



# CALIFORNIA REGIONAL CLIMATE ADAPTATION INITIATIVE

Understanding Climate Change in California's Southern Desert Region; What Your Organization Can Do About It



By taking action today, the Inland Deserts Region can move towards a healthier, more prosperous and sustainable future.

## Why address climate change? What's the threat?

Changes in global and local temperatures depend on the accumulation of carbon dioxide and other heat-trapping gases emitted from human activities into the atmosphere. The accumulation of greenhouse gases (GHGs) could be high (harming human health) or low (reducing health risks). The direction on climate impacts depends on the success of both international and local efforts to reduce GHG emissions.



### How will the Inland Deserts Region be impacted by climate change?

**THE INLAND DESERTS ARE WARMING.** By mid-century (2041-2060) the inland desert regions of Southern California will likely warm by 4°F to 7°F above historic climatic temperatures.

**OUR HEALTH IS IN THE BALANCE.** Longer and more frequent high-heat days will increase the number of heat-related illnesses, such as heat stroke, heat cramps, heat exhaustion, and dehydration, as well as other illnesses and premature deaths. Mortality risk for those 65 or older could increase ten-fold by the 2090s.

**AIR QUALITY WILL LIKELY WORSEN.** Hotter future temperatures will also increase surface ozone concentrations.

**AT TIMES THERE WILL BE DROUGHT.** Droughts will become more severe due to rising temperatures, increasing evaporation and decreasing soil moisture. Despite senior water rights of inland irrigation districts on Colorado River water, serious shortages in the lower Colorado River Basin could result in serious curtailment of water allocation during drought.

**FLOODING WILL BECOME A LARGER PROBLEM.** Projected increases in precipitation could result in larger floods, mudslides and debris flows. Landslides could take place in the San Bernardino and San Jacinto mountains, where complex geology and fault zones intersect steep terrain prone to wildfire risk and heavy precipitation events

**PRESERVING THE SALTON SEA.** The future of the region is highly dependent on the fate of the Salton Sea, which is currently threatened by diminishing levels of inflows from agricultural runoff. As the Sea shrinks, the dry lakebed will grow. It will likely become a major source of dust, polluting the air of the region

1 All citations are from Hopkins, Francesca. (University of California, Riverside). 2018. Inland Deserts Summary Report. California's Fourth Climate Change Assessment. Publication number: SUM-CCCA4-2018-008.



**WILDFIRE WILL BECOME MORE DESTRUCTIVE.** Wildfires will likely increase in frequency and scope throughout the inland area. The most fire prone areas include the San Gorgonio Pass, gateway to the Coachella Valley, and the Cajon Pass leading to the Victor Valley. Strong winds in these areas play a vital role in the spread of wildfires.

WAIT — THERE'S GOOD NEWS. Local governments within the region have made progress to reduce greenhouse gas emissions and make plans to adapt to climate change. Several plans highlighted are: County of Riverside Climate Action Plan (2019), City of Palm Springs Sustainability Plan (2019), Southern California Association of Governments Sustainability Program, City of Calexico Climate Action Plan (2015), Coachella Valley Mountains Conservancy Strategic Plan (2019), and County of San Bernardino Resilience Strategy (2014). Additionally, municipalities within the region are updating their General Plans to include actions on climate mitigation and adaptation.

#### **ACTION(S) TAKEN**

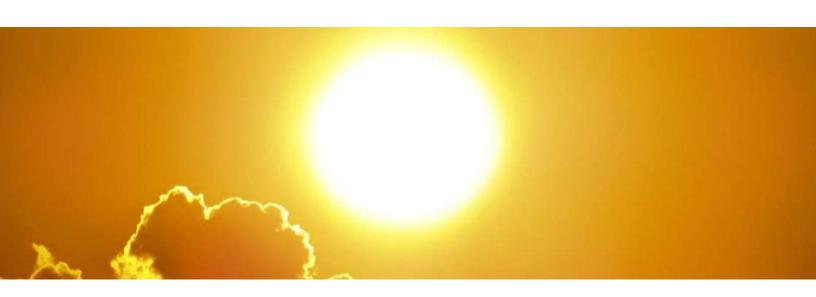
Although the Inland Deserts Region will be impacted in many ways by a changing climate, the region already has specific plans in place to address those impacts with innovative solutions that will create more livable cities for everyone. There are two pieces of legislation and one executive order that drive climate action in California.

- **Senate Bill 32 (2016)** requires California Air Resources Board (CARB) to reduce greenhouse gas emissions to 40% below 1990 levels by 2030.
- Senate Bill 100 (2018) commits California to achieving 100% renewable energy by 2045.
- **Executive Order B-55-18** commits California to achieving carbon neutrality in every sector by 2045.



On the regional level, cities and counties have identified actions and set targets to reduce GHG emissions and address climate change impacts. Highlighted actions include:

- In 2020, the Inland Southern California Climate Collaborative (ISC3) was formed. The ISC3 is a diverse, cross-sectoral network of agencies, organizations, companies, and institutions working together to advance equitable solutions to create a resilient and thriving Inland Southern California in the face of climate change.
- The Western Riverside Council of Governments (WRCOG) Climate Action Plan (2014)
  works to mitigate climate change through a unified, collaborative approach with its member
  cities through actions that reduces emissions, improve air quality, and protects natural
  systems, while promoting healthier communities and enhancing social equity.
- In 2020, WRCOG won a grant from the California Resilience Challenge. The grant will fund the development of a comprehensive Energy Resiliency Plan aimed at improving resilience to power shortages and emergencies.
- The City of Palm Springs Sustainability Plan outlines climate action and resilience strategies that prioritizes greenhouse gas reduction measures with co-benefits that make the community more resilient to climate change.
- The Riverside County Health Coalition is a collaboration of public and private sectors, school districts, community businesses, local and regional organizations and community members committed to policy development and advocacy, environmental change and community empowerment for healthy lifestyles in Riverside County.
- The County of Riverside's Climate Action Plan was updated in 2019 and serves as a framework for the County to continue to reduce greenhouse gas emissions. The plan encourages energy efficiency and renewable energy, development and penetration of zero-emission vehicles (ZEVs), water conservation, and increased waste diversion



- Leadership Counsel for Justice and Accountability based in the East Coachella Valley mobilizes community voices, advocates for sound policies, and eradicates injustice to promote equal access to opportunity regardless of race, income and place.
- The City of Calexico Climate Action Plan
   outlines policies and measures in the
   transportation, energy efficiency, renewable
   energy, and solid waste management sectors
   that the City will implement to reduce citywide
   GHG emissions. Highlighted measures include
   implementing policies that encourage walking
   and biking, safe routes to school programs, and
   gradually replacing city's diesel vehicle fleet
   with CNG and EV buses.
- establishes strategies for reducing municipal and community-wide greenhouse gas (GHG) emissions. Along with the Plan, the City amended their General Plan to include land use policies that encourage sustainable development. Highlighted policy amendments include: contribute to a reduction of vehicle miles traveled (VMT) through land use and zoning measures and conserve imported water by requiring water conservation techniques and water conserving appliances, in rehabilitated and new projects, and



• The San Bernardino County Resilience Strategy Plan identified its most vulnerable and critical County sectors for a focused discussion on key climate impacts to the region and proposed adaptation strategies to protect those most vulnerable. Highlighted strategies include: identify ways for individuals with restricted mobility to reach cooling centers and resilience hubs, coordinate with the san bernardino county homeless partnership and related programs to ensure that shelters are available during highly hazardous events, and integrating climate change adaptation into transportation plans.

**DEFEND CLIMATE PROGRESS.** These climate action policies often come under attack from fossil fuel and other corporate interests. Above all else, the State's existing climate policies need to be defended.

**NEXT STEPS.** Here are some actions that you can take right now to prepare for the impact of climate change in the Inland Deserts region.

- **THE MAIN PROBLEM... WELL, IT'S CARS.** The leading source of greenhouse gas emissions in California is from the transportation sector. How do we reduce those emissions? First, by building affordable housing near public transit, and by creating neighborhoods that promote biking, scootering and walking. Another essential climate strategy is to encourage transition to electric and hydrogen-fueled vehicles
- **COMMUNITY CHOICE ENERGY.** Local community and municipal programs allow households to choose how much of their energy consumption comes from renewable energy resources, thereby lowering greenhouse gas emissions and ensuring electricity grid resilience.
- **COOL DOWN NOW.** Deploy "cool roofs" cool roofs cool your buildings, protect the people working or living inside, reduce energy consumption and even reduce smog.
- WATER IS LIFE. Take advantage of free water conservation initiatives provided by Metropolitan Water and local water utilities these products not only lower water bills, they save greenhouse gas emissions and help communities become more resilient.
- THIS AIN'T MARYLAND. Convert grass lawns with a turf replacement program and replace them with California-friendly landscaping to conserve water, save money on utility bills, and create a wildlife-friendly environment. Turf conversion programs are often provided by Metropolitan Water and local water utilities.

There are many cost effective strategies that Californians can adopt around the home that can improve their quality of life and help with climate change.

- SOLAR PANEL PRICES ARE DROPPING. The price of photovoltaic panels has dropped significantly. The return on investment could be just a few short years.
- appliances can be the biggest energy users in a household. Homeowners can make a big difference by making sure their air-conditioners and heaters are working efficiently. Taking care of these appliances can save residents money, energy, and ensure comfort on days with extreme weather.



- APPLIANCE RECYCLING AND EXCHANGE PROGRAMS. Local utilities may help you recycle
  old appliances, and in some cases, replace them with new, energy efficient ones.
- **EFFICIENCY PAYS DIVIDENDS.** Energy efficient light bulbs and appliances may be eligible for rebates through online marketplace websites from utility companies like SCE. They lower utility bills and a household's carbon footprint.
- **NATIVE PLANTS AND GARDENS.** Local organizations and utilities can provide rebates and instructions on converting your lawn into a native plant garden, which can help you save on your bill, conserve water, and create sustainable green space in your community.
- CAPTURE AND STORE RAINWATER. Local and state utilities have programs to subsidize purchases of water storage barrels and cisterns that can store up to 1,000 gallons of water. According to the American Rainwater Catchment Systems Association, a house with a 1,500-square-foot roof in an area that receives 7 inches of rain a year (Inland Deserts averages 6-8 inches) could collect 6,500 gallons of water in a year.

In the face of pandemics and other threats, climate solutions can also foster greater social connection and community resilience at-large.

- ORGANIZE THE NEIGHBORHOOD. Climate action starts when community members
  organize, educate their neighbors, and unite around common principles. Neighbors learn
  about each other's needs and priorities, about where their resources come from, about how
  their local economies are run. They learn the power of their collective voice and the
  importance of knowing their neighborhood and their neighbors.
- **JOIN A CLIMATE COLLABORATIVE.** The Inland Southern California Climate Collaborative facilitates the work of local governments in Riverside, San Bernardino and Imperial counties.
- **COOLING AND RESILIENCE CENTERS.** Expand the use of cooling centers make them into resilience centers spaces such as libraries, senior centers, rec centers, and pools serve as designated areas to assist the public in times of need.



- **PROTECT NATURE.** Finally, the Inland Deserts region is famous for its natural beauty, which is accessible to families, outdoor enthusiasts who enjoy hiking and strolling on trails. Protecting this is incredibly valuable for its own sake, let alone from a climate resilience or mitigation perspective.
- **GROW A CIVIC CULTURE.** Engage with people who may at first show uninterest, especially disenfranchised people. Give them the tools to engage with the political process through the lens of climate action and sustainability.

#### More about CCEDA and Climate Resolve

**CCEDA** is comprised of organizations actively engaged in revitalizing California's **neighborhoods** and its members produce results through a full range of community building strategies including real estate development-housing, retail and commercial-business assistance and lending, social services, and job training and creation. Additionally, CCEDA provides its members a clearinghouse for information and action that advances the field of community economic development.

Climate Resolve builds collaborations to champion equitable climate solutions. We connect communities, organizations and policymakers to address a global problem with local action. We inclusively develop practical initiatives that reduce climate pollution and prepare for climate impacts. Our purpose is a just and resilient future.



For more information on climate leadership in your community contact the California Community Economic Development Association:

244 San Pedro St # 412, Los Angeles, CA 90012

cceda.com | (213) 625-0105

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