



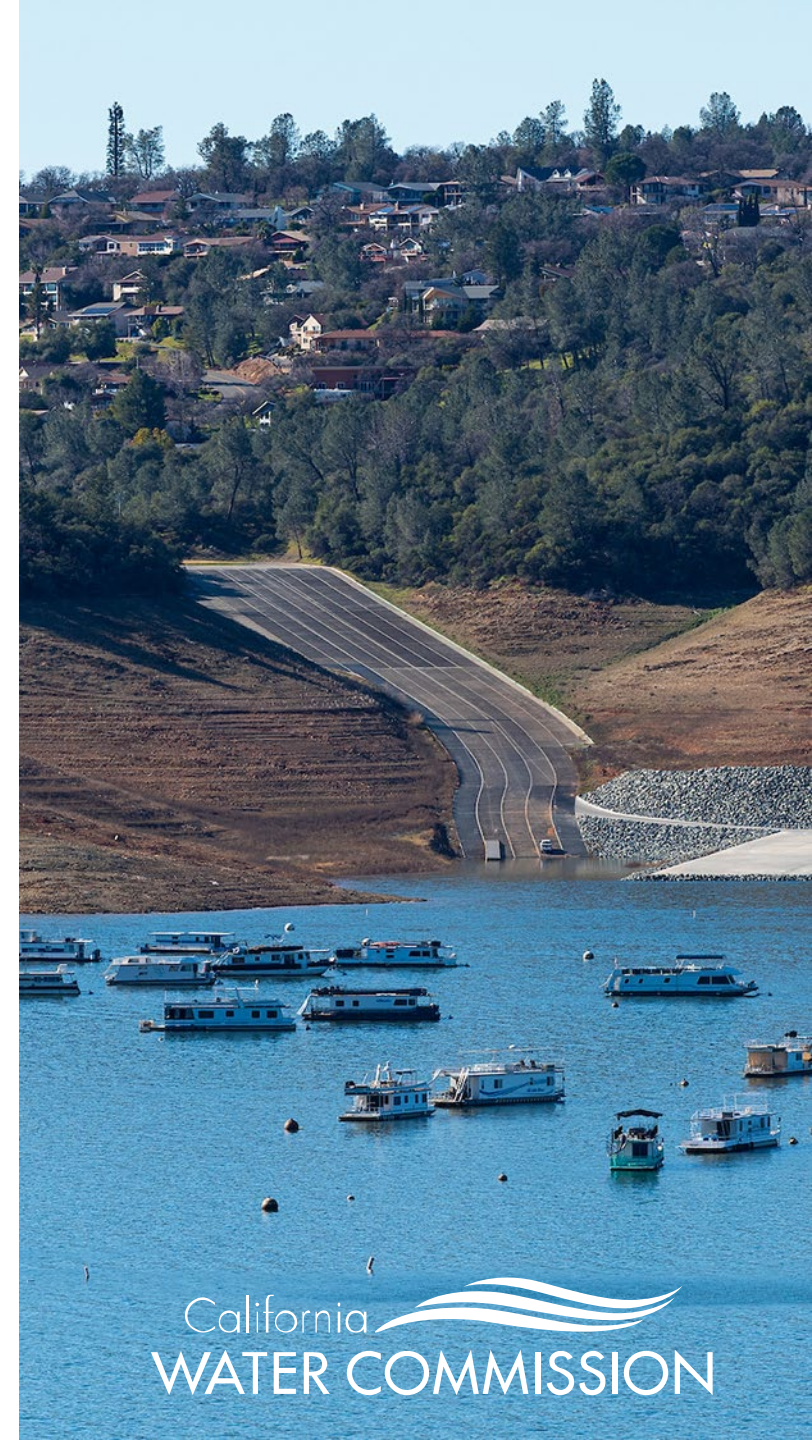
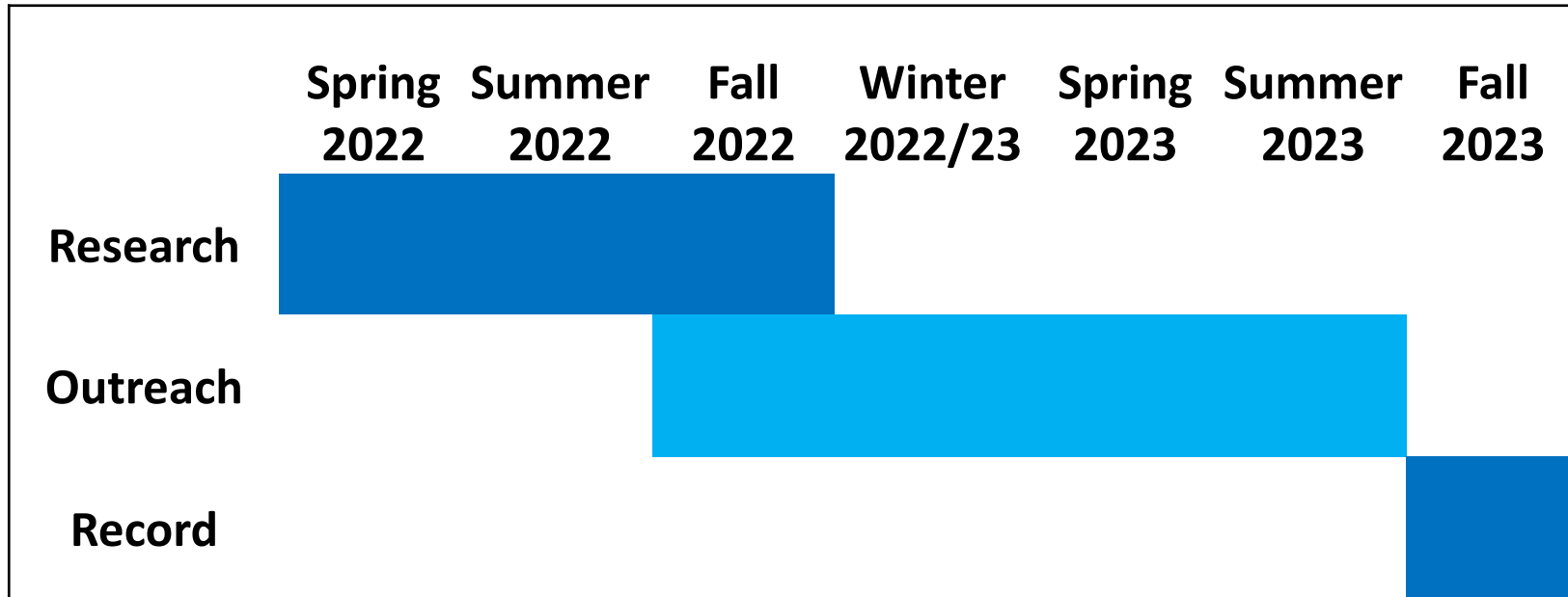
# Potential State Strategies for Protecting Communities and Fish and Wildlife in the Event of Drought

# Water Resilience Portfolio Action 26.3

**Develop strategies to protect communities  
and fish and wildlife in the event of  
drought ~~lasting at least six years~~**

# Goal of Commission Process

- Engage experts, interested parties, public
- Develop potential strategies
- Produce guidance document

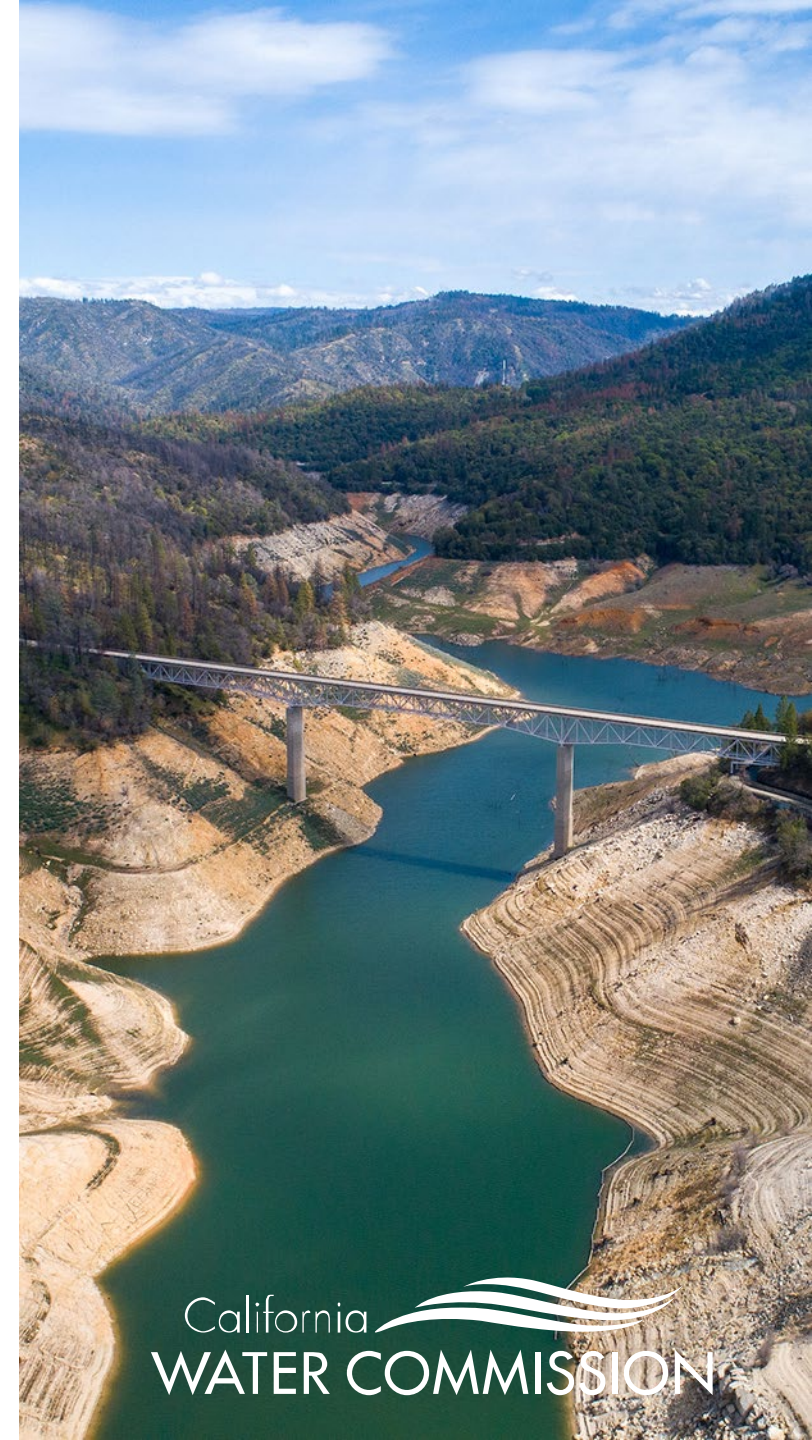


# What We've Done

- **Step 1 - Research:** Explore How Long-term Drought Has Been Managed Elsewhere & Align Effort with Current State Drought Work
- **Step 2 - Outreach:** Engage Stakeholders, Experts, and the Public to Explore Potential Strategies for Managing Drought in California
- **Step 3 - Record:** Develop White Paper **[[in progress]]**

## Outreach by the Numbers

- |   |              |
|---|--------------|
| • Experts consulted during Step 1:                    | <b>62</b>    |
| • Resources cited in drought annotated bibliography:  | <b>70</b>    |
| • Tribal discussions participants/Tribes represented: | <b>38/30</b> |
| • Workshop participants:                              | <b>269</b>   |
| • Survey respondents:                                 | <b>233</b>   |
| • Outreach presentations given during Step 2:         | <b>21</b>    |



# White Paper Structure

- Executive Summary
- Introduction
- Potential Drought Strategies
- Conclusion
- Appendix 1: Related California Water Planning
- Appendix 2: Overview of State Drought Actions
- Appendix 3: Overview of Commission's Process
- Appendix 4: Drought Working Group Overview



# Key Points: Introduction

- Climate change and drought are related; must prepare for both together
- Preparing for drought in non-drought years is important
- Drought can be managed through water supply and water demand management
- Commission's drought work is embedded in and builds on myriad other State efforts
- Commission's drought work is forward-looking and offered for consideration by State decision-makers



# Key Points: Potential Drought Strategies

- Commission is proposing four strategies:
  1. Scale Up Groundwater Recharge
  2. Conduct Watershed-level Planning to Reduce Drought Impacts to Ecosystems
  3. Better Position Communities to Prepare for and Respond to Drought Emergencies
  4. Support Improved Coordination, Information, and Communication in Drought and Non-drought Years
- Strategies intersect, require working together across water sectors, users
- Public engagement is critical, as is State accountability and follow-through



# 1: Scale Up Groundwater Recharge

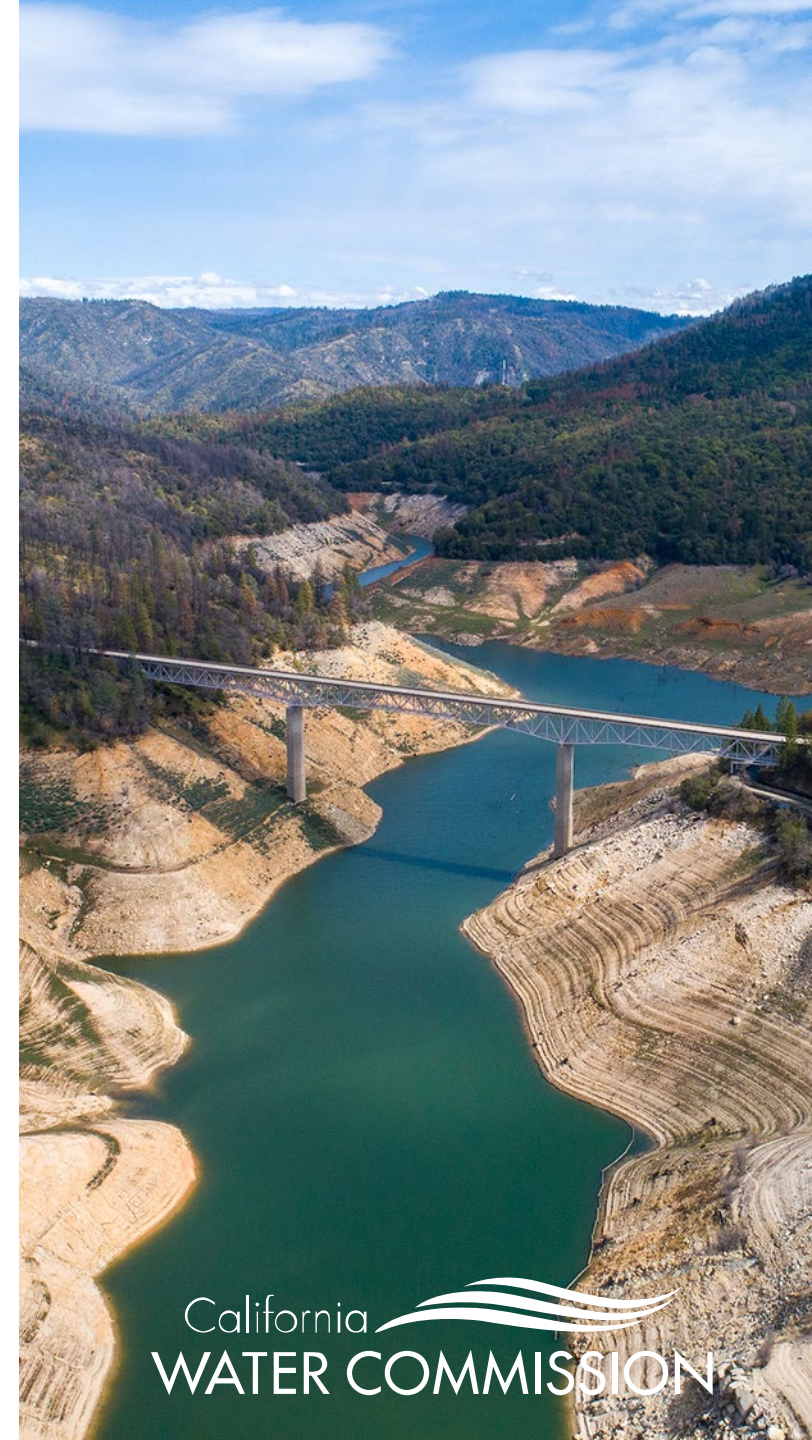
1. Prepare for opportunities for groundwater recharge by working with partners, especially the flood management community, to identify flood water diversion and recharge opportunities.
2. Promote recharge efforts through education and outreach and financial incentives.
3. Continue to support efficient permitting to maximize groundwater recharge while protecting the natural environment and communities.
4. Working with the flood management community, support and align the construction and operation of water infrastructure to advance groundwater recharge that specifically protects fish and wildlife and communities during drought.
5. Review recent drought and flood response actions to clarify lessons learned and identify on-going improvements and efficiencies.





## 2: Conduct Watershed-level Planning to Reduce Drought Impacts to Ecosystems

1. Analyze ecosystem water supply needs to understand the amount of water required to sustain functioning ecosystems as water scarcity increases.
2. For priority rivers and streams, advance the establishment of instream flows that protect fish and wildlife in a changing climate as called for in the [California Water Action Plan](#) and the Portfolio.
3. Evaluate the application of environmental water planning, as described in the box below.
4. Consider identifying and securing assets for the environment that can be flexibly deployed, assigning a trustee to manage those assets, and integrating them into environmental water plans that allow for flexible management of water resources to benefit ecosystems broadly. Protecting water for fish and wildlife could be done through regulation, negotiated general agreements as part of regulations (e.g., water quality control plans or Habitat Conservation Plans), or water purchase agreements.



## 2: Conduct Watershed-level Planning to Reduce Drought Impacts to Ecosystems

5. Continue to modernize the water rights data system and improve the Water Board's capacity to administer water rights during drought conditions.
6. Implement key fish and wildlife protection projects and habitat restoration and conservation projects that provide drought resilience and refugia.
7. Integrate fire/forest management into drought planning and projects.
8. Catalog State actions taken to protect fish and wildlife during the 2020-2022 drought, identify lessons learned, and create a cross-agency emergency action plan for protecting fish and wildlife during severe drought.



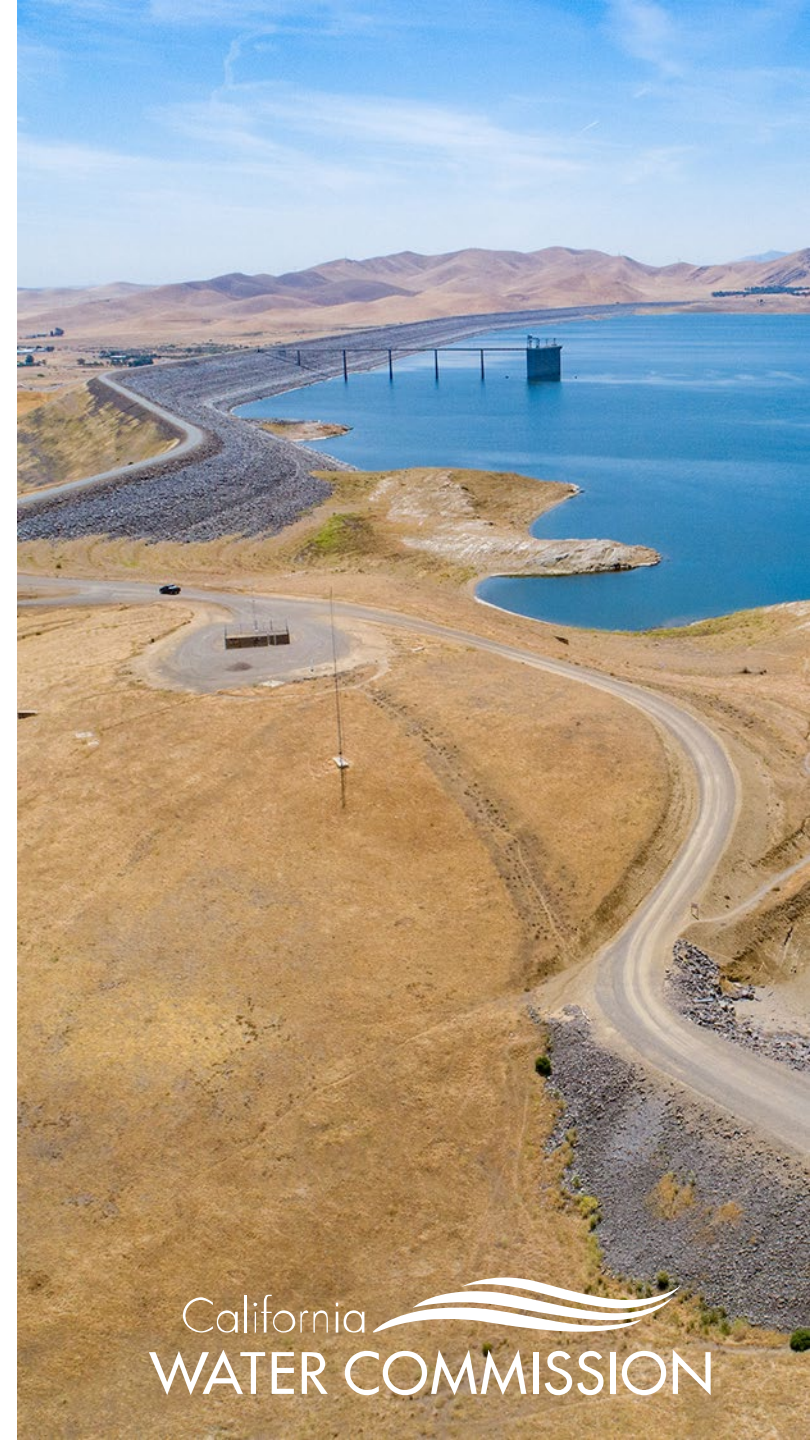
# 3: Better Position Communities to Prepare for and Respond to Drought Emergencies

1. For small and/or rural, disadvantaged communities and Tribes, design climate disaster funding that allows for nimble, efficient response to on-the-ground emergencies.
2. Ramp up efforts to improve water system resiliency and actions to increase supply reliability for communities and encourage regional approaches to water resource management.
3. Support integrated land and water planning to facilitate improved water demand management, and water conservation and efficiency.



# 4: Support Improved Coordination, Information, and Communication in Drought and Non-drought Years

1. Support staffing at State agencies to address drought issues and engage in and oversee on-going collaboration and adaptive drought management that integrates flood management.
2. Support sub-seasonal and seasonal forecasting to anticipate drought by working with local, federal, academic, and industry partners to advance enhanced forecasting at longer timescales.
3. Develop a consistent public information campaign to support local messaging, educate Californians about water, and to spur behavioral changes that support drought resilience.



# Next Steps

- **Public comment period open until December 15, 2023**
- **Final white paper presented at January 2024 meeting**