

DEC 2025

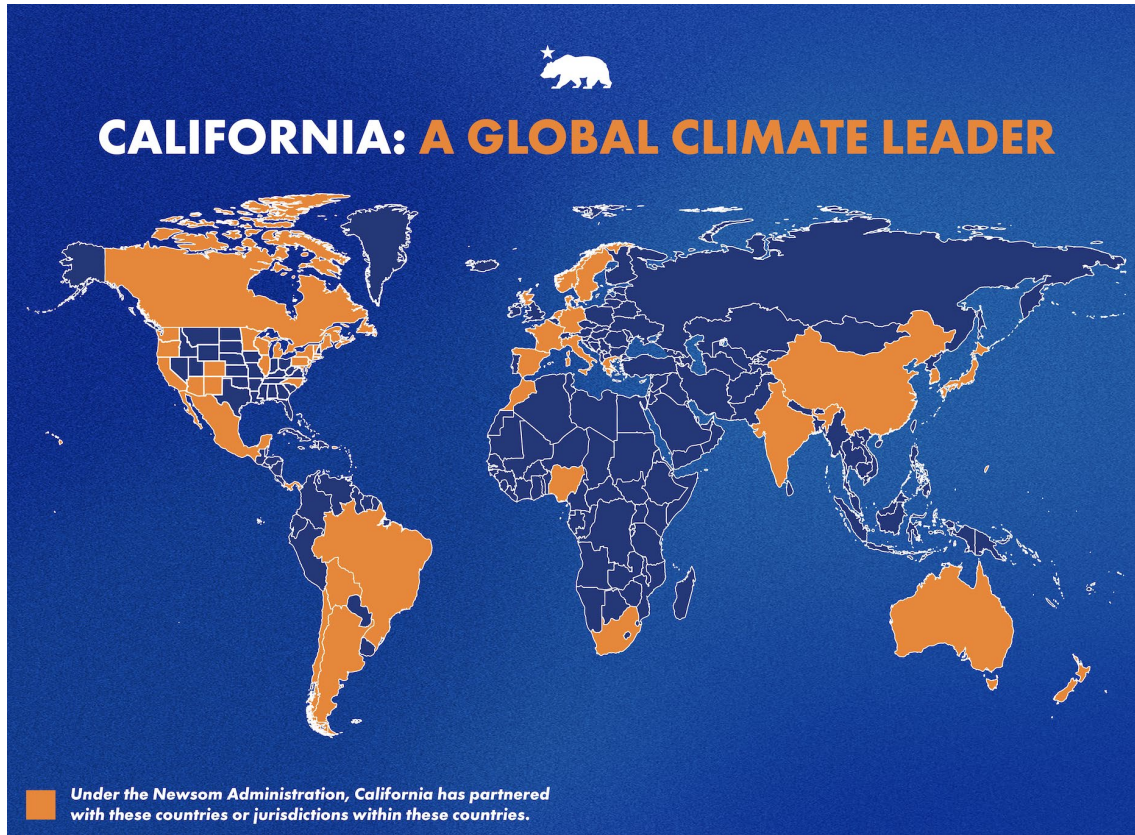
Lead Scientist Report



**Delta
Stewardship
Council**

A CALIFORNIA STATE AGENCY

California's growing international partnerships



Map of international partnerships

[California and Brazil ink new climate partnership to cut pollution, protect public health, strengthen economy | Governor of California](#)

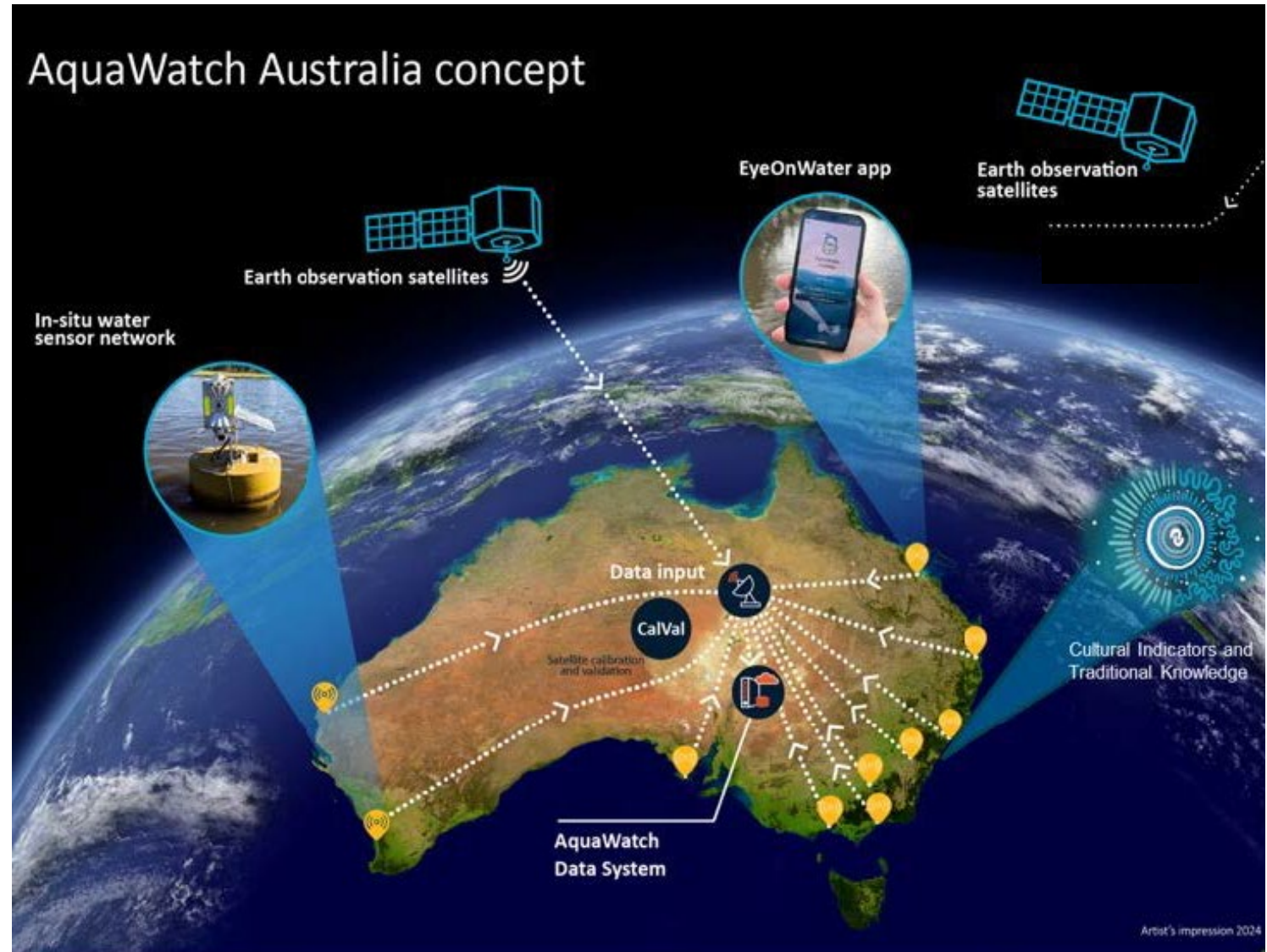


MOU signing with Australia

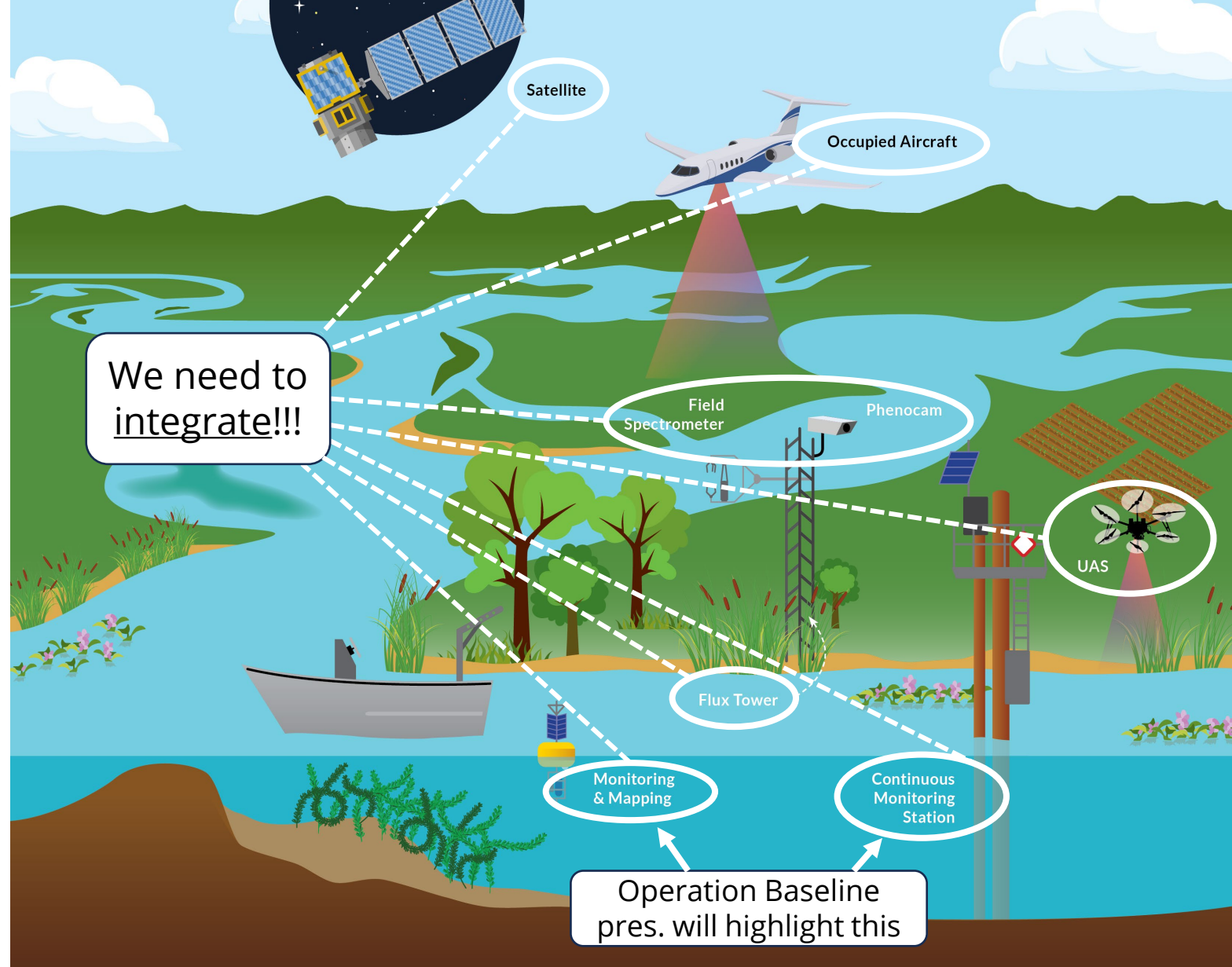
<https://www.gov.ca.gov/2023/08/15/governor-newsom-announces-new-climate-partnership-with-australia/>

Partnering with Australia on AquaWatch

- CSIRO (Australia's National Science Agency)
- "Weather service for water quality"



Using a ground-to-space sensor network to monitor water quality in the Delta



Modified from an illustration by Vincent Pascual with the California Office of State Publishing, in: Hestir, E., & Dronova, I. (2023). Remote Sensing of Primary Producers in the Bay-Delta. *San Francisco Estuary and Watershed Science*, 20(4). <https://doi.org/10.15447/sfews.2023v20iss4art5>

An Integrated Sensor Network & Data Driven Approach to Satellite Remote Sensing of Dissolved Organic Matter

<https://doi.org/10.1029/2024EA004048>



Dulci Avouris



Erin Hestir



Jeff Hansen

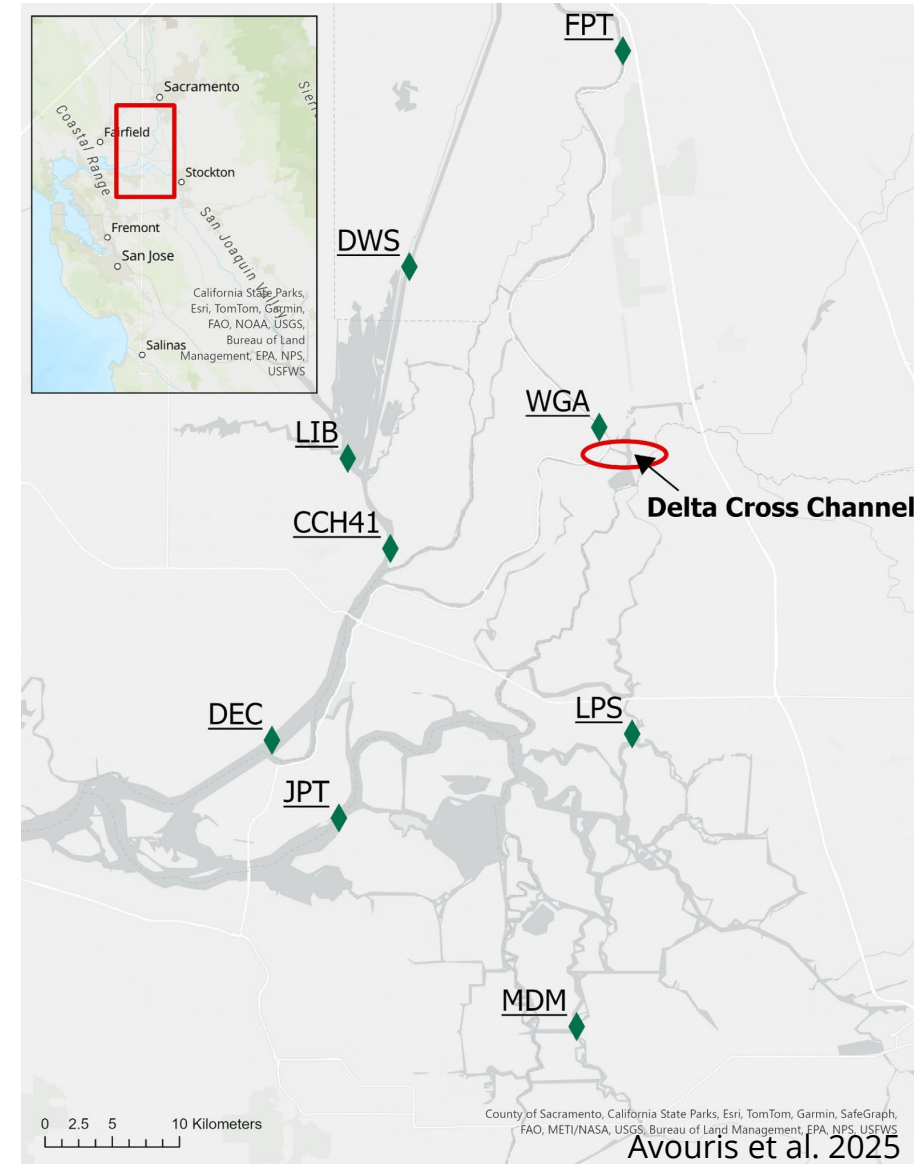
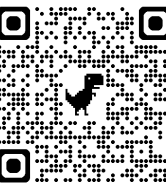


Jacob Fleck



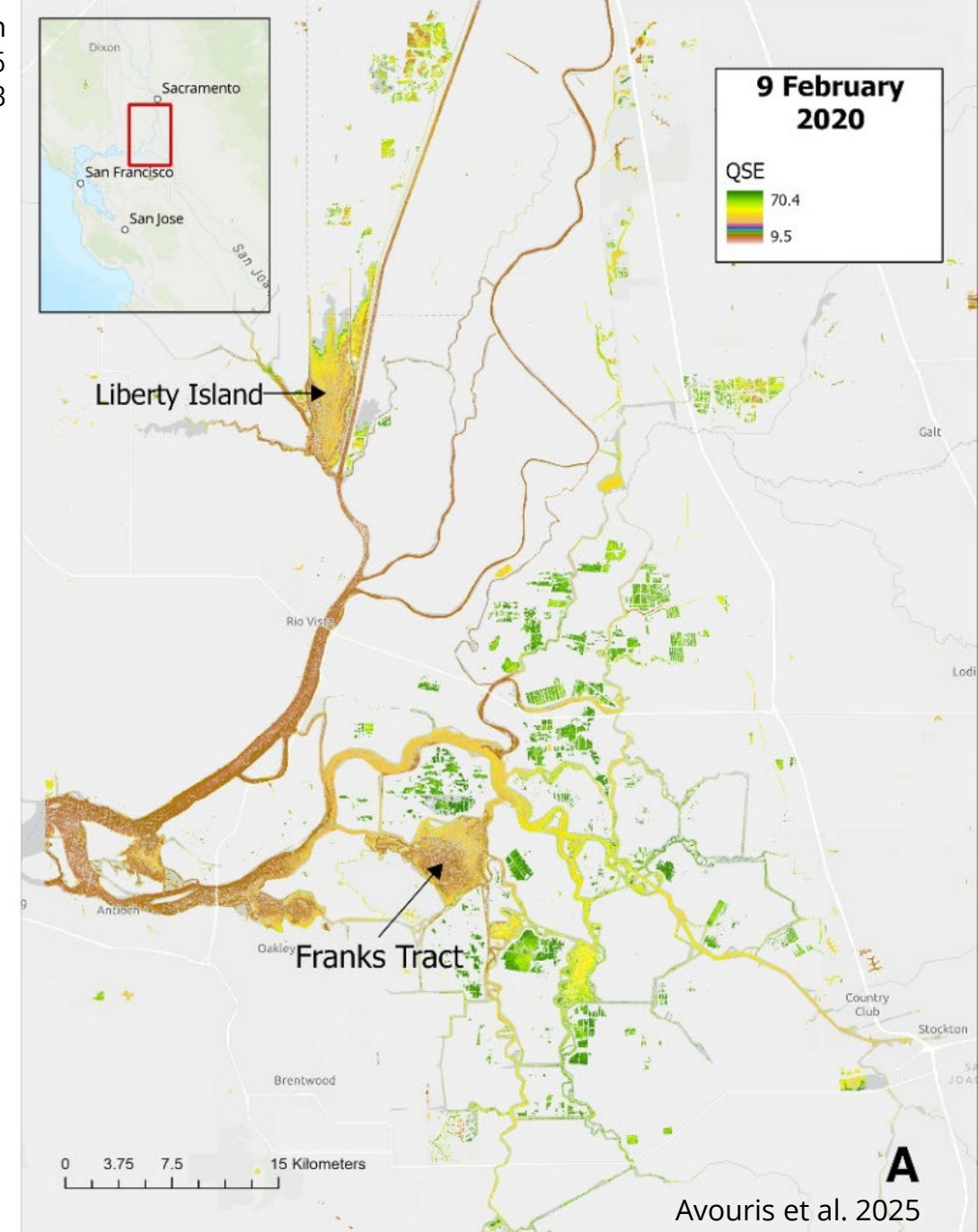
Brian Bergamaschi

Agenda Item: 8, Presentation
Meeting Date: December 18, 2025
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Implications

- **Model successfully estimates DOM!**
 - across Delta, in different seasons and at different tidal stages
- **Proof of concept for AquaWatch**
 - real-time monitoring using ground-to-space sensor network
- **Monitoring networks are vital**
- **To scale this technology, collaboration and coordination will be key**



Delta Science Program Activities

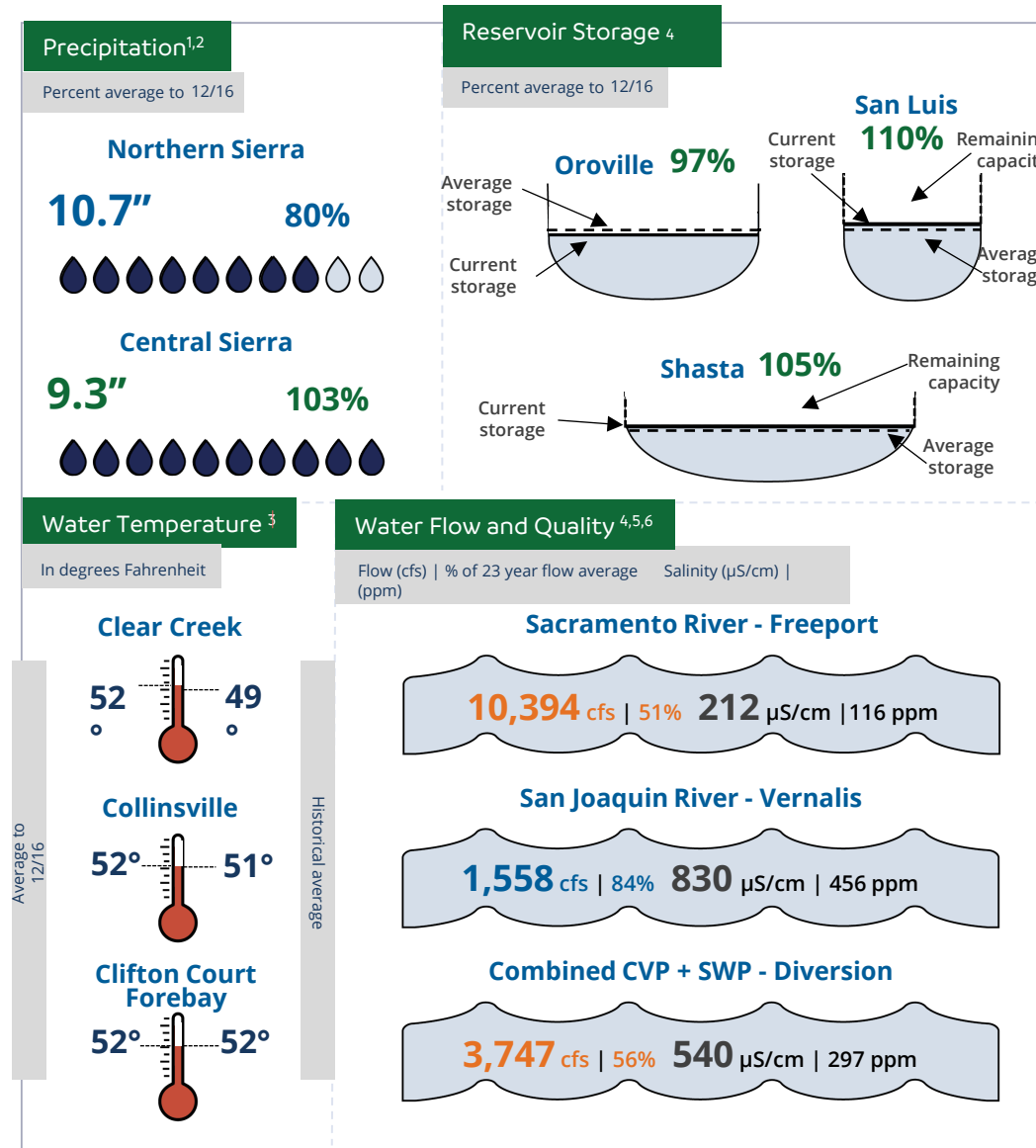
Peer review updates

- Water Year 2024 and 2025 Winter-Run Chinook Salmon Annual Loss
- Spring-Run Juvenile Production Estimate
- Stanislaus River Steelhead Juvenile Production Estimate

Draft 2026 Delta Science Plan released

On Your Radar

March 5, 2026: Bay-Delta blue carbon symposium at UC Davis



¹ <https://go.usa.gov/xQsUc> ³ <https://go.usa.gov/xURFU> ⁵ <https://go.usa.gov/xQsU2>
² <https://go.usa.gov/xQsUa> ⁴ <https://go.usa.gov/xQsUr> ⁶ <https://go.usa.gov/xQsUT>