

2021 California Climate Adaptation Strategy Northern Sierra Regional Workshop Summary June 2, 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 Northern Sierra Workshop on June 2, 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?

- Wildfire
- Diminishing snowpack
- Flooding
- Drought
- 2. What are some of your region's unique challenges in adapting to climate change?

Common themes:

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

Illustrative responses:

- Multiple jurisdictions, especially with federal land management
- Help for homeowners to harden their homes, both financial and workforce. Many homeowners are elderly
- Lack of FEMA floodplain mapping
- Coordination between local, state, and federal landowners
- 3. What gives you hope about your region's ability to adapt to climate change?

Common themes:

- Current climate adaptation action, policy, and programming
- Public interest, awareness, education, and urgency
- Strong adaptation leadership and informed decision-makers
- Utilization and value of nature-based solutions

Illustrative responses:

- Grassroots organizations are strong
- Growing understanding that the Sierra Nevada is crucial to the rest of the state
- Fabulous bureaucratic infrastructure that is actually leading the way (Strategic Growth Council, Department of Water Resources, Caltrans)
- Ecosystems here are evolved to cope with stressors, when healthy

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: 67% of respondents
- Medium: 27% of respondents
- Low: 0% of respondents
- Not sure: 7% of respondents
- 2. What actions are needed to achieve this priority?

- Resilience planning
- Funding
- Forest management
- Workforce/economic development and high-road economic opportunities

Illustrative responses:

- Consistent, reliable, long-term access to funding to support continued implementation
- Fire risk reductions with local jobs for biomass utilization
- Weatherization of homes (big challenge for renters, low-income)
- Ensuring jobs for those dependent on winter tourism economy
- 3. How are you working to ensure equitable climate adaptation outcomes for this priority?

Common themes:

- Meaningful community engagement in decision-making
- Workforce/economic development and high-road economic opportunities
- Indigenous land management/uplift Traditional Knowledges
- Recognizing regional needs

Illustrative responses:

- Engagement with underrepresented and tribal communities
- Our agency created community priority zones that identify vulnerable communities that fall through the gaps in the statewide definitions
- Co-management of lands with tribes
- Understanding that vulnerable populations here don't necessary look the same as vulnerable populations in other parts of the state

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?

- Emergency preparedness and response
- Forest management

- Education and public awareness
- Resilience planning

Illustrative responses:

- Effective forecasting and alerting systems
- Wildfire mitigation through forest restoration
- Public communication about what to do in case of wildfire
- Establishment of Firewise Communities
- 3. How are you working to ensure equitable adaptation outcomes for this priority?

Common themes:

- Education, public awareness, and communication
- Emergency planning and preparedness
- Meaningful community engagement in decision-making
- Workforce/economic development and high-road economic opportunities

Illustrative responses:

- Create neighborhood wildfire awareness and preparedness groups
- Make sure emergency messaging available in multiple languages
- Way more resources for organizations that support those communities
- Need to hire more social workers

Draft Statewide Priority – Build a Climate Resilient Economy

- 1. How important is this priority for your region (high, medium, low, not sure)?
 - High: 82% of respondents
 - Medium: 18% of respondents
 - Low: 0% of respondents
 - Not sure: 0% of respondents
- 2. What actions are needed to achieve this priority?

Common themes:

- Workforce/economic development and high-road economic opportunities
- Forest management
- Resilience planning
- Emergency preparedness and response

Illustrative responses:

• Diversification - tourism as it currently exists is not very climate resilient

- Increase capacity for forest management work
- Update infrastructure to adapt to climate change. (i.e., shade structures at trailheads)
- Disaster planning resources and funding
- 3. How are you working to ensure equitable adaptation outcomes for this priority?

Common themes:

- Housing security
- Local business support
- Workforce/economic development and high-road economic opportunities
- Funding

Illustrative responses:

- Affordable housing and work training for all workers
- Support small business resilience planning
- Targeting resilience/restoration job opportunities to low-wage workers in tourism
- Created a business resiliency fund for COVID plan to keep it growing in the future

Draft Statewide Priority – Accelerate nature-based climate solutions

- 1. How important is this priority for your region (high, medium, low, not sure)?
 - High: 92% of respondents
 - Medium: 0% of respondents
 - Low: 8% of respondents
 - Not sure: 0% of respondents
- 2. What actions are needed to achieve this priority?

Common themes:

- Funding
- Forest management
- Technical assistance, guidance, and capacity-building
- Wetland restoration

Illustrative responses:

- Funding for large landscape projects and adaptive management
- Forest health is water health and vice versa
- Developing climate resiliency definitions for landscapes
- Meadow and wetland restoration

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

Common themes:

- Workforce/economic development and high-road economic opportunities
- Indigenous land management/uplifting traditional knowledge
- Forest management
- Coordination, partnerships, and collaboration

Illustrative responses:

- Employing locals and building infrastructure via a collaborative process
- Incorporating tribes and indigenous communities as key decision-makers about land management
- Lake Tahoe West large scale forest restoration
- Employing locals and building infrastructure via a collaborative process

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: 67% of respondents
 - Medium: 17% of respondents
 - Low: 16% of respondents
 - Not sure: 0% of respondents
- 2. What actions are needed to achieve this priority?

Common themes:

- Climate science accessibility and utilization
- Funding
- Monitoring and tracking
- Research and knowledge sharing

Illustrative responses:

- Add ideas from climate science into infrastructure planning
- Capacity and money to use Cal-Adapt data in planning and implementation
- Better snowpack/snow water equivalents (monitor across the landscape to improve estimates/forecasts)
- Downscaled climate data
- 3. How are you working to ensure equitable adaptation outcomes for this priority?

Common themes:

• Climate science accessibility and utilization

- Coordination, partnerships, and collaboration
- Indigenous land management/uplifting traditional knowledges
- Forest management

Illustrative responses:

- Use executive summaries for high level findings and appendices for the details
- More collaboration between university and locals, especially tribes
- We need better action-oriented models for integrated traditional ecological knowledge and climate science into decision-making everywhere
- We're focused on fuels reduction at an increased pace and scale to get to 1 million acres/year to have a chance

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: 91% of respondents
 - Medium: 9% of respondents
 - Low: 0% of respondents
 - Not sure: 0% of respondents
- 2. What actions are needed to achieve this priority?

Common themes:

- Funding
- Coordination, partnerships, and collaboration
- Research and knowledge-sharing
- Technical assistance, guidance, and capacity building

Illustrative responses:

- Create a regional think tank
- Funding to support staff time and capacity to participate in partnership/collaborative development and participation
- Build in considerations of avoided costs of climate impacts
- Utilize CivicSpark fellows
- 3. How are you working to ensure equitable adaptation outcomes for this priority?

- Coordination, partnerships, and collaboration
- Meaningful community engagement in decision-making
- Forest management

• More effective governance models and leadership

Illustrative responses:

- Toolkits to help develop these partnerships
- Provide funding for community groups to participate in the planning process
- By getting as much accomplishment on the ground in fuels reduction and roadside fuel breaks on evacuation routes as possible to provide a safer environment for the people
- Federal & State legislation and initiatives/bonds to increase funding

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

Responses:

- Built environment
- Scaling up
- Regional differences

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?

Common themes:

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

Illustrative responses:

- Homeless services
- Keep power on; reduce Power Safety Power Shutoffs
- Public access to lakes and rivers
- Education people don't think of it as an issue
- 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:

- Adaptation strategies and guidance
- Community-driven science/community engagement
- Improved data, mapping, and technology
- Sector-specific research and data

Illustrative responses:

- Best practices to adaptation approaches
- Survey of vulnerable communities to find out what they are most worried about or which risks they will be facing
- More Light Detection and Ranging (LiDAR) of forests
- Post-fuels reduction/forest thinning, what are the best revegetation approaches?
- 3. How can the state support a regional approach to adaptation and resilience through the Strategy?

Common themes:

- Support for region-specific approaches
- Monitoring and tracking
- State action and leadership
- Leverage existing efforts

Illustrative responses:

- Monitoring efforts to track the effectiveness of actions and to adapt to new findings/changes
- Make it clear who (if anyone) is a regional coordinator for this work
- Regionally-specific adaptation strategies that scale up and down
- Align Adaptation Strategy with Assessment Reports so impacts lead directly to adaptations

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)

What climate impacts are you most concerned about in your region?	
Flood changes pests and disease	
stressed out people wildfire smoke rain on snow loss of coastal fog landslides drought, wildfire smoke Water supply winter flooding	
drought wildfire infrastructure severe weather snowpack invasive species change in runoff timing flooding	
declining snowpack extreme heat biodiversity loss	

Impact	Number of Responses
Wildfire	6
Loss of coastal fog	2
Drought	2
Change in runoff timing	2
Snowpack	2
Winter economic changes	1
Severe weather	1
Stressed out people	1
Water supply	1
Biodiversity loss	1
Infrastructure	1
Rain on snow	1
Flood changes	1
Flooding	1
Type-conversion	1
Landslides	1
Pests and disease	1

Impact	Number of Responses
Winter flooding	1
Declining snowpack	1
Extreme heat	1
Wildfire smoke	1
Invasive species	1

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

Response
Less voters in this area tends to mean less attention is paid
Lack of rural data
Help for homeowners to harden their homes, both financial and workforce. Many
homeowners are elderly.
Increased pressure from tourism
The state tends to focus on urban challenges
Lack of FEMA floodplain mapping
Monitoring to support adaptive management
Loving our cars more than public transportation
Priority here versus more populous regions
Subsidiarity
Multiple jurisdictions, especially with federal land management
Variation within the region - huge areas with diverse challenges
A "One size fits all approach"
Coordination between local, state, and federal landowners
Presence of fighting wildfire - CAL FIRE vs. USFS
People getting together and agreeing on what to do
Political interest in addressing climate change
Capacity
The problem is so big, the solutions are hard to develop and implement
Funding, capacity, collaboration across jurisdictions
Resolve to invest in adaptation
Rural local government capacity - many governments have 1-2 planners to do
EVERYTHING, with no particular climate expertise
Understanding of the sense of urgency
Unfunded mandates
Money to fund big solutions
Lack of funding, capacity, and political support for the actions.

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

Response
Funding for fuels reduction projects
Fabulous bureaucratic infrastructure that is actually leading the way (SGC, DWR, Caltrans)
Local neighbors are willing to help each other during emergencies.
We have no choice
Federal recognition of climate change
Growing understanding that the Sierra Nevada is crucial to the rest of the state
More and more awareness of risks and how to adapt
Recent actions to expedite vegetation treatments, e.g., CaITVP
Public support for Sierra Nevada's great amenities and ecological services
Ecosystems here are evolved to cope with stressors, when healthy
Meetings like this
Multi-jurisdictional work, collaborative groups
Desire to change.
Grassroots organizations are strong
California is playing a leadership role
Larger landscape restoration efforts
Citizen action - firewise communities
Nature is powerful

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

Priority 1: Protect climate vulnerable communities
Protecting Lake Tahoe clarity
Improved emergency alert system
Education (in all languages)
Funding NOT based on population or other metrics that do not provide rural counties at the headwaters equity in funding opportunities
Expedite forest resilience measures
Home hardening and transportation for disabled and elderly.
Strengthen tolerance
Destigmatize vulnerability
Fire risk reductions with local jobs for biomass utilization
Ensuring jobs for those dependent on winter tourism economy
Home hardening and veg treatments
Reducing carbon emissions.
Weatherization of homes (big challenge for renters, low-income)

Capacity for local governments to under adaptation planning AND implementation. Funding and staff capacity

Wildfire risk reduction in the WUI.

Forest management

Reducing threat of wildfire

Better public transportation options

Consistent, reliable, long-term access to funding to support continued implementation

Access to transportation

Priority 2: Advance public health and safety

Public communication about what to do in case of wildfire

Establishment of firewise communities

Home/infrastructure armoring

Clear evacuation routes and communications

Multi-jurisdictional wildfire preparedness plans

Effective forecasting and alerting systems

Forest restoration

Extreme heat mitigation

State Medicare for all

Echo forest management

Warming temps will open the region to pest and disease that haven't been present in the past

Wildfire mitigation through forest restoration

Forest management

Emergency planning

Access to recreation

Hire more fire fighters

Education and awareness

Evacuation and emergency planning

Outreach to tribes

Educate second home owners

Build strong relationships with emergency mgmt. orgs and orgs that support vulnerable communities

Working with Fire Safe Council to provide fuel reduction resources for properties most in need (elderly, disabled)

Create neighborhood wildfire awareness and preparedness groups

Multilingual/cultural educational materials

Adding better transportation for the disabled and elderly.

Data and understanding the needs

Way more resources for organizations that support those communities

Planning projects that will increase local jobs.

Make sure emergency messaging available in multiple languages

Ditto to a lot of the last priority area answers

Track funding opportunities

Need to hire more social workers

Priority 3: Build a climate resilient economy

Train restoration practitioners (diversify economy)

Echo infrastructure improvements to support tourism

Forest resilience career opportunities

Increase capacity for forest management work

Protecting forestry resources

Update infrastructure to adapt to climate change. (I.E. Shade structures at trailheads)

Management of forest - recreation economy

Provide forest management jobs

Disaster planning resources and funding

Help the tourism industry become more resilient.

Being resilient to climate change will preserve the tourist economy, so addressing resiliency inherently leads to a climate resilient economy

Transportation and housing

Increase wages.

Resilience/restoration economy

Supporting chambers of commerce - tourism

Re-training for climate jobs

Create jobs not dependent on winter tourism and snowpack

Diversification - tourism as it currently exists is not very climate resilient

Economic diversification

Talk up support for the fed civilian climate corps and then target unemployed people to provide them skills to apply for the positions

Affordable housing and work training for all workers.

Support small business resilience planning

Support small businesses

Echo the need for affordable housing

Technical assistance programs

Created a business resiliency fund for COVID - plan to keep it growing in the future

Workforce housing is a crucial and often missing puzzle piece

Supporting a range of local businesses

Just started an economic resiliency and recovery planning process

Targeting resilience/restoration job opportunities to low-wage workers in tourism

Ensure that affordable housing available for all workers

Priority 4: Accelerate nature-based climate solutions

Forest thinning. Watershed resilience.

Forest health is water health and vice versa

Public and private lands

Manage forests for long term sequestration

Holistic landscape projects

Clear definitions of nature-based climate solutions

Thinking about agriculture

Better measuring carbon sequestration

Ensuring that our carbon stocks REMAIN stocks

Developing climate resiliency definitions for landscapes

Control the hordes of recreationists on the public land

Funding for large landscape projects and adaptive management

Meadow and wetland restoration

Fuels reduction

Funding, funding, funding

Meadow restoration

Funding

Forest restoration

Priority 5: Make decisions based on best available climate science

Better snow pack/snow water equivalents(monitor across the landscape to improve estimates/forecasts

Improved methods for communicating science to the public, and how it informs decision-making

Add ideas from climate science into infrastructure planning.

Universities with lower overhead costs that eat 50% of project budgets

Source all data - use best available

Monitoring and adaptive management

More understanding of carbon sequestration

Echo - data needs to be approachable to the public / leadership

Sufficient funding for monitoring and research

Measure onset of spring (phenology)

Capacity and \$ to use Cal-Adapt data in planning and implementation

Translating the science for stakeholders, decision makers, and public

Increase fuels reduction to move forest landscapes to a desired and manageable condition at the rate of at least 1 million acres/year

Access to easy to use climate science

Translation of climate science into infrastructure design

Funding

Awareness of climate research

Downscaled climate data

Priority 6: Leverage resources for climate action through partnerships and collaboration

More contacts for local nonprofits to work with local, state, and federal government in capacity building.

Not just CivicSpark fellows, but permanent full-time positions that pay a salary reflecting the importance of the work. If this is truly important, we shouldn't rely on underpaid fellows

Capacity building across jurisdictions

Create pathways for private investment that are easy to use

Create a regional think tank

Incentives for private investment

Need to create funding streams through e.G. Transportation and recreation user fees Capacity building through staffing funding

Focus all of the State's CalFire grant programs to "action" on the ground -- fuels reduction and roadside fuel breaks to provide safe evacuation routes

Clear direction from state resources about working on federal land and with federal partners

Build in considerations of avoided costs of climate impacts

Funding to support staff time and capacity to participate in partnership/collaborative development and participation

CivicSpark fellows!

Make it easier to do joint CEQA/NEPA documents

Putting a dollar amount to the economic value of ecosystem services

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

Priority 1: Protect climate vulnerable communities
Housing burdened communities need more help
Need more comfortable community places to avoid wildfire smoke
Understanding the limitations of low-income communities and low-income
jurisdictions
Complete the local fire station here in newcastle.
More meaningful engagement with tribes is needed
Need more mental health resources
Understanding that vulnerable populations here that don't necessary look the same
at vulnerable populations in other parts of the state
Engaging local communities in workforce training and forest restoration job
opportunities
Engagement with underrepresented and tribal communities
Going to stakeholders where they are
Working in collaboratives
Comanagement of lands with tribes
Our agency created community priority zones that identify vulnerable communities
that fall through the gaps in the statewide definitions
Increasing community outreach and engagement
Priority 2: Advance public health and safety
Outreach to tribes
Educate second home owners

Build strong relationships with emergency mgmt. Orgs and orgs that support vulnerable communities

Working with fire safe council to provide fuel reduction resources for properties most in need (elderly, disabled)

Create neighborhood wildfire awareness and preparedness groups

Multilingual/cultural educational materials

Adding better transportation for the disabled and elderly.

Data and understanding the needs

Way more resources for organizations that support those communities

Planning projects that will increase local jobs.

Make sure emergency messaging available in multiple languages

Ditto to a lot of the last priority area answers

Track funding opportunities

Need to hire more social workers

Priority 3: Build a climate resilient economy

Affordable housing and work training for all workers.

Support small business resilience planning

Support small businesses

Echo the need for affordable housing

Technical assistance programs

Created a business resiliency fund for COVID - plan to keep it growing in the future

Workforce housing is a crucial and often missing puzzle piece

Supporting a range of local businesses

Just started an economic resiliency and recovery planning process

Targeting resilience/restoration job opportunities to low-wage workers in tourism

Ensure that affordable housing available for all workers

Priority 4: Accelerate nature-based climate solutions

Incorporating tribes and indigenous communities as key decision-makers about land mgmt.

Upper watershed needs the acknowledgement it deserves from downstream

Respecting tribal sovereignty

Scaling up fuels reduction FAST!

Building partnerships with local governments and nonprofits for restoration projects.

Tribal indigenous knowledge

Would love to see downstream users see the benefit of nature based solutions high in the watershed they rely on

Finer scale climate modeling (sub-watershed level)

Incorporating recreation opportunities into restoration efforts

Local employment

Educate leadership

? Equitable? Get on with moving the forests back to a desired condition that can be managed at the rate of at least 1 million acres/year

Thinking about how to prioritize meadow restoration projects to maximize sequestration

Creating long-term job opportunities

Increasing workforce capacity

Employing locals and building infrastructure via a collaborative process

Echo multi benefit projects

Incorporate natural resource education into restoration projects

Watershed work is important

Coordinate/collaborate with grassroots organizations - local knows best

Lake tahoe west - large scale forest restoration

Thinking about multi-benefit projects

Priority 5: Make decisions based on best available climate science

Collaborative learning networks like SCALE

More collaboration between University and Locals, especially tribes.

Use graphs, tables, etc. to communicate information

Strategies for addressing conflicts between what science advices and what communities want

Make Climate Science easier for the public to understand.

Use executive summaries for high level findings - and appendices for the details

We're focused on fuels reduction at an increased pace and scale to get to 1 million acres/year to have a chance. Last fall, we burned 20% of the National Forests in CA in 4 months.

Test

We need better action-oriented models for integrated TEK and climate science into decision-making everywhere

Retrain ski resort employees/snow based tourism for other types of work

Bringing in traditional ecological knowledge

Science to action plans

Using maps to visualize and analyze projects and plans

Priority 6: Leverage resources for climate action through partnerships and collaboration

TACs

Federal & State legislation and initiatives/bonds to increase funding

Utilize UC Cooperative Extension

More engagement between the tribes and community groups.

Working with community-based organizations focused on equity

Provide funding for community groups to participate in planning process

Inclusion of key local jurisdictional departments

By getting as much accomplishment on the ground in fuels reduction and roadside fuel breaks on evacuation routes as possible to provide a safer environment for the people

Toolkits to help develop these partnerships

Need better understanding of if/how we can support tribes and indigenous

communities

Greater tribal engagement

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

Response
Scaling up
Built environment
Regional differences

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

Response
High heat drives more visitors to the sierra
Incentives for landlords to address heat in homes - concern about renters
Public access to lakes and rivers
Echo fewer PSPS would be good - keep power on
Helping homeowners add air conditioning to older homes. Lots of older homes have
no cooling or swamp coolers.
Education - people don't think of it as an issue
Homeless services
Retrofits (SB 350)
Massive effort toward fuels reduction so the utilities can keep the power on!
Affordable housing
Shade trees
Cooling 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
Market strategies for adaptation strategies that work
Scientific understanding of groundwater impacts/projections
Outreach tools to ensure adaptation actions are equitable
Economy driven resources
More lidar of the forests.

Response

Remove red tape associated with doing controlled burns

How to increase use of prescribed fire on the landscape

Survey communities - ask about needs

So many data gaps in our region. Large area with low population density means a very high margin of error in census, and lots of variation within a single census unit. We have a limited understanding of small pockets of need/vulnerability. Limited data collection points for things like air quality, water quality, etc. Lack of large, state-wide assessment of things like sierra nevada infrastructure

Best practices to adaptation approaches

None.

Move all the money for research into action on the ground -- strategic fuel breaks, roadside fuel breaks for evacuation routes; getting to at least 1 million acres/year of fuels reduction. We burned 20% of the national forests in CA in 4 months last fall.

Survey of vulnerable communities to find out what they are most worried about or which risks they will be facing

Primary drivers of fuel-driven megafires and how to estimate large risk areas for treatment priority.

We need more data scientists in rural communities

Post-fuels reduction/forest thinning, what are the best revegetation approaches?

Technical support from agencies

Tools to help collaborate

Guidance documents

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

Response

Report out on outcomes in between updates

Regionally-specific adaptation strategies that scale up and down

Make it clear who (if anyone) is a regional coordinator for this work

Empower regional leaders to lead identification of their region's overarching vulnerabilities

Don't ignore federal lands

Continue to scale down from major ecoregions to smaller planning scales

Understanding how regions are defined - what is the common denominator

Communication channels up and down from state to region to locality

Monitoring efforts to track the effectiveness of actions and to adapt to new findings/changes

Declare the entire state a vegetation emergency thereby triggering the state's vegetation exemption to all fuels reduction efforts. With the state exemption in-place now for catastrophic fire, the landowner can go to work on restoration within 5 days. Make it easy to report on how our accomplishments fit within the state strategy

Response

Sub regions within the regions

More funding for planning as we shift to larger scale projects

Is there one definitive region map for the state?

Create state captain, by region, for a direct link

Align Adaptation Strategy with Assessment Reports - so impacts lead directly to adaptations