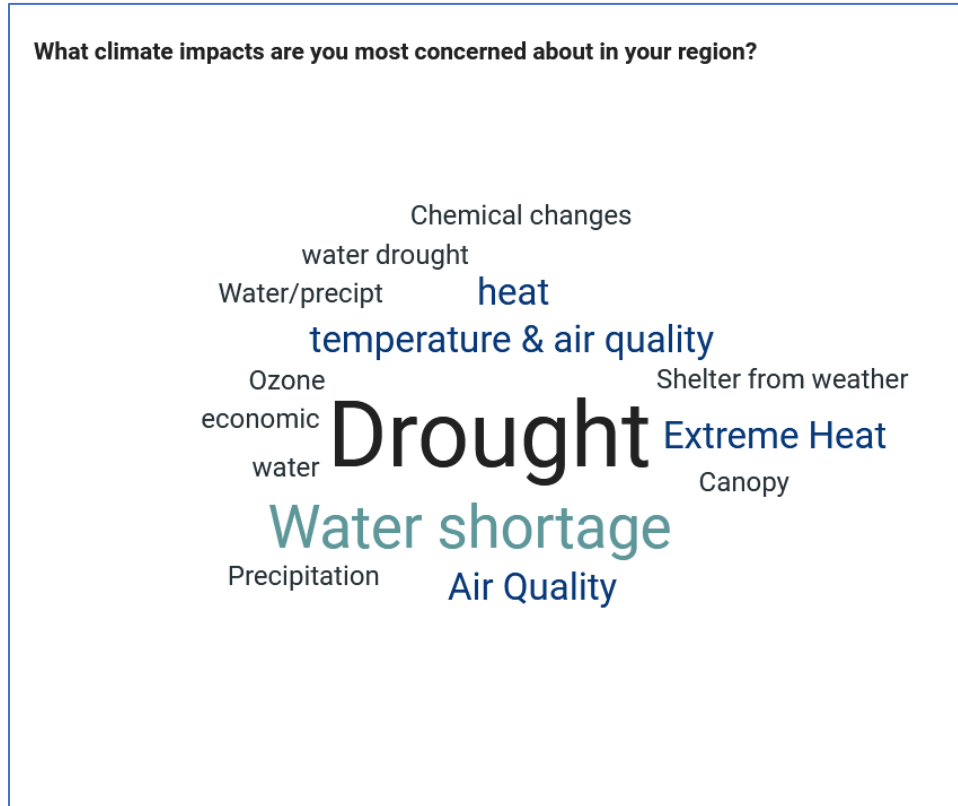
Responses:

- Capacity building in the region, including data & tools, but also support for partnerships and convening, which does not occur naturally
- Could we do things more holistically? Put solar panels on the irrigation canals? Make sure that air and water and agriculture are working together.
- Fund valley-wide collaboratives for aligned planning/projects that include community resident representation
- Provide funding/models for collaborative groups like was done for IRWMs.
- Prioritizing community driven solutions
- Support local governmental agencies and communities
- Ensure that all regional needs are given equal weight regardless of population.
- Capacity building in the region, including data & tools, but also support for partnerships and convening, which does not occur naturally

Next Steps and Closing

Deputy Director Key provided an overview of the Strategy timeline. Deputy Secretary Hansen thanked participants for attending, provided a link to an online survey if participants wished to share additional information, and shared agency contact information for any additional stakeholder questions.

**Question #1: What climate impacts are you most concerned about in your region?
(Word cloud)**



Impact	Number of Responses
Drought	8
Water shortage	4
Air Quality	2
Extreme Heat	2
Temperature & air quality	2
Heat	2
Chemical changes	1
Shelter from weather	1
Economic	1
Ozone	1
Water/precipitation	1
Canopy	1
Water drought	1
Precipitation	1
Water	1

Question #2: What are some of your region's unique challenges in adapting to climate change? (Open answer)

Response
Educational resources.
Infrastructure investment, groundwater recharge, conveyance projects, funding for SGMA implementation, SWEEP
Loss of funding for UC ANR Farm Advisors
Local organizations with adequate capacity
Funding for implementing efficient technologies
Politics and "status quo" farming techniques
Technical research
Governance seeing the importance of climatic impacts on communities.
Transparency and Accountability from agencies and valley representatives
Lack of funding
Organizational capacities to address issues in a comprehensive process
Funding
Re-using water
Funding and Technical Assistance
Understanding the full impact
Balancing environment, human, and economic needs of the region.
Multi-year hydrologic variability, imported water reliability
Water usage
Project Funding

Question #3: What gives you hope about your region's ability to adapt to climate change? (Open answer)

Response
Recognition and concern on the impact of Climate Changes
Awareness of agriculture's role in climate mitigation
Recognition that climate change is real
Cooperation among various stakeholders
Environmental justice finally getting support from the state to address these issues. There is hope because we are now in the forefront.
Different stakeholders beginning to talk to each other about how to build water resilience in the region
Legislative Leadership
Society starting to realize how critical this issue is in the SJV
Putting ag land to work as carbon sinks
Community advocacy

**Question #4: What actions are most needed in this region to achieve each priority?
(Open answer)**

Priority 1: Protect climate vulnerable communities
Food co-ops
Joint efforts with governance to reduce emissions in ag... equitable representation in decision making,as well as more funding fir CBO s that have been in the effort to make the differences
Improve buildings for climate resilience. Plant more trees.
Immediate protections from climate gases and air pollution
Education to society about risks
More funding and technical support for vulnerable DACs
Education about water conservation and protection
Additional trees.
Prioritizing green space conservation/development for heat protection/resilience.
Increase and Maintain Shade Trees
Flood protection
Ensure equitable access to water.
Ensure safe and reliable water supply--both at home and at work
Water usage quotas
Build and fund resilient infrastructure e.g., stormwater capture system
Fund water infrastructure.
Additional water conveyance and storage
Authentic Community Engagement with CBO Partners
Reduce groundwater depletion.
Priority 2: Advance public health and safety
Modifying 617 guidelines to ensure better air quality investments
Better integration of health agencies/representatives as expert advisors locally on development and long-term planning for climate-related mitigation
Increased access to mental health providers.
More support for "active transportation"
Reduce air pollution
Addressing homelessness
Transparency and accountability from agencies and representatives to prioritize health and safety
Additional access to medical care (acute shortage of doctors in the area). Decreased agricultural production resulting from SGMA implementation is likely to increase exposure to Valley fever
Wildfire prevention
Access to medical centers
More accessible medical systems

Heating centers
Protection for farmworkers from wildfire smoke
Fossil fuel setbacks and phase outs
More primary caregivers and better access to care.
Provide clean drinking water.
Heat refugia (cooling centers)
Priority 3: Build a climate resilient economy
Job training for careers of the future
A reliable water supply and infrastructure to capture and save for use storm water from extreme weather events.
Oil industry innovations and acceptance of electrification in Kern County.
Government incentives for farmers to diversify crops/renewable energy. Incentives for workers to move away from fossil fuel economy
Provide workforce development opportunities and resources for a just transition into a caring economy
Push for greater electrification, methane capture and water resiliency in agriculture practices
Repair and maintain infrastructure to ensure reliable surface water
Investments in Regional Climate Collaboratives
Power mapping
Adequate water resource infrastructure to manage water throughout the region, conveyance, storage, and recharge,
In the near term, additional support for the existing agricultural economic base through improved water supply reliability. In the long-term, the Valley needs improved economic diversification.
Priority 4: Accelerate nature-based climate solutions
Funding Agriculture; Research Service, Extension Service and Natural Resource Conservation Service outreach and funding
Use forest biomass (fuel reduction) to build soil health in foothills and valley
ID best areas for groundwater recharge and best soils for ag production vs. other uses (i.e., habitat, solar power).
Build/support marketplaces that reward producers/entities for utilizing practices that provide a climate benefit. Encourage experimentation through incentives that provide a "safety net" so a failure will not destroy a farm or business.
Effective partnerships between valley stakeholders & land managers in source-water areas to advance pace & scale of forest restoration
Comprehensive Forest management plan, cover crops and soil health.
Improved permitting processes and funding
Incorporating indigenous knowledge and compensation for that knowledge
Meaningful Integration of Natural and Working Lands into 2022 Scoping Plan
Protect and enhance riparian corridors for ecosystem/biodiversity/ground water recharge, etc.
Funding
Priority 5: Make decisions based on best available climate science

More information on major flood projections
Developing crop varieties that can handle less chilling hours and higher temps during growing seasons
Provide examples of science to local news to allow better spread of this information into community
More research on Agroecological Science
Promote & achieve integrated water management, to provide resilience & flexibility, something that has been elusive in the past
Implementing policies to combat extreme heat as recommended by CDPH, CARB, CAL FIRE, CNRA, etc.
Political will from Valley reps to prioritize and use best available climate science in decision making
Utilize the research capabilities of the universities in the region to partner with state agencies.
Further research on Sierra runoff from Central and Southern Sierra
Priority 6: Leverage resources for climate action through partnerships and collaboration
Continued collaboration through Uncommon Dialog, Water Blueprint, etc.
Offer "carrots" to collaborations
Bridging gaps between environmental interests and environmental justice interests
Incentives for collaborative planning and implementation for adaption & water resilience, taking a whole-watershed perspective
Technical assistance for community
Boots on the ground technical assistance
Building collaborations by funding agencies to work on collaborations
Leadership

Question #5: How are you working to ensure equitable adaptation outcomes for this priority? (Open answer)

Priority 1: Protect climate vulnerable communities
CV SALTS
Finding solutions that work with the existing SJ Valley businesses
By participating in sustainable collaboratives as they relate to SB 1000... As a member of the first inaugural cohort Partners Advancing in Climate Equity...I am bringing back the knowledge to my community.
Making CVCs a consideration in current and future climate response projects.
Participation in climate action groups
Advocating for community driven processes/ solutions
Encouraging community engagement in government prioritization and planning
Raise community awareness. I joined the Citizen's Climate Lobby to learn about current community actions
Collaborative efforts and increased outreach with CBOs, non-profits, and residents

Partnering with EJ advocates to support deep investments in priority programs (TCC, Urban Forestry, LIWP)
Looking for ways to improve multi-benefit groundwater recharge to improve groundwater quality and quantity for disadvantaged communities
Our organization partners with communities to assess needs and develop strategies to procure resources for prioritized needs
Working across sectors/organizations to build resilience and capacities
Priority 2: Advance public health and safety
Reaching out to organizations that advocate for Disadvantaged Communities, and individuals, in the region.
We are working to create responsible forest management policy to reduce wildfire risk, improve water quality and water supply
Partnered with EJ groups to create a Just Recovery Network that outlines more than a dozen recommendations to Legislature and Administration for equity investments emphasizing public health and safety
Providing open space for recreation and public education including green corridors
Research on cost effective water treatment at home and community levels.
Priority 3: Build a climate resilient economy
Working with local community business leaders.
Working with climate corps
Provide technical assistance to underserved communities at reduced rates to increase adoption of management strategies.
Partnering with Central Valley leaders such as Valley LEAP on deep community outreach for granting opportunities
De-stigmatize climate change and resilience through education
Research, planning, and facilitation for water resource infrastructure to manage water throughout the region
Utilizing farming that uses less water
Our organization is working to improve regional water supply reliability and advance policies to increase regional economic development
Priority 4: Accelerate nature-based climate solutions
Remembering that many vulnerable communities most often are made up of workers and families that rely on agriculture for employment.
developing a biomass program utilization (land applications) to also create job training for CCC's and LCC's, and a tribe (CHIPS program)
Investing more than one million dollars in grants to promote urban forestry with heavy emphasis on uplifting DACs and LICs and supporting jobs in the green infrastructure space
Formally link actions to beneficiaries, i.e., general public vs special interests, vs DACs
Participation in the restoration of the San Joaquin River.
Ecosystem restoration along SJ River that also provides access for tribal members and DACs, plus others
Priority 5: Make decisions based on best available climate science
Funding community-based impact research

Guest speaker at CSUF on Climate issues for the SJV
Groundwater recharge research.
Listening tours -- making sure the science and community needs have middle ground
Supporting Flood MAR planning project on the SJ River near Fresno
Educating the public & decision makers on the link between actions and outcomes, risks, resilience
Involved with collaborative groups that have found funding for UC Merced to do climatology and groundwater models
Priority 6: Leverage resources for climate action through partnerships and collaboration
Introductions to programs and collaborative partners, technical assistance providers
Promoting transparency in decision making, including through better data & better sharing of those data
This is a major goal of the San Joaquin River Conservancy!

Question #6: Are there any critical regional priorities not covered by one of the six we've outlined? (Open answer)

Response
Climate-resilient economy is not necessarily a climate-smart economy. Focus on electrification and clean energy jobs
Environmental/Climate Justice
Capacity building & better decision making for building resiliency to climate change
Environmental Justice

Question #7: What actions are needed to mitigate the impacts of increasing temperature and extreme heat in your region? (Open answer)

Response
Landlord air conditioning requirements for renter protections
Create coordinated body of all state agencies operating in extreme heat space to increase collaboration
Reliable electricity supply
Climate & heat smart architecture & development
High heat =high ozone, protections from this air pollution for most vulnerable communities
Plant appropriate trees in urban and rural areas. Increased solar power on houses so that people can afford electricity for cooling.
Support to ag for workforce protections and heat tolerant crops
Strong investments in urban forestry (i.e. CAL FIRE's Urban and Community Forestry Program)

Question #8: As you consider all of the priorities, are there knowledge gaps or information needs that you need answered in order for you to accelerate your work across these priorities? Examples include research needs or data and tools you think would be helpful to advance your work. (Open answer)

Response
Addition research and funding for the prevention of soil erosion.
Need increased research on regional impacts that look at multiple factors involving climate change including economic impacts. See the Central Valley Water Blueprint as an example.
Access to community friendly, easily accessible data and notifications
Readily available data & tools to enable & promote partnerships that can reduce wildfire & drought impacts on the region, especially risks driven by what occurs in Sierra Nevada
Lack of quantitative data and tools that can correlate reduced ambient temperature to reduced hospitalizations and mortality resulting from extreme heat. More research here needed
better knowledge of extreme event flooding vulnerabilities, especially for DACs

Question #9: How can the state support a regional approach to adaptation and resilience through the Strategy? (Open answer)

Response
Provide funding/models for collaborative groups like was done for IRWMs. Biggest issue has been the ability to put these together and then maintaining. DWR's offer to fund facilitation for these was huge but needs to be done in more than water integration.
Ensure that all regions' needs are given equal weight regardless of population.
Fund valley-wide collaboratives for aligned planning/projects that include community resident representation
Prioritizing community driven solutions
Capacity building in the region, including data & tools, but also support for partnerships and convening, which does not occur naturally
Support local governmental agencies and communities
Could we do things more holistically? Put solar panels on the irrigation canals? Make sure that air and water and agriculture are working together.