

# Safeguarding California Plan: 2017 Update

## Sector Recommendations

★ = Recommendation or next step related to California Native American Tribes

### NATURAL AND MANAGED RESOURCE SYSTEMS

#### Agriculture

- A-1. Build soil organic matter on California's farms and ranches to achieve multiple benefits
- A-2. Advance water management and energy efficiency in agricultural operations
- A-3. Support California's dairies in climate smart management practices
- A-4. Increase farmland conservation
- A-5. Grow the Climate Smart Agriculture Outreach Platform

#### Biodiversity and Habitat

- B-1. Strengthen the climate adaptation component of conservation planning efforts at multiple scales
- ★ **B-1.3 Engage and support local and tribal communities in their planning processes where significant ecological resources are concerned**
- B-2. Enhance habitat connectivity and protect climate refugia through strategic acquisition and protection activities
- B-3. Increase restoration and enhancement activities to increase climate resiliency of the natural landscape
- B-4. Increase biodiversity monitoring efforts to better understand baseline conditions and make possible the early detection of climate impacts
- B-5. Continue incorporating climate considerations into state investment decision processes related to fish and wildlife conservation
- B-6. Provide educational opportunities to the public and state agency staff regarding climate impacts and adaptation options for ecosystems, fish, wildlife, and plants

#### Forests

- F-1. Enhance forest health and resilience by improving forest management on private and public lands
- ★ **F-1.4. Partner with Native American tribes to benefit from traditional knowledge of prescribed fire and forest management**
- F-2. Increase protection of forested lands, reduce conversion to non-forest uses, and facilitate reforestation opportunities to result in a more stable forested land base
- F-3. Continue investing in urban forestry to enhance the health of current urban forests and expand urban tree canopy statewide
- F-4. Promote rural and tribal land stewardship and sustainable economic development by expanding wood products markets, biomass utilization, and outdoor recreation
  - F-4.2 Provide financial and technical assistance to rural communities and Native American Tribes near forested areas to increase capacity for biomass utilization**
  - F-4.6. Work with Native American tribes to protect tribal access to non-timber forest products and traditional activities such as cultural burns and activities related to subsistence in forests such as hunting, fishing, and trapping**
- F-5. Implement sustainable forest management and working forests for the overall health and protection of forested watersheds
- F-6. Foster fire-adapted communities through local planning and fire preparedness
  - ★ **F-6.7c. Develop county and regional fire readiness plans with community-based groups such as fire safe councils, fire and land management agencies; engage individual community and tribal members in these efforts**
- F-7. Support key research, data management, and monitoring needs in the forestry sector and apply findings through adaptive management

## Oceans and Coasts

- O-1. Leverage regulatory, permitting, and planning authority to preserve coastal communities and resources by adapting infrastructure and other development to be more resilient to sea level rise and extreme events
- O-2. Support natural infrastructure, living shorelines, and other adaptations that protect and rehabilitate coastal and marine ecosystems and beaches
- O-3. Develop actionable science that reflects the latest and evolving trends over a range of spatial and temporal scales
- O-4. Assess community and ecosystem vulnerability through the use of decision-support tools and analyses
  - O-4.2. *Assess the vulnerability of archaeological sites and natural and cultural resources to sea level rise.*
    - ★ **O-4.2a. Work with tribes on participatory mapping of coastal tribal resources and development of vulnerability assessments**
      - O-4.2b. *Initiate vulnerability study of the Department of Parks and Recreation's natural and cultural resources' exposure to sea-level rise*
- O-5. Widely communicate guidance, data, and resources for ocean and coastal adaptation strategies, further outreach and education efforts, and provide pathways for meaningful community engagement
  - ★ **O-1.5. Develop policies to protect public trust, cultural, and archaeological resources along the coast**
    - O1.5a. Identify existing or potential threats to public trust assets and develop policies that ensure the ongoing availability of trust lands and their values for current and future generations**
    - O1.5b. Assess and plan for the protection of beaches and public access to the shoreline so that the loss of beaches does not disproportionately burden underserved or other underrepresented populations**
    - O1.5c Safeguard cultural and archeological resources threatened by sea level rise and ensure California Native American tribes and other affected groups are involved and supported in planning efforts to address these impacts**
- O-6. Coordinate across agencies and with external partners to ensure efficient problem solving to address climate change impacts

## Water

- W-1. Vigorously prepare California for flooding
- W-2. Support regional groundwater management for drought resiliency
- W-3. Diversify local supplies and increase water use efficiency
- W-4. Reduce Sacramento-San Joaquin River Delta climate change vulnerability
- W-5. Prepare California for hotter and drier conditions and improve water storage capacity
- W-6. Address water-related impacts of climate change on vulnerable and disadvantaged populations and cultural resources
  - ★ **W-6.7. The Water Board will increase outreach to environmental justice and disadvantaged communities and Native American tribes in collaboration with non-governmental organizations**
- W-7. Continue to mainstream climate considerations into water management through improved understanding of climate risks and tool development
- W-8. Utilize low-impact development and other methods in state and regional storm water permits to restore the natural hydrograph Require closer collaboration and coordination of land use and water planning activities to ensure that each reinforces sustainable development that is resilient to climate changes
- W-9. Require closer collaboration and coordination of land use and water planning activities to ensure that each reinforces sustainable development that is resilient to climate changes
- W-10. Protect and restore water resources for important ecosystems

## SOCIAL SYSTEMS AND THE BUILT ENVIRONMENT

### Emergency Management

- EM-1. Employ research and deploy tools and data that demonstrate how climate change will affect all phases of emergency management and exacerbate the impacts of emergencies and disasters
- EM-2. Enhance preparedness and coordination, as necessary through ad hoc or recurring advisory bodies, to address climate change impacts and inform emergency management policy

- EM-3.** Incorporate climate considerations into emergency planning efforts at all levels
- EM-4.** Identify access and functional needs communities who will be exposed to greater risks from climate impacts, and work collaboratively to build whole community resilience

## **Energy**

- E-1.** Continue to support climate research for the energy sector to better inform climate adaptation and mitigation strategies
- E-2.** Use common climate scenarios in all energy research and planning, and work to help standardize climate scenarios across state government planning and investment
- E-3.** Continue incorporating implications of climate change into all energy sector planning and decision-making
- E-4.** Support local adaptation planning efforts and increase outreach about available analytical tools
- E-5.** Investigate means to provide long-term support for Cal-Adapt advancement, maintenance, and expansion
- E-6.** Increase climate resiliency in low-income and disadvantaged communities

## **Land Use and Community Development**

- L-1.** Develop innovative governance models and public engagement strategies to engage residents, especially vulnerable communities, to be sustainable, equitable, and adaptable
- L-2.** Provide technical support, guidance, and capacity building to implement climate adaptation initiatives for local and regional governments and communities
- L-3.** Coordinate state guidelines and policies to promote climate resilience and hazard avoidance with local government general plans, zoning ordinances, subdivision regulations, and development incentives
- L-4.** Integrate economic development initiatives with programs designed to bolster resilience
- L-5.** Make resilience a key element of state housing policies and programs
- L-6.** Ensure a coordinated and robust strategy is implemented across state and local governments to address environmental justice issues and the state's most vulnerable populations
- L-7.** Provide financial support to promote infill development, affordable housing, transit-oriented development, smart planning and conservation to bolster grassroots resilience

## **Public Health**

- P-1.** Promote community resilience and health equity to reduce vulnerability to climate change through improving underlying economic, environmental and social conditions
- P-2.** Educate, empower and engage California residents, communities, organizations and businesses to take actions to reduce individual and community vulnerability to climate changes through mitigation and adaptation
- P-3.** Identify, assess impacts, and promote mitigation and adaptation strategies with public health and equity co-benefits, and assure they do not have unintended consequences for health equity
- P-4.** Establish, improve, and maintain mechanisms for robust rapid surveillance of environmental conditions, climate-related illness, vulnerabilities, protective factors and adaptive capacities
- P-5.** Improve public health preparedness and emergency response
- P-6.** Collaborate with multiple agencies and organizations at local, state and federal levels
- P-7.** Conduct research and promote access to best available data to enable enhanced promotion and protection of human health and equity in light of climate change
- P-8.** Implement policy changes at local, regional and national levels
- P-9.** Identify, develop and maintain adequate funding for implementation of public health climate adaptation strategy

## **Transportation**

- T-1.** Understand climate trends that impact transportation
- T-2.** Complete analysis of vulnerability assessments, and prepare adaptation plans to address identified vulnerabilities
- T-3.** Inform the transportation decision-making processes
- T-4.** Improve transportation system resiliency
- T-5.** Maintain and enhance information sharing and education

## QUESTIONS FOR DISCUSSION

***Based on the climate change vulnerabilities you have observed or experienced:***

1. Are the current recommendations sufficient or insufficient? How should the recommendations that mention tribes be improved?
2. What tribal vulnerabilities should be addressed in the chapters that do not mention tribes?
3. Are there any projects that are working towards these recommendations that should be listed as "ongoing actions?"
4. Other comments, thoughts, or suggestions?