Date of Hearing: April 30, 2025

ASSEMBLY COMMITTEE ON LOCAL GOVERNMENT Juan Carrillo, Chair

AB 93 (Papan) – As Amended April 10, 2025

SUBJECT: Water resources: demands: data centers.

SUMMARY: Establishes requirements for data centers, 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) Defines the following terms:
 - a) "Data center" to mean 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. Types of data centers include the following:
 - i) "Type I data center," also commonly known as a "hyperscale data center," means 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.
 - ii) "Type II data center," means a data center with at least 2,000 and no more than 50,000 kilograms per square meter and a power consumption of a least two megawatts and no more than 25 megawatts.
 - iii) "Type III data center," means a data center with at least 500 and no more than 5,000 kilograms per square meter and a power consumption of less than two megawatts.
 - b) "Local jurisdiction" to mean a city, county, or other political subdivision within the state that issues business licenses.
- 2) Requires a person who owns or operates a data center, when applying to a city or county for an initial business license, equivalent instrument, or permit, to provide, under penalty of perjury, on the application, an estimate of the expected water use.
- 3) Specifies 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 provide, under penalty of perjury, on the renewal application, a report of annual water use.
- 4) Provides that a city or county shall require a data center operating within its jurisdiction, as a condition for obtaining or renewing a business license, to meet efficiency standards as determined by the local jurisdiction. These efficiency standards may include, but not be limited to, the use of closed-loop systems, the use of nonpotable water, and the installation of rainwater and stormwater capture infrastructure. These efficiency standards may also be more stringent for a hyperscale data center than a Type II data center, whose applicable standards may be more stringent than a Type III data center.
- 5) Requires, on or before January 1, 2028, the Department of Water Resources (DWR) and the State Energy Resources Conservation and Development 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 urban water use objectives, as specified, and the Energy Star Program of the United State Environmental Protection Agency, as that program existed on January 1, 2025, to the extent that the Energy Star Program is applicable to water usage.

- 6) Specifies that, as part of a water usage demand analysis, a public entity shall identify the average volume of water delivered to data centers, as defined.
- 7) Finds and declares that water conservation is a matter of statewide concern and is not a municipal affair. Therefore, this bill applies to all cities, including charter cities.
- 8) Provides that no reimbursement is required by this bill for certain costs that may be incurred by a local agency or school district to the extent that:
 - a) This bill creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, or changes the definition of a crime.
 - b) A local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for a program or level of service mandated by this bill.
- 9) Specifies that if the Commission on State Mandates determines that this bill contains other costs mandated by the state, reimbursement to local agencies and school district for those costs shall be made.

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 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: This bill is keyed fiscal and contains a state-mandated local program.

COMMENTS:

1) **Bill Summary.** This bill requires a person who owns or operates a data center, when applying to a city or county for an initial business license, equivalent instrument, or permit, to provide, under penalty of perjury, on the application, an estimate of the expected water use. If the data center is applying for a renewal of a business license, equivalent instrument, or permit, the data center must provide, under penalty of perjury, a report of annual water use. This bill also requires a city or county to require a data center, as a condition of obtaining or renewing a business license, to meet certain efficiency standards determined by the local jurisdiction.

This bill requires, on or before January 1, 2028, DWR and the State Energy Resources Conservation and Development Commission to develop guidelines and best practices to maximize the use of natural resources to address the developing and emerging needs of technology that are consistent with urban water use objectives and the Energy Star Program, as that program existed on January 1, 2025, as applicable. Lastly, this bill requires certain public entities to identify the average volume of water delivered to data centers in their water usage demand analysis required by existing law.

The author is the sponsor of this bill.

- 2) Author's Statement. 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. AB 93 is a pragmatic solution that carefully considers a delicate balance of resource demand, local resources constraints, and revenue benefits of data center expansion."
- 3) **Data Centers.** 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." 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.

4) **Business Licenses.** Existing statutes dating back to 1901 have empowered both counties and cities to license businesses for the purpose of regulation. The California Constitution allows a city or county to "make and enforce within its limits, all local, police, sanitary and other ordinances and regulations not in conflict with general laws," known as police powers. It is from this fundamental power that local governments derive their authority to regulate behaviors, business operations, and land uses. Local agencies also use this "police power" to abate nuisances and protect public health, safety, and welfare.

As an extension of the police power, state law allows local governments to require businesses operating in their jurisdictions to obtain a license and impose related licensing fees. Local governments license businesses for a lot of reasons: to identify individuals operating businesses in their jurisdictions, to ensure compliance with other local laws, to facilitate contact in case a problem arises, and to raise money to support public services that support those businesses.

Business license application and renewal processes vary throughout the state. Some cities use an "over-the-counter" ministerial process when issuing business licenses. While most cities and counties require businesses to operate under a business license, some cities and counties do not issue business licenses at all, including San Diego County. Some cities, like San Diego, issue business tax certificates rather than business licenses. In these jurisdictions, once businesses pay an annual tax for the benefit of operating in the city, the city issues the certificate.

- 5) **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), Chapter 14, Statutes of 2018 and AB 1668 (Friedman), Chapter 15, Statutes of 2018] 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.
- 6) **CII study.** According to the Water, Parks and Wildlife Committee analysis of this bill, 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 to 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 completed this study

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).

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

- a) 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;
- b) 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.
- c) 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
- d) 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.
- 7) **Proposition 218.** The California Constitution requires voter approval for taxes and many other fees and charges. Proposition 218 (1996) added Article XIIID to the California Constitution, which imposed voter approval requirements for most "property-related fees"—any levy other than an *ad valorem* tax, a special tax, or an assessment imposed by an agency on a parcel or on a person as an incident of property ownership, including a user fee or charge for a property-related service.

Before a local government can charge a new property-related fee, or increase an existing one, Proposition 218 requires local officials to:

- a) Identify the parcels to be charged.
- b) Calculate the fee for each parcel.
- c) Notify the parcels' owners in writing about the fees and the hearing.
- d) Hold a public hearing to consider and count protests.

e) Abandon the fees if a majority of the parcels' owners protest.

New, increased, or extended property-related fees generally require voter approval by one of the following: a majority-vote of the affected property owners; two-thirds registered voter approval; or weighted ballot approval by the affected property owners.

Fees or charges for property related services cannot exceed the proportional cost of providing service to the parcel and must be used only for the purposes for which they were collected. Property-related fees must also only fund services actually used by or immediately available to the property owner, not based on potential or future use. Finally, Proposition 218 prohibits local governments from imposing property-related fees or charges for general governmental services—including fire, police, ambulance, or library services—if the service is available to the public at large in substantially the same manner as it is to property owners.

Water, sewer, and refuse collection services are exempt from Proposition 218's voter approval requirements, but must meet all other procedural and substantive requirements in Proposition 218, including the requirement to hold a protest hearing not less than 45 days after mailing a notice of new or increased rates to affected property owners. If a majority protest the fee, based on the proportional obligation of the affected property, then the local agency cannot impose the fee.

- 8) **AB 755 of 2023.** AB 755 (Papan), Chapter 542, Statutes of 2023, required a public entity 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. The analysis must identify the following:
 - a) The costs of water service for the highest water users.
 - b) The average annual volume of water delivered to high water users.

The costs of water service and the average annual volume identified in the analysis must also be made publicly available by posting the information in the public entity's cost-of-service analysis.

- 9) **Policy Considerations.** The Committee may wish to consider the following:
 - a) Efficiency Standards. This bill requires a local jurisdiction to determine efficiency standards for data centers to meet. First, it is not clear what local jurisdiction would create the efficiency standards as "local jurisdiction" is defined in this bill as a city, county, or other political subdivision. Would it be the city or county issuing a business license or some other jurisdiction like a water provider that is a special district? Many cities and counties do not provide retail water service to their residents. Often, water service is provided by a separate special district, like a water district, or a private or mutual water company.

Second, if the intent is to have the city or county that issues the business license create the efficiency standards, would that city or county be equipped to determine those standards if they are not in the business of providing water?

Third, requiring each city or county to create their own efficiency standards could lead to differing criteria in each city or county, possibly making it difficult for data centers to comply with the requirements. Also, could this create a race-to-the-bottom scenario where standards are purposefully lessened in order to attract data centers to a given area? Given these questions, the Committee may wish to consider if consistent, statewide standards are more appropriate.

- b) **Determinations.** Most cities and counties issue business licenses or an equivalent instrument; however, not all cities and counties are water providers. Presumably, in order to determine if a data center is meeting the established efficiency standards, the city or county would be required to conduct some type of inspection. If a business license is issued in a ministerial manner, does that process allow for the type of inspection that may be needed to determine if a data center has met the required standards? In addition, are those cities and counties that do not provide water service in the best position to determine if the efficiency standards are being met? The Committee may wish to consider if the process of issuing business licenses is the best opportunity to conclude whether or not data centers are complying with the requirements in this bill.
- 10) **Committee Amendments.** In order to respond to the policy considerations above, the Committee may wish to consider the following amendments:
 - a) Add intent language that states: It is the intent of the Legislature that data centers are considered commercial, industrial and institutional users under the state's Making Conservation a Way of Life legislation, consistent with the urban water use objectives under Chapter 9 (commencing with Section 10609) of Part 2.55 of Division 6.
 - b) Specify that a data center must provide its water supplier, under penalty of perjury, information related to estimated water use prior to applying to a city or county for an initial business license.
 - c) Provide that, when applying to a city or county for an initial business license, a data center shall self-certify, under penalty of perjury, on the application, that they have provided its water supplier an estimate of the expected water use.
 - d) Specify that, when applying to a city or county for a renewal of a business license, a data center shall self-certify, under penalty of perjury, on the renewal application, a report of annual water use for the prior period.
 - e) Specify that, as a condition for obtaining or renewing a business license, a data center must self-certify that they will meet the efficiency guidelines and best practices as determined by the State.
 - f) Remove requirement for cities and counties to require a data center to meet efficiency standards that are determined by a local jurisdiction.
 - g) Add clarity to what information must be included in the guidelines and best practices developed by the State.

11) **Arguments in Support.** According to a coalition of supporters, including the California Coastkeeper Alliance, "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. AB 93 is a practical, well-balanced solution that recognizes the need for progress while carefully considering the impact on our local communities, resources, and economy.

"The bill appropriately empowers local authorities to impose efficiency standards, enabling regions to tailor regulations based on their unique needs and circumstances. At the same time, it ensures that public utilities have the tools to accurately assess the broader impact of data centers on the overall system, promoting greater sustainability and accountability within the sector.

"Without strategic oversight, unchecked expansion of data centers could place unsustainable pressure on local resources and infrastructure. AB 93 strikes the right balance between facilitating growth and ensuring responsible resource management."

- 12) **Arguments in Opposition.** According to the Data Center Coalition, "Given the nuance required in selecting an appropriate cooling solution, we are concerned about proposed requirements as a condition for obtaining or renewing a business license that may be overly restrictive or impossible to achieve. Such requirements could be prohibitive given the complexity involved in retrofitting existing infrastructure and substantial modifications required for existing plumbing, piping, and rack configurations.
 - "Rather than imposing disparate reporting and efficiency requirements solely on data centers, a more equitable approach would acknowledge the significant water consumption across diverse industries, including agriculture, manufacturing, mining, and construction. Data center operators are actively prioritizing water efficiency through operational best practices and innovative development strategies, often collaborating with local authorities and conservation organizations on water restoration and reclamation projects. A December 2024 report by Virginia's Joint Legislative Audit & Review Commission (JLARC) substantiates this commitment. The report confirmed that in Virginia, home to the world's largest data center market, data center water usage is currently sustainable, and the state ensures future sustainability through regulation. The report also noted that in 2023, 83% of data centers in Virginia used the same amount of water (or less) than the average large office building."
 - "...Data centers fuel economic growth, supporting jobs in technology, construction, engineering, and maintenance. Data centers also attract investment from cloud providers, AI developers, and enterprise IT, strengthening California's digital economy. AB 93 risks stifling job creation and innovation by discouraging data center expansion.
- 13) **Related legislation**. AB 222 (Bauer-Kahan) 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.

SB 57 (Padilla) 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 currently pending in the Senate Appropriations Committee.

SB 58 (Padilla) 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 currently pending in the Senate Revenue and Taxation Committee.

SB 327 (McNerney) 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 currently pending in the Senate Energy, Utilities, and Communications Committee.

- 14) **Previous Legislation.** AB 755 (Papan), Chapter 542, Statutes of 2023, required 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.
- 15) **Double-Referral.** This bill was double-referred to the Assembly Water, Parks, and Wildlife Committee, where it passed on 10-1 vote on April 8, 2025.

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 Waterkeeper

Russian Riverkeeper

San Diego Coastkeeper

Santa Barbara Channelkeeper

Shasta Waterkeeper

South Yuba River Citizens League The Otter Project Water Climate rust Yuba River Waterkeeper

Opposition

Data Center Coalition

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