2021 California Climate Adaptation Strategy
San Francisco Bay Area Regional Workshop Summary
June 21, 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 Francisco Bay Regional Workshop on June 21, 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 smoke
- Ecosystem and biodiversity impacts, loss of wetlands/Bay health
- Wildfire

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
- Inefficient government policies and regulations
- Inequity

Illustrative responses:

- Funding gaps and lack of technical assistance to access programs
- Lack of vision in planning for long-term
- Overcoming permitting barriers and regulations that were built for historical conditions
- Regional inequity (e.g. municipal coffers empty in lower-income communities) and governance fragmentation

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

Common themes:

- Public interest, awareness, education, and urgency
- Strong adaptation leadership and informed decision-makers
- Current climate adaptation action, policy, and programming
- Coordination, partnerships, and collaboration

Illustrative responses:

- Diversity and creativity of people
- High level support and buy in
- Openness to prescribed burns
- Bay Area Climate Adaptation Network (BayCAN) and other collaborations

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: 84% of respondents
- Medium: 14% of respondents
- Low: 2% of respondents
- Not sure: 0% of respondents

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

Common themes:

- Meaningful community engagement and decision-making
- Funding
- Education and public awareness
- Research and knowledge-sharing

Illustrative responses:

- Learning from disadvantaged communities, not just "educating" them
- Changing grant requirements to allow more funding to be allocated to community capacity building
- Looking to cultures around the world for their approaches to heat, erosion, drought, etc. -- the "developed world" has much to learn from other countries
- Assessing the specific physical vulnerabilities and needs in each area/community

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

Common themes:

- Funding
- Meaningful community engagement in decision-making
- Prioritizing climate vulnerable communities
- Workforce/economic development and high-road economic opportunities

Illustrative responses:

- Some Measure AA funding going to equity projects like the Oakland Shoreline Leadership Academy, led by the West Oakland Environmental Indicators project
- Environmental Justice (EJ) Parent Academy, compensating community for their time, keeping them engaged throughout the years
- The Oakland Department of Transportation is doing cool stuff with regard to race equity prioritization
- Engaging young people (college interns) in land use planning and conservation to bring in more diverse perspectives to the sector

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: 12% of respondents
- Low: 2% of respondents
- Not sure: 0% of respondents

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

Common themes:

- Service provision and resilience hubs
- Resilience planning
- Emergency preparedness and response
- Water resilience

Illustrative responses:

- Free mitigation for wildfire smoke (clean air shelters, distribute masks, etc.)
- Need to stop continuing to build in areas that will be vulnerable to sea level rise
- Account for increased liquefaction risk from rising groundwater
- Protecting drinking water

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

Common themes:

- Emergency planning and preparedness
- Meaningful community engagement in decision-making
- Prioritize public health
- Service provision and resilience hubs

Illustrative responses:

- Providing communities with the tools to build emergency and response preparedness within neighborhoods and allowing them to put in the work while building a stronger sense of community
- Hearing from community-based organizations about how to improve our services to support communities during climate shocks
- Identifying clear connections between climate and health (e.g. those with asthma and wildfire smoke)
- Meeting people's material needs - shelter, food, sanitation, etc.

Draft Statewide Priority – Build a Climate Resilient Economy

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

- High: 59% of respondents
- Medium: 36% of respondents
- Low: 5% 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
- Resilience planning

- Funding
- Education and public awareness

Illustrative responses:

- Transforming from an extractive economy to a circular economy
- Help businesses think through the future impacts of climate change and how that might impact their current decisions. Bay cities can think about sea level rise when they plan new development and push it back from the shoreline.
- Increase focus on direct payments for sequestration rather than carbon offsets which allow continued pollution
- Education of the businesses on how to respond to a crisis...like the quake preparedness education that is well dispersed.

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

Common themes:

- Education, public awareness, and communication
- Climate smart agriculture
- Worker protections
- Workforce/economic development and high-road economic opportunities

Illustrative responses:

- Meet with city councils to help them think about nature-based solutions to climate change so they adapt their general and climate plans. The Sierra Club is meeting with cities in our 3 counties to update or get their climate plans
- Support farmers from marginalized groups to access funding for ecosystem services
- Making sure outdoor workers have protections from extreme weather
- Creating opportunities in historically underserved communities

Draft Statewide Priority – Accelerate nature-based climate solutions

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

- High: 72% of respondents
- Medium: 21% of respondents
- Low: 0% of respondents
- Not sure: 8% of respondents

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

Common themes:

- Funding

- Community greening
- Conservation
- Regulatory actions

Illustrative responses:

- Funding for acquisition and restoration of lands that achieve nature-based solution goals.
- Restoration of urban canopy
- Quantifying carbon at a local/plant community scale to help prioritize land protection
- Close the regulatory gaps to protect areas that could serve as migration pathways for wetlands

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

Common themes:

- Coordination, partnerships, and collaboration
- Funding
- Meaningful community engagement in decision-making
- Restoration

Illustrative responses:

- Fund Resource Conservation Districts who work with public and private land managers
- Support farmers from marginalized groups who are enacting nature-based solutions (soil health, etc.) to access funding
- Need to provide grants for vulnerable communities so that those interested in participating in planning processes can do so (funding to make up for lost time away from work and family)
- SF Bay Restoration Authority projects such as the South Bay Salt Pond Restoration Project

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: 88% of respondents
- Medium: 12% 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
- Education and public awareness
- Research and knowledge sharing
- Technical assistance, guidance, and capacity-building

Illustrative responses:

- Educate local elected officials, business owners, property owners, general public. Need to use accessible language. Lots of graphics
- More publicity for [climate resilience] actions
- Routine updates on state guidance for assumptions on sea-level rise for consistency across regions
- Developing really excellent decision aids for all kinds of decision makers

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

Common themes:

- Climate science accessibility and utilization
- Meaningful community engagement in decision-making
- Research and knowledge-sharing
- Resilience planning

Illustrative responses:

- Encouraging scientific advisory panels and review of proposed plans
- Respecting autonomy and privacy of private landowners as I talk to them about these issues
- Provide funding to researchers from vulnerable communities and research conducted by the communities themselves
- Keeping city staff and council updated on latest climate science.

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: 83% of respondents
- Medium: 11% of respondents
- Low: 0% of respondents
- Not sure: 6% of respondents

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

Common themes:

- Coordination, partnerships, and collaboration

- More effective governance and leadership
- Funding
- Regulatory actions

Illustrative responses:

- Solutions will require input from a number of disciplines to fully utilize
- There needs to be the will to plan for resilience especially at the local level where land use decisions are made
- Funding for regional collaboratives such as BayCAN
- Really reconsider / streamline CA Environmental Quality Act (CEQA) – it can be a major unnecessary impediment

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

Common themes:

- Coordination, partnerships, and collaboration
- Meaningful community engagement in decision-making
- Prioritizing climate vulnerable communities
- Education, public awareness, and communication

Illustrative responses:

- Aligning with sister agencies on climate assumptions and planning/adaptation strategies
- Engage at-risk communities in all steps of the process
- Incorporating climate change into our outreach and education work, with focus on reaching vulnerable communities
- Creating a master plan for better diversity, equity, and inclusion in our public engagement

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

Common themes:

- Conservation, restoration, and ecological health
- Coordination and collaboration
- Housing
- Social cohesion

Illustrative responses:

- Nature-based solutions sounds like it's only for USE VALUE of nature in specific places, not broad preservation of species
- Create synergy by engaging beyond California
- More affordable housing

- How do we engage the individual? How can the State bring residents on board to personally address climate change in daily activities?

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:

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

Illustrative responses:

- Allow homeowners to produce more energy from roof tops
- Plant more trees to provide canopy
- Investing in trusted community and public facilities for cooling access and services during heat waves
- Public health education about heat health impacts

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
- Carbon neutrality
- Economic and financial information/data
- Effective coordination, partnerships, and collaboration

Illustrative responses:

- Information on effective wildfire resilience designs on an individual and community level
- Reviewing regulatory barriers to adaptation efforts and opportunities to reduce costs. Sometimes the paperwork is so confusing/ time consuming that it's not worth it!
- How best to reduce and not just displace emissions

- Research should focus not only on individual actions but on what collective actions have the most impact.

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

Common themes:

- State mandates, regulation, guidance, and incentives
- Funding and financing
- Support region-specific approaches
- State action and leadership

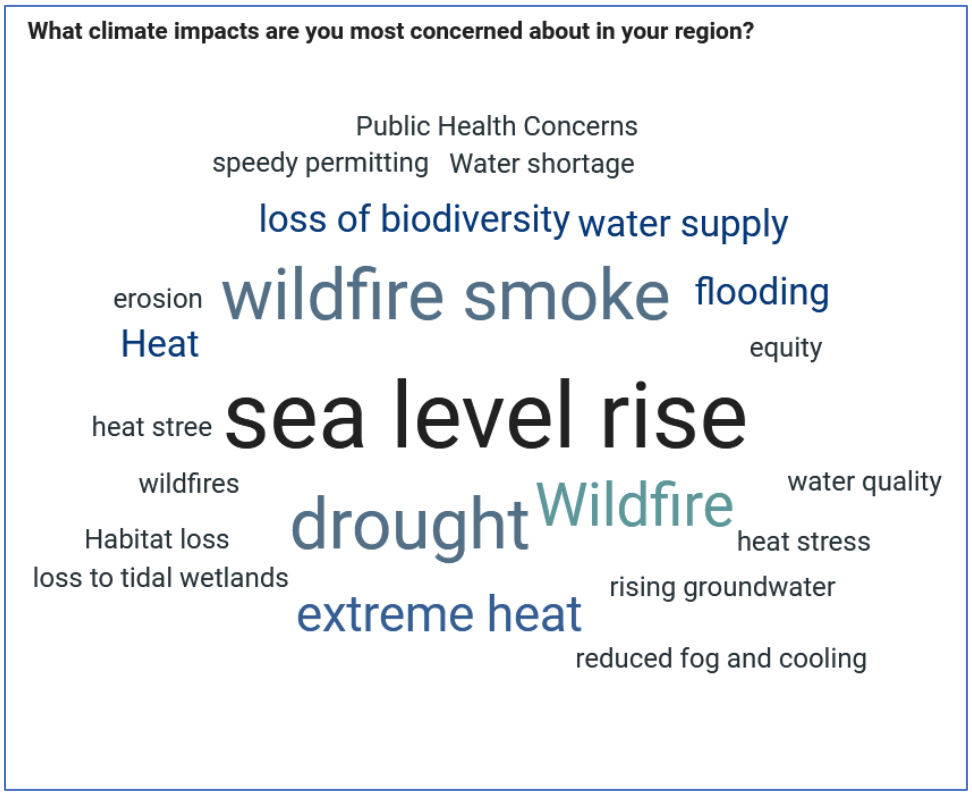
Illustrative responses:

- Hosting forums across the state to partner and share info on specific issues
- Helpful in the short term would be more advance notice on grant and funding opportunities - often we don't hear about them until it's no longer practical to develop partnerships and pursue.
- Support the regional organizations that are doing the work. create a cohesive approach and framework to follow
- Support strategies based on ecological/watershed landscape divisions, not just jurisdictional

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	18
Wildfire smoke	14
Drought	14
Wildfire	9
Extreme heat	7
Loss of biodiversity	5
Flooding	4
Water supply	3
Heat	3
Public health concerns	2
Water shortage	2
Rising groundwater	2
Wildfires	2
Habitat loss	2
Heat street	2
Hazardous materials	1
Danger to farmworkers	1

Impact	Number of Responses
Community effects	1
Loss of farmland	1
Economic impacts	1
Water quality	1
Contaminants flood impact	1
Salmonid streams too dry	1
Reduced water quality	1
Increased inequality	1
Impacted communities	1
Groundwater rise	1
Speedy permitting	1
Loss of CA ecosystems	1
Biodiversity loss	1
SLR and SF bay shoreline	1
Loss of tidal wetlands	1
Traffic emissions	1
Vector-borne diseases	1
Impact on poor	1
Resource centers	1
Need for more wetlands	1
Climate injustice	1
Loss of tidal marsh	1
Power outages	1
Farming	1
Pollution exacerbation	1
Agriculture	1
Fuel reduction	1
Loss of farm viability	1
Increased fire vulnerability	1
Loss freshwater/snowpack	1
Erosion	1
Air quality	1
Conservation	1
Wetland degradation	1
Extreme heat.	1
Heat stress	1
Rising water levels	1
Air pollution from transportation	1
Loss to tidal wetlands	1

Impact	Number of Responses
Reduced fog and cooling	1
SF bay health	1
Smoke wildfire	1
Differential exposure	1
Extreme events	1
Urban heat	1
Flashier run-off patterns	1
Sea-level rise	1
Fire	1
Flood	1
Smoke from wildfires	1
Water supply reliability	1
Equity	1
Air quality deterioration	1

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

Response
Regulatory barriers to allowing beaver dams.
Lack of vision in planning for long-term
Regressive hydrologic modeling
Business incentives continue to support climate change
Bias against farming when it can be a source of combatting climate change with eco sensitive practices
Burdensome regulation - red tape!
Introduced species
Environmental permitting
Funding to implement actions to reduce risk and build resilience.
Collaboration of all state agencies
Funding for community driven planning
Regional transportation planning
Housing shortage
Lack of regulatory processes to protect bay shorelines
Need to recognize integration off environment and agriculture priorities
$$ for protecting undeveloped shoreline lands $$ for preserving tidal marshes. $$ for implementing restoration.
Teaching sustainability
Permitting hurdles for implementing adaptation strategies

Response
Gaps in regulation of areas that are within identified future flood risk areas
Risk based culture
Development just above the tideline halting migration of wetlands
Funding gaps and lack of technical assistance to access programs
Disinvestment in infrastructure maintenance and renewal
Lack of regional shared priorities
Equitable resources
Lack of clear messaging
Quantity of needed funding over time
Utility management
Overcoming permitting barriers and regulations that were built for historical conditions
Need to identify resilience as a top state/regional priority
Reducing building and construction in high disaster risk areas
Local funding -- city and county
Funding
Politics and seemingly conflicting interests (environmental vs. Farming).
Lack of public awareness of loss of biodiversity as a corollary to climate change.
Equitable engagement and involvement with frontline communities
Integrate fire and fuels mgmt
Lack of funding to conserve tidal wetland migration corridors
Need funding for more wetlands creation
Funding opportunities
Political logjams
Lack of knowledge
Least funding for most vulnerable communities
Equitable access to resources
Cost
Loss of tidal flats and wetlands leading to significant loss of bay ecological health
Inefficient governance
Homes in high climate risk areas
Council buy-in
Poor political will to reduce urban sprawl
Sense of urgency
Complicated urban infrastructure
Competing priorities
Equity
Housing security
Lack of regional coordination across jurisdictions to design and implement climate resilience projects
Working at the landscape scale
Coordination across jurisdictions

Response
Equity in distribution of funding
Funding public understanding of issue
Feasibility
Action
Fragmented local planning
Drowning of tidal wetlands and losses of all the functions they provide
Behavior changes
Need to raise homes that are vulnerable to increased flooding -- locals need funding
Regional inequity (e.G. Municipal coffers empty in lower-income communities) and governance fragmentation
Need a countywide response and leadership to formulate that response
SLR and SF bay shoreline - need for cities to build farther away from shore line
Too many silos and not enough coordination/partnerships
Lack of regional governance
The hard-to-reach are the most affected
Lack of data to understand what are the most important steps
Clean transportation, transit
Permitting
Gaps between science and implementation
Housing precarity
Slow permitting
Old infrastructure
Human behavior
Regional coordination
Funding
Staffing
No regional plan
Funding

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

Response
State passing laws to make it harder to build in high risk areas
You hear now about what to do instead of if. So, that's progress!
Nature's ability to heal
People who don't work in the field are preparing (e.G., Getting air filters)
30 x 30 promotes relationships and cross connections in our region.
Increasingly sophisticated analyses identifying how best to adapt to and reduce climate change

Response
Recent state and federal policies
Restoration authority demonstrates public's desire to protect the health of the bay
Diversity and creativity of people
The fact that we are doing a climate adaptation strategy
Younger generation's concern about climate
Conservation Lands Network
Developed plans for urban greening and etc.
Openness to prescribed burns
Legislative leadership
No other choice
Awareness and funding
Access to scientific expertise in universities and other places
Widespread desire to address the issue
Problems are understood by science, just not by public
SF Bay Restoration Authority and Measure AA show political will and effective implementation of shoreline rehabilitation projects
Growing awareness of the threat SLR poses
The SFEI SLR natural adaptation atlas
Collaboration and supportive leadership
Increased awareness
Some policies which recognize severity of challenge
Openness to change
Government that acknowledges climate change
Consensus on the urgency of the situation
Transit measures passing
Shared recognition that climate change is happening now
Openness to learning
People are recognizing threats of sea level rise; many are seeking mechanisms to protect the bay ecosystem
Strong community partners and organizations
Discussions of large amounts of funding in new budget
Community interest
There have been a lot of scientific studies about what we need to do to protect tidal wetlands
Hope CA can be a global example
Regional collaboration efforts
Support from community/stakeholders
We have many learned people at CNRC and in the advocacy, academic and general community.
High insurance rates will force people to leave high risk areas
Growing awareness

Response
collaboration high level support and buy in
Progressive response compared to other areas and other parts of the country
Increasing community interest and advocacy
Hearing more about climate change in the media
An aware public
All the brilliant people living in the bay!
Awareness
Bay Restoration Program and funding
Climate activists working together!
Meeting farmers who care deeply about the environment
BayCAN and other collaborations
The will is there to make a difference
Histories of radical grassroots activism
Well-educated populace
Engaged youth
The people working on these issues.
Innovative thinkers
Lots of political will in Bay area for restoration
Awareness is growing
Strong state policy
Collaboration

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

Priority 1: Protect climate vulnerable communities
All communities are vulnerable, some to sea level rise, some to wildfires...
Resilience hubs and places with power
Address current and historic EJ (or Climate Justice) issues
Looking to cultures around the world for their approaches to heat, erosion, drought, etc. -- the "developed world" has much to learn from other countries
Add pollution costs to overall product/system pricing
Building decarbonization beginning with public sector and those most impacted
Urban cooling
Grants for low income neighborhoods
All legislative actions, for example, housing not built where flooding is expected, should include the requirement that climate change impacts on vulnerable populations be considered.
Equitable resource allocation
Learning from disadvantaged communities, not just "educating" them

Recognition of interconnection - all social / public programs are climate related!
More options for de-carbonized transit
Phase out refineries
Effective public outreach
Funding for community led solutions
Local microgrids (solar+storage) at public schools for community resilience hubs
Comprehensive plans for both built and natural resources
Engagement of these communities in coming up with solutions
Putting these issues into simple language. The conversation is still too wonky.
Rate assistance flexibility for utilities (work on prop 18)
Housing. Lots more housing.
Dedicated investments for community-led solutions like resilience hubs
Including community input EARLY, not at the end as window dressing
Improving methods to identify said vulnerable populations
1. Protection from toxic air possibly emitted from industry close to where they live by getting those businesses to clean up their processes. 2. Protection from extreme heat...Multifamily housing dwellers often do not have ac and also have to deal with smoke at the same time. They then can't open the windows to reduce the heat. Untenable.
Support for community-level organizations who can really reach communities who are most vulnerable and ensure solutions are developed with their input and actually address their needs
Let communities lead
Changing grant requirements to allow more funding to be allocated to community capacity building
Managed retreat
Safe housing
Protection from sea level rose and flooding, housing those who are unhoused, urban greening/cooling. Asking communities what they need!
Provide the opportunity for interested members of the community to participate in planning processes. Could be through grants to supplement hours away from family and work.
Broaden definition to include non-geographical communities such as individuals with access and functional needs, non-english speakers, older adults, children
Widespread education on community driven planning models and equitable hiring practices to shift power from government to community and create a more representative climate workforce
Close chevron refinery
Protection against water-borne diseases, pandemics, originating from climate change
Include their needs in emergency preparedness and long-term plans
Putting in place a framework to ensure that the funding actually flows to them -- not like many relief programs where the least funding goes to those who need it most
Assessment and adaptation planning regarding the intersection between

contaminated lands and flooding. Many vulnerable communities are already exposed to disproportionate levels of contamination and risks will increase dramatically with rising sea levels, more intense storms, and rising groundwater.
Racial equity-focused investment in public infrastructure (utilities, transit, education system, etc.)
Streamlining regulatory processes for SLR and climate adaptation projects
Educate the communities provide economic support for them to the part in these discussions
Assessing the specific physical vulnerabilities and needs in each area/community.
Develop funding sources
Overlay DAC with multi hazard mapping including climate risks
Community engagement tactics must be changed to reach these communities. Trainings, funding, working with leaders in the community etc.
Reaching out to these communities and seeing what they need and trying to get it done.
Funding and technical assistance
Avoiding development in hazard areas
Funding opportunities such as grants (cost matching)
Partner with community members and organizations to understand what they want and need
Education for residents and policy makers. Community-informed actions. Funding. Staffing.
Their genuine and deep engagement
Relocation funding
Funds to elevate homes; construction of sea walls; more wetlands
Including them in solutions development
Consultation with those communities to start with
Funding without strings - supporting community sovereignty and grassroots leadership
Engagement with communities on what works for them
Community engagement
Funding for proactive outreach
Identifying which communities are most vulnerable
A seat at the table
Targeted funding to improve adaptive capacity
Listening to the solutions they want to implement, and then implementing them!
Funding
Priority 2: Advance public health and safety
Close the gaps in regulations to ensure that building and infrastructure won't be placed in harm's way
Progressive fee structures for public services
Protective gear, water for workers who work during extreme heat, smoke

Stop building in the path of danger. Change land use to protect life and nature,
Community-led and culturally competent emergency response planning
Preventing evictions
Preserve Bay's shallow water habitats and include need to protect adjacent shorelines from development
Community microgrids
Solutions to smoke and heat that go beyond shelters or air conditioning
Preparedness plans and resources
Rain catchment systems
Insurance
Heat Action Plans - specific to county/city
Action from regulatory agencies to protect people from remobilization of buried contaminants by SLR and rising groundwater
Adding to the idea of preserving land, must be for housing, but also HABITAT and AGRICULTURE
Adequate funding and prep for public health and emergency ops for extreme events
Increase access to urban green spaces
Urban greening
Supporting community-based resilience hubs which can provide power and shelter (as well as resources outside of emergencies)
Support systems for mutual community aid-food, water, power, shelter
Water conservation is critical.
Access to healthy food
Progressive tax structure (esp. Property taxes) for these investments
Get protective resources to those most vulnerable
Mosquito abatement to address increasing risk of mosquito borne diseases
Regulations that will preserve land useful for resilience from sea level rise.
Expanding community-based response and relief efforts to address wildfire smoke, power outages, and extreme heat including at local public institutions (e.G., Libraries, schools)
Shelter from smoke/heat. Better communication around power shutoffs. No new housing in the wild land urban interface—prioritize infill
Address how underground contaminants (superfund sites) will be impacted from groundwater level rise.
Prioritize ecosystem services and natural capital
Retrofit homes to protect against flooding -- e.G. Elevate homes
Stop building in areas of SLR, fire corridors.
Account for increased liquefaction risk from rising groundwater
Preserving SFBay's ecological health. Failure to preserve the Bay's health can lead to significant air quality issues. It will also lead to loss of economic health
Flexible, renewable power grid
Increased access to healthy food
Education and access to protective gear

Clear connection between climate impacts and health
Community resilience center with power
Continuing to also do our best on emissions reduction and drawdown
Retrofitting buildings to make them more fire resilient (home hardening & defensible space)
Clear, concise, and coordinated communication from regional partners to the public
Increase high density housing, limit urban sprawl, increase public transit
Preparedness planning
Diversion of funding from systems of criminalization (police, prisons, etc.) To more life-giving institutions and climate-relevant infrastructure
Need to prioritize protecting residential homes that are vulnerable to flooding -- those are folks that are unable to pay to protect their homes
Reduce homelessness
Resilient power sources for PSPSs
Mental health from access to nature
Urban greening.
Education for residents and businesses
Protecting drinking water
Need to stop continuing to build in areas that will be vulnerable to SLR
Urban greening to reduce urban heat
Increased public health funding and infrastructure
Vegetation management for wildfires
Emergency health services
Urban greening and healthy baylands
Accurate flood mapping, including community perspectives
Coordinated response
Drinking water protection
Better forest management to reduce disastrous wildfires
Free mitigation for wildfire smoke (clean air shelters, distribute masks, etc.)
Prevent wildfires
Improve mutual aid
Sequester and store GHGs
Jobs closer to where people live
Wildfire resiliency
Priority 3: Build a climate resilient economy
Funding programs to retrofit existing buildings
Preserve and restore tidal wetlands to protect infrastructure
Climate resilient agriculture and protection of workforce from climate impacts
Support for recycling becoming profitable
Diversification of water supplies and direct potable re-use
Waste reduction
Fund communities themselves to implement adaptation strategies

Help businesses think through the future impacts of climate change and how that might impact their current decisions. Bay cities can think about SLR when they plan new development and push it back from the shoreline.
Leadership from local elected officials, business and community leaders
Investment in public health prevention
Yes to circular economies!
Re-build infrastructure and develop workforce to support it
Sustainable buildings agency to decarbonize existing buildings beginning with public sector
Create local circular economies (e.G., Local food bought by local hospitals)
Increase focus on direct payments for sequestration rather than carbon offsets which allow continued pollution
Preservation of bay's wetland habitats
Planning for new infrastructure that looks at end of century estimates for SLR and not the near term 2050 that is so often used
Equity in adaptation to reduce inequality
The transition from fossil fuels to renewable energy in ALL sectors
Support for local agricultural producers, including to advance soil health
Build up marshlands now so they have time to adapt as the tide rises
Re-zoning. Less single-family homes protections.
Train on jobs for the future
Increasing direct payments to farmers for preserving habitat and sequestering carbon (updated as more science becomes available)
Making sure local governments and citizens recognize the risks, so they will take action.
It's important for businesses to understand their immediate risks and have a plan.
Educating community members on the importance and benefits of sustainability.
Hold megacorps accountable for their emissions.
Incentives/support for businesses that adopt green practices
Communication with and education of businesses to the risks and ways to respond
More distributed employment
Investing in the care economy and workers to support responses to climate disasters (e.g., Healthcare, home care, social workers, public sector)
Economic development that is targeted at the county level. The regional approach often leads to solutions that are focused on urban centers, assume everyone wants to commute to San Francisco and Oakland. That is not true. We need good jobs distributed across the Bay Area.
Efficient and resilient transportation system
Water conservation
Reduce local zoning power, while increasing state zoning authority
Legislation that provides just transition for workers as we move to carbon neutral economy.
Disinvestment from hydrocarbon-based industries
An efficient and resilient network of public, decarbonized transportation

Increasing reliable public transportation
Reliability of water supply sources
It is important to support the economy's resilience to climate, but also to ensure that the economy supports climate resilience for all
Reduce GHGs sequester carbon preserve landscapes
To build a climate resilient economy you not only need to help businesses, but also homeowners!! Without people living in a home, businesses would not survive!
Water-efficient irrigation for agriculture, promoting water recharge and watershed health
Living shorelines
Economic studies showed a healthy bay is essential for the Bay Area's economy to be successful
Ensure our infrastructure is resilient to extreme events so the economy can continue to function post-disaster
Ensure the reliability of our supply chains
Legislation that forces business to consider climate in making decisions
Wetland restoration
Education of the businesses on how to respond to a crisis...like the quake preparedness education that is well dispersed.
Engage small businesses in what they can do to be resilient - many may not even have insurance
Transforming from an extractive economy to a circular economy.
Teleworking options
Climate-safe infrastructure
Securing regular access to electricity
Worker protections! Stronger unions!
Priority 4: Accelerate nature-based climate solutions
An amazing documentary
Need to prioritize this work and move projects forward
Replace parking lots with parks
Better communication to the public what are nature-based solutions
Fund maintenance and monitoring
Fund more research on regenerative ag research
Need legislators to speak about this important strategy and bring it into the dialog.
Rip out highways (e.g. 980...) And invest in transit
Supporting agricultural producers to build soil health, increase habitat and improve water conservation
Educate the public
More funding for sustainable agriculture
Require a county approved plan for sea level rise adaptation before building within the FEMA 100 year flood zone.
Urban / green streets. Reducing urban hot spots.

Staying up to date on the latest science
Making sure everyone knows these solutions work BETTER than gray solutions in many cases (co-benefits)
Celebrate rewilding, including with native grazers (tule elk, etc.) To enhance carbon sequestration and biodiversity
Allow beaver dam analogues with less regulatory barriers.
Developing sources of sediment
Funding for acquisition and restoration of lands that achieve nature-based solution goals.
Improve regulatory programs that will preserve our shoreline areas from development so they can be used to create and preserve wetlands to sequester carbon, support the bay's food chain and to keep our temperatures cooler than otherwise (wetlands help cool local climates)
Support for sustainable agriculture
Participation in planning by community based orgs for frontline/vulnerable communities
More guidance/BMPs for green infrastructure
Understanding NBS ability to withstand extreme events
A lot of funding so that work can start now on building wetlands so that they don't get flooded out
Improve access to green space for low income and/or BIPOC communities
Support for San Benito ranchers and their participation in the program not to develop their lands for 10 years and for their use of eco friendly, climate smart land / ranch management practices.
Life cycle budgeting and funding
Use wastewater as a resource
Government supporting the allowance to take risks to solve this problem
More progressive city planning (ending outdated parking requirements
Track habitat losses and gains, and monitor habitat quality and ecosystem health.
$$$$$$$$$$$$$$$
Encouraging planting NATIVE trees and plants in urban areas to maintain some habitat areas
Regional coordination of dwindling sediment supplies within the Bay
Capacity provision for reps/orgs from vulnerable communities
Knowing the facts about vast species loss already
Runoff management to minimize contamination
Prevent development along coast
Protect wetland migration space
Showing that it is a priority by putting funding into this strategy
Acquire and restore baylands, wetlands and tidal wetlands to protect the shoreline, store carbon and develop habitat resilience.
Not doing things "how we've always done them" - that got us here
Prevent development in diked former baylands
Improving wildlife movement corridors -- wildlife bridges and tunnels to cross freeways,

etc.
Wetlands and eelgrass sequester as much carbon as tropical forests so restore as many types of bay wetland and submerged aquatic vegetation as possible
Restoration of urban canopy
Close the regulatory gaps to protect areas that could serve as migration pathways for wetlands
Urban tree cover
Permitting
Coordinate priority areas for use of limited fill material (dirt) so that we can use as much as possible for tidal marsh restoration projects
Support with grants for agency coordination
The Sierra Club Loma Prieta Chapter has a Bay 2030 advocacy program that outlines the issues and nature based solutions. They recently held a 3 day seminar that is taped and available on the SCLP website.
Collaborations across jurisdictions to match nature's impact areas and opportunities
Explicitly valuing nature (from moral perspective and for ecosystem services)
Densification, rather than building into open space
Quantifying carbon at a local/plant community scale to help prioritize land protection
State funding for green infrastructure and flexibility in transportation funding to support green streets
Change in ACOE nav dredge sediment policy
Funding staff
Investment in planting more trees, green space
For the region to work collaboratively
Require consideration of nature-based solutions in shoreline development and adaptation plans
Restore oak woodlands, native grasslands, and chaparral vegetation
Coordinated action across jurisdictions
Streamline regulatory permits
Streamlining permitting
Evaluate whether reusing storm water could help?
$$$$
Increased funding for wetland restoration
Protection of tidal wetland migration pathways
Restore wetlands
You mentioned schools. For ideas on helping schools, see this commentary from last week: https://edsource.org/2021/california-climate-investment-fund-should-support-schools/656549
Urban waterways restoration - daylighting, greening, channel reconstruction, etc.
Streamlining permitting
$$$
State funding for wetland restoration

Funding
FUNDING!!!
Priority 5: Make decisions based on best available climate science
Regulation to insure proper incentives
Learning more about planning paradigms - relating top-down and bottom-up
Educate the general public about the science
More publicity for actions
Provide incentives for researchers so they are less wary of becoming involved in shaping policy
Shifting messaging away from individual action
Education, communication and communication; let people know why it is important to preserve the state's ecological health
Provide clear evidence and connection to climate change and local impacts.
Better communication of the "plan for 3.5' of SLR by 2030" guidance from the most recent OPR strategic - a good goal and nice to have a simple target to communicate, but not well-explained at this point what it means and when to apply it
Keep the science coming. It keeps getting better and more scaled to a regional level.
Science on multiple / compounding hazards
Application of science for land management and studies at local levels—there are a lot of gaps and variability in the science and we need to try things out to know what works under certain conditions
Creating stronger partnerships with researchers and practitioners
Second citizen science- KQED did great work on indoor heat
Align vulnerable communities' needs with actions
Stop allowing actions that science has already proven is harmful, such as oil and gas extraction
Building air quality projections / datasets
Protect lands and provide funds to accomplish SF Bay Habitat Goals, a science based plan for wetlands and other bay habitats
Exploring the overlap and interplay of projected climate impacts with socioeconomic vulnerability and neighborhood conditions
Routine updates on state guidance for assumptions on sea-level rise for consistency across regions
Break down silos with universities/research organizations
Encourage citizen science
The science exists, e.g. Bay adaptation Atlas; Bay Ecosystem Habitat Goals, sediment studies, etc. but needed is a regulatory program that would enable the bay area to follow those studies' suggestions whenever possible.
Consult our world class universities for the science!
Review existing studies for actions and identify any gaps.
Embedding climate expertise in city staff
Education and outreach to public with vulnerable communities as highest priority to

reach out to
Align energy utilities and public goals
It's complicated to find the right solutions so getting the cross disciplinary input on solutions
Improved regional capacity and technical assistance
Include lifecycle emissions for all economic activities.
Need education at the local agencies and clear guidance re SLR
Create opportunities for participatory research and citizen science to democratize climate knowledge production
Better understanding of the science by the public so it isn't such a hard sell
Sharing climate change assumptions
Clear guidance on SLR projections for planning purposes
More investment in research on agriculture's potential for sequestration
Educate local elected officials, business owners, property owners, general public. Need to use accessible language. Lots of graphics.
Funding for local agencies; and, non-profits
Regional policies that reflect he best available climate science for that region
I said "medium" instead of "high" only because we already know a lot of what we need to know to act!
Expand to include social science and behavioral economics.
Implement many pilot projects to see what works need to take action not just studies
Pushing the science beyond physical change to economic impact quantification - need info translated to $$$
Transparency in funding, and…funding!
We need science / academic advisory.
Universal assumptions and understanding of impacts and predictions.
Help to communicate/educate members of the public on climate science
Research
Thoughtful outreach
Developing really excellent decision aids for all kinds of decision makers (community orgs up to Administration)
Invest in social science research about climate change
Climate services for jurisdictions
Priority 6: Leverage resources for climate action through partnerships and collaboration
Solutions will require input from a number of disciplines to fully utilize
BayCAN!
Regulatory program for sea level rise threatened shorelines
Communicate with elected officials at all levels of government to encourage partnerships.
Coordination and information sharing between agencies
Regional land use restrictions

Second on funding for BayCAN to have more staff time
Collaborate with businesses which have expressed environmental/climate goals to ensure their contributions are meaningful and strategic, not just lip service
Prioritizing frequent meetings between local agencies
There needs to be the will to plan for resilience especially at the local level where land use decisions are made
Job training for climate-oriented jobs
CEQA is not the problem, it is how to think outside the box to make it work
Funding for regional collaboratively such as BayCAN
Regional oversight on land use controls so we can build housing in smart and climate-resilient places
Someone/some agency needs to lead and coordinate.
Meaningful long term community engagement
Academic centers that can focus on building public partnerships
Better city-university partnerships
Streamlining CEQA can lead to even greater climate change impacts
Staff
Consolidate agencies regionally. For example, BART and CalTrans
Elected officials focusing on this and requesting staff recommendations
Establishing trust and open communication with communities and tribes
Preserving land suitable for natural adaption to sea level rise
Building community through communication and outreach. Then share what you have learned with those who are interested in those topics. This fuels the enthusiasm for trying new concepts.
Staff to support collaboration
Enable tribal stewardship to leverage tribal knowledge
Leadership prioritizing climate action when it comes to staff time and budgeting
Better involvement and stewardship by the dept. Of fish and wildlife and the commission in assuring the survival of our ecosystems.
Need stronger legislative support to provide greater funding
Need to meaningfully listen to communities and tribes
More staffing to collaborate across agencies.
Streamline permitting programs
Reallllly reconsider / streamline CEQA - it can be a major unnecessary impediment
Improved governance
Staff to do the collaboration.
Regional leadership

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

Priority 1: Protect climate vulnerable communities

Community decision-making!
Important to remember that effort to reduce affluent's impact on climate (too much consumption, etc.) is important as well as helping economically disadvantaged
We are envisioning the RYSE youth center in Richmond as a youth-led climate resilience hub with clean resilient energy and other key investments
https://www.oaklandca.gov/topics/oakdot-racial-equity-team
Looking for solutions that protect the environment as well as communities but ensuring vulnerable communities get same treatment as affluent communities
Yes to asking what is needed and empowering rather than sending in outsiders
I'm in a university working to expropriate university resources. Get funding out of the ivory tower and usual circulation paths!
Trying to establish relationships that will grow into two-way conversations.
Integrated Water Resource Planning through DWR has attempted to increase resiliency for the Bay Area as a whole by improving water infrastructure, water recycling and alternative water generating resources.
Using equity screening tool to review actions for our local government's climate plan
When investments are made for infrastructure, that the jobs and contracts for that work flow to those unemployed and small women Minority businesses in the communities - vs. BAU
Engaging young people (college interns) in land use planning and conservation to bring in more diverse perspectives to the sector.
Asking communities what they need before acting. Empowering communities rather than sending outsiders in to do the work.
Getting students involved in supporting community-led efforts
https://www.same.org/Get-Connected/Find-a-Post/San-Francisco/Events/Monthly-Luncheon
Prioritize community/Tribe-led projects
Public transit to adaptation resources such as green spaces, cooling centers, resources for learning how to adapt, places to get products to help (AC, air filter, etc.)
EJ Parent Academy, compensating community for their time, keeping them engaged throughout the years
Expanding how we value expertise to include community knowledge, and valuing that expertise at the same level as technical experts
We are in the very early stages of taking action on this. We are currently working on updating our engagement strategies to ensure we can communicate effectively with these communities.
Investing in holistic solutions that break silos and bridge climate mitigation + adaptation alongside simultaneously addressing economic, health, and social needs
I am reaching out to Tribes and vulnerable communities to learn what their challenges and needs are.
Needs to be funding available to ensure members of vulnerable communities can actually participate in the planning processes dealing with adaptation strategies
Lawsuits against environmentally destructive actions
Participating in Bay Adapt and other processes Listening to CBO representatives

Encouraging nature based solutions
Connecting community based organization with scientists and policy-makers
Considering equity in grant funding processes such as Measure AA funds
Training staff on equity and climate
Start climate change education at early levels to ensure broad community knowledge
Engaging all community members in identifying needs, concepts and designs.
Multiyear listening project with pilot testing solutions to better prepare lower quality housing (air filters, weatherstripping, air quality monitors)
Some Measure AA funding going to equity projects like the Oakland Shoreline Leadership Academy, led by the West Oakland Environmental Indicators project
We're in the process of updating our County's General Plan. Environmental justice, sustainability, health will be woven throughout. We are explicitly address climate adaptation and resilience.
Affordable rates and financial assistance programs
Providing trees for neighborhoods with least tree cover
I advocate for state legislation through 350 SV that has EJ and Just transition in many of the bills.
Formalized representation for communities and Tribes at regional planning bodies
OakDOT is doing cool stuff wrt race equity prioritization - check that work out!
Meaningful community engagement and co-creation of solutions
I do not think the Bay Area is equitably distributing funding for adaptation...
Asking communities how to best reach them with info about how to protect themselves in climate emergencies like heat and smoke
Researching grant opportunities
Ensure that funding actually flows to those who need it most
Affordable, energy-efficient housing
Funding CBO engagement
Priority 2: Advance public health and safety
Meeting people's material needs - shelter, food, sanitation, etc.
Support farm workers
Should include overlays of all public buildings in cal-adapt and schools to map potential community resilience hubs.
Funding mechanisms, e.G. Restoration authority, exist to help implement shoreline preservation and restoration
Define equitable? Greatest protection of life, of ecosystems, of dollar value of real estate, of diverse communities. Where is adaptation needed the most to adapt to the changes coming.
Identifying clear connections between climate and health (e.G. Those with asthma and wildfire smoke)
Relationships, relationships, relationships
Protecting homes and businesses from flooding
Supporting local food system for stable access to nutritious food
I also think that protecting plants and wildlife health and safety is intertwined with this

human public health and safety positive outcome.
Supporting farmers providing healthy food for all
Thinking about ways to build systems of emergency response that don't require police
Considering how to support outdoor workers and others particularly affected by smoke and heat
Increase CPUC oversight over PG&E
Working to pass AB 1087: EJ Community Resilience Hubs Program which could create statewide resources for resilience hubs models across the State
Watershed restoration to reduce flooding in vulnerable communities which improving wildlife habitat
Providing communities the tools to build emergency and response preparedness within neighborhoods and allowing them to put in the work while building a stronger sense of community
Improving water supply to region
Incentive/reimbursement programs for purchasing air filters
Uplifting partner organizations and non-profits
Many studies exist that indicate actions necessary to preserve Bay's ecological health
Asking communities about their needs and coordinating responses to climate shocks among county emergency services, public health, and social services through climate action planning
Education and advocacy.
Prioritizing investment based on historic disinvestment/racial bias in public systems
Through 350 Silicon Valley, I support legislation that addresses public health and safety as part of climate change adaptation.
Healthcare setting (hospitals, clinics, etc...) preparedness for climate impacts
They are not -- focus is on building more wetlands, but we need to identify those residential units that are vulnerable to flooding
Ensuring a reliable clean water source
Hearing from CBOs about how to improve our services to support communities during climate shocks
Surveying community members over many years
Priority 3: Build a climate resilient economy
Climate change modeling efforts
Stand for the many not the few.
Educate public
Increase access to green jobs training in decarbonization/solar/other solutions etc.
Walkable cities -- support very local economies
Making sure outdoor workers have protections from extreme weather
Educate the public on the need to be concerned about sea level rise adaption using natural solutions
Provide incentives to eco-friendly businesses that train and employ members of disadvantaged communities
Educate electeds!

Improving and expanding composting in rural areas
Labor organizing
Prioritize housing over offices where cities have a jobs/housing imbalance
Support farmers from marginalized groups to access funding for ecosystem services
Tree plantings to decrease heat islands
Campaigns to shop/support local
Climate emergency trainings for public sector workers like librarians and park and rec staff
Creating new jobs to address adaptation work
Avoid investments in natural gas infrastructure
Highlight the multiple benefits: water quality, flood protection, connecting to the bay
Provide incentives to go green.
Support businesses owned by a diversity of people
Providing technical assistance to land managers especially farmers and ranchers
Work to preserve the environment which is fundamental to the region's economy
Meet with city councils to help them think about nature based solutions to climate change so they adapt their general and climate plans. Sierra club is meeting with cities in our 3 counties to update or get their climate plans.
Stop weiner
Using Capital Improvement Funds wisely.
ECONOMY: sharing resources with businesses like Green Business Certification to help them save money
Updating capital contracts for adaptation projects to prioritize local jobs
Reduce permitting red tape so that it doesn't take such a high level of resources to implement nature-based solutions
Accessing federal state local and private funds to redistribute to land stewardship projects
More programs like youth conservation corps
Building bike- and pedestrian-friendly infrastructure in commercial areas - e.g. Telegraph Ave in Oakland. It's great!
Educating farmers on climate smart ag (cover crops etc.)
Put people to work protecting our lands
Support state senator Scott Weiner
Targeted outreach
Need to work with homeowners to get their homes prepared
Support sustainable agriculture
Creating opportunities in historically underserved communities
Support unions
And, starting working with them
Supporting sustainable agriculture
Support unions
Priority 4: Accelerate nature-based climate solutions
Access to nature experiences for all

Fund RCDs who work with public and private land managers
Streamline regulations and permitting from multiple agencies
Community food forests for local food security and cooling green space
Learning from groups like Coastal Commission and Resilient Bay Area
Talk to our UC Coop Extensions about land / water management research and practices that they recommend.
Deemphasizing the importance of land ownership (i.e. RCDs used to only work with land owners)
Existing studies show the importance of wetlands restoration to bay ecological and economic health and also shows where and how to do it. We need a regional program to implement those studies to the extent possible with full compensation to all communities equally based on need.
Center vulnerable/frontline communities needs in planning nature-based solutions
Utilize Local Government Commission resources
Recognize that every person relates to nature but not necessarily in the same way, open up more ways
Need to provide grants for "vulnerable communities" so that those interested in participating in planning processes can do so (funding to make up for lost time away from work and family)
Regional collaboration
See the SFEI Sea Level Rise Adaptation Atlas.
Lots of planning and feasibility efforts
Partnerships across government agencies
Building relationships with unsupported communities
Limit water use to # gl/person
Many people working on small scale pilot NBS projects
Talk to the Corps of Engineers so they would be aware of Nature based solutions in their levee work around the bay shoreline.
Funding should be used to address inequities
Restoring creeks and salt ponds
Recognizing in programming that people are a part of nature and relate to place/environment based on culture and identify - interrupting the dichotomization
Protection of sensitive facilities against sea level rise.
Yes to tribal stewardship! Support preservation of management strategies and ecosystems that support traditional foodways
Counties with sustainability departments
Technical/science evidence and support for nature-based solutions
Tribal traditional management of land and waters
Highlighting what does exist in outreach and communications (would love to see a short documentary on bay area nature-based solutions!)
Job creation
We are developing a carbon sequestration feasibility study for the many land use types in our county, through a grant from the CA Dept. of Conservation (SALC). We are partnering with the Resource Conservation District and UC Coop Extension.

BRRIT streamlining permitting for restoration
Cross-jurisdictional planning for SLR resiliency
Provide grants to cities/counties to plant trees, evaluate stormwater reuse, etc.
Active resource conservation district
Education is needed about nature based solutions as many people do not understand the term.
SF Bay Restoration Authority projects South Bay Salt Pond Restoration Project
Support farmers from marginalized groups who are enacting nature based solutions (soil health, etc.) to access funding
Urban farming
Restore tribal stewardship of lands
We passed measure AA to fund restoration projects and need state funding to match that investment
Being conscientious about the potential for harmful green gentrification
Markets for agricultural producers who are already farming sustainably
SFBRA & Measure AA funding (proven model that could be expanded)
Wetland restoration
Priority 5: Make decisions based on best available climate science
Learning how outcomes and priorities of vulnerable communities may not look like or be what agencies think
Not specific to science, but allowing shorter work weeks (32 hrs a week) for fulltime pay
Working on adaptive management programming - cycles of experimentation that can incorporate new data
Educating decision makers on the importance of buying into latest science
Demonstrate how strategies that harm poor communities (focusing on highways over public transit) are also bad for climate
Trying to get adaptation processes to recognize the need to protect CA and the Bay's ecological health as well as community health - they go together.
Funding research to show best projects for SLR resiliency response doesn't fit typical planning jurisdictions and project proponents
Respecting autonomy and privacy of private landowners as I talk to them about these issues
Encouraging scientific advisory panels and review of proposed plans
Helping to translate smoke and heat protection guidance for COVID conditions
Keeping city staff and council updated on latest climate science.
Pairing science (quantification) with narrative / lived experience from frontline communities (i.E. The data isn't the whole story)
Working with research institutions and allowing scientists to do their research on our land
Keeping up to date on latest science
Bring under-resourced communities into the adaptation processes
Effective outreach marketing

Creating tools to communicate climate research to decision makers
Provide funding to researchers from vulnerable communities And research conducted by the communities themselves
Created a heat vulnerability GIS map for our county to help planners and community focus on areas most affected by increasing heat
Through the ongoing updates to our General Plan, Climate Action Plan, and zoning ordinances.
I am talking to those underrepresented by our Sierra Club Chapter to find out needs.
Creating a Climate Adaptation Plan
Following state SLR guidance document for SLR projections
Building partnerships with frontline/vulnerable communities
I'm building climate science educational curriculum - trying to make climate literacy widely accessible
Consulting a Science Advisory Panel to guide us on difficult land management topics
Priority 6: Leverage resources for climate action through partnerships and collaboration
Engaging/mentoring students
Creating a master plan for better diversity, equity, and inclusion in our public engagement
Collaboration to bring diverse talents
Socially equitable solutions should come from the community and through collaboration with the science community reach positive outcomes
Take part in the ongoing bay area's processes e.G. Bay adapt
Reaching out to private lands owners/managers....Build communication and understanding of their efforts / challenges.
Education around need to act now to successfully adapt to sea level rise
Incorporating climate change into our outreach and education work, with focus on reaching vulnerable communities
Engage at-risk communities in all steps of the process
Partnering with non-profits who serve/have relationships with more vulnerable communities
Every project is viewed through an equity lens.
Prioritize community and Tribal voices in planning efforts
More funding for community capacity building is needed
Aligning with sister agencies on climate assumptions and planning/adaptation strategies
Hire more diverse applicants
Reaching out to learn about the organizations and needs of regions that are different from mine. - respecting their wishes and taking guidance.
Same as earlier responses
Training academic personnel in community engaged research
Collaborating with a diverse group of land managers in climate adaptation efforts
Supporting efforts like BayCAN equity committee to provide regional understanding and tools for equitable adaptation outcomes

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

Response
Something about engaging beyond CA for synergy?
The Priority that is missing is taking adaptation actions that preserve the ecological health of California (and SF Bay)
Nature based solutions sounds like it's only for USE VALUE of nature in specific places, not broad preservation of species
Nature-based solutions frames nature as a tool -- rather than having its own value
Regulatory gaps in conserving lands that could serve as wetlands migration pathways. Regulatory gaps in prohibiting new development placed in harm's way
More affordable housing
Yes. How do we engage the individual? How can the State bring residents on board to personally address climate change in daily activities?
Ensuring long-term sustainable drinking water supplies for California
Sustainable agriculture and food access should fit in somewhere
Yes, ecosystems and habitat!!
Build innovative financing structures for equitable climate adaptation investment
Protection of native biodiversity
As someone commented earlier, preserving ecosystems and habitat

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

Response
Allow homeowners to produce more energy from roof tops
Protect farm workers
A/c for buses - we have bus outages because buses are too hot for drivers
Allow solar users to separate from the grid during power outages.
Enforcement of protections for outdoor workers, more OSHA requirements for indoor workers (warehouses)
Clean energy microgrids and solar + storage investments during heat-induced power outages
DO NOT BUILD IN THE HIGH AND VERY HIGH FIRE ZONES!
Include disabled community in these efforts to monitor, educate and serve.
Restore urban waterways
Stop building into the WUI (density, not sprawl please!), Where heat can become fire
More solar panels on parking lots, more green roofs, to reduce urban heat island effect
Better access to natural areas, shaded parkland, shaded communities
Programs to check on older adults
Mini grid solar tied to air conditioning

Response
More robust list of cooling centers - it's hard to coordinate info from many cities
Provide subsidies for backup power, air filters, and other equipment
Public health education about heat health impacts
Reduce hardscape from driveways
Making public spaces welcoming and culturally relevant and welcoming to the communities they serve, so they always feel free to go there
Air conditioning in schools - many schools in Oakland become saunas in the heat, particularly in low-income communities
Multifamily housing residents need help with extreme heat and smoke during summer.
Incentivize the use of building materials that reduce heat islands impacts - cool roofs, insulation, paint, landscaping, etc.
Increase weatherization and efficiency in buildings
Public transit to access central places for cooling like libraries
Help the homeless and vulnerable groups
Public health education on what to do on extreme heat days
Funding for ongoing O&M of green infrastructure
Landlord requirements to provide tolerable temperatures indoors, without putting tenants in uncomfortable position of reporting issues
Community aid networks to check on vulnerable residents
Investing is trusted community and public facilities for cooling access and services during heat waves
Microgrids for PSPS avoidance
More swimming pools. More parks.
Locally anchored and managed microgrids to ensure no power loss during extreme temps
More funding and staff for increasing trees, installation of green spaces and infrastructure
Accessible funding for private home retrofitting and AC installation
Increase use of permeable surfaces
Cooling centers
Reduce impervious surface
Mechanisms by which surface water bodies can be kept cool (for salmonids, water quality, etc.)
Increased wetland habitats, both bay and seasonal (upland wetlands) help cool adjacent areas and also provide greater humidity so reduce fire threats
Support for lawn conversions
Cover the canal that goes north to south with solar panels to reduce the evaporation and provide power.
Revegetate with native vegetation in East Bay Parks
Reduction in hardscape in all projects.
Recycling wastewater
Less intense development
Reduce industrial air pollution exacerbated by heat

Response
Plant more trees to provide canopy
Already answered in the vulnerable community and health sections...
Renewable energy-fueled air conditioning installations
Greening communities
Trees, particularly in impacted communities
Urban greening
Urban canopy
Urban forestry programs.
Urban greening.
Plant more trees
A reliable energy grid

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
Science to support how adding more trees can save money
More info on adaptation strategies for rising groundwater
Funding research to reduce cow emissions
Work to improve carbon offset EM&V - it's shady right now
The SF bay estuary needs a regional approach, but nature based adaption needs land above the high tide line and there are no incentives for local entities who own the land to cooperate in a regional one
Reviewing regulatory barriers to adaptation efforts and opportunities to reduce costs. Sometimes the paperwork is so confusing/ time consuming that it's not worth it.
Information on effective wildfire resilience designs on an individual and community level.
Connect with global knowledge -- western knowledge is not the only type!
Shore up the forest offset program to avoid leakage and ghost carbon
Recommendation for updating cost-benefit analyses to include climate impacts and social impacts
Clear guidance of what exact SLR projections local governments are recommended to use for each type of infrastructure (not just general categories of "risk aversion" language in current guidance)
Systems for information-sharing and coordination
Better mechanisms to move sediment from behind dams into o the bay
I have learned that there are local, state wide, national and even continent to continent work and knowledge being done for wildlife corridors and migrations. They all seem to know of one another and be linked up. The state planners need to be

Response
knowledgeable about these efforts so they can take advantage of what's already there.
Research should focus not only on individual actions but on what collective actions have the most impact. For example individual carbon footprint cannot compare to oil and gas company or building a new highway!
A lack of understanding about social science and how to communicate existing science to the public to shift to a sustainable economy.
Sponsorship so more local govts could have a climate fellow/americorps member could be beneficial
Air quality projections, analogous to temperature projections (which is hard, I know)
Full and transparent life-cycle analysis of GHG emissions and savings in emissions in all carbon-reduction project work
Water savings research and end use analysis
Real-time understanding of transportation (VMT, mode of travel etc.). Building tdm models is resource-intensive and out of date by the time they are published
A better understanding of how rising groundwater related to SLR will impact communities. Will levees provide adequate protection in areas of increasing groundwater elevations as the bay rises
How best to reduce and not just displace emissions
There is lots of good science in the Bay Area. There is a HUGE gap in connecting the science to the policies, regulations and laws that we operate under day to day.
Database cleanly and clearly displaying what other local governments and organizations are doing, and the costs and impacts associated with projects/programs
What kind of exposure are community members in the Bay having to dangerous air quality? What are the effects? What kinds of mitigation and adaptation strategies work for them? What messages might promote adoption of those adaptation behaviors?
More research on blue carbon
Economic impact of groundwater rise on buildings and infrastructure
Planning framework education, esp. for extreme events. bottom-up, top-down, decision scaling... etc. etc.
Assistance to cities/counties in identifying the highest issues for our specific areas
What is the real potential for ag carbon sequestration? How does this vary based on practices, topography, etc.? Uncertainty is holding us back from reaching potential and getting adequate funding.
Best practices
Consistent, clear guidance on SLR projections for planning
What is state's intention for funding and vision for role of local govts? It's hard for those of us in the field to get a handle on this.
More research is needed to understand how to encourage people to make behavioral changes.
Stronger, better staffed UC extension network for community-embedded scientists (leveraging partnerships) - extension folks are great, we need more!

Response
Projections for groundwater inundation (as a result of sea-level rise)
Recommendations for updated building and infrastructure codes, standards, specifications

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

Response
Watershed level management of water
Work with counties/cities to promote infill rather than WUI development/sprawl to meet housing allocations
Regional mapping of risks
Think about across CA migration routes for wildlife
Support and build capacity for cross sector collaboration in partnership with community based organizations
Use regional instead of state amis to define "low income" communities when using as a metric of vulnerability
Address fragmentation in drinking water management - some form of supported consolidation?
Support strategies based on ecological/watershed landscape divisions, not just jurisdictional
Hosting forums across the state to partner and share info on specific issues
Expand the jurisdiction of BCDC and State Lands to address SLR
Share info or do surveys to show high level of regional concern among the public about climate impacts (national studies show this, am sure it's higher locally)
Support for landscape-scale and cross-jurisdictional planning efforts (emphasize collaboration with neighboring jurisdictions in rfps)
Provide regulatory tools for agencies that can take actions to preserve the bay in the face of SLR
Either regulate or provide incentives for local entities to use bayland above high tide line for further adaption to sea level rise
Top-down state fixes for NIMBYism on housing development. I can't believe I'm saying this, but perhaps less local control there...
Reduce regulation on community led initiatives
Regional studies about specific identified threats.
A lot of people are suggesting funding -- I would suggest getting some of this funding by reviewing subsidies and eliminating subsidies that support actions that harm climate, such as for oil and gas extraction, gas powered cars, chemical heavy agriculture, etc.
Should ensure that SLR guidance adopted by state agencies filters down to local planning entities.
Support the regional organizations that are doing the work. Create a cohesive approach and framework to follow

Response
Regions have priorities based that drive their needs. Organize around this. This is such a general comment that it's probably useless.
Elevate regional planning approaches as necessary for disbursement of local funds?
Funding for greatly increased communication efforts to inform the public about SLR threats and possible responses
Funding for collaborative initiatives across jurisdictions
Hate to say a requirement, but perhaps require some regional strategies or commitment or body so that these get more support
Help coordinate regional responses, with permitting and funding
Identifying the key stakeholders for various industries in each region
The state could help with community wide education
Legislation a la Scott Wiener's proposals to allow regional overrides of local land use controls and promote housing development in smart places
Update the State's laws on water, air, ESA, CEQA, building codes to address climate change.
(for UC extension - they're the ANR folks doing climate work, not the online school)
Funding for state and regional agencies that are working on SF Bay adaptation strategies
Funding for local governments to increase staff
Harness UC extension. They're embedded in every county.
Funding for regional planning and staff
Also on previous question of accelerating work -- also helpful in the short term would be more advance notice on grant and funding opportunities - often we don't hear about them until it's no longer practical to develop partnerships and pursue
FUNDING