

Date of Hearing: April 14, 2026

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE

Diane Papan, Chair

AB 2469 (Papan) – As Amended April 8, 2026

SUBJECT: Data centers: water use disclosures

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. Specifically, **this bill:**

- 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 approval issues 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.
 - 6) Requires each urban retail water supplier to implement the CII water use classification adopted pursuant to this bill.

EXISTING LAW:

- 1) Requires DWR, in coordination with the State Water Board, to conduct studies and investigations to develop recommendations for efficient water use by commercial, industrial, and institutional (CII) water users by October 1, 2021. The State Water Board shall adopt performance measures for CII water use based on these recommendations by June 30, 2022 (Water Code § 10609.10).
- 2) Requires a water supplier to prepare a water supply assessment for a residential, commercial, or industrial project that must undergo review under the California Environmental Quality Act (CEQA) and will use more than a specified amount of water (see discussion under Background, below). The water supply assessment must contain information regarding the project's water use and the ability of the water supplier to meet the project's water demands (Water Code § 10910 *et seq.*).

- 3) Requires DWR to investigate the state's groundwater basins and, among other things, identify basins that are subject to critical conditions of overdraft (Water Code § 12924).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

COMMENTS:

- 1) **Purpose of this bill.** 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.

- 2) **Background.** 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.”¹ There is increasing awareness of the energy and water demands (primarily related to cooling) associated with data centers as artificial intelligence (AI) and other technologies are being deployed.

While California has been home to data centers for decades, in recent years, developments in technology have increased the demand for large data centers capable of storing, processing, and serving huge amounts of data. California is a desirable destination for data center projects, with a highly skilled workforce, close proximity to computing demand, and access to large fiber optic connections around the world. Clusters of data centers exist in Silicon Valley, San Francisco, Los Angeles, and Sacramento, with other projects located around the

¹ Md Abu Bakar Siddik, Arman Shehabi, and Landon Marston, “The Environmental Footprint of Data Centers in the United States,” *Environmental Research Letters*, 16 (2021).

state.

Cooling technology and water demand. 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, including:

- Air-based cooling. Chilled air is circulated through server racks using computer room air conditioners or air handlers to remove heat from equipment.
- Chilled water systems. Mechanical chillers produce chilled water that absorbs heat from servers through heat exchangers before the heat is rejected outdoors.
- Evaporative cooling systems. Cooling towers or evaporative coolers use the evaporation of water to remove heat, which can significantly reduce electricity use but increases water consumption.
- Liquid cooling. Coolant is delivered directly to server components or through cold plates and immersion systems, allowing heat to be removed more efficiently than with air cooling.
- Economization technologies. Air-side or water-side economizers take advantage of cool outdoor air or water temperatures to reduce the need for mechanical cooling when environmental conditions allow.

Many data centers combine several technologies either sequentially or depending on weather conditions and server load. The blend of possible technologies introduces tradeoffs between electricity and water use (and between onsite and offsite water use).

Irregular water demand and peak use. 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.² 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.

Consumptive water use. 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 uses refers to water that is withdrawn or diverted from the environment that is made unavailable

² Yuelin Han, Pengfei Li, Adam Wierman, and Shaolei Ren, “Small Bottle, Big Pipe: Quantifying and Addressing the Impact of Data Centers on Public Water Systems,” *arXiv preprint*, doi:10.48550/arXiv.2603.02705 (2026).

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.

Scale of potential demand. Existing and proposed data centers range from relatively small “edge” or collocated facilities to huge “hyperscalers,” including a proposed \$10 billion, 330 MW project in Imperial County that could use as much as 750,000 gallons of water per day. As data centers continue to surge in growth, concerns about data center water use are driving discussions around sustainability, evaluations of appropriate location siting and available supply.

Implications for water infrastructure. 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.

Absent reliable information about expected usage, water infrastructure decisions are based on estimates and projections that may or may not be borne out. In practice, this limited visibility compounds the general trend across California water agencies to project (and build for) higher water use than is actually realized.³ In addition to overbuilding for capacity, local water suppliers risk stranded assets if data center projects either do not materialize or close. In an industry characterized by many proposed projects with fewer constructed projects and rapid obsolescence of cutting-edge technology, these risks are meaningful and may exacerbate concerns over water affordability.

Improving planning and coordination. 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.⁴ 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.

CII water use. 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

³ Johanna A. Capone and Landon T. Marston, “Water Demand Projection Accuracy and Demand Management Trends in California Cities,” *Water Resources Research* 61, no. 11 (2025).

⁴ Marie Grimm, Nell Green Nylen, and Michael Kiparsky, *Regulating Data Center Water Use in California*, (Center for Law, Energy & the Environment, UC Berkeley School of Law, Berkeley, CA: 2026), 40-43. See <https://www.law.berkeley.edu/data-center-water-use>.

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 ____.

Water supply assessments. 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 CEQA process. The water use thresholds that trigger a water supply assessment are as follows (Water Code § 10912):

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 25,000 square feet of floor space;
- A proposed hotel or motel that has more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- A proposed mixed-use project that includes one or more of the above; and
- A proposed project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

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.

- 3) **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.”

- 4) **Oppose unless amended.** The California State Association of Counties (CSAC) has taken an “oppose unless amended” position on this bill noting that “the problems this bill is seeking to address are real.” However, CSAC contends this bill will interfere with the local decision-making process and impose new requirements on local agencies to review the water use assessment this bill creates that will increase local agency costs. CSAC states “Local governments are best suited to understand the potential costs and benefits of data center projects in their communities. The Legislature can best support communities by crafting collaborative efforts to gather more information about projects in a manner that does not unduly constrain local governments.” CSAS expresses a desire to work with the author to amend this bill to “preserve local permitting authority,” “address the proposed state waiver process” (by DWR for critically over-drafted groundwater basins), and “avoid imposing new costs to local governments.”
- 5) **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.”
- 6) **Dual referral.** This bill has also been referred to the Assembly Local Government Committee.
- 7) **Related legislation.** AB 2619 (Papan) of the current legislative session requires data center developers to provide information on water use to water suppliers and local governments prior to being issued a business license and upon renewal of a business license, and requires urban water suppliers to consider data center demand in water shortage planning. AB 2619 is also set for hearing in this Committee on April 14, 2026.

AB 1577 (Bauer-Kahan) of the current legislative session, among other provisions, requires a data center to submit total water consumption, potable water consumption, and water usage effectiveness to the California Energy Commission on a monthly basis. AB 1577 is pending in the Assembly Utilities and Energy Committee.

SB 887 (Padilla) of the current legislative session specifies that development and operation of a data center is not eligible for a California Environmental Quality Act (CEQA) categorical exemption, and authorizes data centers meeting specified criteria to be eligible for the “environmental leadership development” program which provides CEQA judicial streamlining. SB 887 is pending in the Senate Energy, Utilities, and Communication Committee.

AB 93 (Papan) of 2025 would have required a data center operator to provide its estimated or actual water use to its water supplier as a condition of obtaining or renewing a business license issued by a city or county. AB 93 was vetoed by Governor Newsom. The veto message states:

This bill requires data centers, when applying for an initial business license, to provide to their water supplier an estimate of expected water use. It further requires data centers, when applying for a renewal of a business license, to provide their water supplier with a report on annual water use.

The widespread adoption of artificial intelligence technologies is driving an unprecedented demand for data center capacity throughout the nation. As the global epicenter of the technology sector, California is well positioned to support the development of this critically important digital infrastructure in the state.

While I appreciate the author's intent, I am reluctant to impose rigid reporting requirements about operational details on this sector without understanding the full impact on businesses and the consumers of their technology.

AB 222 (Bauer-Kahan) of 2025 requires developers of AI models to estimate energy use associated with using the AI model, requires data centers to report energy use to the California Energy Commission, and requires the California Energy Commission to adopt efficiency standards for data centers. AB 222 was held in the Senate Appropriations Committee.

SB 57 (Padilla), Chapter 647, Statutes of 2025, authorizes the California Public Utilities Commission to conduct a specified assessment of electrical corporations' potential costs and rate impacts associated with serving new electrical loads from data centers.

SB 1298 (Cortese) of 2024 would have authorized the California Energy Commission to exempt from certification a thermal power plant with generating capacity of up to 150 megawatts that is to be used solely as a backup generation facility for a data center, if certain conditions are met. SB 1298 was held on the Assembly Floor.

REGISTERED SUPPORT / OPPOSITION:

Support

California Coastkeeper Alliance

Oppose Unless Amended

California State Association of Counties

League of California Cities

Rural County Representatives of California

Opposition

Bay Area Council
Building Owners and Managers Association of California
CalAsian Chamber of Commerce
California African American Chamber of Commerce
California Business Properties Association
California Chamber of Commerce
California Hispanic Chambers of Commerce
Data Center Coalition
NAIOP Commercial Real Estate Development Association of California
Silicon Valley Leadership Group
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