# SENATE COMMITTEE ON APPROPRIATIONS
**Senator Sabrina Cervantes, Chair**
**2025 - 2026 Regular Session**

**AB 2521 (Papan) - California Council on Science and Technology: water availability study: Central Valley**

**Version:** July 2, 2026
**Urgency:** No
**Hearing Date:** August 3, 2026
**Policy Vote:** N.R. & W. 6 - 0
**Mandate:** No
**Consultant:** Ashley Ames

**Bill Summary:** This bill would, upon appropriation, request that the California Council on Science and Technology (CCST) undertake two watershed-wide water availability studies for watersheds that are within, or drain into, the Central Valley to help facilitate groundwater recharge permitting.

**Fiscal Impact:**
- One-time costs, likely in the millions of dollars (General Fund or special fund), for CCST to undertake and complete a comprehensive study of water availability in the two selected watersheds. CCST estimated a cost of about $1.5 million for an 18-month study on a prior version of this bill, while the Department of Water Resources (DWR) notes that a useful study could cost $2 million to $4 million and would ultimately depend upon the level of detail needed or the end use of the studies.
- The State Water Board estimates ongoing costs of $500,000 annually (General Fund) to assist CCST with understanding information related to water right permits, licenses, and claims, ensure the study produces information that could potentially be used in future permit applications, and, after the study's release, assist applicants in making use of it for their permit applications.
- DWR anticipates its costs would be minor and absorbable.

**Background:** Groundwater makes up roughly 40 percent of California's water supply in an average year and 60 percent or more in dry years, and interest in recharging aquifers during wet periods has grown since the Sustainable Groundwater Management Act passed in 2014. Recharge at scale requires a water right, and obtaining one requires a water availability analysis — an assessment of whether water is actually available to divert, paid for by each applicant separately. The state also funds watershed-scale hydrological studies through DWR, which serve a broader planning purpose and are budgeted accordingly.

*Cost of the water availability analysis.* A water availability analysis is a necessary part of any water right application, required under Water Code Section 1260, which obligates an applicant to set forth sufficient information to demonstrate a reasonable likelihood that unappropriated water is available for the proposed appropriation. The analysis can be time-consuming and costly, often exceeding $50,000. The State Water Board currently allows an expedited form of analysis for temporary groundwater recharge permits, known as the 90/20 method: water is treated as available for diversion on a given day if instream flow exceeds the flow that typically occurs in 90 percent of years, and then only up to 20 percent of total flow at that time.

*Cost as a barrier to permitting.* The Assembly Water, Parks and Wildlife Committee held an outcomes review hearing on AB 658 (Arambula, 2019), which established the five-year temporary permit for groundwater recharge. Permittees testified that the cost of the water availability analysis was a barrier to obtaining a permit, and some stated they would not have pursued one without financial support from DWR to complete the analysis. Witnesses put the cost of an analysis for a five-year permit at around $50,000.

*Existing watershed studies and their cost.* DWR conducts watershed-scale studies that provide state, federal, and local agencies a shared technical and hydrological foundation for coordinating water management. Its San Joaquin Basin Flood-MAR studies cover the Calaveras, Stanislaus, Tuolumne, Merced, and Upper San Joaquin watersheds and evaluate how the basin can manage water resources across extreme wet years and long dry periods; DWR used eight models and generated more than eight million data points. That study cost $20 million. Planned studies of the Tulare and Sacramento River watersheds are estimated at $14 million to $20 million. DWR notes that its existing studies do not compare water that may be available in a watershed against the uses and desired uses of water, which would be pertinent to underground storage permitting, but could serve as a starting point.

*CCST's funding.* CCST is a nonprofit organization established at the Legislature's request in 1988. It receives funding from philanthropic foundations, public and private higher education institutions, federally funded research institutions, the state, investment income, and individual donations, and reported $8.4 million in revenues in 2025.

**Proposed Law:** This bill would:

1. Require DWR, in consultation with the State Water Board and the California Department of Fish and Wildlife, to select, on or before January 1, 2028, two watersheds that are within, or drain into, the Central Valley to conduct a watershed-wide water availability study.

2. Request that CCST, in consultation with DWR and the State Water Board, and subject to appropriation, undertake and complete a comprehensive study of water availability in the selected watersheds.

3. Require the study to accomplish, but not be limited to, all of the following:

    a. Determine daily flow rates in rivers, streams, and creeks in the watersheds over the past 30 years to the extent data is available.

    b. Quantify the maximum allowable diversions under existing permits, licenses, and claims in the watersheds.

    c. Quantify water actually diverted under existing permits, licenses, claims in the watersheds over the past 30 years to the extent data is available.

    d. Identify and quantify any water quality or environmental flow requirements, including water quality requirements under licenses from the Federal Energy Regulatory Commission, in rivers, streams, and creeks in the watersheds.

e. Determine when and under what conditions water is available in excess of existing claims and regulatory requirements.

4. Require the study to be completed within two years of the Legislature appropriating money for purposes of undertaking the study.

5. Declare that it is the intent of the Legislature that the above-described study will serve as a water availability analysis for future applications to the State Water Board for standard or temporary permits for diversion of water to underground storage in the selected watersheds.

6. Make legislative findings and declarations as to the necessity of a special statute for the Central Valley.

**Related Legislation:**

AB 2026 (Aguiar-Curry, 2026) would revise and recast the conditions for the appropriative water right exemption for diversions of floodflows for groundwater recharge, expand the definition of "urgent need" for temporary permits to include diversions to augment a basin's recharge in support of its sustainability goal, exempt the State Water Board's issuance of a temporary permit from the California Environmental Quality Act and from lake or streambed alteration agreement requirements, and require the board to compile and post information on permits issued and diversions conducted under temporary permits.

AB 658 (Arambula, 2019) authorized a groundwater sustainability agency or local agency to apply for, and the State Water Board to issue, a conditional temporary permit for the diversion of surface water to underground storage that advances the sustainability goal of a groundwater basin, and to petition for a corresponding temporary change order. Both run five years. The bill required the board to post information on the effectiveness of those provisions by December 31, 2024.

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