

CLIMATE CHANGE

California is on the frontline of the global climate crisis with record-breaking heat, extreme flooding, and devastating wildfires impacting communities across the state. The summer months of 2022 included extreme heat waves and drought conditions, and 2023 began with statewide flood events in the winter and spring.

The 2021 and 2022 Budget Acts allocated approximately \$54 billion over five years and delivered a climate agenda to fully integrate climate solutions with equity and economic opportunity. With critical investments in health, education, and jobs the state's climate agenda is simultaneously confronting the crisis while building a more resilient, just, and equitable future for all Californians.

The Budget maintains approximately \$51.4 billion (95 percent) of these investments. The Budget prioritizes equity and investments in populations facing disproportionate harm from pollution and the climate crisis. Further, the Budget includes an additional \$890 million in new climate expenditures for a total approximately \$52.3 billion over six years. The Administration also continues to pursue available federal climate funding, including the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA) and will also engage the Legislature to explore a climate resilience bond.

CLIMATE PILLAR LEGISLATION IMPLEMENTATION

In 2022, California enacted landmark legislation to advance the Administration's climate goals of cutting pollution, advancing carbon neutrality, developing a carbon

removal target date for natural and working lands, and accelerating the state's transition to clean energy. The Administration has begun these initiatives and the Budget includes resources to continue their implementation.

- **Nature-Based Solutions**—Chapter 341, Statutes of 2022 (AB 1757) outlined a comprehensive portfolio of initiatives that include setting targets, quantifying and reporting progress, updating the state strategy, and engaging with experts, to develop an ambitious range of targets for natural and working lands. The Budget includes \$7.6 million General Fund and Cost of Implementation Account in 2023-24 and \$5 million ongoing to support implementation.
- **Clean Electric Grid**—Chapter 361, Statutes of 2022 (SB 1020) advances new interim clean energy targets for California while increasing community engagement. The bill requires eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035; 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040; and 100 percent of electricity procured to serve all state agencies by December 31, 2035. SB 1020 accelerates Chapter 312, Statutes of 2018 (SB 100) requirements for state agencies by ten years. The Budget includes \$4 million from various funds (General Fund, Cost of Implementation Account, Greenhouse Gas Reduction Fund, and Public Utilities Commission Utilities Reimbursement Account) in 2023-24, and additional ongoing funds, across multiple agencies to support implementation.
- **Carbon Sequestration**—Chapter 359, Statutes of 2022 (SB 905) establishes a framework for capture, utilization, and storage of compressed carbon dioxide and created the Carbon Capture, Removal, Utilization, and Storage Program. The Budget includes \$7.8 million Cost of Implementation Account for the State Air Resources Board (\$3.6 million), Department of Conservation (\$3.7 million), and State Water Resources Control Board (\$280,000) in 2023-24 and ongoing to support implementation.

WESTERN JOSHUA TREE CONSERVATION ACT

The western Joshua tree is an iconic, ecologically and culturally important species that is an irreplaceable component of California's natural heritage. The impacts of climate change are occurring with more intensity and frequency than previously anticipated and are threatening the western Joshua tree. At the same time, achieving a clean

energy future and providing housing for all Californians are among the highest of state priorities.

The Western Joshua Tree Conservation Act provides for the conservation of this universally important species at a landscape scale, while establishing an efficient process to permit incidental take of the western Joshua tree subject to conditions for avoidance, minimization, and mitigation through payment of in-lieu fees. The Act thus protects and conserves the western Joshua tree while facilitating much-needed renewable energy projects to reduce the impacts of climate change and critical housing needs.

For the first time, the Act establishes a requirement for the Department of Fish and Wildlife to directly advance Tribal co-management, include Tribal knowledge in management of the species, and relocate trees onto Tribal lands upon request. The Act provides for development and adoption of a range-wide conservation plan for the western Joshua tree that will guide conservation efforts, permitting conditions, relocation of trees, and expenditures of in-lieu fees for the conservation of the species.

Recent budgets have included billions of dollars for clean energy and housing program investments. The Western Joshua Tree Conservation Act will facilitate permitting processes to help advance clean energy and housing projects in the region that align with these investments. The Budget includes \$5 million one-time General Fund to convene stakeholders to provide input to the Department of Fish and Wildlife in its western Joshua tree conservation efforts.

CLIMATE INVESTMENTS

ZERO EMISSION VEHICLES

With nearly half of the nation's Zero Emission Vehicles (ZEVs), and with recently adopted mandates for moving to clean trucks and buses, California is demonstrating to the world that a zero-emission transportation future is possible. The state recently achieved its goal of 1.5 million ZEVs on the road—two years ahead of schedule.

The 2021 and 2022 Budget Acts committed \$10 billion over five years in investments to the state's ZEV agenda—ranging from cleaning up short-haul trucks and school buses to accelerating equitable electrification of passenger vehicles—coupled with infrastructure and incentives for in-state manufacturing.

The Budget maintains \$10.1 billion (100 percent) over six years in investments to the state's ZEV agenda—including targeted investments in disadvantaged and low-income communities by increasing access to the benefits of clean transportation and by continuing to decarbonize California's transportation sector and improve public health. The Budget offsets \$3.2 billion of General Fund reductions across various ZEV programs with approximately \$3.2 billion in fund shifts to the Greenhouse Gas Reduction Fund to specified programs. The Budget also includes an additional \$2.3 million General Fund investment to support a zero-emission jobs roadmap.

TRANSPORTATION

As the largest contributor of California's greenhouse gas emissions, the transportation sector must align project delivery with climate change considerations. The Budget demonstrates a continued commitment to address transportation-related climate issues.

The Budget includes \$14.9 billion in various funds—an increase of \$1.1 billion from the 2022 Budget Act for transportation programs and projects that align with the state's climate goals.

In addition to the 2022 funding levels, the Budget includes \$1.1 billion Greenhouse Gas Reduction Fund and Public Transportation Account funding for the new Zero-Emission Transit Capital Program. This program will fund zero emission vehicles and associated infrastructure or transit operations. Given the projected decline in General Fund revenues, the Budget also includes a \$500 million fund shift from General Fund to state transportation funds.

This considerable investment puts California in a competitive position as it pursues substantial federal funding from the IIJA and other programs by leveraging funding from both state and local sources.

SIGNIFICANT ADJUSTMENTS

- **Transit Intercity Rail Capital & Zero-Emission Transit Capital Programs**—The Budget provides \$5.1 billion in additional program funding as part of the \$8.8 billion multi-year augmentation for local transit capital infrastructure and zero emission vehicle projects. These funds will be allocated by formula, with additional flexibility for transit operators to make capital improvements or address operational shortfalls

as ridership remains below pre-pandemic figures. This additional flexibility in funding is accompanied by new statutory accountability and reporting requirements.

- **Active Transportation Program**—The Budget includes \$500 million for the Active Transportation Program as part of a \$1.05 billion total package. The program provides funding for projects that increase the proportion of trips accomplished by walking or biking, and increases the safety and mobility of non-motorized users.
- **Climate Adaptation Program**—The Budget replaces \$200 million General Fund with \$200 million State Highway Account funding for the Climate Adaptation Program. Matched with \$200 million federal IIJA funding, this results in \$400 million for projects that support climate resiliency and reduces infrastructure risk.
- **High-Priority Grade Separations**—The Budget contains a delay of \$350 million in funding originally planned for these projects to be available in 2023-24, which will instead be made available in 2025-26. Given the multi-year nature of these types of projects, this shift should not significantly impact the ability to deliver the same number of projects that will improve safety for people walking, biking, and driving at rail crossings.

WILDFIRE AND FOREST RESILIENCE

The ongoing impact of climate change on California's wildlands continues to drive critically dry fuel conditions and longer, more severe fire seasons. The 2021 and 2022 Budget Acts committed \$2.8 billion over four years to continue strengthening forest and wildfire resilience statewide.

The Budget maintains \$2.7 billion (98 percent) of these investments over four years to advance critical investments in restoring forest and wildland health to continue to reduce the risk of catastrophic wildfires in the face of extreme climate conditions. The Budget includes \$61 million in General Fund reductions across various programs, which include, but are not limited to, Climate Catalyst Fund, Stewardship of State-Owned Lands, and Workforce Training. These reductions are offset in part by a \$14 million shift to Proposition 98.

WATER

The past five years have been marked by weather extremes—a wet 2019 followed by three years of drought conditions. At the outset of the current water year, which began last October, about 90 percent of the state was gripped by drought conditions, major

reservoirs held 69 percent of average storage, hundreds of thousands of acres of farmland had been fallowed for lack of irrigation water surface supplies, and wells were going dry.

Over three weeks in late December 2022 and early January 2023, a series of atmospheric river storms brought record flooding to several locations. A series of cold storms then brought record-breaking snowfall, followed by another series of warm atmospheric river storms. By April 1, the San Joaquin region recorded its wettest October-March in the observed record since 1896. In addition, the Southern Sierra Nevada recorded its largest snowpack for April 1 since 1950. This set the stage for additional spring flooding in the San Joaquin Basin and the lakebed of the former Tulare Lake.

The 2021 and 2022 Budget Acts committed \$8.7 billion over multiple years to support drought resilience and response programs to help communities and fish and wildlife avoid immediate impacts from extreme drought, while advancing projects and programs that will improve the state's resilience to future droughts and floods.

The Budget maintains \$8.1 billion (93 percent) of these investments over multiple years in programs and projects to bolster the capacity of communities and ecosystems to endure droughts and floods. The Budget reflects \$632 million in General Fund reductions and \$455 million in delays across various programs which include, but are not limited to, water recycling, Salton Sea restoration, and water conservation programs. At the same time, the Budget includes new strategic investments to continue supporting the state's drought response, accelerate implementation of the state's Water Supply Strategy, and increase flood preparedness and response.

SIGNIFICANT ADJUSTMENTS

- **Water and Wastewater Arrearages**—Shifts \$200 million Coronavirus Fiscal Recovery Fund of 2021 from the Department of Community Services and Development to the State Water Resources Control Board to extend the California Water and Wastewater Arrearage Payment Program supported by the American Rescue Plan Act of 2021. The Budget extends the end date of the eligible period of arrearage forgiveness from June 15, 2021, to December 31, 2022. These funds are in addition to approximately \$400 million already available to support the Program.
- **Lead in Schools**—An increase of \$25 million one-time General Fund for the State Water Resources Control Board to support work associated with lead in schools, contingent on enactment of associated legislation.

- **High Priority Stream Gages**—An increase of \$23.9 million General Fund in 2023-24 and \$2.8 million in 2024-25 to support reactivation and deployment of priority stream gages consistent with the SB 19 Stream Gaging Prioritization Plan.
- **Monterey Fish Screens**—An increase of \$17 million one-time General Fund to backfill for previously reverted funds for installation of fish screens.

TULARE BASIN AND STATEWIDE FLOOD RESPONSE AND SUPPORT

Many communities across the state have been significantly affected by the historic atmospheric rivers from recent storms. The Tulare Basin and other areas of the state prepared for and responded to additional flooding due to the snowmelt from the historic levels of snowpack.

Flooding impacts in the Tulare region worsened through the spring and into the early summer as snowmelt escalated due to higher temperatures in the Sierra Nevada. State, local, and federal partners worked collaboratively through the spring on snowmelt forecasting, reservoir operations, flooding assessments, and flood response support to best position the region to respond to and lessen flooding impacts on communities.

As a result of the Governor's Executive Order N-6-23 on March 31, the state was able to expedite levee repairs, floodwater diversion and other emergency response activities. California also secured a Presidential Major Disaster Declaration to support storm response and recovery in Tulare County and other impacted counties.

Building on the Administration's continuing commitment to address statewide flood impacts, the Budget includes \$436 million one-time General Fund to support various at-risk communities, including those in the Tulare Basin, from these impacts and to better withstand future flood events. These include:

- **Urban Flood Risk Reduction**—\$135.5 million General Fund over two years to support local agencies working to reduce urban flood risk.
- **Delta Levees**—\$40.6 million General Fund and bond funds for ongoing Delta projects that reduce risk of levee failure and flooding, provide habitat benefits, and reduce the risk of saltwater intrusion contaminating water supplies.
- **Central Valley Flood Protection**—\$25 million General Fund to support projects that will reduce the risk of flooding for Central Valley communities while contributing to ecosystem restoration and agricultural sustainability.

- **Flood Contingency**—\$135 million one-time General Fund as a flood contingency set aside to support costs associated with preparedness, response, recovery, and other associated activities related to the 2023 storms, the resulting snowmelt, and other flooding risks, including, but not limited to, supporting communities and vulnerable populations, such as farmworkers, from these impacts and to better withstand future flood events. This includes \$20 million to support flood relief in the community of Pajaro and \$20 million to support flood relief in the community of Planada.
- **Flood Control Subventions**—\$75 million one-time General Fund to support local flood control projects, including in communities impacted by recent storms, such as the Pajaro River Flood Risk Management Project.
- **Small Agricultural Business Relief Grants and California Underserved and Small Producer Farmer Program (CUSP)**—An increase of \$20 million one-time General Fund for the California Small Agricultural Business Drought Relief Grant Program and \$5 million for CUSP to provide direct assistance to eligible agriculture-related businesses that have been affected by the recent storms.

The Budget also includes legislation that streamlines regulatory requirements to allow for diversion of flood flows for underground storage, subject to screening and other conditions to protect water quality, infrastructure, and wildlife habitats. Recognizing the extreme drought gripping the Colorado River, the legislation also extends certain streamlining efforts related to water conservation in that basin.

NATURE-BASED SOLUTIONS

California's natural and working lands are essential to combating climate change and protecting the state's world-renowned biodiversity. Trees, plants, grasses, and soils remove and store carbon dioxide from the atmosphere. Healthy landscapes can provide a powerful "sink" to absorb greenhouse gases and help achieve the state's 2045 carbon neutrality goal.

In 2022, over 190 countries joined the 30x30 Initiative, following California's lead in committing to conserve 30 percent of the state's lands and coastal water by 2030 to protect biodiversity, expand equitable access to nature and its benefits, combat climate change, and build resilience to climate impacts.

The 2021 and 2022 Budget Acts committed \$1.6 billion for nature-based solutions. The Budget maintains \$1.4 billion (90 percent) of these investments over multiple years in program that support nature-based solutions. The Budget includes \$155 million in

General Fund reductions across various programs which include, but are not limited to, state conservancy programs, Natural Community Conservation Program, and Climate Smart Land Management Program. The Budget also includes a new investment of \$9.5 million one-time General Fund for the Ocean Protection Council to support the Intertidal Biodiversity DNA Barcode Library.

EXTREME HEAT

Extreme heat ranks amongst the deadliest of all climate change hazards. Projections indicate all regions of California will be affected in the years and decades ahead by higher average temperatures and more frequent and life-threatening heat waves, disproportionately impacting the most vulnerable communities. The Administration is aggressively implementing actions in the Extreme Heat Action Plan, finalized in 2022.

The 2021 and 2022 Budget Acts committed \$649 million for extreme heat. The Budget maintains \$404 million (62 percent) of these investments over multiple years in programs and projects to support extreme heat. The Budget includes \$303 million of General Fund reductions across various programs, which include, but are not limited to, Urban Greening, the Low-Income Weatherization Program, and the Extreme Heat and Community Resilience Program. These reductions are offset in part by \$58 million in fund shifts to the Greenhouse Gas Reduction Fund.

COMMUNITY RESILIENCE

California's communities face complex challenges from climate change—both from its direct impacts, and from its compounding effects on existing stressors and inequities—which is why California's Climate Adaptation Strategy prioritizes the protection of vulnerable communities.

The 2021 and 2022 Budget Acts committed \$1.9 billion for community resilience investments over multiple years to advance climate resilience in low-income and underrepresented communities. The Budget maintains \$1.5 billion (79 percent) of these investments over multiple years in programs and projects to promote community resilience. The Budget reflects \$630 million of General Fund reductions and \$85 million in delays across various program, which include but are not limited to, Community Resilience Centers, Regional Climate Resilience, and Transformative Climate Communities Programs. These reductions are offset in part by \$250 million in fund shifts to the Greenhouse Gas Reduction Fund.

COASTAL RESILIENCE

The impacts of climate change on the coast and ocean include sea-level rise, more extreme storm events, coastal erosion, increased water temperatures, and ocean acidification. These impacts affect public and private property and infrastructure, public access to and along the coast, ecosystem health, and California's coastal economy, including tourism and fishing.

The 2021 and 2022 Budget Acts committed \$1.3 billion for coastal resilience over multiple years. The Budget maintains \$1.1 billion (86 percent) of these investments over multiple years in programs and projects for coastal resilience. The Budget reflects \$184 million in General Fund reductions across several coastal protection and adaptation programs.

SUSTAINABLE AGRICULTURE

California's agricultural industry is where unrivaled innovation meets world-renowned output. In the face of mounting climate change-driven challenges like drought and extreme heat, California's farmers continue to produce food that improves nutritional outcomes in historically underserved communities and feeds households across the state, across the country, and around the world. California agriculture is also on the frontline of fighting climate change by pioneering climate smart agriculture that fosters innovation in carbon sequestration, emissions reduction, and ecosystem resilience improvements.

The 2021 and 2022 Budget Acts committed \$1.1 billion over multiple years for climate smart agriculture investments and to help foster a healthy, resilient, and equitable food system.

The Budget maintains \$1.1 billion (92 percent) of these investments. The Budget includes \$144 million in General Fund reductions across various programs, which include but are not limited to, Healthy Soils Program, Pollinator Habitat Program, and Conservation Agriculture Planning Grant Program. These reductions are offset in part by a shift of \$50 million to the Greenhouse Gas Reduction Fund. The Budget also includes an additional \$140 million of new investments for the CalFresh Market Match Program, Funding Agricultural Replacement Measures for Emission Reductions Program, Enteric Fermentation Incentive Program, and Organic Transition Pilot Program.

CIRCULAR ECONOMY

Building the circular economy will help California combat climate change and move to a carbon neutral future by reducing methane pollution and plastic waste. The 2021 and 2022 Budget Acts included \$468 million over two years for programs supporting a circular economy that recognizes waste as a resource, shifting the state's focus to a more resilient and renewable economy.

The Budget maintains \$443 million (95 percent) of these investments to support implementation of goals to reduce short-lived climate pollutants and advance organic waste infrastructure. The Budget includes \$25 million in General Fund reductions across several programs which include, but are not limited to, Composting, and Recycling Feasibility Grant Programs.

Successfully building California's circular economy will require innovative solutions and approaches to waste. To this end, the Budget also includes \$2.3 million from various special funds for the Department of Resource Recycling and Recovery to develop a zero-waste plan that serves as a roadmap for the transition to a true circular economy that reduces use of natural resources, brings new remanufacturing industries and jobs to the state, and enhances the ability of Californians to recycle.

ENERGY

California is experiencing a substantial shift in conditions affecting its transition to a clean energy future from climate change. This is creating new and compounding challenges to electric service reliability and affordability for all Californians, especially in disadvantaged and low-income communities.

The 2022 Budget Act provided a total of \$7.9 billion in energy budget investments and legislative actions to expedite the state's transition to clean energy, and funded important reliability programs that provided critical support to the grid during last September's record-breaking heat event. In addition, Chapter 239, Statutes of 2022 (SB 846) proposed \$1 billion over three years beginning in 2023-24 for a Clean Energy Reliability Investment Plan, subject to future appropriation.

The Budget maintains approximately \$7 billion (88 percent) of last year's historic \$7.9 billion investment in a clean energy agenda including investments in areas such as building decarbonization, transmission development, and long duration energy storage. The Budget continues to support building a clean, reliable, affordable, and safe electric

grid by appropriating \$100 million of the one-time \$1 billion investment in programs and projects as proposed by the Clean Energy Reliability Investment Plan, pursuant to Chapter 239, Statutes of 2022 (SB 846). The Administration is committed to continuing discussion with the Legislature on the remaining \$900 million in funding available for the Plan, subject to appropriation.

The state will continue to prioritize affordability, reliability and safety as it encourages efforts to decarbonize the electric grid and scale the deployment of clean electric generation and energy storage projects—evidenced by the historic level of General Fund investment in the 2022 Budget Act that is maintained in the 2023 Budget.

With more definitive guidance from federal agencies, the state agencies are also pursuing IJA and IRA funding through formula and competitive grant opportunities. The state is positioning itself to secure large amounts of this federal funding and direct it toward California's energy priorities.

The Budget includes \$2.9 billion General Fund in reductions and \$863 million General Fund in delays to future years. Affected programs impacted include, but are not limited to, residential solar and storage, long duration energy storage, and equitable building decarbonization. These are offset in part by a \$1.1 billion fund shift to Greenhouse Gas Reduction Fund.

OTHER ENERGY-RELATED ADJUSTMENT

- **Climate Innovation Program**—A reduction of \$48 million in 2022-23 and a delay of \$150 million of funds in the current year and the budget year to 2026-27 for the Climate Innovation Program at the California Energy Commission (CEC).

TRANSPORTATION FUELS—CONSUMER PRICE GOUGING PROTECTIONS

The Budget supports the implementation of Chapter 1, Statutes of 2023, First Extraordinary Session (SB x1-2), to protect Californians from experiencing price gouging at the pump by oil companies. From August to October 2022, Californians paid some of the highest gasoline prices ever recorded in the state—reaching a record \$6.42 per gallon—even though the price of crude oil was declining, state taxes and fees remained unchanged, and gasoline prices did not increase outside the western United States.

Recognizing the need for greater transparency in the pricing, contracting, and marketing practices of the transportation fuels industry participants, SB x1-2 was

enacted in March and became effective in June 2023. The legislation authorizes the CEC to establish a maximum gross refining margin of profit that refiners can make above the costs of doing business. The law also includes provisions that require greater transparency into the petroleum supply chain by requiring increased reporting and by creating a new, independent division within the CEC to oversee the adequate, affordable, and reliable supply of this resource. This is especially important to manage petroleum supply price volatility as the state transitions from petroleum-based fuels toward cleaner fuels to meet transportation needs. To implement the bill's measures, the Budget includes the following resources to several state agencies so that they may carry out their new tasks and responsibilities:

- \$5.9 million Energy Resources Programs Account and 14 positions on an ongoing basis for the CEC to collect new data, analyze and track trends in the petroleum supply chain and pricing, produce required reports, and establish a new oversight division, which will collectively help maintain a reliable supply of affordable and safe transportation fuels in California. Additionally, the Commission will redirect 10 existing positions internally to support the new Division of Petroleum Market Oversight.
- \$1 million one-time Cost of Implementation Account for the California Air Resources Board to support development of the Transportation Fuels Transition Plan.
- \$286,000 Occupational Safety and Health Fund and 1 position for the Department of Industrial Relations to support analysis on managing refinery turnaround and maintenance schedules to prevent price spikes.

CLIMATE HEALTH

Climate change affects the health of every Californian, but some communities experience disproportionate public health impacts from climate change more than others. The 2022 Budget allocated \$346 million General Fund over multiple years for investments to address the health impacts of climate change.

The Budget maintains \$321 million (93 percent) of these investments in recognition of the continuing statewide goal of mitigating the health impacts of climate change. The Budget includes \$25 million of General Fund reductions and \$115 million in delays, affecting programs that include the Community Health Worker Program and Climate Health Resilience Planning Program. If there is sufficient General Fund in January 2024, reductions not otherwise offset by other funds or delayed will be restored. See the Introduction Chapter for further information on this trigger.