Date of Hearing: April 8, 2025

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE
Diane Papan, Chair
AB 93 (Papan) – As Amended March 24, 2025

SUBJECT: Water resources: demands: data centers

SUMMARY: Establishes requirements for business licenses, cities and counties, state agencies, and urban water suppliers to report water use by data centers and require data centers to use water efficiently. Specifically, **this bill**:

1) Requires an owner or operator of a data center to estimate its expected water use, under penalty of perjury, on the initial application for a business license from a city or county.

2) Requires an owner or operator of a data center to provide, under penalty of perjury, a report of its annual water use on the application for a business license renewal from a city or county.

3) Provides that cities and counties shall require data centers operating within their respective jurisdictions to meet efficiency standards as a condition of obtaining or renewing a business license. The efficiency standards may include specified requirements and be more stringent for a hyperscale data center than a Type II data center, whose efficiency standards may be more stringent that a Type III data center.

4) Requires the State Water Resources Control Board (State Water Board) and State Energy Resources Conservation and Development Commission (California Energy Commission) 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 the Urban Water Use Objective and U.S. Environmental Protection Agency's Energy Star program, as it existed on January 1, 2025.

5) Requires a public entity to identify the average volume of water delivered to data centers when conducting a cost-of-service analysis to set fees and charges for water service.

6) Defines "data center" as a facility that houses computing infrastructure for the primary purpose of processing, storing, or distributing electronic data. Further defines the following types of data centers:

    a) "Type I data center" or "hyperscale data center" as a data center with more than 10,000 kilograms per square meter and more than 10,000 servers with a power consumption of more than 25 megawatts;

    b) "Type II data center" as a data center with at least 2,000 and no more than 50,000 kilograms per square meter and a power consumption between 2 megawatts and 25 megawatts; and

    c) "Type III data center" as a data center with at least 500 and no more than 5,000 kilograms per square meter and a power consumption of less than 2 megawatts.

7) Defines "local jurisdiction" as a city, county, or other political division in California that issues business licenses.

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

9) 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.

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, 16100).

2) Establishes the California Energy Commission with various responsibilities with respect to developing and implementing the state's energy policies (Public Resources Code § 25000 *et seq*.).

3) Establishes the State Water Board to provide for the orderly and efficient administration of the state's water resources (Water Code § 174 *et seq*.).

4) Requires the state to achieve a 20% reduction in urban per capita water use by December 31, 2020 (20x2020 target) and requires each urban retail water supplier to establish their own target to contribute towards achieving the statewide 20% reduction goal (Water Code §§ 10608.16, 10608.20).

5) Defines "process water" as water used by industrial users to produce a product or product content or water used for research and development. Includes water used for cooling in buildings used in the manufacturing process, control rooms, data centers, laboratories, clean rooms, and other industrial facilities (Water Code § 10608.12).

6) Permits an urban retail water supplier that has a substantial percentage of industrial water use in its service territory to exclude "process water" from its calculation of its urban water use target to meet the 20x2020 target [Water Code § 10608.24(e)].

7) Requires the Department of Water Resources (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).

8) Requires urban water suppliers to identify the costs of water service for the highest users and the average annual volume of water delivered to high water users when conducting a cost-of-service analysis used to set fees and charges for water service (Water Code § 390).

FISCAL EFFECT: Unknown. This bill is keyed fiscal.

COMMENTS:

1) **Purpose of this bill**. According to the author, "As technology has evolved into the new frontier of Artificial Intelligence, the demand for data centers has exploded, and with it,increased competition over our most precious natural resources. Even with recent developments in water efficiency, data centers use a considerable amount of water. Since data centers prioritize cheap energy sources and proximity to customers, many data centers are being developed in water stressed areas. As California's needs for data processing grows, a better understanding of the ratepayer impacts and environmental tradeoffs must be understood. [This bill] is a pragmatic solution that carefully considers a delicate balance of resource demand, local resources constraints, and revenue benefits of data center expansion."

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 AI and other technologies are being deployed.

   Business licenses. Almost every city and county in California requires that businesses 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.

   Urban water use objective. Following the 2012-16 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" are 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.

   CII study. Water use by data centers falls under the CII classification; however, except for a portion of outdoor landscape water use associated with CII water users, CII water use is not part of the urban water use objective. Instead, the Making Conservation a Way of Life package tasked DWR conduct a study on CII use and recommend performance measures to the State Water Board that would improve water use efficiency in the CII sector. DWR

[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).

completed this study in September 2022. The study's recommendations for CII water use include, among others, the following:

- Require urban retail water suppliers to classify all CII water users into one of 19 categories (data centers are explicitly identified as belonging to the "manufacturing" category) within five years. *The final regulation requires urban retail water suppliers to classify CII users by June 30, 2027 in accordance with ENERGY STAR Portfolio Manager's broad categories*;

- Require urban retail water suppliers to develop a CII-Best Management Practices (BMP) implementation program targeting the highest CII water users (top 20% by volume) that focuses on: (1) outreach, technical assistance, and education; (2) incentives; (3) landscape irrigation and management practices; (4) operational practice updates; and (5) collaboration and coordination. Interestingly, the report specifically excludes "process water" (and, therefore, data centers) from the CII-BMP implementation program recommendation because "process water" was exempted from the 20x2020 target. *The final regulation requires urban retail water suppliers to design a conservation program by June 30, 2029 that targets inefficient CII users and incorporates at least two of the recommended BMPs*.

- Provide an alternative pathway for urban retail water suppliers that already have long-standing CII-BMP implementation programs. *The final regulation does not appear to address this recommendation; however, presumably an urban retail water supplier with an existing program will already be in compliance with requirements to develop a conservation program by June 30, 2029*; and

- Adopt a conversion threshold of one acre of landscape area irrigated by a mixed use meter on a per-parcel basis for converting to a DIM (this allows for suppliers to better estimate outdoor landscape use in the CII sector). *The final regulation requires urban retail water suppliers to identify CII water users with large landscape areas and, either install DIMs, or calculate a water budget for such users, and then provide BMPs to these users*.

Proposition 218. This bill requires a cost-of-service analysis to identify the water use of data centers. Retail water agencies conduct a cost-of-service analysis to establish or raise water rates and comply with Proposition 218. Enacted in November 1996, Proposition 218 amended the California Constitution by placing restrictions on how local agencies use fees, charges, or special assessments ("property-related services") to cover the cost of providing services, including for water service. In order to assess a fee, water agencies must ensure it meets five standards under Proposition 218: that a fee or charge (1) not exceed the cost of providing the service for which it is charged or (2) be used for any purpose other than that for which it is charged; (3) that a fee not exceed the proportional cost of providing a service to an individual property; (4) that no fee be imposed for a service unless that service is actually used by or available to a property owner; and (5) that no fee or charge may be imposed for general governmental services that are available to the public in the same manner as it is to property owners. To comply with Proposition 218, water agencies have to undertake a detailed cost study to establish the basis upon which the amount of a proposed fee or charge is calculated, notify customers of a proposed fee or charge, and hold a public hearing on the proposed fee or charge. If a majority of the property owners that will be subject to the

proposed fee or charge protest the fee or charge, a local agency may not impose the fee or charge.

3) **Arguments in support**. The California Coastkeeper Alliance and other environmental organizations write in support of this bill stating "As we witness the rapid growth of Artificial Intelligence and other technologies that rely heavily on data storage and processing, the demand for data centers has exploded. This increase in demand has created heightened competition for our most valuable natural resources, such as energy and water. The average data center uses 300,000 gallons of water per day for cooling, with large data centers using up to 5 million gallons per day – enough to supply water to hundreds of thousands of homes. [This bill] is a practical, well-balanced solution that recognizes the need for progress while carefully considering the impact on our local communities, resources, and economy."

4) **Technical amendment**. This bill requires the California Energy Commission and State Water Board to develop guidelines and best practices for energy and water use related to California's emerging technology needs. Given that DWR has done previous studies and reports on CII water use, DWR is a more appropriate entity for this task. The following amendment will address this:

   Proposed Water Code, Section 189.4. On or before January 1, 2028, the ~~***board***~~ ***department*** and the State Energy Resources Conservation and Development Commission shall 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 Chapter 9 (commencing with Section 10609) of Part 2.55 of Division 6 and the Energy Star program of the United States Environmental Protection Agency, as that program existed on January 1, 2025, to the extent that the Energy Star program is applicable to water usage.

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

6) **Related legislation**. AB 222 (Bauer-Kahan) of the current legislative session requires developers of artificial intelligence (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 is pending in the Assembly Privacy and Consumer Protections Committee after passing the Assembly Utilities and Energy Committee (13–5) on April 2, 2025.

   SB 57 (Padilla) of the current legislative session requires the Public Utilities Commission to establish a tariff on the transmission and distribution of electricity to data centers and require that data centers use 100% zero-carbon energy by January 1, 2030. SB 57 is set for hearing in the Senate Energy, Utilities, and Communications Committee.

   SB 58 (Padilla) of the current legislative session provides a partial state sales tax exemption on the purchase of "data center equipment" for data centers that meet specified certification requirements including using 70% carbon free energy, using a skilled and trained workforce, and creating at least 20 jobs. SB 58 is set for hearing in the Senate Revenue and Taxation Committee.

SB 327 (McNerney) of the current legislative session requires the California Energy Commission to initiate and agreement with the U.S. Department of Energy to establish a fusion energy data center in California that meets specified requirements. SB 327 is pending in the Senate Energy, Utilities, and Communications Committee.

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.

AB 755 (Papan), Chapter 542, Statutes of 2023, requires an urban water supplier to conduct a "water usage demand analysis" before completing, or as part of, a cost-of-service analysis used to set fees and charges for water service pursuant to Proposition 218. Requires the water usage demand analysis to identify the costs of water service for the highest users incurred by the urban water supplier and the average annual volume of water delivered to high water users.

REGISTERED SUPPORT / OPPOSITION:

Support

California Coastkeeper Alliance
Center for Environmental Health
Clean Water Action
Climate Reality Project Bay Area Chapter
Climate Reality Project San Diego
Climate Reality Project San Fernando Valley Chapter
Climate Reality Project, Los Angeles Chapter
Climate Reality Project, Orange County
Community Water Center
Humboldt Waterkeeper
Inland Empire Waterkeeper
Leadership Counsel Action
Los Angeles Waterkeeper
Monterey Waterkeeper
Orange County Coastkeeper
Russian Riverkeeper
San Diego Coastkeeper
Santa Barbara Channelkeeper
Shasta Waterkeeper
South Yuba River Citizens League
The Otter Project
Water Climate Trust
Yuba River Waterkeeper

Opposition

None on file

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