Date of Hearing: April 14, 2026

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE
Diane Papan, Chair
AB 2619 (Papan) – As Amended April 8, 2026

SUBJECT: Water resources: data centers

SUMMARY: 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. Specifically, **this bill**:

1) Defines "data center" as a facility that houses computing infrastructure, including graphics and central processing units, servers, storage devices, networking equipment, and associated power and cooling systems, for the primary purpose of processing, storing, or distributing electronic data. Further defines three types of data center:

    a) "Type I data center," or "hyperscale data center," as a data center more than 10,000 servers or a power consumption of more than 25 megawatts.

    b) "Type II data center" as a data center with a power consumption of at least 2 megawatts and no more than 25 megawatts.

    c) "Type III data center" as a data center with a power consumption of less than 2 megawatts.

2) Defines "water supplier" as a community water system or an urban water supplier.

3) Requires that prior to applying to a city or county for an initial business license, equivalent instrument, or permit, a person who owns or operates a data center shall provide its water supplier, under penalty of perjury, an estimate of the expected water use, the anticipated source of water, and the data center's projected water use volume for the maximum day, maximum month, and average year.

4) Requires that when applying to a city or county for an initial business license, equivalent instrument, or permit, a person who owns or operates a data center shall report, under penalty of perjury, on the application, an estimate of the expected water use, the anticipated source of water, and the data center's projected water use volume for the maximum day, maximum month, and average year.

5) Requires that when applying to a city or county for a renewal of a business license, equivalent instrument, or permit, a person who owns or operates a data center shall report, under penalty of perjury, the data center's annual water use for the preceding calendar year, including total water use, direct water use, indirect water use, and cooling system type."

6) Defines types of water use:

    a) "Direct annual water use" as the volume of water withdrawn, delivered, or otherwise used onsite for data center operations, including cooling, sanitation, irrigation, and any

other operational use, identified by source, including potable water, nonpotable water, or recycled water.

b) "Indirect water use" as the volume of water withdrawn for the purpose of generating the electricity consumed by the data center.

c) "Total water use" as the sum of direct water use and indirect water use.

7) Requires the Department of Water Resources (DWR) and the State Energy Resources Conservation and Development Commission (California Energy Commission), by January 1, 2029, to develop guidelines and best practices to maximize the use of natural resources to address the developing and emerging needs of technology in California that are consistent with urban water use objectives under the Water Code and the Energy Star program of the U.S. Environmental Protection Agency, as that program existed on January 1, 2025, to the extent that the Energy Star program is applicable to water usage.

8) Requires that best practices include:

a) The use of closed-loop systems;

b) The use of nonpotable water;

c) The installation of rainwater and stormwater capture infrastructure;

d) Water-efficient practices for indoor and outdoor water use;

e) Water-efficient practices need to be scalable and increased for Type I and Type II data centers; and

f) Location, design, construction, and capacity of cooling water intake structures reflecting the best technology available for minimizing adverse environmental impact.

9) Requires DWR, on or before January 1, 2029, in coordination with other relevant state agencies, to develop guidance that cities and counties may use for assessing projected water use, water efficiency measures, and cumulative water resource impacts of proposed data centers within the context of local and regional water management objectives.

10) Requires every urban water supplier to include data center demand as a key data input to evaluate water supply reliability for the urban water supplier's water shortage contingency plan.

11) Requires urban water suppliers to include information about data center demand in its annual water shortage assessment report to DWR.

12) Finds that water conservation is a matter of statewide importance and not a municipal affair for purposes of consistency with the State Constitution.

13) Finds that this bill does not require the state to reimburse local agencies for implementing this bill as local agencies have funding mechanisms available to them or because this bill creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction.

14) States that it is the intent of the Legislature that data centers are considered commercial, industrial, and institutional (CII) users under the state's "Making Conservation a California Way of Life" regulation, consistent with the urban water use objectives.

15) Makes various findings and declarations about the impact of the growth of large data centers on demand for water resources.

EXISTING LAW:

1) Authorizes the legislative body of an incorporated city or a county board of supervisors to license businesses within their respective jurisdictions and to set license fees, as specified (Business and Professions Code §§ 16000 and 16100).

2) Establishes DWR with various responsibilities relating to the protection, conservation, development, and management of the state's water supply (Water Code § 120 *et seq.*).

3) Establishes the California Energy Commission with various responsibilities with respect to developing and implementing the state's energy policies (Public Resources Code § 25200 *et seq*.).

4) Defines "community water system" as a public water system that serves at least 15 service connections used by yearlong residents or regularly serves at least 25 yearlong residents of the area served by the system (Health and Safety Code § 116275).

5) Defines "urban water supplier" as a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually (Water Code § 10617).

6) Requires every urban water supplier to prepare and adopt an urban water management plan, including a water shortage contingency plan, and update it every five years (Water Code § 10620 *et seq.*).

7) Requires every urban water supplier to conduct an annual water supply and demand assessment and submit to DWR an annual report with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communications actions consistent with the supplier's water shortage contingency plan (Water Code § 10632.1).

8) Requires the State Water Resources Control Board (State Water Board), in coordination with DWR, to adopt long-term standards for the efficient use of water on or before June 30, 2022 for outdoor residential use, outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use, and water loss, and sets standards for indoor residential water use (Water Code §§ 10609.2–10609.4).

9) Requires DWR, in coordination with the State Water Board, to conduct studies and investigations to develop recommendations for efficient water use by 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).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

COMMENTS:

1) **Purpose of this bill.** According to the author, "California's water supply is finite, and recent droughts have made clear that we must plan smarter for the demands of a changing climate. At the same time, California is experiencing rapid growth in data centers that operate around the clock and rely on a dependable water supply. While California has long required reporting from water users to support sound, comprehensive planning, there remains a gap in transparency when it comes to data centers, leaving local governments and water agencies without consistent information about their water demands. [This bill] is about transparency, preparedness, and responsible growth. This bill ensures that local governments and water suppliers have the information they need to plan for new development without compromising water reliability for residents, agriculture, and businesses. [This bill] requires data centers to report their water use through the existing business licensure process, directs [DWR] to develop practical efficiency guidance, and integrates data center demand into drought and water supply planning. California has always led the nation in both innovation and water stewardship. [This bill] continues that tradition by making sure our policies keep pace with emerging technologies while protecting our most precious resource."

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, 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 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 with thousands of servers produce immense amounts of heat that need 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;

[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).

- 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; and

- 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 than the peaking factor for other large water 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.

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)

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[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).

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.

Water supply assessments. A water supply assessment is required for a proposed project with a water use that exceeds certain thresholds and is completed as part of the California Environmental Quality Act (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; or
- 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

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[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.

assessment process provides the primary opportunity for public input and awareness of water use by a proposed water user.

Urban Water Management Plans. Every five years, urban water suppliers (those water suppliers that provide more than 3,000 acre-feet of water annually or serve more than 3,000 connections) are required to submit urban water management plans to DWR. Each urban water management plan must include a variety of information, including an assessment of water supply reliability over a 20-year time horizon, a description of demand management efforts, a discussion of the use and planned use of recycled water, and a water shortage contingency plan.

A water shortage contingency plan is a detailed proposal for how an urban water supplier intends to act in the case of an actual water shortage condition, whether caused by drought, climate change, population growth, or any other reason. The plan must include analysis of the water supply reliability assessment, the procedures for an annual water supply and demand assessment, including key data inputs and methodology, operational plans at standardized shortage levels, communications protocols, enforcement methods and authorities, a financial plan, and reporting and reevaluation procedures. This bill requires urban water suppliers to include information about data center demand as a key data input in their annual water supply and demand assessment conducted under their water shortage contingency plan.

In addition to the full update to the urban water management plan required every five years, urban water suppliers must conduct an annual water supply and demand assessment and submit an annual water shortage assessment report to DWR on or before July 1 of every year. These assessments must include information about anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. This bill requires urban water suppliers to include data center demand in their annual water shortage assessment report submitted to DWR.

Urban Water Use Objective. Following the 2012–2016 drought, the Governor and Legislature negotiated a two-bill package known as "Making Conservation a Way of Life" [SB 606 (Hertzberg) and AB 1668 (Friedman)] to establish a new foundation for long-term improvements in water conservation and drought planning to adapt to climate change. These two bills provided expanded and new authorities and requirements to enable permanent changes and actions to drive more efficient water use and better prepare the state for future droughts. A major aspect of "Making Conservation a Way of Life" is the requirements for urban water agencies to improve water use efficiency via the urban water use objective. The urban water use objective is the sum of: (1) indoor residential water use; (2) outdoor residential water use; (3) outdoor CII use associated with dedicated irrigation meters (DIM); (4) water losses; (5) variances, if applicable; and (6) bonus incentives for recycled water, if applicable.

The legislation also directed DWR to complete a report and make recommendations for "performance measures" that urban retail water suppliers can implement to incentivize water use reductions in the CII sector. Under Water Code § 10608.12(v), performance measures are defined as actions taken by urban retail water suppliers that result in increased water use efficiency among CII water users. Performance measures may include, but are not limited to,

educating CII water users on BMPs, conducting water use audits, and preparing water management plans. Performance measures do not apply to "process water," including data center cooling water.

DWR released its report[5] on performance measures for the CII sector, including data centers, in 2022. The report recommended the adoption of a classification system for CII water users, performance measures for outdoor irrigation, and an implementation program for best management practices (BMPs). In 2024, the State Water Board adopted final regulations for "Making Conservation a Way of Life," requiring urban retail water suppliers to:

- Categorize by 2029 their CII accounts into one of 22 classifications (18 adopted from Energy Star Portfolio Manager and four added by the State Water Board);
- Identify their highest water users in each CII classification (those at or above the 97.5th percentile and those at or above the 80th percentile); and
- Implement BMPs to target their highest (97.5th and 80th percentiles) CII users by June 30, 2039.

This bill requires DWR and the California Energy Commission to develop guidelines and best practices for data centers, including guidance for cities and counties to use for assessing projected water use, water efficiency measures, and cumulative water resource impacts of proposed data centers.

Business licenses. Almost every city and county in California requires businesses to have a general license to operate within their respective jurisdictions. The requirements to obtain a business license vary by jurisdiction, but typically require payment of a fee and registration of the business's name (i.e., "doing business as"). This bill requires data centers to provide information regarding their water use when applying for or renewing a business license with a city or county.

3) **Arguments in support.** The California Initiative for Technology and Democracy writes, "[This bill] would provide baseline insight into the operations of resource-intensive data centers. . . . Today, communities are left to piece together on their own how data centers built and operated by some of the wealthiest and most powerful companies in history will affect them. Local jurisdictions cannot effectively represent or act in the best interest of their residents without access to this basic information. . . . By shining a light on how data centers affect communities, this bill will equip state and local decision-makers with the data they need to act in the public interest." Providing specifics, the Santa Clara Valley Water District adds, "This bill would improve water planning by requiring that data center demand be added to an Urban Water Management Plan's annual water supply and demand assessment and annual water shortage contingency plan."

4) **Arguments in opposition.** The Data Center Coalition, writing for a coalition of business groups, states: "[This bill] raises concerns regarding competition, privacy, and security for

[5] DWR, "Summary of Recommendations for Performance Measures for Commercial, Industrial, and Institutional Water Use." (Sacramento, 2022).

data centers and data center customers, as well as the many residents and business across California that depend on digital infrastructure." The Data Center Coalition continues: "Rather than imposing disparate reporting and efficiency best practices on data centers, 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."

5) **Dual referral.** This bill is also referred to the Assembly Local Government Committee.

6) **Related legislation.** AB 2469 (Papan) of the current legislative session, 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. AB 2469 is also set for hearing in the Assembly Water, Parks, and Wildlife 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 Appropriations Committee.

   SB 887 (Padilla) of the current legislative session specifies that development and operation of a data center is not eligible for a 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
California Initiative for Technology & Democracy
Santa Clara Valley Water District

Oppose unless amended

California Broadband & Video Association
CTIA – The Wireless Association
USTelecom – The Broadband Association

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 California
Silicon Valley Leadership Group
TechCA
Technet

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