



2021 California Climate Adaptation Strategy North Coast Regional Workshop Summary June 22, 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 North Coast Workshop on June 22, 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?*

- Drought/water supply
- Wildfire
- Sea level rise
- Ecosystem and biodiversity impacts

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

Common themes:

- Lack of resources and capacity
- Climate impact severity and frequency

- Lack of clear leadership, political will, and consensus among decision-makers
- Lack of regional coordination and strategies

Illustrative responses:

- Cost of fire fuel reduction
- Funding for evacuation routes
- Difficulty implementing controlled burns
- Low acceptance of mitigation efforts

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

Common themes:

- Coordination, partnerships, and collaboration
- Current climate adaptation action, policy, and programming
- Public interest, awareness, education, and urgency
- Research, knowledge sharing, and actions based on climate science

Illustrative responses:

- Our willingness to collaborate
- Investments California is making in fire risk reduction efforts
- Growing consensus on what resilience looks like
- Continuing research pointing the way to resilience

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: 73% of respondents
- Medium: 20% of respondents
- Low: 7% of respondents
- Not sure: 0% of respondents

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

Common themes:

- Nature-based solutions: forest management
- Emergency preparedness and response
- Resilience planning
- Pollution reduction

Illustrative responses:

- Fire prevention, fuel load management
- Community fuel breaks and evacuation corridors
- Resilient power grids
- Clean-up of contaminated sites vulnerable to SLR

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

Common themes:

- Coordination, partnerships, and collaboration
- Meaningful community engagement in decision-making
- Education and public awareness
- Resilience planning

Illustrative responses:

- North Coast Resource Partnership leadership and governance is designed for inclusion and equity
- Reflecting on who is missing from the conversation and how to best engage them
- Discussing the benefits provided by managed agricultural lands for climate solutions and greenbelts for fire breaks
- Vulnerability assessment completed, evacuation plans shared, working on remote mobility solutions

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: 85% of respondents
- Medium: 15% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

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

Common themes:

- Resilience planning
- Pollution reduction
- Prioritizing public health
- Climate impact adaptation

Illustrative responses:

- Plan for resilient critical infrastructure and sea level rise

- Clean up of contaminated sites vulnerable to Sea Level Rise
- Better access to reliable healthcare
- Reduction of catastrophic wildfire events

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

Common themes:

- Access and recreation
- Resilience planning
- Education, public awareness, and communication
- Service provision and resilience hubs

Illustrative responses:

- Extend regional trail networks for active transportation
- Mobility planning for remote communities
- Resources in multiple languages with equal ease of access
- Coordinating with senior centers, social service agencies

Draft Statewide Priority – Build a Climate Resilient Economy

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

- High: 69% of respondents
- Medium: 31% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

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

Common themes:

- Resilience planning
- Workforce/economic development and high-road economic opportunities
- Housing security
- Service provision and resilience hubs

Illustrative responses:

- Reduce wildfire risks and improve electrical grid reliability
- Reduce dependence on fossil fuels
- Higher wages and affordable housing
- Dependable broadband countywide

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

Responses:

- Networking with other rural counties to bring EV charging infrastructure to the North State
- Making an effort to publicize opportunities to all sectors of the community
- Added housing planning to our regional duties
- Reminding policy makers that conservation isn't the only answer for climate solutions.
- Relaying the benefits of agricultural lands with climate solutions.
- Advocating
- Networking with other rural counties to bring EV charging infrastructure to the North State
- Performing climate scenario analysis to understand potential implications to all aspects of business and operations
- Consider ways to compensate agricultural professionals for their time in assisting climate planning

Draft Statewide Priority – Accelerate nature-based climate solutions

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

- High: 86% of respondents
- Medium: 14% 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
- Conservation
- Forest management

Illustrative responses:

- Incentives and support for private landowners to implement conservation and fuel reduction projects
- Use California's clout at the national level to encourage additional federal support of California solutions in agriculture
- Using conservation easements to protect working lands
- Funding and infrastructure options for large scale fire fuel removal projects on private and public lands

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

Responses:

- Sharing best available science and data for decision making and sharing demonstration projects as examples
- Working closely with landowners and sharing science/understanding of long term impacts and their options
- Personally supporting local land trusts
- Changing agriculture practices to encourage sustainable soil carbon increases
- Riparian and wildland restoration to improve water quality and carbon fixation
- Consider impacts of these solutions on most vulnerable communities and populations
- Developing designs standards that include nature-based and sustainable building practices

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:

- Climate science accessibility and utilization
- Coordination, partnerships, and collaboration
- Research and knowledge sharing
- More effective governance and leadership

Illustrative responses:

- Access to up-to-date research and modeling
- Collaborate with other organizations and agencies to learn what studies and research are available
- Availability of UC and State system researchers to business and public policy makers, particularly when it comes to carbon and water
- Model behavior to demonstrate effectiveness of the science

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

Common themes

- Meaningful community engagement in decision-making

- Research and knowledge-sharing
- Education, public awareness, and communication
- Other

Illustrative responses:

- Engage and support under resourced communities and Tribes
- Advocating for disadvantage rural areas
- Trying to figure out how to get best baseline data and how to monitor outcomes such as vehicle miles traveled (VMT), emissions, transportation modes, environmental, hydrological, public health etc.
- Zoning for VMT reduction

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?*

Common themes:

- Coordination, partnerships, and collaboration
- Meaningful community engagement and decision-making
- Technical assistance, guidance, and capacity-building
- Funding

Illustrative responses:

- Expand the ability of researchers to work in public-private partnerships to tackle climate challenges (e.g. additional support/funding for outreach work, case studies, community-wide implementation of studies for sustainable water use, carbon etc.)
- More forums for sustainability officers
- Increase capacity of state and local government staff to address SLR with technical assistance/guidance
- Provide stipends or honoraria to stakeholders that would otherwise have to participate as a volunteer

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

Responses:

- Creating easier to understand materials on climate issues.
- More education on these issues
- A federal infrastructure bill could go a long way to assisting with meeting unfunded mandates
- Get input from a wide range of stakeholders before developing funding applications
- Incentives for public participants
- Inviting partners to participate in identifying transit solutions for remote areas
- It would be good to establish a shared vision, scope, and time horizons associated with adaptation need
- Rural California climate solutions are not the same as more urbanized areas. Rural CA needs to have focused solutions that work for the residents.
- It would be great to have an easy to find/access system where potential climate mitigation projects can be joined

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

Response:

- Sea level rise, first and foremost around Humboldt Bay, is near-term critical

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?*

Common themes:

- Community services and support
- Cool surfaces and built infrastructure
- Nature-based solutions
- Education and public awareness

Illustrative responses:

- Ways to deal with overcrowding by visitors seeking relief from heat
- Solar shade structures over parking lots, which can also power EVs
- Allow flexibility in grant programs to allow tree purchase in infrastructure projects
- Coastal areas don't have the extreme heat so much as unusual heat - we need to understand the consequences of that such as increased drought

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:

- Sea level rise and groundwater impacts
- Understanding cascading impacts
- Best approaches for public engagement
- Evaluate cost/benefits of various adaptation strategies
- Low carbon back-up power sources for PSPS events (need research on this)
- Public transit research for best technology decisions in transition to zero emission vehicles for rurals
- How to measure social impacts
- What types of demographic shifts might we see such as climate refugees
- Agreed upon metrics for measuring progress

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

Common themes:

- Data and resource tools,
- Funding and financing
- Support for region-specific approaches
- Coordination, partnerships, and collaboration

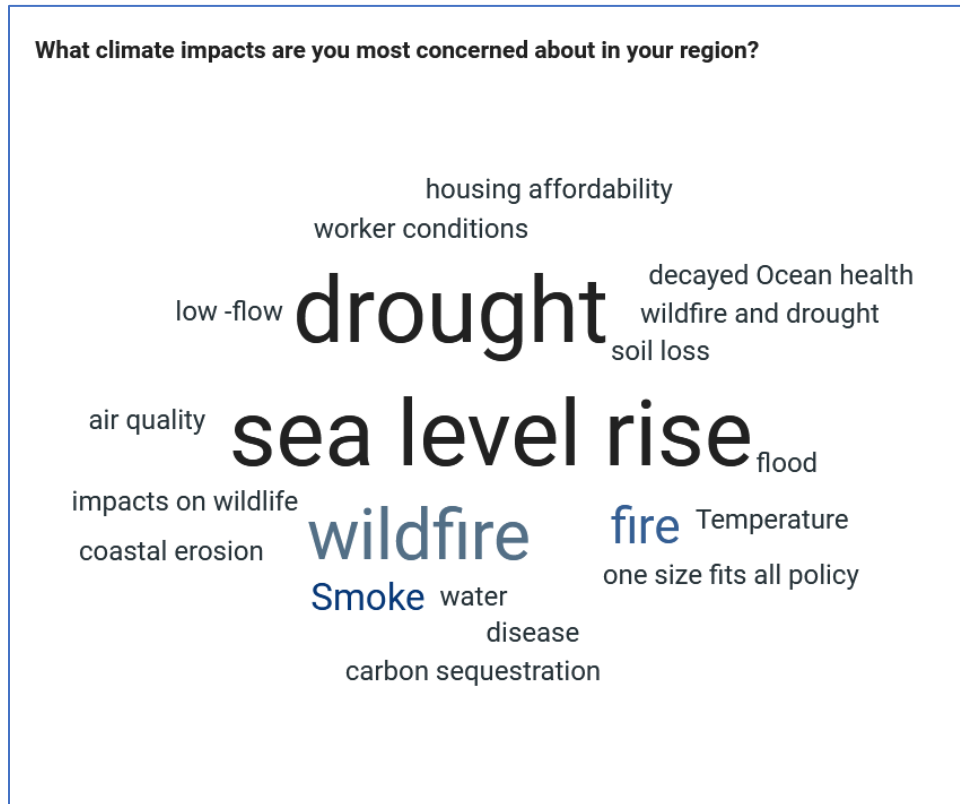
Illustrative responses:

- Gather data for us to use regionally (baseline and monitoring, etc.)
- Increase funding specifically for State's Active Transportation Program grants
- Identify leading community organizations and support their role in developing a regional approach
- Hosting or promoting forums for jurisdictions to work together on these issues

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	6
Sea level rise	5
Wildfire	4
Fire	3
Smoke	2
Decayed ocean health	1
Disease	1
Species changes	1
Soil loss	1
Air quality	1
Agricultural impacts	1
Sea-level rise	1
Worker conditions	1
One size fits all policy	1
Impacts on wildlife	1
Carbon sequestration	1
Biodiversity loss	1

Temperature	1
Housing affordability	1
Water	1
Low-flow	1
Ecosystem breakdown	1
Wildfire and drought	1
Coastal erosion	1
Flood	1

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

Response
Economics
Technical support needs
Public/landowner perspectives
Funding for evac routes
Keeping hydrological processes functioning for water supply for communities and wildlife, maintain water quality
Funding for vegetation management, workforce development, technical assistance to under resourced communities
Remote communities
Protecting infrastructure that is already in place such as roads and wastewater treatment.
Regional coordination
Stability of water sources for agriculture
Funding
Community capacity
Economic sectors that remain based on natural resource productivity
Vulnerable populations, lack of resources
Complexity of programs
Funding for retreat or to create resiliency
Low acceptance for mitigation efforts
Coordination across jurisdictional boundaries
Funding
The backlog of making the region resilient to wildfire
Cost of fire fuel reduction
Lack of urgency
Difficulty implementing control burns
High workload, low staffing, low funding

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

Response
Mendocino County locals are early adopters of zero emission vehicles and solar
People taking it seriously
New science/data and the attention it receives now
Traditional Ecological Knowledge = Tribal programs as great examples
Continuing research pointing the way to resilience
Special Districts and fire districts are coordinating with county and state agencies
Acceptance of climate issues by planners and public
Entrepreneurial, creative, and artistic people willing to help
Lots of work conducted so far to continue building on
There is significant interest within the community and local agencies are at least engaged in planning
Growing consensus on what resilience looks like
Our willingness to collaborate.
There are new funding sources for climate change adaptation activities
Investments California is making in fire risk reduction efforts
Firewise community preparation made safe, orderly evacuation in recent Willits wildfire

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

Priority 1: Protect climate vulnerable communities
Resilient infrastructure, services for evacuees and biomass economy investment.
Mobility for remote, vulnerable communities
Clean-up of contaminated sites vulnerable to SLR
Energy security
Planning for sea level rise, esp. for vulnerable communities who will face more and more flooding
Resilient power grids
Options/assistance for low-income housing vulnerable to SLR
Identify vulnerable communities and develop collaboration
Technical assistance to create equity prioritization tool for infrastructure projects
Post fire hazard planning
Evacuation routes
Infrastructure improvements or relocation to accommodate sea level rise.
Funding and assistance for home hardening, vegetation removal, and similar preparation for the next wildfires.
Prescribed fire
Air quality considerations

Fire prevention, fuel load management
Fuel reduction.
Emergency evac routes
Community fuel breaks and evacuation corridors
Priority 2: Advance public health and safety
Safety for the nuclear plant
Affordable health care and access to medical services.
Removal of petroleum facilities in Humboldt Bay
Providing emergency evacuation
More walkable, livable streets
Building the resiliency of existing communities
Renewable energy. flooding mitigations (especially critical roadways)
Address low river flows
Additional federal/state lands management
Plan for resilient critical infrastructure & SLR
Evacuation routes for disasters
Broadband and improved emergency communications
Better access to reliable healthcare
Reliable communication networks during climate events
Clean-up of contaminated sites vulnerable to SLR
Renewable energy backup power systems
Smoke management
VMT reduction
Reduction of catastrophic wildfire events
Realistic eelgrass mitigation ratios
Wetland restoration
Priority 3: Build a climate resilient economy
Ensuring there are adequate water resources to support agriculture.
Valuing ecosystem services: biomass, water, forests
Don't allow large cannabis plantations
Flexible policies that recognize actions taken to date and don't lead to rigid mandates that do not consider the economics of operating land-based businesses like farming, ranching or forestry.
Affordable housing
Reduce wildfire risks and improve electrical grid reliability
Sharing the message that California is still open for business and tourism despite climate challenges
Long-term plans to maintain functional infrastructure
Higher wages, affordable housing
Identify new opportunities and help businesses and entrepreneurs connect
Reduce dependence on fossil fuels
Appropriate planning for infrastructure to ensure it is available in a changing climate

Dependable broadband, countywide
Priority 4: Accelerate nature-based climate solutions
Develop urban shade trees for cooling and carbon sequestration
Guidance for creation of NB solutions that could result in loss of prime ag land and wetlands
Healthy forest implementation
Use CA's clout at the national level to encourage additional federal support of California solutions in agriculture
Promoting greenscapes in housing development and urban redevelopment projects such as rooftop gardens, edible landscaping, bioswales, and rain gardens.
Funding and infrastructure options for large scale fire fuel removal projects on private and public lands.
Identify how implementing these nature-based solutions can also support a climate resilient economy
Using conservation easements to protect working lands.
Programmatic environmental compliance for restoration projects
Support of farmers / ranchers to implement best practices for carbon sequestration, including marginal abatement cost curves so that the limited private/public funds can be most effectively spent
Protect fish and riparian habitat, i.e., don't clear-cut forests for PG&E lines
Incentives and support for private landowners to implement conservation and fuel reduction projects
Consistent funding
Funding pilot projects
Permitting support
Priority 5: Make decisions based on best available climate science
Funding to monitor projects to inform possible revisions
Provide tech assistance to regions
Leverage the cooperative extension resources to engage on climate issues for farmers
Routinely reserve time on agendas to discuss and give/get direction on next steps. Cross-agency collaboration.
Information sharing on how best to implement recommendations coming from research.
Model behavior to demonstrate effectiveness of the science
Provide data and resources widely and obtain funding to provide technical assistance to utilize this info.
Collaborate with other organizations and agencies to learn what studies and research are available
public engagement on climate science
Availability of UC and State system researchers to business and public policy makers. Especially when it comes to carbon and water
Agreement between jurisdictions that border each other
Implement what we already know with available technologies such as electric vehicles

Access to up-to-date research and modeling.
Priority 6: Leverage resources for climate action through partnerships and collaboration
Technical resources for rural areas
Expand the ability of researchers to work in public-private partnerships to tackle climate challenges (e.g., additional support/funding for outreach work, case studies, community-wide implementation of studies for sustainable water use, carbon etc.)
Broadband access!
More forums for sustainability officers
Increase capacity of state and local government staff to address SLR with technical assistance/guidance
Understanding the relationship between state and local jurisdictions roles/responsibilities on Humboldt Bay, especially in the context of state retained jurisdiction of areas vulnerable to SLR
Provide stipends or honoraria to stakeholders that would otherwise have to participate as a volunteer
More collaboration with tribes who are active in forest and other resource management.
Continued and accelerated coordination within region and stipends for community members to participate.
Collaboration between agencies and business entities
Online remote collaboration tools for less travel to meetings, more effective work time

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

Priority 1: Protect climate vulnerable communities
Discussing the benefits provided by managed agricultural lands for climate solutions and greenbelts for fire breaks
Working closely with transit system
North Coast Resource Partnership leadership and governance is designed for inclusion and equity.
reflecting on who is missing from the conversation and how to best engage them
We need to treat hazardous landscape fuels engaging socially vulnerable communities
trying to prioritize funding projects towards that goal
Vulnerability assessment completed, evacuation plans shared, working on remote mobility solutions
Developing a coastal resilience community engagement program.
Networking
Priority 2: Advance public health and safety
Reducing dependence on cars
Limiting accommodations for vehicles in order to promote active and public transit.
Actively supporting active transportation

Coordinating with senior centers, social service agencies
Starting at ground zero: build relationships with under-resourced/under-served communities, community-based organizations, and other constituents. Listen to their immediate goals and needs. Respond accordingly
Prioritization of regional planning and implementation actions through collaborative process
Addressing equity and environmental justice in sea level rise adaptation planning
Resources in multiple languages with equal ease of access
Mobility planning for remote communities
Building trails
Extend regional trail networks for active transportation
Supporting public transit
Planning for water resiliency
Priority 3: Build a climate resilient economy
Added housing planning to our regional duties
Consider ways to compensate ag/maricultural professional for their time in assisting climate planning
Making sure there is adequate infrastructure/ resources to support new large-scale projects such as aquaculture and cannabis operations.
Making an effort to publicize opportunities to all sectors of the community
Reminding policy makers that conservation isn't the only answer for climate solutions. Relaying the benefits of agricultural lands with climate solutions.
Performing climate scenario analysis to understand potential implications to all aspects of business and operations
Networking with other rural counties to bring EV charging infrastructure to the North State
Advocating
Priority 4: Accelerate nature-based climate solutions
Developing designs standards that include nature based and sustainable building practices.
Sharing best available science and data for decision making and sharing demonstration projects as examples
Personally supporting local land trusts
Riparian and wildland restoration to improve water quality and carbon fixation
Consider impacts of these solutions on most vulnerable communities and populations
Working closely with landowners and sharing science/understanding of long-term impacts and their options
These questions are starting to sound the same :)
Changing agriculture practices to encourage sustainable soil carbon increases
Priority 5: Make decisions based on best available climate science
Trying to figure out how to get best baseline data and how to monitor outcomes such as VMT, emissions, transportation modes, environmental, hydrological, public health etc.
Public engagement and outreach for regional transportation plan update

Providing opportunities for the public to have input into compilation and analysis of the climate science
Engage and support under resourced communities and Tribes.
Make climate models that are downscaled to CA available for many different stakeholders. I.e., expand funding and understanding of CalAdapt
Public workshops/presentation to share knowledge and gain understanding
Staying up to date on what research is available.
Advocating for disadvantaged rural areas
Zoning for VMT reduction
Priority 6: Leverage resources for climate action through partnerships and collaboration
More education on these issues
Rural California climate solutions are not the same as more urbanized areas. Rural CA needs to have focused solutions that work for the residents.
It would be good to establish a shared vision, scope, and time horizons associated with need adaptation
It would be great to have an easy to find/access system where potential climate mitigation projects can be joined
Creating easier to understand materials on climate issues.
Get input from a wide range of stakeholders before developing funding applications
Inviting partners to participate in identifying transit solutions for remote areas
Incentives for public participants
A federal infrastructure bill could go a long way to assisting with meeting unfunded mandates

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

Response
Sea level rise, first and foremost around Humboldt Bay, is near-term critical. (You might've covered that.)

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

Response
Update building standards to address heat
Ways to deal with overcrowding by visitors seeking relief from heat
Solar shade structures over parking lots, which can also power EVs
For inland regions, more options for community cool zones. Places to hang out with AC.
Allow flexibility in grant programs to allow tree purchase in infrastructure projects
Coastal areas don't have the extreme heat so much as unusual heat - we need to

understand the consequences of that such as increased drought
Support for exploration of adapted crop varieties to ensure California Agriculture remains strong
Additional water storage (private and public) for improved year to year water security
Install more solar photovoltaics to power cooling systems in homes and in emergency centers

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
Best approaches for public engagement
Understanding cascading impacts
Low carbon back-up power sources for PSPS events (need research on this)
Public transit research for best technology decisions in transition to ZEVs for rurals
What types of demographic shifts might we see such as climate refugees
Agreed upon metrics for measuring progress
Evaluate cost/benefits of various adaptation strategies
How to measure social impacts
SLR + groundwater impacts

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

Response
Fund clean transportation infrastructure
Flexible policy that recognizes the unique nature of each region
Increase funding specifically for State's Active Transportation Program grants
Gather data for us to use regionally (baseline and monitoring, etc.)
Support local leadership for establishing accurate baseline data to base future achievable climate goals that fit the specific North Coast region county.
Support regional planning and prioritization of actions and funding through regional block grants for implementation
Have a seat/s at the table for us
Hosting or promoting forums for jurisdictions to work together on these issues
Identify leading community organizations and support their role in developing a regional approach.
Identify the adaptation actions that are applicable regionally and what types of actions would have to be on the subregion or local scale.

More funding for rural regions, not based on population numbers
Empower regional actors like NCRP across sectors like wildfire and water resources
Increase funding for ATP
Funding