



2021 California Climate Adaptation Strategy San Diego Regional Workshop Summary June 17, 2021

Welcome and Overview

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

Goals of the 2021 Strategy are to:

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

This document is intended to provide a summary of all stakeholder input received during the San Diego Regional Workshop on June 17, 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:

- Sea level rise
- Wildfire
- Extreme heat and urban heat island effect
- Drought/water supply

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

Common themes:

- Land-use
- Lack of clear leadership, political will, and consensus among decision-makers
- Climate impact severity and frequency
- Lack of coordination

Illustrative responses:

- Affordable housing/need to develop versus resilience
- Competing interests on coastal issues
- Fire protection from public lands
- Cross-jurisdictional coordination/action

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, planning, and programming
- Strong adaptation leadership and informed decision-makers
- Indigenous knowledge and expertise

Illustrative responses:

- The Climate Science Alliance in San Diego County
- Active community based organizations building community
- Strong local non-governmental organizations
- Inclusion of Tribal knowledge

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: 91% of respondents
- Medium: 0% of respondents
- Low: 0% of respondents
- Not sure: 9% of respondents

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

Common themes:

- Emergency preparedness and response
- Coordination, partnerships, and collaboration

- Meaningful community engagement and decision-making
- Indigenous land management/uplift Traditional Knowledges

Illustrative responses:

- Have a plan for the emergency relocation of most vulnerable
- Collaboration between multiple agencies, academia, nonprofits
- Community ownership of energy/food resources
- Biosecurity for Native American communities for cultural resources

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

Common themes:

- Energy resilience
- Meaningful community engagement in decision-making
- Nature-based solutions: Conservation
- Climate science accessibility and utilization

Illustrative responses:

- Delivering renewable energy to San Diego residents
- Educating and surveying farmers about climate adaptation needs
- Making sure that public lands continue to enhance the well-being of San Diego area residents
- Providing scientific data on climate, water, wildfire risks to planners

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

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

Common themes:

- Water resilience
- Energy resilience
- Pollution reduction
- Service provision and resilience hubs

Illustrative responses:

- Improve water quality in the Tijuana River Estuary
- Ensure all communities have own solar power, water capture and internet access
- Clean and reliable power; good/realistic alternatives to personal vehicles for transportation
- Mobility options

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

Common themes:

- Meaningful community engagement in decision-making
- Energy resilience
- Conservation
- Housing security

Illustrative responses:

- We are creating an Equity Guidance Curriculum that focuses on implementing equity in adaptation planning. We also are forming our projects around communities of concern and making sure these communities are represented from the start of the adaptation planning process.
- Delivering renewable energy to San Diego residents
- Making sure that public lands continue to enhance the well-being of San Diego area residents
- Safe housing and decent wages for farmworkers. Solar array supplying our electrical needs.

Draft Statewide Priority – Build a Climate Resilient Economy

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

- High: 67% of respondents
- Medium: 17% of respondents
- Low: 17% of respondents
- Not sure: 0% of respondents

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

Common themes:

- Energy resilience
- Regulatory actions
- Resilience planning
- Water resilience

Illustrative responses:

- Locally generated renewable power and increasing energy efficiency
- Address Historic Review processes to enable more infill redevelopment
- Make suburban sprawl more difficult to permit/build
- Workforce empowerment for green jobs in communities of concern

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

Responses:

- Educating in multiple languages about impacts and adaptations to climate change
- Supporting local farmers
- Plan for relocation of climate refugees due to SLR, Wildfire, Flood or Drought at the infill, town extension, or new town scale.
- Local purchasing/educate on benefits of supporting local business
- Living wages for workers in new sustainable agriculture where everyone is prosperous
- Facilitating a diverse local economy (not overly reliant on one or two industry sectors)

Draft Statewide Priority – Accelerate nature-based climate solutions

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

- High: 75% of respondents
- Medium: 25% of respondents
- Low: 0% of respondents
- Not sure: 0% of respondents

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

Common themes:

- Community greening
- Climate-smart agriculture
- Wetland restoration
- Water resilience

Illustrative responses:

- Urban canopy restoration with native plants and storm water infiltration
- Regenerative agriculture
- Living shorelines
- Reduce urban hardscape surfaces to allow more water infiltration and carbon sequestration

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

Responses:

- Link conservation of biological diversity in the county to conservation of diverse Native American cultures
- Ensuring adequate tree canopy and green space in all neighborhoods
- Assisting Port of SD with sustainable development practices
- Participating in classes offered by Kumeyaay leaders
- Inspiring youth to pursue green careers

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: 75% of respondents
- Medium: 0% of respondents
- Low: 25% of respondents
- Not sure: 0% of respondents

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

Responses:

- Citizen science
- Access to climate science so that it is clear what it means and how to use it for your project
- Acknowledging science that may not fit the narrative
- Policy makers need to seek out the great expertise among San Diego scientists
- Engage with UCSD, SOI, SDSU, USD, and City College
- Engaging scientists at all levels
- Writing Op-Eds to help the public understand the value of science and the meaning of adaptation.
- Incorporate community responses and allow for participation
- Start projects then monitor outcomes
- Sharing research and project results publicly

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

Responses:

- Acknowledging science that may not fit the narrative
- Sharing research and project results publicly
- Writing Op-Eds to help the public understand the value of science and the meaning of adaptation

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:

- Breaking the culture of competition between cities
- Coordinate existing efforts to avoid exhausting potential participants
- Funding tied to collaborations
- Municipal leadership and cooperation for coastal habitat management
- Regional governance and planning to reduce redundancy
- Funding for boundary spanning organizations
- More leadership from the MPO
- Transparency and reduced redundancy

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

Responses:

- Offering our resources to other groups working on same topics
- Establishing working groups and other forums for communication and engagement
- Hosting workshops on specific adaptation approaches.
- Outreach to understand needs and aspirations
- Development of equity index

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

Responses:

- Physical urban planning and design responses to climate adaptation
- Take up cross-border efforts to improve climate adaptation
- Setting an example for less progressive regions of the country

Summary of Input on Cross-Cutting Questions

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

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

Responses:

- Transition to heat-tolerant crops
- Subsidized/free trees for residents willing to care for them
- Increasing light reflectance of human-made surfaces
- Wildfire preparedness

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:

- Provide a central location to place any proposed Federal or State legislation that is being considered that could affect a local plan for moving forward with their CARP.
- How much carbon can we sequester with regenerative agriculture practices in our climate?
- Please collaborate with Jack Dangermond (ESRI) and his science and planning staff to build a planning and using GeoDesign. CalFire and other agencies already build on GeoDesign
- Need coupled social ecological systems (both social and ecological scientists)
- Need more involvement of social scientists in developing and evaluating solutions. Includes anthropologists, sociologists, scientists, community organizers. Not JUST physical scientists -- it is a human and social problem

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

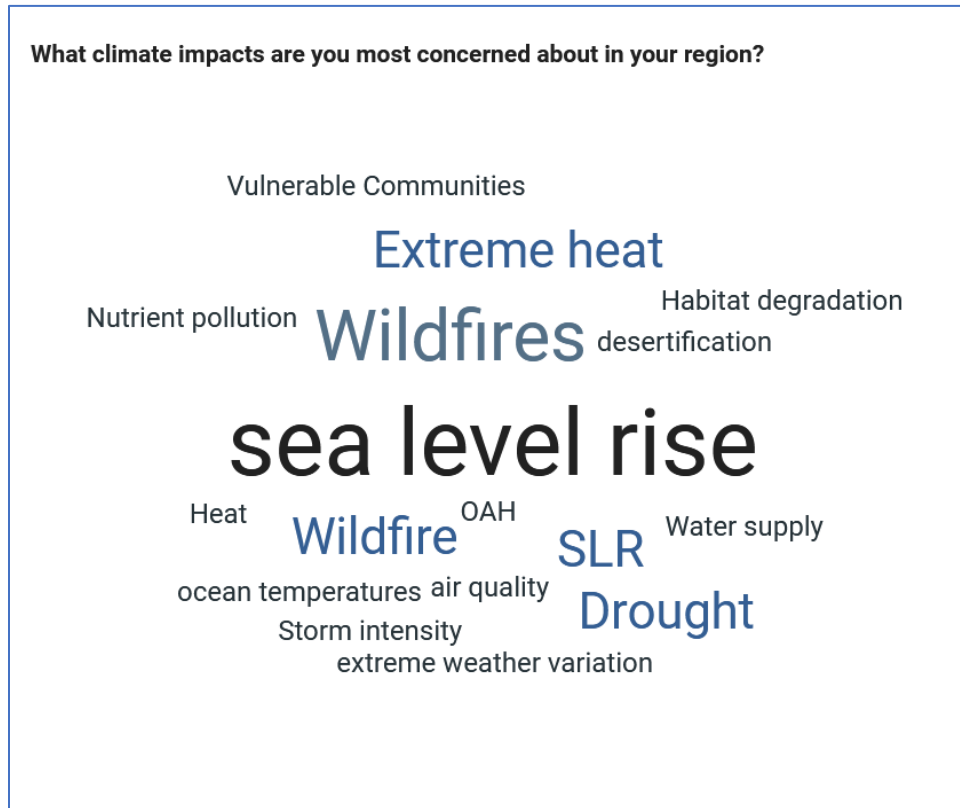
Responses:

- Funding for training and capacity at regional scales for adaptation projects
- Prioritizing funding for collaborative efforts
- Customize approaches by geographic conditions. Beach, River, UWI, desert

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
Sea level rise	4
Wildfires	3
Drought	2
Extreme heat	2
Wildfire	2
SLR	2
Extreme weather variation	1
Air quality	1
Desertification	1
Habitat degradation	1
Storm intensity	1
Ocean temperatures	1
Water supply	1
Vulnerable communities	1
Heat	1
Agricultural productivity	1

Impact	Number of Responses
Nutrient pollution	1
OAH	1

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

Response
Weather prediction to counter adverse effects of severe unexpected flux; reduction of carbon footprint using solar arrays; desalination to counter worsening quality and supply of imported water
Local zoning
Floods
Housing demand
Training for communities to prepare
Cross-jurisdictional coordination/action
Rate of change needed
Limits on grazing lands for fire control
Competing interests on coastal issues
Affordable housing/need to develop vs resilience
Fire protection from public lands
Political will
Coastal hard armoring
Sea walls

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

Response
Having Nicole Capretz on SGC
Climate Action Campaign efforts.
Technology associated with R&D and governmental incentives, financial and political, to improve access and utilization of resources
Native American communities
Inclusion of Tribal knowledge
Active CBOs building community prioritizing communities of concern
The Climate Science Alliance in San Diego County
Abundance of state funding opportunities
The potential for an organized regional response
Increasingly informed communities

Response
Strong local NGOs
The State directing this initiative, just like Affordable Housing and Transit at the city level.
Connection to the land
Benefits of collaboration

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

Priority 1: Protect climate vulnerable communities
Biosecurity for Native american communities for cultural resources
Collaboration between multiple agencies, academia, nonprofits
Mobilization of emergency services to areas experiencing greatest impact
Community ownership of energy/food resources
Agricultural community needs state incentives to go solar. Farmers and grove owners need desalinated, adequate water supplies. Groves need immigrants to live safely and economically to do the work in the fields.
Support and promote farms and ranches doing regenerative agriculture
Have a plan for the emergency relocation of most vulnerable.
Shelter planning for people from ravages of climate-induced catastrophes
Monitoring and reporting systems
Cooling centers
Workforce empowerment for urban communities - solar energy and water conservation
Priority 2: Advance public health and safety
Safe harbor for H2A and local farm labor. Medical care for all. Water acquisition that is safe and abundant for grove needs.
Strategy to control wildfire smoke
Mobility options
Clean and reliable power; good/realistic alternatives to personal vehicles for transportation
Expand targeted grazing in wildland urban interface
Clean up imperial beach
Mitigate water quality impacts near the border
Ensure all communities have own solar power, water capture and internet access
Improve water quality in the tijuana river estuary
Reliable and renewable power
Pedestrian and bicycle facility improvements
A secure supply of clean water in sufficient quantity
Priority 3: Build a climate resilient economy
Limit water use, less water subsidies to ag

Infill and redevelopment (with safeguards to avoid displacement)
Address Historic Review processes to enable more infill redevelopment.
Build local food system for more local supply
Limit development
Wetland restoration
Removing barriers and actively promoting worker/community ownership of land, enterprise, and energy.
Protect agricultural water rates
Locally generated renewable power and increasing energy efficiency
State needs to give tax incentives to agricultural development of solar energy; we got federal tax help, but state did not have program.
Make suburban sprawl more difficult to permit/build.
Reduce dependency on fossil-fuel vehicles and freeway traffic
Workforce empowerment for green jobs in communities of concern
Priority 4: Accelerate nature-based climate solutions
Local water harvesting
Restoration of riparian forests and oak woodlands
Living shorelines
Targeted grazing
Constructed wetlands
Ocean based blue technology opportunities in our city's bays.
Urban canopy restoration with native plants and storm water infiltration
Urban forestry
Wetland restoration
Reduce urban hardscape surfaces to allow more water infiltration and carbon sequestration
Seagrass protection and restoration
Regenerative agriculture
Priority 5: Make decisions based on best available climate science
Citizen science
Access to that science so that it is clear what it means and how to use it for your project
Incorporate community responses and allow for participation
Engaging scientists at all levels
Policy makers need to seek out the great expertise among San Diego scientists
Engage with UCSD, SOI, SDSU, USD, and City College
Start projects then monitor outcomes
Priority 6: Leverage resources for climate action through partnerships and collaboration
Regional governance and planning to reduce redundancy
Breaking the culture of competition between cities
Municipal leadership and cooperation for coastal habitat management

Coordinate existing efforts to avoid exhausting potential participants
Funding for boundary spanning organizations
Transparency and reduced redundancy
Funding tied to collaborations.
More leadership from the MPO

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

Priority 1: Protect climate vulnerable communities
Safe housing and decent wages for farmworkers. Solar array supplying our electrical needs.
Providing scientific data on climate, water, wildfire risks to planners
Delivering renewable energy to SD residents
Supporting Climate Action Campaign initiatives.
Amplifying voice of communities of concern
Maintaining open space buffers
Educating and surveying farmers about climate adaptation needs
Making sure that public lands continue to enhance the well-being of San Diego area residents
Outreach through our local general plan update process
Priority 2: Advance public health and safety
Sharing job opportunities in sustainability to members of communities of concern
Nonjudgmental easy access to medical care for grove workers; safe housing for workers and families; safe agricultural practices for workers
Provide options for low-income people to access renewable energy readily
Inclusive outreach to expand regenerative agriculture
Collaboration with healthcare sector
Active Transportation Plans
Priority 3: Build a climate resilient economy
Living wages for workers in new sustainable agriculture where everyone is prosperous
Local purchasing/educate on benefits of supporting local business
Facilitating a diverse local economy (not overly reliant on one or two industry sectors)
Plan for relocation of climate refugees due to SLR, Wildfire, Flood or Drought at the infill, town extension, or new town scale.
Educating in multiple languages about impacts and adaptations to climate change
Supporting local farmers
Priority 4: Accelerate nature-based climate solutions
Participating in classes offered by Kumeyaay leaders
Assisting Port of SD with sustainable development practices
Inspiring youth to pursue green careers
Link conservation of biological diversity in the county to conservation of diverse

Native American cultures
Ensuring adequate tree canopy and green space in all neighborhoods
Priority 5: Make decisions based on best available climate science
Writing Op-Eds to help the public understand the value of science and the meaning of adaptation.
Acknowledging science that may not fit the narrative
Sharing research and project results publicly
Priority 6: Leverage resources for climate action through partnerships and collaboration
Establishing working groups and other forums for communication and engagement
Outreach to understand needs and aspirations
Hosting workshops on specific adaptation approaches.
Offering our resources to other groups working on same topics
Development of equity index

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

Response
Take up cross-border efforts to improve climate adaptation
Setting an example for less progressive regions of the country
Physical urban planning and design responses to climate adaptation

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

Response
Wildfire preparedness
Cool roofs and pavements
Increase light reflectance of human-made surfaces
Subsidized/free trees for residents willing to care for them
Transition to heat tolerant crops
Efficient irrigation systems
Drought tolerant urban canopy in EVERY neighborhood
Passive building design
Cover crops for orchards
Increase our transit capacity to shift our mode from cars to multi-modal transportation
Urban forestry

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
Getting state agencies (e.g., Coastal Commission) on the same page regarding the science
What efforts by existing institutions can be combined?
Need to be very clear between what is mitigation and what is adaptation... Adaptation is the physical response to climate calamities and more physical planning tools are needed to adapt to SLR, Fire, Flood/Drought.
How much carbon can we sequester with regenerative agriculture practices in our climate?

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

Response
Funding for training and capacity at regional scales for adaptation projects
Customize approaches by geographic conditions. Beach, River, UWI, desert
Prioritizing funding for collaborative efforts