California Water Boards
Drought Response
Jessica Bean
Division of Water Rights
State Water Resources Control Board
California Water Boards

- Protect Water Quality
- Regulate Drinking Water
- Administer Water Rights
- Provide Financial Assistance
2022 Drought Impacts

- 1450+ household water shortages
- 70 HAB advisories
- 10,000+ Fish killed in SF Bay
- 14,300 Agricultural jobs lost
- 64% Wells at historic lows
- $1.3+ billion Loss to agriculture
- 5% State water project contracts met
Water Boards Drought Actions

- Drinking Water Assistance
- Financial Assistance
- Water Conservation
- Emergency Curtailments
- Groundwater Recharge
Drinking Water Assistance

Safe & Affordable Funding for Equity & Resilience (SAFER) Drinking Water Program

Focus on small disadvantaged communities & low-income households

- Interim & emergency water supplies
- Technical assistance & planning
- Some construction & operations & maintenance
- System consolidation

$700 million for small disadvantaged community projects since 2019
Drinking Water Success Story

Self-Help Enterprises helps 3,400 households in the San Juaquin Valley

Serves Kern, Kings, Tulare, Fresno, Madera, Merced, Mariposa, San Joaquin & Stanislaus Counties

- Regional Bottled Water
- Household Solutions
- Dry Well Tanks & Hauling
- Regional Well Replacement/Repair

$115M awarded - $83M remaining
Financial Assistance

$3.3 billion to boost drought resilience and increase water supplies in FY 21/22)

Types of projects:
• Dinking water infrastructure
• Drinking water consolidation
• Emergency and interim drinking water supplies
• Technical assistance

Multiple sources depending on need:
  Visit bit.ly/water_grants_loans
Water Conservation

Fastest, cheapest & easiest way to stretch water supplies

• Voluntary 15% conservation (2021)
• Wasteful use prohibitions & demand reduction (2022)
• Urban retail suppliers:
  • Water loss performance standards (2023)
    • Monitor and reduce leaks
  • Save 88,000 AFY
• Water use objectives (2024)
  • Choose your own adventure
Emergency Curtailments

Implement priority system while protecting fish, wildlife, & human health & safety.

- Restricts in order of priority:
  
  “First in Time, First in Right!”

- 10,000+ rights curtailed:
  
  First for many old water rights

- Tied to emergency order and regulations:
  
  Cannot do this in non-drought years

- Lots of enforcement
Groundwater Recharge

**CA goal to expand groundwater recharge by at least 500,000 AFY by 2030**

- Types of recharge: natural, incidental, managed
- Managed typically requires a permit
  - 7 permits approved & 190,000 AF authorized
- 340+ managed projects proposed
  - Unclear how many rely on the same water
- Process takes time
  - Need to start early
Data Challenges

Example: Data Quality Issues in 2019 Sacramento River Self-Reported Diversions

Nearly 4,000 reporters
(\(>5,000\) AFY)

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<th>Amount</th>
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<td>Corrected</td>
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<td>Difference</td>
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86% reduction!
Improvements

• UPWARD- Updating Water Rights Data for CA
  • Replace antiquated data system
  • Digitize millions of paper documents
  • Establish data standards

• Drought Planning
• Supply and Demand Assessment Tools
• Telemetry Research
• Increased Enforcement
Collaboration & Engagement

Advisory Groups
- SAFER
- Recycled Water
- Cooling Water Intake
- UPWARD

Workshops & Listening Sessions
- Water Rights Drought Effort Review
- Drinking Water Affordability
- Emergency Curtailments
- Water Use Efficiency
- Racial Equity

Interagency Workgroups & Taskforces
- Emergency Response (drought, fire, other)
- Water Quality Monitoring Council
- Recycled & Storm water
- Project-specific groups

Local Knowledge & Solutions
- Russian River Voluntary Water Sharing Program
- Scott/Shasta Local Cooperative Agreements
- Many project-specific activities
California's Water Cycle

A Water Cycle

Drought

Panic

Discuss Conservation Alternatives

End of Drought

Apathy

Flood

End of Flood

Panic

Discuss Conservation Alternatives

Submitted by Lyn Townsend, Forester, WNITC, SCS

Technology Transfer Note, 2/23/82, WNITC, SCS