

# Paying for Climate Adaptation in California

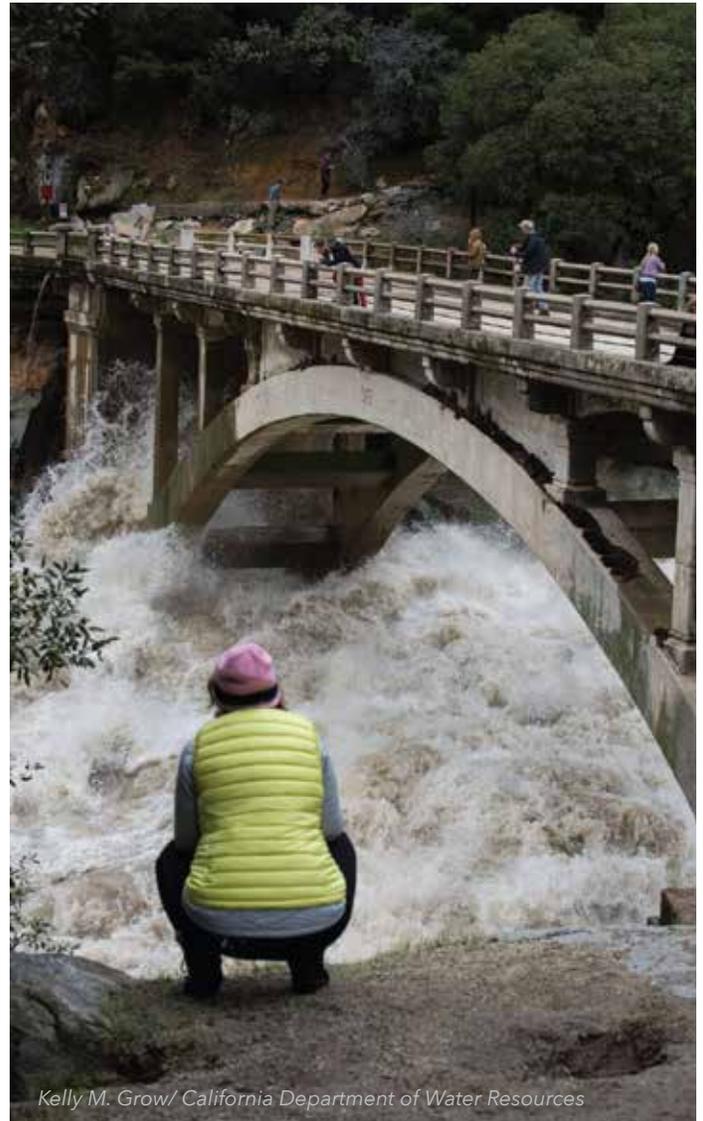
## A Primer for Practitioners

### **CLIMATE CHANGE EFFECTS, ALREADY MANIFESTING, DEMAND BIG INVESTMENTS.**

Weather extremes threaten California's water, gas, electric, and transportation systems and natural ecosystems. For example, coastal highways must be realigned. The electrical grid must be upgraded to handle an increasing number of extreme heat days. Rural communities dependent on shallow groundwater wells need drought-proof supplies. Millions of flammable trees killed by drought-related disease must be managed across California forests. Public health, emergency response, and job training warrant investment, too.

### **HOW TO PAY FOR THESE INVESTMENTS?**

An October 2018 report by engineering firm AECOM and Resources Legacy Fund synthesizes information local, regional, and state leaders need to begin securing the money to pay for climate change adaptation and resilience projects. The report, available at [resourceslegacyfund.org/reports-and-publications](https://resourceslegacyfund.org/reports-and-publications), gives a foundational understanding of existing constraints and opportunities so that project leaders and policy makers can better address critical infrastructure needs to build a more equitable and resilient California.



*Kelly M. Grow/ California Department of Water Resources*

*Old Route 49 bridge crossing over the South Yuba River in Nevada City during the January 9, 2017 atmospheric river event.*

The report recommends ways cities, counties, water districts, utilities, state agencies, private companies, and other entities can make the investments California needs to thrive despite climate change.

- Integrate resilience requirements and design principles into all infrastructure-related policies, programs, and investment decisions.
- Adopt disclosure requirements that will steer investors toward projects and institutions exposed to less climate (and thus financial) risk.
- Increase market incentives (such as insurance discounts) for projects that increase resilience.
- Develop more and better data about climate risk and share data and adaptation lessons learned in accessible formats.
- Invest in cost-benefit analyses to demonstrate what we already know: The cost of doing nothing is more expensive than paying for adaptation.
- Make sure the funding and financing for resilience projects includes all phases, from predevelopment to maintenance and renewal.
- Coordinate adaptation across jurisdictions to achieve efficiency of scale.
- Pursue multi-function projects that qualify for a wide range of funding sources.
- Engage communities early, often, and always to deliver projects that communities need and support.
- Encourage private sector participation in projects but include requirements and metrics to ensure the private sector role advances public goals.



*Kelly M. Grow/ California Department of Water Resources*  
State engineers discuss the temporary emergency drought barrier on West False River in the Sacramento-San Joaquin Delta in May 2015.



*Florence Low/ California Department of Water Resources*  
East Porterville residents receive water through a new connection to the city of Porterville system in August 2016. Hundreds of East Porterville residents lost their water supplies in the 2012-2016 drought as wells went dry.