



2021 California Climate Adaptation Strategy Southern Sierra Regional Workshop Summary June 3, 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 Southern Sierra Regional Workshop on June 3, 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:

- Wildfire
- Habitat and biodiversity loss
- Drought

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

Common themes:

- Lack of resources and capacity

- Lack of clear leadership, political will, and consensus among decision-makers
- Lack of coordination
- Research and data gaps

Illustrative responses:

- The scale of the problem is larger than our region's capacity to address it
- Resistance to green energy
- Alignment with state policies
- Regional Asset Inventory

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

Common themes:

- Public interest, awareness, education, and urgency
- Current climate adaptation action, policy, and programming
- Coordination, partnerships, and collaboration
- Utilization and value of nature-based solutions

Illustrative responses:

- The next generation
- Alignment of state and federal policy
- Partnerships with federal agencies
- A lot of conservation planning work has already been done (for example, the Southern Sierra Partnership Framework) -- we know what we need to conserve

Summary of Alignment Between Draft Statewide Priorities and 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: 83% of respondents
- Medium: 0% of respondents
- Low: 0% of respondents
- Not sure: 17% of respondents

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

Common themes:

- Coordination, partnerships, and collaboration
- Forest management
- Technical assistance, guidance, and capacity building
- Funding

Illustrative responses:

- Facilitate the alignment for action between Federal Land Managers and State Jurisdictions including Counties
- Prescribed fire
- Technical assistance for [project] implementation
- Funding to pivot base economies

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

Responses:

- "A Changing Climate | Vulnerability in California's Eastern Sierra"
- Facilitating collaboration between siloed groups (e.g. planning and public health depts.)
- Implementation of alternative transportation equitably throughout communities
- The regional climate report identified that Tribal communities and other frontline groups face substantial health risk from climate change hazards.
- Working with collaborative groups to increase ability to compete for grant funding and to increase understanding of issues.

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: 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?*

Responses:

- Communication into hard to reach communities during emergencies like wildfire
- Community centers outfitted with air conditioning for smoke events for vulnerable populations
- Make communities more smoke and heat-event ready
- More home hardening and defensible space
- Technical support and financing to leverage Digital 395 - Broadband infrastructure
- Assistance with defensible space for low income or elderly residents
- Coordinated messaging program between state and federal partners
- Regional Emergency Response communications system

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

No responses were given for this question.

Draft Statewide Priority – Build a Climate Resilient Economy

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?*

Responses:

- More precipitation is likely to fall as rain instead of snow, reducing the winter recreation season and associated economic activities
- Skiing (shorter winters, less snow pack), agriculture (due to drought and water conflicts), reduced recreation due to lower reservoirs and intense heat.
- “A Changing Climate | Vulnerability in California’s Eastern Sierra” identifies that recreation and tourism industry workers are likely to face economic harm when recreation activities are disrupted.
- Technical assistance and funding to assist with pivoting base economies - recreation, agriculture, etc.
- “A Changing Climate | Vulnerability in California’s Eastern Sierra” identified that Ecosystem services provide an average of \$95 billion per year in services to the Eastern Sierra region, with the highest valued service being carbon storage and water quality.
- Technical assistance and funding to assist with pivoting

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

Responses:

- On March 7, 2019, the Sierra Nevada Conservancy (SNC)’s Governing Board authorized \$618,750 of Proposition 68 funds for the “The Eastern Sierra Sustainable Recreation Partnership: Sustainable Recreation and Tourism Initiative” to benefit the SNC’s Eastern sub-region.
- Sustainable Recreation and Tourism Initiative
- We will need broadband expansion and education opportunities
- Providing job training for residents that currently work in the recreation industry
- “A Changing Climate | Vulnerability in California’s Eastern Sierra” recommends Programs for incorporation into the SRTI “Visitor Connection Package” to educate residents, visitors, and workers about Sustainable Recreation and Stewardship, tribal culture, climate change hazards, and historical and interpretive opportunities within the Study Area.

Draft Statewide Priority – Accelerate nature-based climate solutions

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?*

Responses:

- Forest management
- Innovative funding strategies to get more prescribed fire implemented. A realignment of air control boards priorities and loosening of their restrictions on windows for prescribed burning. Large scale collaboration projects like the Eastern Sierra Climate and Communities Project.
- Regional collaboration and coordination
- Funding for landscape-scale conservation, from high-altitude areas to the Valley floor
- Nature-based solutions
- Per “A Changing Climate | Vulnerability in California’s Eastern Sierra, direct state investment to maintain and enhance the total annual economic value of ecosystem services provided by lands within the boundaries of the Study Area which range from approximately \$43.6 billion to \$190.9 billion, with an average annual value of \$95.4 billion.

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

Response:

- Rural communities have difficulty competing for State funding against better resourced communities.

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?*

Responses:

- Access to regional specific climate change analysis and planning
- Coordination of state and federal efforts regardless of jurisdictional boundaries
- Make science findings understandable to all stakeholders
- Funding to aggregate existing studies

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

Responses:

- Ask communities what questions they want answered by science and make findings understandable
- Ensure inclusion of traditional ecological knowledge during decision making.
- Our region is poorly represented at the state and federal level on these topics
- We need support from state and federal legislators

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: 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?*

Responses:

- Collaborate across property boundaries
- A replicable sustainable recreation program in California's magnificent Eastern High Sierra
- A unique public/public partnership between the United States Forest Service and local agencies
- A shift from fire suppression-based fire management to multiple objective based fire management
- Expediting CA Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA) reviews for forest management projects
- <https://www.essrp.org>

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

Responses:

- Inter-jurisdictional coordination to address climate change impacts to economies and ecosystems: wildfire, drought, and watershed conflicts are not defined by demographics or jurisdictional boundaries

- This is the land acknowledgement for “A Changing Climate | Vulnerability in California’s Eastern Sierra” - Public lands in the United States hold the creation stories, burial grounds, and ceremonies of indigenous people who were killed or forcibly removed from their ancestral homes during territorial acquisition. Many tribes, composed of different bands, continue to live in the Eastern Sierra region, caring for their native lands as they coexist with the ongoing impacts of colonization. Past or present tribes and bands associated with the region that this effort is aware of include, but are not limited to, the Miwok, Mono Lake Kutzadika’á, Mono/Monache, Nüümü (Paiute), Newe (Shoshone), Timbi-Sha, Utu Utu Gwaitu Paiute, and Washoe. Two Nüümü terms describe the region and provide important context to ideas offered in this document. The first is Pamidu Toiyabe (Western Mountains), and the other, more widely known place name is Payahuunadü (The Place Where Water Flows). This acknowledgement is an invitation to all organizations, residents, and visitors to recognize the way this history has shaped the present as all parties work together in anticipation of a better future.
- Ask ourselves “who is missing from the decision-making circle?”

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

Responses:

- Water in California is provided by the Sierra Nevada - whether it's the western watershed or the eastern watershed. The Sierra Nevada is a critical climate change resource.
- The plan should be more closely integrated with state (and federal) 30x30 goals
- <https://www.calrecvision.org>
- The case for statewide cross-jurisdictional collaboration is clear. Catastrophic wildfires and other consequences of climate change have demonstrated the necessity for coordination among agencies, local governments, and organizations that collectively face destructive impacts to communities, forests, and recreation resources. Greater demand for equitable access to outdoor recreation for all Californians has highlighted systemic institutional and cultural barriers that have excluded underserved communities from the outdoors

Summary of Input on Cross-Cutting Questions

Following the discussion on the draft 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:

- Figure out how to provide refuge for people and also how to provide relief for plants and animals (and other species) that are heat sensitive.
- Statewide origination and destination studies that will identify how human beings are moving around in response to extreme heat to help mitigate the consequences of this activity
- Using "big data"
- Funding for urban greening (particularly for active transportation projects), air conditioning for vulnerable populations, ecosystem restoration.
- Implement the Statewide Comprehensive Outdoor Recreation Plan

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.*

Responses:

- Need a good, locally-useable and frequently updated, online map of where highest fire risks are to better prioritize protection actions (vulnerable communities and leverage resources, etc.)
- We already have a map of wildfire risk, but we need a map or understanding of the soil types that are most at risk: water holding capacity and suitability or likelihood of natural reforestation. Where are the most valuable soils so they can be preserved most aggressively?
- Funding and technical support for the Eastern Sierra Council of Governments JPA
- Rural communities - like those in the Southern Sierra - are often struggling to address current pressing or State mandated needs (public health, housing, much less economic development, etc.) particularly after COVID. Local leadership will need technical assistance and funding to develop resiliency plans and implement them
- 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?*

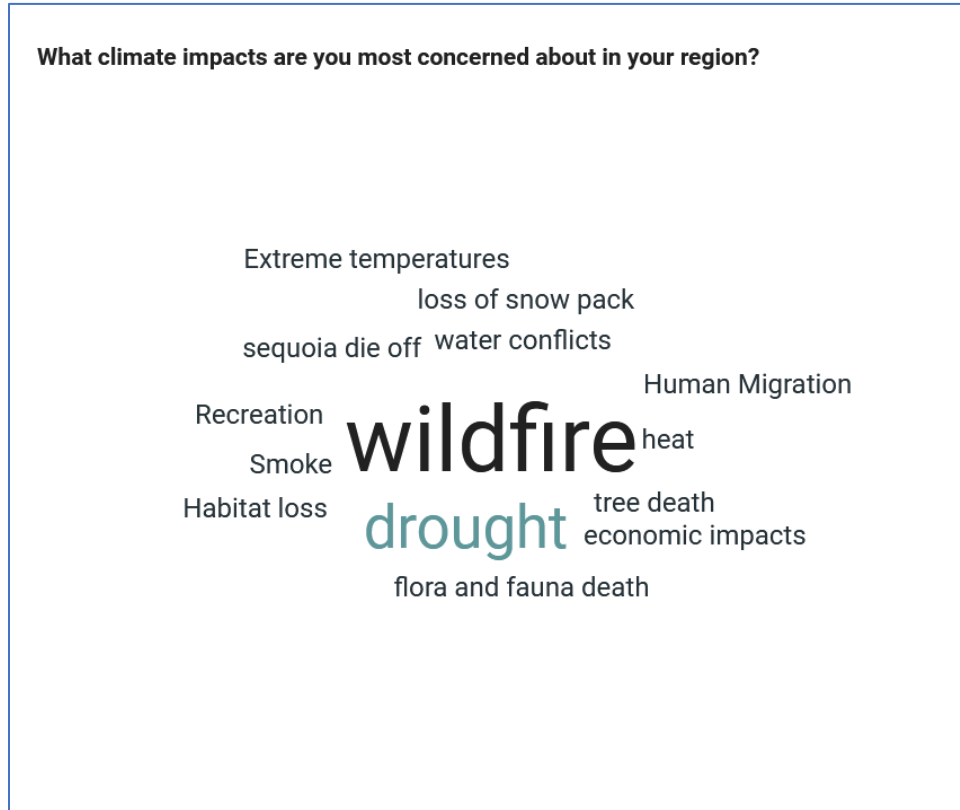
Responses:

- Local leadership education, funding, and technical assistance - rural communities do not have capacity for unfunded State mandates
- Please provide funding and technical assistance to our regional Council of Governments (ESCOG and the "ESCOG: Sustainable Recreation and Ecosystem Management Program")
- Please understand that the ESCOG is a JPA and will never be an MPO - funding is needed for Rural California to garner political support for state policies such as climate change
- Making Cal Fire firefighters available for prescribed fire activities on federal lands through some form of partnership.

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
Wildfire	3
Drought	2
Human Migration	1
Economic impacts	1
Sequoia die off	1
Habitat loss	1
Loss of snow pack	1
Extreme temperatures	1
Water conflicts	1
Flora and fauna death	1
Recreation	1
Smoke	1
Heat	1
Tree death	1

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

Response
Regional Asset Inventory
Funding
Inter-jurisdictional coordination.
Funding for Rural California
Uninformed decision makers
Resistance to green energy
Alignment with State Policy
Rrestricted Rx fire windows
The scale of the problem is larger than our region's capacity to address it.
Inadequate funding for conservation and restoration work
Technical Capacity

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

Response
"A CHANGING CLIMATE VULNERABILITY IN CALIFORNIA'S EASTERN SIERRA"
Investments in sustainable community infrastructure
Support from outside the region for unique resources (trees)
A lot of conservation planning work has already been done (for example, the Southern Sierra Partnership Framework) -- we know what we need to conserve
The next generation
Alignment of State and Federal Policy
Some trees are still alive
Partnerships with Federal Agencies
Engaged youth
Tenacity of the residents

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

Priority 1: Protect climate vulnerable communities
Alignment of NEPA/CEQA to facilitate work on the ground
Technical assistance
Funding to pivot base economies
Educating community members to advocate for themselves and their community
Technical Assistance is needed for implementation

Prescribed fire, too
Conserving and restoring open space; providing access to nature
National and international action to combat climate change
Facilitate the alignment for action between Federal Land Managers and State Jurisdictions including Counties
Prescribed fire.
Priority 2: Advance public health and safety
Communication into hard to reach communities during emergencies like wildfire
Technical support and financing to leverage Digital 395 - Broadband infrastructure
Community centers outfitted with air conditioning for smoke events for vulnerable populations
More home hardening and defensible space
Coordinated messaging program between state and federal partners
Assistance with defensible space for low income or elderly residents
Make communities more smoke and heat-event ready
Regional Emergency Response communications system
Priority 3: Build a climate resilient economy
More precipitation is likely to fall as rain instead of snow, reducing the winter recreation season and associated economic activities.
Skiing (shorter winters, less snow pack), agriculture (due to drought and water conflicts), reduced recreation due to lower reservoirs and intense heat.
"A Changing Climate Vulnerability in California's Eastern Sierra" identifies that recreation and tourism industry workers are likely to face economic harm when recreation activities are disrupted.
Technical assistance and funding to assist with pivoting base economies - recreation, agriculture, etc.
"A Changing Climate Vulnerability in California's Eastern Sierra" identified that Ecosystem services provide an average of \$95 billion per year in services to the Eastern Sierra region, with the highest valued service being carbon storage and water quality.
Technical assistance and financial assistance for pivoting
Priority 4: Accelerate nature-based climate solutions
Forest management
Innovative funding strategies to get more Rx fire implemented. A realignment of air control boards priorities and loosening of their restrictions on windows for Rx burning. Large scale collaboration projects like the Eastern sierra Climate and Communities Project. More Rx fire
Ditto this: Funding for landscape-scale conservation, from high-altitude areas to the Valley floor
Regional collaboration and coordination
Funding for landscape-scale conservation, from high-altitude areas to the Valley floor
Per "A Changing Climate Vulnerability in California's Eastern Sierra, direct state investment to maintain and enhance the total annual economic value of ecosystem services provided by lands within the boundaries of the Study Area which range from

approximately \$43.6 billion to \$190.9 billion, with an average annual value of \$95.4 billion.
Priority 5: Make decisions based on best available climate science
Coordination of State and Federal efforts irregardless of jurisdictional boundaries
Make science findings understandable to all stakeholders
Funding to aggregate existing studies
Access to regional specific climate change analysis and planning
Priority 6: Leverage resources for climate action through partnerships and collaboration
A REPLICABLE SUSTAINABLE RECREATION PROGRAM IN CALIFORNIA'S MAGNIFICENT EASTERN HIGH SIERRA
Expediting CEQA and NEPA for forest management projects.
A shift from fire suppression based fire management to multiple objective based fire management
A UNIQUE PUBLIC/PUBLIC PARTNERSHIP BETWEEN THE UNITED STATES FOREST SERVICE AND LOCAL AGENCIES
Collaborate across property boundaries
https://www.essrp.org

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

Priority 1: Protect climate vulnerable communities
""A Changing Climate Vulnerability in California's Eastern Sierra""
The regional climate report identified that Tribal communities and other frontline groups* face substantial health risk from climate change hazards.
Facilitating collaboration between siloed groups (e.g. planning + public health depts.)
Implementation of alternative transportation equitably throughout communities
Priority 2: Advance public health and safety
<i>(no responses for this priority)</i>
Priority 3: Build a climate resilient economy
On March 7, 2019, the Sierra Nevada Conservancy (SNC)'s Governing Board authorized \$618,750 of Proposition 68 funds for the "The Eastern Sierra Sustainable Recreation Partnership: Sustainable Recreation and Tourism Initiative" to benefit the SNC's Eastern sub-region.
Sustainable Recreation and Tourism Initiative
We will need broadband expansion and education opportunities.
Providing job training for residents that currently work in the recreation industry
"A Changing Climate Vulnerability in California's Eastern Sierra" recommends Programs for incorporation into the SRTI "Visitor Connection Package" to educate residents, visitors, and workers about Sustainable Recreation and Stewardship, tribal culture, climate change hazards, and historical and interpretive opportunities within

the Study Area.
Priority 4: Accelerate nature-based climate solutions
Rural communities have difficulty competing for State funding against better resourced communities.
Priority 5: Make decisions based on best available climate science
Our region is poorly represented at the state and federal level on these topics
Ensure inclusion of traditional ecological knowledge during decision making.
Ask communities what questions they want answered by science and make findings understandable
We need support from state and federal legislators
Priority 6: Leverage resources for climate action through partnerships and collaboration
Inter-jurisdictional coordination to address climate change impacts to economies and ecosystems: wildfire, drought, and watershed conflicts are not defined by demographics or jurisdictional boundaries
This is the land acknowledgement for "A Changing Climate Vulnerability in California's Eastern Sierra"
Ask ourselves 'who is missing from the decision-making circle?'
Public lands in the United States hold the creation stories, burial grounds, and ceremonies of indigenous people who were killed or forcibly removed from their ancestral homes during territorial acquisition. Many tribes, composed of different bands, continue to live in the Eastern Sierra region, caring for their native lands as they coexist with the ongoing impacts of colonization. Past or present tribes and bands associated with the region that this effort is aware of include, but are not limited to, the Miwok, Mono Lake Kutzadika'a, Mono/Monache, Nüümü (Paiute), Newe (Shoshone), Timbi-Sha, Utu Utu Gwaitu Paiute, and Washoe. Two Nüümü terms describe the region and provide important context to ideas offered in this document. The first is Pamidu Toiyabe (Western Mountains), and the other, more widely known place name is Payahuunadü (The Place Where Water Flows). This acknowledgement is an invitation to all organizations, residents, and visitors to recognize the way this history has shaped the present as all parties work together in anticipation of a better future.

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

Response
Water in California is provided by the Sierra Nevada - whether it's the western watershed or the eastern watershed. The Sierra Nevada is a critical climate change resource.
https://www.calrecvision.org
The case for statewide cross-jurisdictional collaboration is clear. Catastrophic wildfires and other consequences of climate change have demonstrated the necessity for

Response
coordination among agencies, local governments, and organizations that collectively face destructive impacts to communities, forests, and recreation resources. Greater demand for equitable access to outdoor recreation for all Californians has highlighted systemic Institutional and cultural barriers that have excluded underserved communities from the outdoors
The plan should be more closely integrated with state (and federal) 30x30 goals

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

Response
Implement the SCORP
Funding for urban greening (particularly for active transportation projects), air conditioning for vulnerable populations, ecosystem restoration.
Figure out how to provide refuge for people AND also how to provide relief for plants and animals (and other species) that are heat sensitive.
Using "big data"
Statewide origination and destination studies that will identify how human beings are moving around in response to extreme heat to help mitigate the consequences of this activity

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
All of the priorities: rural communities - like those in the Southern Sierra - are often struggling to address current pressing or State mandated needs (public health, housing, much less economic development, etc.)...particularly after COVID. Local leadership will need technical assistance and funding to develop resiliency plans and implement them.
Funding and technical support for the Eastern Sierra Council of Governments JPA (ESCOG)
We already have a map of wildfire risk, but we need a map or understanding of the soil types that are most at risk: water holding capacity and suitability or likelihood of natural reforestation. Where are the most valuable soils so they can be preserved most aggressively?
Technical Assistance in the most general and pervasive sense....
Need a good, locally-useable and frequently updated, online map of where highest fire risks are to better prioritize protection actions (vulnerable communities and leverage resources and etc. etc.

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

Response
Making Cal Fire firefighters available for Rx fire activities on federal lands through some form of partnership.
Please understand that the ESCOG is a JPA and will never be an MPO - funding is needed for Rural California to garner political support for State Policies such as Climate Change
Local leadership education, funding, and technical assistance - rural communities do not have capacity for unfunded State mandates
Please provide funding and technical assistance to our regional Council of Governments (ESCOG and the "ESCOG: Sustainable Recreation and Ecosystem Management Program"