




CALIFORNIA
CLIMATE
ADAPTATION
STRATEGY




2022
Implementation
Report



"The impacts of climate change are felt year-round in California, and we are acting now to help all Californians prepare and adapt. California's Climate Adaptation Strategy recognizes that climate change threatens communities and natural places in every part of our state and accelerates actions to protect the most vulnerable. While we have made progress over the last year, the climate crisis demands we move further and faster to reduce risks to our people and communities."

-Governor Gavin Newsom



The progress outlined in this 2022 Implementation Report is thanks to the insights, experience, and tireless efforts of a diverse, growing, and deeply valued community of leaders, practitioners, experts, and groups across California and beyond. We are deeply grateful for this collective wisdom and shared commitment. This collaboration will be essential to continuing to achieve and realize the priorities of the California Climate Adaptation Strategy.

A copy of this document can be found online at ClimateResilience.ca.gov



California is leading the world protecting people and nature from the impacts of climate change. While global climate change drives unprecedented impacts across California, our state is acting swiftly and demonstrating leadership and innovation to adjust to changes and build resilience to evolving threats.

This report charts the State of California's progress implementing our Climate Adaptation Strategy (Strategy) over the last year in 2022. This Strategy is driving state leaders and agencies to coordinate across all sectors to ensure a shared approach to reducing risks and building climate resilience.

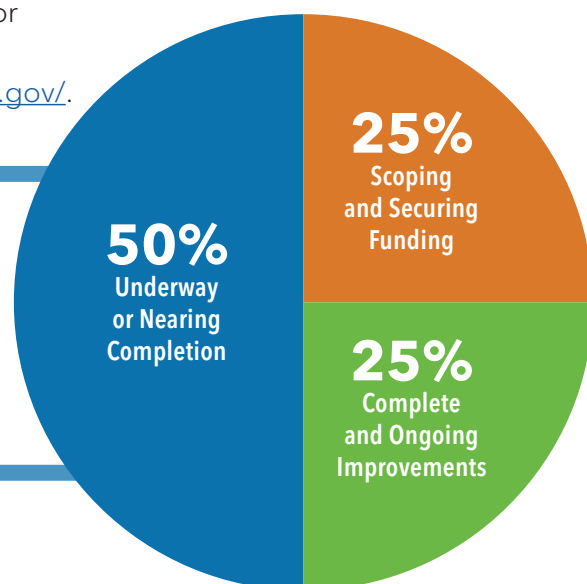
This shared approach is based on six key priorities that must drive all resilience actions in California:

1. Strengthen **Protections for Climate Vulnerable Communities**
2. **Bolster Public Health and Safety** to Protect Against Increasing Climate Risks
3. Build a **Climate Resilient Economy**
4. Accelerate **Nature-Based Climate Solutions** and Strengthen Climate Resilience of Natural Systems
5. Make Decisions Based on the **Best Available Climate Science**
6. **Partner and Collaborate** to Leverage Resources

Across the six priorities, progress is now being measured through specific metrics, which have been included in this Strategy for the first time in 2022. Progress updates on all the Strategy's metrics can be found here: <https://www.climate resilience.ca.gov/>.

AT-A-GLANCE

Nearly three-fourths of the Strategy's 350+ metrics are well underway, ongoing, or completed, with the other fourth of the Strategy's metrics in the early stages of scoping and organizing or beginning project work.





State agencies will continue to chart how California is adapting to climate impacts through yearly reports and regular Strategy updates.

California's Climate Change Impacts - Year in Review

2022 was a year of unprecedented extremes in California, dominated by extreme heat, drought, and ended with flooding. These trends were apparent in an annual report by the California's Environmental Protection Agency, which outlines how climate change affects the state's weather, water sources, plants and animals, and human health, including California Native American tribes. [This report for 2022](#) highlights:

- Since 1895, annual average air temperatures in California have increased by about 2.5 degrees Fahrenheit (°F).
- Warming occurred at a faster rate beginning in the 1980s. Eight of the ten warmest years on record occurred between 2012 and 2022; 2014 was the warmest year on record.
- Temperatures at night, which are reflected as minimum temperatures, have increased by almost three times more than daytime temperatures. Nighttime warming has been more pronounced in the summer and the fall, increasing by about 3.5°F over the last century. Southern California has warmed faster than Northern California.

Globally, scientists at the Intergovernmental Panel on Climate Change (IPCC) have high confidence (about an 8 out of 10 chance) that:

- Human-induced climate change, including more frequent and intense extreme events, has caused widespread adverse impacts and related losses and damages to nature and people, beyond natural climate variability.
- Across sectors and regions the most vulnerable people and systems are observed to be disproportionately affected.
- The rise in weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt.

The IPCC's scientists have very high confidence (at least 9 out of 10 chance) that:

- Vulnerability of ecosystems and people to climate change differs substantially among and within regions.
- The magnitude and rate of climate change and associated risks depend strongly on near-term mitigation and adaptation actions.



Extreme Heat

The Western United States experienced the most severe heat wave on record in September 2022, breaking thousands of weather records across the West and resulting in 61 million people under active extreme heat advisories, watches, or warnings. Across the West, nearly 1,000 new records were set for the highest daytime temperature on any September day.

Of all the Western states, California endured the hottest temperatures for the longest time, driving the average statewide temperature to the second warmest over the past 128 years.

Sacramento hit 116 degrees on September 6, breaking the city's previous record of 114 degrees set on July 17, 1925. Many other cities tied or set all-time record highs for any month, including Ukiah (117 degrees), Napa (115 degrees), and Merced (115 degrees). Death Valley hit 125.2 degrees, making it the hottest place in the nation on September 6th.

The September heat wave generated significant impacts across the state. According to the California Independent System Operator (ISO) President and CEO, **"The heat wave of September 2022 was one of the most challenging events in the history of the ISO grid."** Record demand for electricity threatened power outages that were narrowly averted through unprecedented actions. This heatwave also created conditions that significantly spread wildfires across California, further threatening public health, safety, and the reliability of the state's energy grid. After the heat wave, California took a variety of actions to better prepare the energy grid from the impacts of climate change, such as temporary generators, efficiency improvements at existing power plants, and programs that encouraged a shift or reduction in demand.

Extreme heat ranks among the deadliest of all climate-driven hazards in California, with physical, social, political, and economic factors effecting the capacity of individuals, workers, and communities to adapt, and with the most severe impacts often on communities who experience the greatest social and health inequities. A preliminary analysis of deaths during the September 2022 heat wave shows significant excess deaths from all causes during that period (approximately a 5% increase in the rate of death compared to the rest of summer 2022). Excess deaths were seen for heat-specific illnesses as well as cardiovascular, respiratory, endocrine, digestive, and renal diseases. Rates of deaths among persons injured while at work were significantly higher during the heat wave period as well.

Many economic impacts are also likely to be observed from this heatwave, including missed work, decreased productivity, and increased medical costs. **It is likely this heatwave had negative consequences for nature, including migration and death of plants and wildlife, significantly impacting California Native American tribes for whom these plants and animals have cultural importance.**



Wildfire

California experienced significantly less fire devastation in 2022 than in recent years, driven by highly cooperative weather, major state investments in wildfire resilience and improved tactical suppression tools, and the actions of state, local, and federal firefighting personnel. **The 2022 fire season saw more fires than the previous fire season along with continued extreme drought and heat conditions, but the 2022 fires yielded a fraction of the devastation.**

In 2022 362,000 acres burned and around 770 structures were lost compared to 2.5 million acres burned and 3,500 structures lost in 2021 and 4 million acres burned and 11,000 structures destroyed in 2020. 2022 had the fewest acres that have burned annually since 2019, with the Mosquito Fire being the largest fire of 2022 at 76,788 acres, but significantly smaller than the 963,000-acre Dixie Fire in 2021. Sadly, 9 lives were lost in 2022, serving as a reminder that there is much work to do to protect Californians from large, fast-moving fires.

Fires that could have become megafires in prior years, such as the Electra Fire in Amador County or the Oak Fire in Placer County, encountered recent fuel reduction projects in their initial hours and were contained. Increased investments in fire suppression, including expanding the firefighting workforce and new heli-tankers, helped speed initial response and keep unplanned fires small. In larger wildfires where properties were lost, firefighters were able to prevent massive catastrophes, including saving an estimated 9,236 threatened structures on the Mosquito Fire (where 78 structures were destroyed), and saved 427 threatened structures from damage or destruction on the Oak Fire (where 194 structures were destroyed).

Governor Newsom and state fire officials announced the end of peak fire season in most areas of California in mid-November, while recognizing the significant work to still do to prepare for, mitigate, and recover from wildfires each year.

Drought and Flood

In 2022, extreme drought gripped California and much of the western United States for a third consecutive year. The drought, begun in 2019, was the third statewide drought declared in California since 2000.

The extended dry conditions diminished river and stream flow, stressing fish and wildlife. **Farmers idled hundreds of thousands of acres of farmland, and thousands of groundwater wells that supply individual homes and small communities went dry, most in the San Joaquin and Sacramento valleys.** Each of California's 58 counties was covered by an emergency proclamation, and Californians were asked to conserve at least 15% compared to 2020 levels, with some local water districts, depending upon their supply situation, asking customers to make much deeper cuts in water use.

This drought has been marked by extreme swings; the state received record-breaking amounts of precipitation in October and December 2021 that were offset by the driest January, February,



and March 2022 dating back more than 100 years. The year 2023 opened with California simultaneously managing both drought and flood emergencies. A series of storms in late December 2022 and early January 2023 broke rural levees, disrupted power, flooded roads, downed trees, and eroded coastal land. The storms built the Sierra Nevada snowpack and raised reservoir levels but did not eliminate drought impacts – including dry wells and the need for hauled water – in all regions of the state.

Climate change has intensified the natural shifts between drought and flood in California’s climate.

This is why the state is investing billions of dollars water storage and conveyance, water recycling, water use efficiency, groundwater recharge, desalination, stormwater capture, flood control, habitat restoration, removal of fish passage barriers, data collection, and a host of water management strategies tailored to local and regional resilience.

Sea Level Rise and Ocean Changes

Sea level rise is continuing to occur along the California coast, at 1 to 2 millimeters (0.04 to 0.08 inch) per year, and 2022 was no exception. **Sea level rise accelerates coastal erosion, worsens coastal flooding during large storms and peak tidal events, and impacts important infrastructure positioned along our state’s 1,100-mile coast.**

Sea level rise is already impacting communities along the coast with varying levels of severity. For example, after Tropical Storm Kay made landfall in late September 2022, Amtrak halted service of the Pacific Surfliner train because sensors detected the land underneath the tracks near San Clemente was moving as much as nearly half an inch a day. This is the nation’s second busiest rail corridor, and travels along 351 miles of Southern California’s coastline.

While sea level rise at times seems less visible and threatening, recent research unveiled how impacts such as coastal flooding could be devastating to California’s communities. **Toxic Tides, a collaboration of community-based organizations and academic researchers, found over 400 hazardous facilities are at risk of flooding from sea level rise by the end of the century. Moreover, they found disadvantaged communities are more than five times more likely to live within 1 kilometer of one of these facilities at risk of flooding in 2050 and over six times by 2100.** Another study from UC Berkeley found 39 out of 43 coastal airports in California have assets exposed to projected flooding that could disrupt their operations in the next 20 to 40 years.

In addition to sea level rise, other climate-driven ocean changes occurred in 2022. **In August and September, thousands of dead fish washed ashore in the San Francisco Bay Area. The die off was caused by a harmful algal bloom.** Although the San Francisco Bay Area is no stranger to harmful algal blooms, this one was longer and more widespread than most. Scientists believe this was due to climate-driven warmer water temperatures and high nutrient levels.



2022 Climate Resilience Action - Key Highlights

California is working urgently and creatively to build an equitable, resilient, and net zero future.

- State leaders delivered the **world's most ambitious plan to achieve carbon neutrality** by 2045 and advanced efforts to phase out the use of fossil fuels that cause climate change.
- State agencies **reimagined and overhauled California's Climate Adaptation Strategy** in line with global scientists' call for unprecedented collective effort and to coordinate across sectors on overlapping threats.
- Governor Newsom and the Legislature **significantly increased climate investments in line with the state's level of ambition** to deliver climate action across all sectors including public health, energy, natural resources, labor, and transportation.

To highlight overarching progress and specific success stories across California state agencies just this past year, in line with the six priorities outlined in the Climate Adaptation Strategy:

Strengthen Protections for Climate Vulnerable Communities

Many California towns and cities are particularly vulnerable to climate-driven threats. Over the last year, several communities ran out of water as their shallow wells went dry amidst record-breaking drought, while other communities were inundated with flood waters this winter amidst intensifying atmospheric river storms. State agencies have prioritized support to these most vulnerable communities, including low-income and rural communities, communities of color, and tribal nations, many of which experience compounding inequalities. State support includes unprecedented funding into these communities, direct technical assistance and guidance to help community leaders build their communities' resilience, and ongoing research and analysis to help communities plan and prepare for the future.

- Awarded more than \$2.7 billion in Homekey funding to create over 12,700 units for people exiting homelessness who are extremely vulnerable to climate risks. A portion of this funding is set-aside for California's tribal communities to serve their unhoused populations and build more resilient communities, further ensuring that the most vulnerable Californians are given access to safe, affordable homes in sustainable communities.
- Updated the [Action Plan for Preventing and Ending Homelessness in California](#) to include an objective and multiple activities aimed at supporting communities in developing disaster preparedness plans that are inclusive of people experiencing homelessness. The Action Plan calls on multiple state departments and agencies to work with partners at the local and state level to develop and disseminate best practices on this work.



With Homekey funding, the Scotts Valley Band of Pomo Indians will renovate a former motel in Lake County. This region has historically been impacted by destructive wildfires; however, this project is an infill development project located in the town of Lakeport, a non-fire hazard severity zone (see map), and within only a mile of basic amenities, such as public transit, grocery stores, pharmacies, and health care providers. This project will provide permanent housing for tribal members experiencing homelessness, a population which is extremely vulnerable to climate risks and typically ineligible for post-disaster housing assistance.

Learn more here: [Homekey | California Department of Housing and Community Development](#)

- Provided intensive technical assistance, data, and tools to two Tribes to integrate health considerations into climate change planning and provided resources and data to additional Tribes across California.
- Supported projects that advance climate resiliency for communities that have experienced climate-related traumas. One such example is a multi-use pedestrian and bicycle path, which is being engineered to also serve as an egress/evacuation route in the case of future wildfires in the Town of Paradise.
- Conducted post-event analysis to estimate excess mortality and morbidity from September's extreme heat event and identify populations that faced disproportionate health burdens from the heat wave. This work is ongoing and will be released in Spring 2023.
- Provided tailored technical assistance to five local health departments to support their planning to prevent and reduce the health equity impacts of climate change. Provided additional tools, templates, and trainings to approximately 38 local health departments.
- Released extreme heat emergency response guidance for local jurisdictions to increase awareness and understanding, reduce climate impacts on children and pregnant people, on protecting vulnerable populations, and for schools on sports and strenuous outdoor activities.
- Invested \$153 million in communities previously impacted by Presidentially declared natural disasters for resilient infrastructure projects (e.g., enhanced flood channels, new fire stations, or wider roads) and public services (e.g., development of community wildfire



plans, education on defensible space around homes, etc.) that increase the resiliency of vulnerable communities and low-income households.

- Awarded \$10.8 million to Socially Disadvantaged Farmers and Ranchers in 2021, with \$4.5 million invested in projects that benefit Priority Populations.

Bolster Public Health and Safety to Protect Against Increasing Climate Risks

Intensifying climate impacts threaten the health and safety of Californians. Wildfire smoke, for example, worsens air quality and impairs breathing, while extreme heat leads to dehydration and worsens acute health risks for those with preexisting conditions. In response to these health risks, state agencies piloted new programs and initiatives that directly address public health threats from climate change, scaled programs that are working across more communities, expanded personnel focused on protecting public health from climate driven threats, and expanded investments to tackle both the immediate and long-term climate-related public health needs across the state.

- Launched a pilot program for community health promoters in the San Joaquin Valley to refer farmworkers with climate-related health conditions to receive prioritized home weatherization and energy efficiency services that can improve housing and health.
- Released the updated [Wildfire Smoke Considerations for California's Public Health Officials](#) to strengthen public health officials' ability to protect communities and vulnerable individuals from the adverse health effects of wildfire smoke. This guidance has been incorporated into the U.S. Health and Human Services information-sharing library of disaster medical, healthcare, and public health preparedness materials.
- Hired 1,350 additional personnel, deployed a new fleet of firefighting helicopters, and used satellite and drone technology to fight fires across the state.



Prepare California is designed to leverage federal and state funds to support the most socially vulnerable communities at the highest risk for future natural hazard events.

Learn more here: [Prepare California | California Governor's Office of Emergency Services](#)



- Distributed \$530 million to 275 separate drought-relief projects around the state between enactment of the 2021-22 budget and the end of 2022. The projects will help build the immediate and long-term ability of small communities, tribal governments, and urban water districts to withstand drought.
- Allocated \$8.6 billion over multiple years to support work to adapt California water systems to climate change. These projects help to implement [California's Water Supply Strategy, Adapting to a Hotter, Drier Future](#) and increase water supply, adapt to more extreme weather patterns caused by climate change, and build the resilience of fish and wildlife to the state's changing hydrology.
- Used 17.4% less water overall than in 2013, at the beginning of the last drought. The state continues to promote conservation as a way of life for all Californians through the public awareness campaign Save Our Water.
- Distributed \$660 million to communities for hazard mitigation in the last 5 years to address climate impacts such as wildfire, flooding, and sea level rise.
- Incorporated climate risks to inform delivery of the California High Speed Rail program, to ensure climate analyses are incorporated into design for infrastructure and stations.
- Launched the Prepare California Initiative to reduce long-term risks from natural disasters, such as flooding, earthquakes, wildfires, landslides, extreme heat, and drought by investing in local capacity building and mitigation projects designed to protect communities.

Build a Climate Resilient Economy

California has grown into the world's fourth largest economy, while providing a global model of a transition to carbon neutral future. Our state's continued prosperity requires that we anticipate and limit impacts from climate-driven threats to jobs, businesses and economic activity. State leaders have allocated funding to make proactive, up-front investments that will reduce the long-term fiscal impacts of climate-driven disasters while also driving the clean energy transition. California's progress building drought and flood resilience across our diverse regions, reducing catastrophic wildfire risk to communities and infrastructure, and enabling infrastructure to limit damage from sea level rise and extreme heat are all examples of how we are strengthening the resilience of our economy for the future.

- Advanced implementation of the Community Economic Resilience Fund, a \$600 million initiative through which 13 economic regions of the state will develop inclusive economic development plans that move toward a carbon-neutral economy while creating equitable economic opportunity for communities.



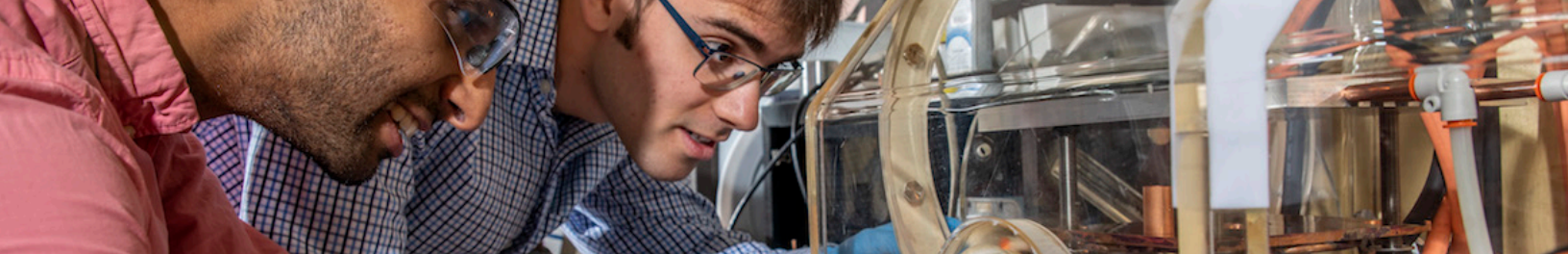
The Community Economic Resilience Fund

was created to promote a sustainable and equitable recovery from the economic distress of COVID-19 by supporting new plans and strategies to diversify local economies and develop sustainable industries that create high-quality, broadly accessible jobs for all Californians and move California toward a carbon-neutral economy.

Upon developing inclusive economic plans, regions will compete for \$500 million in funding for project implementation.

Learn more here: [Community Economic Resilience Fund - Office of Planning and Research](#)

- Ushered in the first-ever offshore wind lease sale auction off the coast of California, a significant milestone in the state's transition to 100% clean energy by 2045. The five lease areas can accommodate over 4.6 gigawatts of offshore wind energy, enough to power over 1.5 million homes. Offshore wind also supports the resilience and reliability of California's grid as it can provide energy at times of the day when other intermittent renewable resources, such as solar and onshore wind, are unavailable.
- Accelerated California's statewide commitment to decarbonizing the economy with a sweeping legislative package of climate measures and a historic budget that supports the clean energy transition and grid reliability. The budget adds over \$8 billion to accelerate clean energy projects coming online, provide relief, and help ensure a reliable grid as California transitions to 100% clean energy while facing more extreme weather events.
- Awarded nearly \$4.5 million through the 'JumpStart' portion of the Prepare California Program to enable investment in infrastructure improvements designed to protect people and property through local capacity building.
- Invested \$200 million for a State Transportation Climate Adaptation Program, with an additional \$200 million in funding for planning grants and adaptation projects aimed at protecting local transportation and related infrastructure. The state also expects an additional \$400 plus million of federal formula funding over the next five years to support state and local climate resiliency projects.



Accelerate Nature-Based Climate Solutions and Strengthen Climate Resilience of Natural Systems

Great progress was made over the last year expanding and “mainstreaming” nature-based solutions to climate threats. State agencies and our partners are restoring natural landscapes and improving land use practices to build our resilience to climate risks and boost our progress toward carbon neutrality. Momentum continues to build through partnerships with landowners and managers, local and regional government, and non-governmental partners. Smart strategic planning, combined with unprecedented investments and scaled projects, is enabling nature to play a central role in our climate action.

- Invested over \$30 million for 42 projects in 2022 for urban forestry and community greening projects that reduce heat risks, improve air and water quality, and reduce energy consumption. Launched a new program to reduce risks of extreme heat to California’s youth by investing \$150 million to strategically cool schoolyards.
- Installed weather stations and wildlife monitoring sites on state lands across the state. This new [Climate-Biodiversity Sentinel Site Network](#) will provide continuous and consistent information on the status and health of California’s ecosystems, including how they adapt over time to the impacts of climate change.
- Formed a technical assistance collaborative with state, federal, and regional government partners known as the California Conservation Planning Partnership that focuses on implementing climate smart agriculture/ forestry practices and streamlining services.
- Delivered the [Natural and Working Lands Climate Smart Strategy](#) to accelerate and scale nature-based climate solutions across California and [Pathways to 30x30](#) to conserve the rich biodiversity of California.
- Issued [California’s Strategic Plan for Expanding the Use of Beneficial Fire](#) to expand the use of prescribed fire and cultural burning to build forest and community resilience statewide.
- Allocated a record \$2.8 billion over three years for new wildfire resilience projects across the state. This includes 40 programs across 22 departments that proactively reduce risks of catastrophic wildfire before wildfires strike. Programs rolled out very quickly with over 1,000 projects launching within the first year of the program.



California's giant sequoia groves, one of the most naturally fire resilient species, is critically threatened by climate change – over 20% of the old growth sequoia population died in the 2020 and 2021 wildfires. A coalition of State, Federal, Tribal, and non-profit land stewards developed a collaborative to expedite protection of these millennia-old trees. State and federal agencies used emergency declarations to expedite prescribed burns and thinning across the 36 most critical groves in California. When large fires came through the old growth groves in 2022, like the Oak Fire in Yosemite and the Mosquito Fire in Placer County, the fire burned at low intensity through the treated groves and these millennia-old monarch trees survived.

Make Decisions Based on the Best Available Climate Science

California has invested more over the last two decades to understand climate impacts on our people and places than possibly anywhere else in the world. This funding has enabled partnerships with our academic institutions and research partners to “downscale” global climate risks to our state in order to better understand the location, timing, and extent of climate impacts. Our state agencies are actively incorporating this best available science to guide decision-making. Our state agency action plan for sea level rise provides a great example of where science drives our investments and programs to build climate resilience. California's Fifth Climate Change Assessment will deepen our understanding of action-oriented science, incorporating traditional ecological knowledge, tribal expertise, community-based experiences, and applied research to better protect California from climate threats.

- Approved the first Climate Adaptation and Vulnerability Assessment for an Investor-Owned Utility. It is now required that Investor-Owned Utilities file these Assessments with the state every four years to ensure electric and natural gas utilities are best planning and preparing for increased operational risks due to changing climate conditions.
- Kicked off the [5th Climate Change Assessment](#), a state-of-play on the best available climate change science to help better understand what climate change means for the future and empower Californians to plan accordingly
- Completed or made substantial progress on 88% of the actions in California's [California's Climate Action Plan for Transportation Infrastructure](#).



- Updated the [Wildfire Hazard Planning Technical Advisory](#), [WUI Planning Guide](#) and the [Wildfire](#) and [Flood-After-Fire Plan Alignment Guides](#) to support adaptation planning and project implementation.
- Produced climate adaptation transportation planning guidance that promotes nature-based adaptation strategies and consideration of public health and community engagement.
- Updated and expanded California's [Extreme Heat Action Plan](#).
- Published a [report tracking implementation of the Water Resilience Portfolio](#), which showed that 89% of the Portfolio's 142 actions are underway or complete. Put another way: The progress report showed that state agencies were making progress on all but 16 of 142 actions.
- Developed the [State Agency Sea-Level Rise Action Plan for California](#) to coordinate and align statewide coastal resiliency actions across 17 state agencies over the next five years.

Partner and Collaborate to Leverage Resources

No one single government or entity can work alone to build climate resilience, particularly in a state as large and diverse as California. Our state's progress reducing climate risks and protecting communities and places from climate impacts relies on hundreds of governments, groups and leaders across the state. Recognizing the importance of collaboration, state agencies are investing new funding in building capacity of community partners, providing technical assistance to access state funding, and reducing complexities of working with state government and getting important projects built.

- Awarded 1,111 climate smart agriculture projects covering 168,000 acres for a total \$123.5 million to date, paving the way for the state's agricultural community to deliver meaningful climate action through use of incentive programs.
- Kept electricity flowing without interruption during September's record-setting heat wave through an all-hands-on deck approach, including enhanced collaboration with state and federal agencies, significant conservation by commercial and residential electricity customers, and the use of new incentive programs to support grid reliability.
- Signed six global partnerships or Memorandum of Understanding (MOUs) with other countries and provinces in 2022 that focus on climate adaptation as an area of shared cooperation. These MOUs with Canada, China, the Netherlands, New Zealand, Japan, and South Africa's Western Cape help California better advance the actions and goals outlined in the Climate Adaptation Strategy.



- Received over \$180 million to build resilient communities and infrastructure that have weathered a disaster or are at risk of facing a disaster. Projects include wildfire hazard mitigation through home hardening, defensible space, vegetation management, fuel modification, and community education; nature-based coastal adaptation and restoration along 1,150 feet of Pacific Ocean shoreline; and construction of groundwater storage wells for use during drought conditions.
- Kick-started implementation of the first federal program for climate adaptation of transportation infrastructure. Funding will increase climate resilience of transportation projects and create a pipeline of climate adaptation projects for future funding.
- Partnered with philanthropy to (a) invest in disaster relief, recovery and resilience through community foundations, and (b) provide capacity-building and technical assistance to climate-resilient economic development initiatives across the state.
- Convened an Extreme Heat Symposium, which brought together thought leaders from communities, academia, and local government to highlight needs and opportunities for addressing this climate threat across California.



Major takeaways from the Extreme Heat Symposium are that California must continue to:

1

Build a reliable and safe energy system

2

Re-imagine communication to reach all Californians

3

Address historical and racial inequities to combat extreme heat

4

Scale innovative solutions

Find more here: [California Extreme Heat Symposium Synopsis](#)



What's Next? Areas of Focus for 2023

1. Urgently deliver and report on climate action through implementation of California's historic climate budget.
2. Leverage record levels of federal climate funding through the Inflation Reduction Act and the Infrastructure Investment and Jobs Act
3. Increase support for Technical Assistance, guidance, and tools to reduce climate risks and increase resilience to future impacts.
4. Utilize best available data to identify the communities most vulnerable to climate change in California.
5. Deepen partnerships with climate adaptation leaders facing similar threats around the world.
6. Deliver California's 2024 Climate Adaptation Strategy in line with the level of meaningful public engagement called for in AB 1384.
7. Fund cutting-edge research that uses the next generation of downscaled climate change projections as part of the California's Fifth Climate Change Assessment.
8. Improve our response to climate change and ability to track collective progress through new information and data products.
9. Remove barriers to state funding and build community capacity by using strategies like advance payment to increase access to funding for lower-resourced organizations and communities.
10. Deepen the integration of California Native American tribal priorities into California climate policies and programs and support tribal partnership and collaboration through funding tribal climate projects.