Table 4-8 provides an overview of each measures' descriptions and benefits. These measures are organized by the climate hazard(s) that they address. Measures that can help reduce risk to multiple hazards (categorized as "Multiple Hazard Measures") are presented first. Most climate risk reduction measures fall under this category, followed by measures that address individual climate hazards or, in some cases, two similar hazards (e.g., extreme precipitation and flooding). The measure descriptions broadly summarize the measure at a high level. Where applicable, an implementation example is provided.

Table 4-8. Description of Climate Risk Reduction Measures

Climate Risk Reduction Measures
Multiple Hazards
MH-1. Strengthen Energy Infrastructure. Strengthen energy infrastructure systems against damage from climate-related effects and expand redundancy in the energy network. For example, retrofit infrastructure components; ensure redundant energy systems (e.g., backup generators, multiple transmission lines feeding a given area). Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, and wildfire.
MH-2. Use Climate-Resilient Design for Infrastructure. Use the best available science and resilient design features in infrastructure to improve resiliency to extreme climate events. For example, special sealants and other materials on roadways can help prevent roadways from softening during extreme heat. Another example to maintain a state of good repair, minimize breaks, and ensure structural integrity in the face of climate change hazards is to use high density polyethylene (HDPE) pipes, which are less expensive and easier to install than metal cast iron pipes. Other resilient design features include choosing appropriate materials for wildfire-prone areas and treating critical outdoor infrastructure pieces to be heat-resistant. Infrastructure reinforcement, stormwater improvements and drainage upgrades, and pumping and water storage facilities can also be installed to increase resiliency to flooding and wave action by coastal storms. Design features should be incorporated to match asset vulnerabilities. The California Department of Transportation (Caltrans) completed a vulnerability assessment of its assets by district, which can serve as a useful resource (Caltrans 2020). Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, and wildfire.
MH-3. Coordinate Redundant Transportation Access. Coordinate with regional transportation agencies to ensure redundancy of critical transportation routes to allow for continued access and movement in the event of an emergency. Have multiple points of ingress and egress to improve evacuation and emergency response access. Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, and wildfire.
MH-4. Strengthen Building Structures. Ensure building structure is strengthened against severe weather impacts through building design. Relevant Hazards: Flooding, extreme precipitation, and wildfire.
MH-5. Use Green Infrastructure for Stormwater Management. Use green infrastructure to reduce stormwater volume and enhance stormwater capture and infiltration. For example, low-impact development, such as the installation of bioretention elements in parking lots and on the street margin, can be implemented through landscape codes, green street standards, and off-site standards. Other examples include rainwater harvesting, permeable pavements, and bioswales. Relevant Hazards: Flooding, extreme precipitation, and drought.

Climate Risk Reduction Measures

MH-6. Upgrade Water Systems.

Upgrade water systems to accommodate projected changes in water quality and availability. For example, wells and intake systems may be too shallow to effectively pull enough water supplies from groundwater aquifers and surface water bodies, higher levels of water contaminants may exceed the capacity of water treatment systems, and water storage tanks may not be able to hold enough water to meet demand if there is a supply interruption. In all these cases, the water system could be upgraded to address the risk.

Relevant Hazards: Flooding and drought.

MH-7. Construct Water Storage Facilities.

Construct additional water storage facilities and improve existing facilities to augment surface and groundwater supplies that can capture excess flows and add protections against flooding and high stormwater flow events. For example, install a dedicated groundwater recharge facility for utilizing excess flows in wet years.

Relevant Hazards: Flooding, extreme precipitation, drought, and decrease in snowpack.

MH-8. Decrease Road Vulnerability to Landslides.

Use retaining walls, slope stabilization techniques, and other strategies to make roads less vulnerable to landslides, mudflows, and erosion. Emphasize resiliency for roads and trails that are on or below steep slopes and have a history of being damaged or blocked by landslide events and affected by erosion.

Relevant Hazards: Extreme precipitation, and wildfire.

MH-9. Support Business Resiliency.

Collaborate with local and regional partners to support business resiliency through preparedness education, trainings, and resources. Target support to small businesses, minority-owned business, and businesses in underserved communities.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, air quality degradation.

MH-10. Implement Community-wide Climate Change Outreach Program.

Collaborate with local, regional, state, and federal partners to develop a community-wide outreach program to educate a diverse community on how to prepare for and recover from climate change effects. An example program would be a climate preparedness outreach program focused on vulnerable populations that provides information on staying healthy and safe during hazardous events.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-11. Encourage/Actively Engage Community in Local Planning.

Explore opportunities to incorporate resident empowerment, leadership, and decision-making such as training programs, guided reviews of plans, neighborhood scans, and mapping activities as part of resident-led planning. For example, fund or solicit participation from schools, faith-based communities, neighborhood-based groups, health equity or environmental justice groups, and businesses in climate resilience planning. Allow and encourage residents to be the decisionmakers in planning.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

Climate Risk Reduction Measures

MH-12. Enhance Community Network Support.

Support and strengthen community social networks and other assets to build climate resilience. For example, support community-driven efforts by assisting with outreach, and learning from and disseminating best practices developed by community groups or local jurisdictions (Deas, Hoverter, & DeWeese 2017).

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-13. Support Local Food Systems.

Support local farmers and local food network. Increase access to healthy food markets, farmer's markets, and other local food sources. Encourage community gardens.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-14. Maintain Trails and Parks.

Collaborate with local and regional partners to provide robust trail and park maintenance to prevent and respond to damage from the effects of climate change. For example, park management agencies can strengthen and stabilize park buildings and trails to prevent future damage. Additionally, park resilience can be furthered with overlapping green infrastructure and stormwater measures such as detention/retention ponds and basins and decreasing impermeable surfaces to naturally capture and treat stormwater flows.

Relevant Hazards: Temperature/extreme heat, flooding, extreme precipitation, and wildfire.

MH-15. Identify Alternative Activities in Climate Sensitive Recreation Areas.

Coordinate with owners of winter recreation areas and water recreation areas to support additional recreational activities that are less dependent on snowpack and water levels. For example, alternative forms of recreation could include biking and hiking trails on skiing mountains during the summer season, or ropes courses and other alternative recreational activities at water recreation sites.

Relevant Hazards: Temperature/extreme heat, drought, and decrease in snowpack.

MH-16. Identify At-Risk Transportation Corridors.

Coordinate with community members, transportation agencies, and private entities to identify local and regional transportation, transit, and active transportation corridors that are at-risk from the effects of climate change. Prioritize further climate risk reduction actions for these routes.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, and extreme precipitation.

MH-17. Identify Alternative Routes for Transit Service.

Coordinate with regional transit providers to identify and communicate to the public alternative routes and stops and other redundancies in the transportation network if normal infrastructure is damaged or closed because of extreme events.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, and extreme precipitation.

MH-18. Maintain Soil Health.

Maintain and improve soil health. For example, increase soil organic matter to improve soils' water-holding capacity, soil structure, and water infiltration, and to reduce erosion (use cover crops and mixes, native grasses, crop or livestock residues, compost, mulch, biochar, or other organic amendments).

Relevant Hazards: Temperature/extreme heat, drought, and decrease in snowpack.

Climate Risk Reduction Measures

MH-19. Stabilize Burned Slopes in Key Areas.

Stabilize burned slopes located above developed areas, important infrastructure, or key transportation corridors as soon as possible after a wildfire event.

Relevant Hazards: Extreme precipitation and wildfire.

MH-20. Improve Medical Facility Preparedness.

Work with local medical providers and hospitals to ensure that medical facilities are prepared to meet any increased demand because of hazardous events. For example, this could be stocking up on specific medical supplies for local emergencies or working with emergency management agencies to have medical professionals and supplies at emergency shelter locations. Training could also be provided to medical staff to help improve recognition of new and emerging diseases in expanded geographies.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-21. Ensure Homeless Services' Availability in Hazardous Conditions.

Coordinate with local homeless services to ensure that emergency shelters are available during extreme heat events, poor air quality events, severe weather events, and other highly hazardous conditions. Ensure that people experiencing homelessness are made aware of these resources. Work with social care organizations to distribute necessities.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-22. Improve Poor Drainage.

Identify and remedy poor drainage areas to reduce disease risk from stagnant water.

Relevant Hazards: Flooding and temperature/extreme heat.

MH-23. Landscape with Climate Considerations.

Encourage landscaping projects to use plants that will continue to be viable in the area under long-term climate conditions. For example, update landscape ordinances and other applicable standards to include plants that are resistant to drought and extreme heat.

Relevant Hazards: Temperature/extreme heat, drought, and decrease in snowpack.

MH-24. Develop Climate Emergency/Business Resilience Plan.

For large commercial developments, develop a climate emergency/business resilience plan.

Relevant Hazards: Flooding, extreme precipitation, and wildfire.

MH-25. Revise Emergency Plans.

Revise emergency management plans, programs, and activities to account for changing hazard profiles and their consequences.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-26. Integrate Climate Change Considerations into Public Safety and Emergency Planning.

Integrate climate change risk reduction considerations into general plan Safety Elements, Local Hazard Mitigation Plans, public safety document, and all phases of emergency planning. A potential resource for implementing this measure is the Coastal Plan Alignment Compass (OPR n.d.).

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

Climate Risk Reduction Measures

MH-27. Provide Greater Affordable Housing Options.

Facilitate affordable housing options outside of hazardous zones for all residents.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-28. Transition to Climate-Smart Energy.

Transition to climate-smart sources of energy. For example, move away from vulnerable sources like hydroelectric, refineries and seaports, centralized power generation facilities that rely on long-range transmission infrastructure; move toward renewable and decentralized energy sources with storage capacity for variations in daily/seasonal demands.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, and wildfire.

MH-29. Identify Climate Hazard Overlay Zones.

Identify and establish climate hazard overlay zones for consideration during zoning and development of general and project site plans. Users can start by looking at hazard zone maps in existing general plans, as these maps have already been developed due to regulatory requirements. Available resources to identify climate hazard zones include the *Adaptation Planning Guide*, OPR's General Plan Guidelines, Cal-Adapt, the *Ocean Protection Council's 2018 Sea-Level Rise Guidance*, and the Integrated Climate Adaptation and Resilience Program Adaptation Clearinghouse.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, and wildfire.

MH-30. Establish Community Resilience Hubs.

Establish resilience hub locations in neighborhoods throughout the community. For example, develop existing community centers into cooling/clean air centers.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, wildfire, and air quality degradation.

MH-31. Improve Transportation Maintenance.

Update transportation maintenance protocols to incorporate climate vulnerabilities.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, and wildfire.

MH-32. Establish Urban Tree Management Plan.

Establish policies and management plans to develop urban forests and incentivize the use of best practices for the long-term maintenance and preservation of urban trees.

Relevant Hazards: Temperature/extreme heat, flooding, extreme precipitation, wildfire, and air quality degradation.

MH-33. Implement Park and Natural Resources Protection.

Develop coastal management plan to protect park infrastructure and natural resources. For example, the plan could include protecting existing open space adjacent to the coast, restoring dune habitat to increase the resilience of beaches, using soft or natural solutions for protecting structures facing flooding or inundation, require mitigation for impacts to public access, and the retrofitting or relocation of recreation and visitor-serving facilities. Develop equivalent plans for parks at risk of wildfire or inland flooding.

Relevant Hazards: Sea level rise, wildfire, and flooding.

MH-34. Implement Integrated Watershed Management.

Reduce flood and drought risk through integrated watershed management. For example, a healthy watershed maintains wetland areas as flood mitigation and maintains undeveloped natural areas, promoting soil health to blunt flood impacts and to assure greater resilience to drought.

Relevant Hazards: Flooding and drought.

Climate Risk Reduction Measures

MH-35. Increase Parks in Underserved Communities.

Increase access for underserved populations to parks, which can provide relief against extreme heat and flooding. Identify park-poor communities and ensure that new urban parks and trail systems are within walking distance to high-density infill, homes, and offices.

Relevant Hazards: Flooding and temperature/extreme heat.

MH-36. Decentralize and Localize Energy Production and Storage.

Increase local, decentralized renewable energy production and energy storage capacity to improve energy independence. For example, remove reliance on long-range transmission electricity infrastructure that may start wildfires by installing micro-grids, local renewable energy generation, and battery storage. Create municipal energy utilities and/ or form electric co-ops between rural jurisdictions for more local control over infrastructure and energy supply.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-37. Develop Climate Hazard Notification System.

Develop a notification system for natural hazards that provides early warnings and evacuation notifications. Ensure that the system can be deployed across multiple scales, is responsive to community needs, and reaches vulnerable populations.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-38. Integrate Climate into Health Programs.

Integrate climate change and health equity into traditional public health programs and core functions.

Relevant Hazards: Sea level rise, flooding, temperature/extreme heat, extreme precipitation, wildfire, drought, decrease in snowpack, and air quality degradation.

MH-39. Implement Pervious and Climate-Smart Surfaces.

Encourage and incentivize the use of pervious and climate-smart landscaped surfaces to reduce the urban heat island effect, catch stormwater, and lower overall water use.

Relevant Hazards: Flooding, temperature/extreme heat, and drought.

MH-40. Address Energy/Water Efficiency Funding Barriers.

Address programmatic, funding, and financing barriers for energy/water efficiency retrofits for low-income households and small businesses. Coordinate with local and tribal governments to provide low-income and disadvantaged community energy efficiency and demand response services.

Relevant Hazards: Temperature/extreme heat, drought, and decrease in snowpack.

MH-41. Expand Urban Greening/Agriculture.

Collaborate with community-based organizations to develop or expand urban greening and urban agriculture programs. For example, urban greening can include adding trees, parks, green infrastructure, and other green elements to a neighborhood. Urban agriculture includes community gardens or small farms within urban areas of a community.

Relevant Hazards: Flooding, temperature/extreme heat, and air quality degradation.

MH-42. Provide Vaccinations for Changed Transmission Vectors.

Ensure that free or reduced-cost vaccinations for vector-borne diseases are widely available.

Relevant Hazards: Flooding and temperature/extreme heat.

Climate Risk Reduction Measures
Sea Level Rise and Coastal Flooding/Erosion
SLR-1. Implement Engineering Solutions. Build a seawall or offshore reefs to protect the project. Build levees to reduce flooding. Consider jetties and groins.
SLR-2: Raise Building Floor Elevations. Ensure buildings have raised finished floor elevations.
SLR-3. Implement Natural Coastline Infrastructure. Use natural shoreline protection methods, such as beach nourishment, living shorelines, and dune restoration, where feasible.
SLR-4. Strengthen Buildings Against Flood. Strengthen buildings against flooding using dry or wet floodproofing techniques.
SLR-5. Use Moveable Infrastructure. Incorporate modular components in the building design to allow the project to move away from coastal flooding and erosion zones.
SLR-6. Develop Adaptive Management Plan. Develop an adaptive management plan to address the long-term impacts of sea level rise. In the plan, include an assessment of local vulnerability, including infrastructure such as roads and water reclamation facilities, buildings in the inundation areas, and ecosystems. For example, adaptive management techniques can include flexible adaptation pathways. Adaptation pathways are a planning approach that address uncertainty by considering multiple possible futures and analyzing the robustness and flexibility of various options across those futures.
SLR-7. Require Consideration of Sea Level Rise for New Development. Require accounting of sea level rise in all applications for new development in shoreline areas. Ensure that all applications for new development account for projected sea level rise and provide adequate protection (e.g., setback, armoring). For example, require applications develop a vulnerability and risk reduction plan that uses the *Ocean Protection Council Sea-Level Rise Guidance*. Provide guidance for applicants in considering most suitable sea level rise scenarios in planning.
SLR-8. Develop Setbacks. Develop adequate setbacks for new development. For example, ensure structures are set back far enough inland from the beach or bluff edge such that they will not be endangered by erosion (including sea level rise induced erosion) over the life of the structure, without the use of a shoreline protective device.
SLR-9. Develop Regional Sediment Management. Develop a regional sediment management program including strategies designed to allow the use of natural processes to solve engineering problems.
SLR-10. Sell off High-Risk Area Development Rights. Allow landowners in high-risk areas to sell their development rights. In conjunction, designate areas for increased density in a community for this.
SLR-11. Site Outside Coastal Hazard Zone. Select sites outside of coastal hazard zone or coordinate with long-term community managed retreat plans. Develop plans allowing for coastal inundation in defined areas.

Climate Risk Reduction Measures
SLR-12. Limit Basements in Flood Zones. Limit basements and first floor habitable space in flood zones and keep critical assets (such as major electrical infrastructure) on higher floors.
SLR-13. Provide Removal Options in Flood Zones. Analyze options for removal of the structure or critical assets connected to the structure when planning and designing new development in flood zones.
SLR-14. Coordinate with Regional Planning Efforts. Coordinate with regional agencies on developing policies and/or plans where project-level solutions alone may not be able to mitigate sea level rise risk.
SLR 15. Alert Public of Storm Surge Risks. Include signage to warn people about flooding during storms and king tides. Provide materials to visitors and communities on risks of storms and king tides.
Extreme Precipitation and Inland Flooding
EP-1. Incorporate Runoff Projections in Hydrologic Designs. Incorporate projected increases in runoff into site-specific hydrologic design. Account for uncertainty in future runoff due to potential changes in precipitation, where past data is not a reliable predictor of future events.
EP-2. Install Stormwater Outfall Pumps/Lift Station for Water Drainage. Install stormwater outfall pumps/lift stations to drain water from the system if outfalls were to become submerged.
EP-3. Install Stormwater Cistern/Retention Basin. Build or enhance stormwater cisterns or retention basins.
EP-4. Waterproof Operational Equipment. Protect mechanical, electrical, and other key operational equipment from flooding at critical facilities/locations by dry proofing or wet proofing facilities.
EP-5. Upgrade Wastewater Systems. Upgrade wastewater systems to accommodate projected changes in precipitation and flooding. For example, enhance wastewater system capacity to prepare for increased flows and strengthen facilities against extreme events.
EP-6. Site Outside Floodplain. Select site outside the floodplain. If not completely possible, keep most climate-sensitive elements of the project outside the floodplain.
EP-7. Maintain Stormwater Infrastructure on Key Routes. Conduct regular cleaning and maintenance of storm drains and other stormwater infrastructure assets along key roadways, especially in advance of the rainy season. Improve storm drain capacity in areas where ponding is regularly observed.

Climate Risk Reduction Measures
Wildfire
WF-1. Implement Fire-Safe Landscaping.
Implement fire-safe landscaping. A toolkit for fire-safe landscaping is available online (IBHS n.d.).
WF-2. Install Fire Suppression Systems and Improve Structural Strength.
Install fire suppression systems in high fire risk locations. Incorporate hardening and strengthening aspects into structure design and material selection, such as tile roofs and mesh in attic vents to prevent ember sparks.
WF-3. Strengthen Vulnerable Assets in High Wildfire Risk Areas.
Strengthen vulnerable assets in high wildfire risk areas. For example, replace wooden electricity distribution poles with steel poles.
WF-4. Educate on Wildfire Resistant Landscaping.
Provide information to homeowners about statutory vegetation management requirements (CAL FIRE 2019a) and promote defensible space to slow fire spread in forested and wildland-urban interface (WUI) areas. For example, send educational materials encouraging homeowners to create fire-resistant zones with stone walls, patios, decks and roadways. Similarly, promote the use of rock, mulch, flower beds and gardens as ground cover for bare spaces and as effective firebreaks. Additional resources are available from CAL FIRE (CAL FIRE 2019b).
WF-5. Site Outside WUI.
Direct site selection outside of the WUI, the zone where development meets wildland areas, including fire hazard severity zones as mapped by CAL FIRE. (Some Counties also have WUI maps.) If not able to site outside the WUI and/or fire hazard severity zones, implement other fire-safe management, such as creating defensible space or carrying out fuel management.
WF-6. Designate and Strengthen Wildfire Emergency Routes.
Identify and mark emergency routes or recommend additional roads in the wildland-urban interface in case of evacuations. Provide advanced public education on evacuation routes and deliver emergency evacuation orders and warnings. Make all notices and guidelines accessible in multiple languages. Ensure redundancy in evacuation routes.
WF-7. Develop Fire Risk Assessment for New Development.
Develop a fire risk assessment for all new development within fire hazard severity zones or the WUI.
WF-8. Implement Fuel Management.
Carry out fuel (i.e., live vegetation or dead biomass) removal/management techniques, such as fuel breaks, in the WUI and in the wildfire influence zone. Conduct controlled/prescribed burns to mitigate wildfire risk.
WF-9. Install Air Filters.
Encourage the installation of air filters to protect against indoor air quality impacts during wildfire smoke exposure events.
WF-10. Adopt WUI Building Standards.
Recommend in Local Responsibility Areas that households adopt WUI Building Standards and consider using WUI-approved construction materials if they are in High and Moderate Fire Hazard Severity Zones.
Temperature/Extreme Heat
EH-1. Install Green Infrastructure.
Install green infrastructure to increase shading and reduce heat impact. For example, green streets and pocket parks.

Climate Risk Reduction Measures
EH-2. Provide Heat Mitigation for Public Walkways and Transit Stops. Collaborate with public works departments and regional transit providers to increase shading and heat-mitigating materials on pedestrian walkways and transit stops. For example, build bus shelters or plant trees at bus stops to provide shade for waiting passengers.
EH-3. Install Heat-Reducing Roof. Install green roofs, cool roofs, or other high-albedo or heat reducing roofs.
EH-4. Enhance Building Envelope Efficiency. Improve building envelope efficiency to protect against extreme heat. For example, install well-sealed doors and windows or window treatments such as solar shades. May also include passive cooling design/architecture.
EH-5. Upgrade to Efficient Equipment/Infrastructure. Upgrade equipment and infrastructure to be more energy-efficient to minimize stress on the electrical grid.
EH-6. Install Refillable Water Stations. Install refillable water stations at parks, trailheads, community centers, and sport courts/fields with available water supplies to encourage proper hydration and protection against heat-related illnesses.
EH-7. Install Equipment Cooling System. Provide cooling systems for equipment sensitive to overheating.
EH-8. Use Alternative Pavement Surfaces. Use alternative pavement surfaces (to reduce rutting, cracking, heat impacts, etc.) when resurfacing roads, critical intersections, multi-use paths, and city parking lots.
EH-9. Expand Urban Tree Canopy. Develop or expand urban tree canopy to help cool urban environments.
EH-10. Install Covered Parking. Install a form of covered parking, such as trees or solar panels, that mitigates heat islands and reduces off-gassing from cars.
EH-11. Work with Schools to Reduce Heat Exposure. Provide education, partnership, and other support to local schools to reduce outdoor exposure during extreme heat events.
EH-12. Provide Backup Power for Cooling Centers. Ensure that facilities used as cooling centers are equipped with backup power supplies, including onsite renewable energy generation and energy storage systems as feasible.
EH-13. Develop Heat Emergency Plan. Adopt or update heat emergency plan. Ensure that the needs of vulnerable and remote populations are accounted for in the plan.
EH-14. Develop Low-Income Energy Programs. Work to coordinate energy-related programs that target low-income communities with broader climate risk reduction efforts.

Climate Risk Reduction Measures
EH-15. Provide Low-Income Air Conditioning.
Provide reduced-cost, energy-efficient air conditioning systems to low-income households.
EH-16. Establish a Shuttle System to Cooling Centers.
Establish a shuttle system to operate during extreme heat events with specific pickup points and provide access to local cooling centers for persons who are unable to drive or lack access to a vehicle.
Drought
D-1. Install Water Efficient Appliances.
Install water-efficient appliances, such as water-efficient faucets and pipe fixtures.
D-2. Install Water Reuse Infrastructure.
Install infrastructure that encourages water reuse, such as greywater appliances and stormwater capture.
D-3. Install Drought Resistant Landscaping.
Install pervious and landscaped surfaces to reduce heat island effects and improve groundwater recharge. Installation may include the use of native, arid ecosystem plants as well as water-smart technologies, such as drip irrigation.
D-4. Educate on Water Conservation.
Educate the public on and encourage water conservation behavior. For example, running education campaigns or having information available at a community center.
D-5. Outreach to Educate About Recycled Water Safety.
Initiate public outreach to encourage acceptance of recycled potable water sources.
D-6. Build Alternatives Forms of Water Recreation.
Work with owners of water recreation sites to begin installing alternative forms of recreation that are less dependent on water levels.
D-7. Diversify Water Supply Sources.
Diversify water supply sources to have backup sources during drought when some water supplies (e.g., surface water) may be scarce to ensure all communities have access to water. For example, increase sourcing from groundwater or local recycled water.
D-8. Develop Groundwater Sustainability Plan.
Work with local water utilities, agencies, and stakeholders to comply with or develop a groundwater sustainability plan.
D-9. Implement Local Water Recycling.
Implement local water recycling, either decentralized at residential/commercial facilities, or centralized at larger community facilities.