



2021 WATER RESILIENCE PORTFOLIO

Progress Report

About the California Water Resilience Portfolio

In April 2019, Governor Gavin Newsom issued an Executive Order directing state agencies to develop recommendations to enable water security for all Californians. His Executive Order N-10-19 stated:

“California’s water challenges are daunting, from severely depleted groundwater basins to vulnerable infrastructure to unsafe drinking water in far too many communities. Climate change magnifies the risk. To meet these challenges, we need to harness the best in science, engineering, and innovation to prepare for what’s ahead and ensure long-term water resilience and health. We’ll need an all-of-the-above approach to get there.”

In the Executive Order, the Governor called on the California Natural Resources Agency, California Environmental Protection Agency, and California Department of Food and Agriculture to develop a “water resilience portfolio,” described as a set of actions to meet California’s water needs through the 21st century. The Governor emphasized the need for actions that provide multiple benefits, utilize natural infrastructure such as forests and floodplains, embrace new technologies, encourage regional approaches, and build integration across state government and partnerships across diverse interests.

Following the Governor’s direction, state agencies developed the Newsom Administration’s Water Resilience Portfolio with extensive stakeholder input. The agencies released a final strategy in July 2020. The document includes 142 separate actions to be taken by state agencies, as resources allow. Taken together, the actions strengthen state support for local efforts to withstand drought and flood, provide safe and reliable water supplies to all communities, and protect natural systems.

The portfolio recognizes that in California, water is largely managed at the local and regional level. Water supplies and needs vary tremendously by location, and so resilience will be achieved region by region, based on unique challenges and opportunities. The portfolio focuses on the state’s role as a funder, operator of inter-regional infrastructure, maker of laws and policies, gatherer and sharer of data, conductor of research, setter of standards, catalyzer for coordination, emergency responder, and partner in addressing problems beyond the capacity of any single region to address. Our progress toward regional water resilience varies by location, but the Water Resilience Portfolio unites state government in fostering that progress.

On the cover: North Fork, American River.
Photo by Bob Wick, BLM.

CONTENTS

Executive Summary 2

 By the Numbers: Actions reduced to numbers, colors and bars

The Progress Report 4

 The Progress Report Key

 Maintain and Diversify Water Supplies 5

 Protect and Enhance Natural Systems 23

 Build Connections 45

 Be Prepared 56

 Executing This Portfolio 67

Appendix 75

 Executive Order N-10-19 76

EXECUTIVE SUMMARY

State agencies immediately began implementing the Water Resilience Portfolio once it was finalized in July 2020. The 142 specific tasks in the portfolio channel state resources to support local work, all with the aim of maintaining and diversifying water supplies, protecting and enhancing natural systems, building connections, and being prepared. Eighteen months after issuing the portfolio, we mark significant progress implementing its actions: Key areas of progress since July 2020 include (but are not limited to):

- Since the start of the Safe and Affordable Fund for Equity and Resilience program in July 2019 through September 2021, the program has provided 141 communities and 364 households with interim drinking water solutions, 185 communities with planning assistance, and 126 communities with long-term solutions to safe drinking water problems.
- In the five months since August 2021, the Department of Water Resources and the State Water Resources Control Board have invested \$92 million in state funds to assist 48 separate small communities across the state with drought-related drinking water supply problems. The funded projects include refurbished wells, new wells and storage tanks, replacement of leaking distribution pipes, and connections to larger, more reliable systems that should leave communities better able to handle the next drought.
- The local water agencies pursuing six new water storage projects eligible for \$2.7 billion in state water bond funding advanced their projects in 2021; all projects were deemed feasible by the California Water Commission after completing draft environmental documents and arranging non-state financing, among other requirements. If completed, those six projects together would expand storage capacity in the state by nearly 2.8 million acre-feet of water.
- The state has aligned planning, technical, and financial assistance to support local agencies implementing groundwater sustainability plans. In April 2021, the state awarded \$26 million for the construction of local projects. An additional \$300 million will be disbursed for planning and projects in coming months. A new \$50 million grant program will support local reuse of farmland where more acres are currently irrigated than groundwater aquifers can support.
- In August 2021, DWR began the first flights of statewide airborne electromagnetic geophysical surveys in groundwater basins along the Central Coast. Conducted statewide over the next few years, these surveys will provide near-continuous data describing the geology of the subsurface that controls the flow of groundwater in the high- and medium-priority groundwater basins, where feasible. The data will inform groundwater sustainability agencies and counties seeking to manage their groundwater sustainably and support land use planning efforts, such as protecting and maximizing recharge areas.
- The decades-long effort to remove four obsolete dams from the Klamath River achieved an important milestone in June 2021, when the Federal Energy Regulatory Commission approved an order transferring ownership of four Klamath River dams from the private utility PacifiCorp to the states of California, Oregon, and the Klamath River Renewal Corporation, a non-profit entity established to remove the dams. FERC is now preparing an environmental impact statement for the dam removal project. Dam deconstruction may begin as early as 2023.

Momentum will continue to build over the next three years, propelled by a robust state funding package in the 2021-22 state budget for drought relief and long-term water resilience. That funding package reflects portfolio priorities. It includes meaningful investments in getting safe drinking water to all communities, recycling wastewater, managing groundwater, repairing water

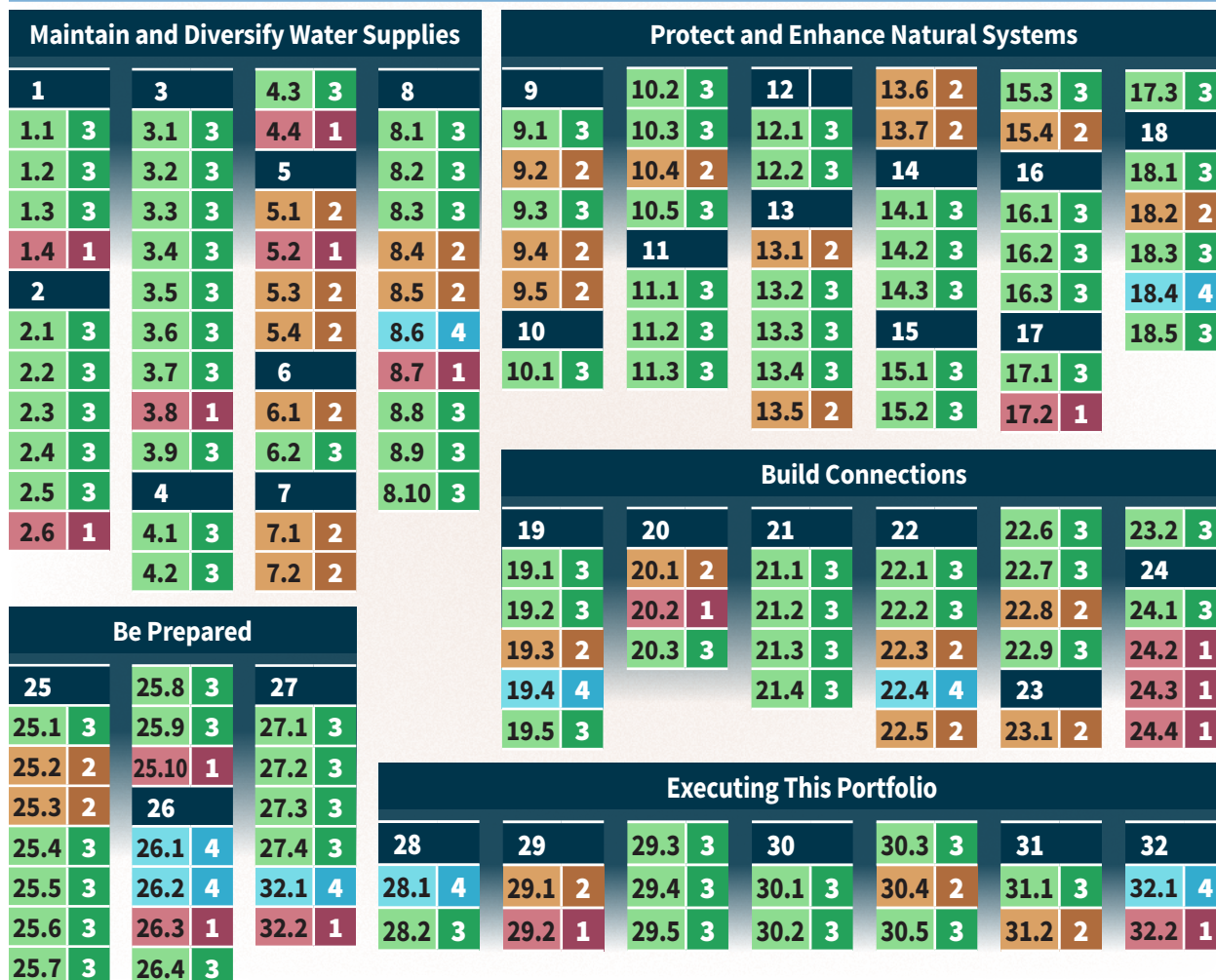
conveyance structures, restoring habitat, making agriculture more wildlife friendly, responding to and preparing for drought, anticipating flood, improving water data and forecasting, and upgrading the state's water right data system, among other actions.

Climate-driven extremes are testing California water systems. The two years following July 2020 rank among the hottest and driest in California's history. In October 2021, an atmospheric river punctuated the drought with such heavy precipitation that it set new records in some cities. The record-breaking deluge did not, however, end drought – a parched landscape

soaked up the rain, and major reservoir storage remains below average. While we recalibrate our expectations of extreme precipitation, long-standing challenges also demand solutions. Major pieces of water infrastructure are aging. Many communities lack unsafe and unreliable water supplies. Fish and wildlife struggle to survive in rivers, streams, and estuaries altered by dams, diversions, and pollution. The portfolio aligns state agencies to respond to old and new risks.

The following pages provide updates on all 142 actions in the portfolio and detail collaboration and coordination underway across California to address water challenges.

BY THE NUMBERS: Action progress reduced to numbers, colors and bars



THE PROGRESS REPORT

The pages that follow list each of the 142 separate actions in the final Water Resilience Portfolio, with a description of progress made since the Portfolio was released in July 2020. State agencies will continue to track progress and issue periodic reports.

The Progress Report Key

The state agencies assigned one of four numbers to each action in the Portfolio to try to capture the current stage of progress:

| | | | | | | | |
|----------|---|----------|---|----------|--|----------|--|
| 1 | Scoping, organizing, defining actions and project goals and outcomes in progress. | 2 | Securing funding, logistics, support materials; groundbreaking; beginning project work. | 3 | Work, documentation and reporting in progress. | 4 | Work nearly complete or completed; assessment or integration into ongoing efforts continues. |
|----------|---|----------|---|----------|--|----------|--|

Agency Acronyms Explained

| | |
|---------------------------|---|
| CDFW | California Department of Fish and Wildlife |
| CalEPA | California Environmental Protection Agency |
| CDFA | California Department of Food and Agriculture |
| CNRA | California Natural Resources Agency |
| Cal OES | California Office of Emergency Services |
| CPUC | California Public Utilities Commission |
| DWR | California Department of Water Resources |
| Flood Board | Central Valley Flood Protection Board |
| Water Boards | Regional Water Quality Control Boards |
| Water Board | State Water Resources Control Board |

The Water Resilience Portfolio (July 2020) final document

Find the document at https://waterresilience.ca.gov/wp-content/uploads/2020/07/Final_California-Water-Resilience-Portfolio-2020_ADA3_v2_ay11-opt.pdf.