### Policy Priorities for California's Water Responding to the Changing Climate

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Alvar Escriva-Bou, Senior Fellow

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Pivoting Today's Pain into Tomorrow's Gain





## In the volatile realm of California's water, some changes are causing immediate challenges

- Most important issues
  - Adapting to more intense droughts
  - Updating infrastructure
  - Securing groundwater sustainability
  - Managing headwater forests to protect water supply
  - Funding unmet needs
- Addressing them requires an innovative, integrated portfolio of solutions



Oroville Spillway damage in 2017 Source: DWR



# Groundwater management is an essential hedge against our increasingly drought-prone climate

- Priorities for managing groundwater
  - Address the negative impacts of increased pumping
  - Pick up the pace of demand management
  - Accelerate actions to improve water storage

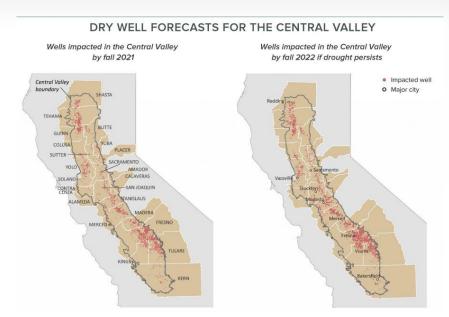


Partnerships can help ease the transition to groundwater sustainability by delocalizing the investment in new water infrastructure



#### Many small systems are at risk of both water quality and supply shortfalls

- Priorities for providing safe and affordable drinking water to all
  - Identify systems at risk of shortages and take rapid action
  - Expand water rate assistance programs
  - Find state and federal funding to speed up climate resilience upgrades

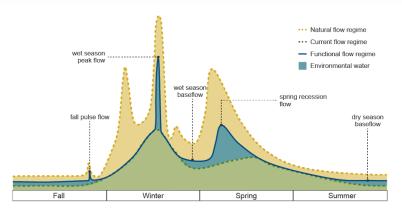


Source: How better data can help California avoid a drinking water crisis (Escriva-Bou and Pauloo, 2021)



# Droughts—and the ways we manage water—have taken an increasingly heavy toll on freshwater ecosystems

- Priorities for freshwater ecosystems
  - Improve planning for environmental water needs during droughts
  - Rethink how water is stored and released to build ecosystem resilience
  - Focus on key watersheds
  - Improve permitting to enable restoration to scale up faster



Source: Making the Most of Water for the Environment: a Functional Flows Approach for California's Rivers (Mount et al, 2020)

### Increasing dry and warm conditions have hastened a major decline in the health of CA's headwater forests

- Policy priorities for managing headwater forests and fires
  - Improve preparedness of at-risk communities
  - Find new ways to pay for long-term forest stewardship
  - Promote partnerships to increase the pace of forest treatment
  - Document forest management progress and gaps



Mechanical thinning. Photo: Michael De Lasaux



#### What will it take to become climate-ready?

- Improve water storage and conveyance
- Promote technological innovation
- Upgrade aging infrastructure
- Manage demand
- Find the money



Farms in Paso Robles Source: DWR



#### Thank you















#### Notes on the use of these slides

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Alvar Escriva-Bou







Thank you for your interest in this work.

