

ASSEMBLY THIRD READING

AB 2469 (Papan)

As Amended April 8, 2026

Majority vote

SUMMARY

Prohibits a local agency from approving construction of a new, or expansion of an existing, data center unless an applicant for a data center project provides the local agency with detailed information regarding the data center's water use and meets other requirements related to workforce and infrastructure for the data center.

Major Provisions

- 1) Defines "water scarcity plan" as a report that includes measures to be implemented under different drought scenarios defined by the U.S. Drought Monitor to reduce water use.
- 2) Defines "water use assessment" as a report that includes a description of a data center and its operations and the following information regarding water use by the data center:
 - a) A detailed accounting of water intake expressed in gallons per day and total volume, including maximum and average daily demand, maximum and average monthly demand, demand over an average 12-month period, water withdrawals, phases of growth or expansion, trigger points for additional demand, full build-out and peak operation scenarios;
 - b) A detailed explanation of each direct water use including specified information regarding cooling systems, humidification, potable and sanitary uses, fire suppression systems, and maintenance operations;
 - c) A cooling alternatives analysis that compares the proposed cooling method to a range of alternatives including evaluation of water use at the data center and at the site of energy generation, an evaluation of impact on source water and water scarcity, and consideration of closed-loop cooling;
 - d) A detailed estimate of indirect water use associated with energy production disaggregated by type; and
 - e) A cost of service study completed by the applicable water supplier within the last five years, or funded by the data center if none exists.
- 3) Prohibits a city, county, or city and county from approving the construction, or expansion that increases the maximum peak water use, of a data center unless the following conditions are satisfied:
 - a) The applicant has provided a water supply assessment;
 - b) The applicant has provided a water use assessment, if requested by the city, county, or city and county;
 - c) The applicant, beginning January 1, 2028, has provided a water scarcity plan;

- d) The applicant has provided the data center's projected and actual water use and water efficiency measures;
 - e) The applicant has made specified disclosures regarding workforce needs associated with the project;
 - f) The applicant has provided all water resource plans, water usage reports, supporting documentation, and any approvals issued by a state or local agency related to the plans or applications;
 - g) The project is not located in a groundwater basin designated as critically overdrafted by the Department of Water Resources (DWR). DWR may waive this prohibition upon a comprehensive assessment demonstrating the project does not pose a disproportionate risk to the health, welfare, or environment of an environmental justice community or equity investment eligible community; and
 - h) The applicant assumes responsibility for the full cost of any required water conveyance, treatment or storage, or distribution infrastructure improvements necessary to serve the project as determined by DWR or the applicable water supplier.
- 4) Requires DWR, in coordination with the State Water Resources Control Board (State Water Board), to conduct necessary studies and investigations and recommend no later than June 30, 2028 a commercial, industrial, institutional (CII) water use classification system for users that qualify as large consumptive use facilities, including data centers.
- 5) Requires the State Water Board in coordination with DWR to adopt the CII water use classification recommended by DWR pursuant to this bill by December 31, 2029.

COMMENTS

Data centers are buildings or facilities that "support servers, digital storage equipment, and network infrastructure for the purpose of large-scale data processing and data storage. Increasing demand for data creation, processing, and storage from existing and emerging technologies, such as online platforms/social media, video streaming, smart and connected infrastructure, autonomous vehicles, and artificial intelligence, has led to exponential growth in data center workloads and compute instances" (Bakar Siddik, Shehabi, and Marston, 2021). There is increasing awareness of the energy and water demands (primarily related to cooling) associated with data centers as artificial intelligence and other technologies are being deployed.

Data centers can have substantial and sometimes irregular demand for cooling water. All computer chips produce heat as waste energy from the electricity flowing through them. While this heat is minimal in the context of a personal computer, data centers made up of thousands of servers produce an immense amount of heat that needs to be removed from the facility to maintain safety and performance. To manage this heat, data centers use a variety of cooling technologies, either sequentially or depending on weather conditions and server load.

Data center water use patterns can be irregular as a result of switching between cooling technologies. Research shows that the "peaking factor" (the factor of the peak use over average use) for data centers can be double or more the peaking factor for other large users (Han et al. 2026). These high peaks occur because data centers need to shift to evaporative cooling

technologies to exhaust waste heat during hot and dry weather conditions, or use more water to remove more heat. Shifting between cooling technologies can result in large surges in demand that need to be accommodated by water distribution infrastructure, even if the average demand is far lower.

Evaporative cooling systems, like those sometimes used in data centers, are consumptive uses of water. This bill would require data center operators to distinguish their consumptive and nonconsumptive water uses. Consumptive water use refers to water that is withdrawn or diverted from the environment that is made unavailable for future use because it has evaporated, transpired, been incorporated into products or crops, or otherwise been made unavailable for immediate use. In contrast, non-consumptive uses of water quickly return to the environment. Examples of non-consumptive use include recreation, hydroelectric power generation, or instream flow.

Data centers need a reliable water supply. Due to the reliability requirement to deliver the demanded water, water infrastructure (both water delivery and wastewater) must be sized to accommodate the peaks in demand. Local water suppliers are then required to build capacity well in excess of average need and potentially may build capacity in excess of any need that materializes, especially if they are building based on limited information about projected water demand.

Better data about water use, whether during the water supply assessment process (if required, see discussion below) or based on research data from across the sector, would assist local water agencies in planning for actual need. Local water utilities could also work with data centers to understand options for the times of highest demand and collaborate on strategies to deliver water supply reliability. The risk of stranded or overbuilt assets can be mitigated by requiring new large customers to pay for necessary infrastructure upgrades as part of the connection process, potentially extending beyond traditional connection fees to include upgrades to mains, pumping stations, and other infrastructure as needed.

Water use by data centers falls under the CII classification, but is not calculated under the urban water use objective ("Making Conservation A Way of Life") intended to increase water use efficiency in California's urban areas. However, as required by the legislative package to enact Making Conservation a Way of Life, DWR conducted a study (completed in 2022) on CII water use and recommended performance measures to the State Water Board that would improve water use efficiency in the CII sector. One of the study's recommendations was to require urban retail water suppliers to classify their CII users by one of 19 user types (e.g., manufacturing/industrial, technology/science). The State Water Board incorporated this recommendation into the final Making Conservation a Way of Life regulations by requiring urban retail water suppliers to classify CII users into one of 22 categories by June 30, 2027; the categories are based on the ENERGY STAR Portfolio Manager categories. This bill requires DWR to develop a separate classification for CII users based on their consumptive use of water by June 30, 2028.

A water supply assessment is required for a proposed project (CII or otherwise) with a water use that exceeds certain thresholds and is completed as part of the California Environmental Quality Act process. The water use threshold that triggers the requirement for a water supply assessment is generally the amount of water required for a proposed residential development of more than 500 dwelling units or commercial or industrial uses that are of defined sizes (Water Code § 10912). To complete the water supply assessment, the project proponent must provide

information to municipal planning decisionmakers about the expected water use. The water supply assessment process provides the primary opportunity for public input and awareness of water use by a proposed CII (or other) water user.

According to the Author

California's finite water supplies are under growing stress from climate change, prolonged droughts, and the expansion of large consumptive water users. While the Legislature has long recognized the importance of coordinating land use decisions with available water supplies, the rapid growth of data centers has exposed gaps in existing law. Data centers represent a new kind of development that can impose significant, highly concentrated water demands on local systems.

This gap is particularly important because data centers operate continuously and can drive substantial peak-day demand, often requiring new treatment, storage, or distribution infrastructure. Without timely and standardized information during the entitlement process, municipalities and water retailers may lack clear visibility into a project's water needs and the leverage to ensure that adequate supplies, infrastructure capacity, and conservation measures are in place prior to entering into service commitments.

[This bill] directly addresses these water management difficulties. [This bill] requires meaningful water planning before local approval and protects critically overdrafted groundwater basins. In doing so, [this bill] provides local governments and water suppliers the information they need to evaluate data center water demand before making irreversible siting and infrastructure decisions.

Arguments in Support

The California Coastkeeper Alliance supports this bill and argues that it will inform local decision-making, condition data center project approvals on meeting necessary requirements, and avoid increased water rates resulting from data center water demand. California Coastkeeper Alliance states: "By requiring data center project applicants to assume responsibility for the costs of water infrastructure additions required to serve their needs, [this bill] would also ensure ratepayers do not end up bearing the costs of infrastructure they do not create demand for. This principle is consistent with the "proportional cost of service" requirement in California's Constitution. Additionally, the bill appropriately allocates risk to project applicants, ensuring that if a facility."

Arguments in Opposition

The Data Center Coalition opposes this bill and maintains it imposes "additional burdensome and disparate reporting requirements on data centers as compared to other" CII users, raises privacy and security concerns, and will undermine California's already shrinking data center market. Rather than placing unique requirements on data centers, the Data Center Coalition asserts "a more equitable approach would acknowledge that data centers are just one water consumer among many diverse industries. Data center operators are actively prioritizing responsible water use through operational best practices and innovative development strategies, often collaborating with local authorities and conservation organizations on water restoration and reclamation projects."

FISCAL COMMENTS

According to the Assembly Appropriations Committee, this bill has the following fiscal impact:

- 1) By authorizing DWR to waive the prohibition on a local agency's approval of the construction or expansion of a data center if the project is located in a basin designated as critically overdrafted by DWR, this bill imposes ongoing costs on DWR. DWR must conduct a "comprehensive assessment" demonstrating that the project does not pose a disproportionate risk to the health, welfare, or environment of an environmental justice community or equity investment-eligible community.

DWR estimates ongoing annual staffing costs of \$750,000 (General Fund) to develop assessment criteria, manage waiver determinations, and potentially promulgate regulations. In addition, to conduct studies and investigations and recommend a CII water use classification for large consumptive use facilities like data centers, DWR estimates a one-time contracting cost of \$1 million as well as \$500,000 in annual ongoing costs for one senior environmental scientist. It is not clear that the bill requires ongoing work of DWR post-2029 and whether DWR requires ongoing funding once it recommends and consults with the State Water Board on the new classification.

- 2) State Water Board estimates ongoing annual General Fund costs of \$250,000 to coordinate with DWR, adopt a new CII water use classification, promulgate a regulation for large consumptive use facilities, and perform subsequent monitoring and updates.

The Legislative Analyst's Office recently warned of General Fund structural deficits of around \$35 billion per year in the 2027-28 fiscal year and ongoing.

VOTES

ASM WATER, PARKS, AND WILDLIFE: 9-2-2

YES: Papan, Alvarez, Ávila Farías, Bennett, Boerner, Caloza, Hart, Muratsuchi, Rogers

NO: Jeff Gonzalez, Alanis

ABS, ABST OR NV: Bains, Gallagher

ASM LOCAL GOVERNMENT: 8-2-0

YES: Carrillo, Pacheco, Ramos, Ransom, Blanca Rubio, Stefani, Ward, Wilson

NO: Ta, Johnson

ASM APPROPRIATIONS: 11-4-0

YES: Wicks, Aguiar-Curry, Calderon, Caloza, Fong, Mark González, Krell, Pacheco, Pellerin, Sharp-Collins, Solache

NO: Hoover, Dixon, Ta, Tangipa

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CONSULTANT: Pablo Garza / W., P., & W. / (916) 319-2096

FN: 0002719