

Date of Hearing: September 12, 2025

ASSEMBLY COMMITTEE ON WATER, PARKS, AND WILDLIFE

Diane Papan, Chair

AB 915 (Petrie-Norris) – As Amended July 17, 2025

SUBJECT: Dam safety: state supervision: exceptions

SUMMARY: Exempts water storage ponds associated with an energy storage system facility that uses compressed air technology and is located in eastern Kern County from dam safety regulations. Specifically, **this bill:**

- 1) Exempts water storage ponds associated with an energy storage facility that uses compressed air technology and is located in eastern Kern County from dam safety regulations if the water storage ponds meet the following criteria:
 - a) Have a maximum pool height of 25 feet or less from the final engineered grade and a maximum storage capacity of 1,500 acre-feet (AF) or less;
 - b) Are designed by, and constructed under, the supervision of a registered civil engineer;
 - c) Are not across a stream or watercourse; and
 - d) Are approved by a lead agency under the California Environmental Quality Act, including if approved by a state agency under a certified regulatory program.
- 2) Declares and finds that this special statute is necessary because of the unique project that will be located in Kern County.

EXISTING LAW:

- 1) Subjects all dams and reservoirs to regulation and oversight by the Division of Safety of Dams (DSOD) within the Department of Water Resources (DWR) (Water Code § 6075).
- 2) Defines “dam” as any artificial barrier, together with additional appurtenant structures (including training walls, spillways, outlets, tunnels, channels, pipelines, or dikes) that may impound or divert water and is either (a) 25 feet or greater in height from the natural stream bed to the top of the barrier/maximum storage elevation, or (b) impounds a capacity of 50 AF of water or more (Water Code § 6002).
- 3) Excludes any barrier not in excess of six feet in height or a barrier with a storage capacity of 15 AF or less, regardless of height, from the definition of dam (Water Code § 6003).
- 4) Excludes certain structures from the definition of “dam,” including an obstruction in a canal or a barrier across a stream channel, watercourse, or natural drainage area, if the structure is no greater than 15 feet in height (Water Code § 6004).
- 5) Excludes dams owned and operated by the federal government from regulation and oversight by DSOD (Water Code § 6009).

- 6) Requires DSOD to inspect dams, reservoirs, and appurtenant structures to verify their safety in accordance with a prescribed schedule depending on the hazard classification, as determined by DSOD, of the facility (Water Code § 6102.5).
- 7) Requires payment of a filing fee for a new dam or reservoir, or the enlargement, repair, alteration, or removal of an existing dam or reservoir. The filing fee is assessed as a percentage, on a sliding scale, of estimated cost of the project (Water Code § 6300).
- 8) Authorizes DWR to assess an annual fee on dam or reservoir operators to cover DWR's reasonable regulatory costs in carrying out the supervision of dam safety (Water Code § 63017).

FISCAL EFFECT: The Senate Appropriations Committee did not hear this bill and, instead, reported it to the Senate Floor pursuant to Senate Rule 28.8; indicating this bill does not appropriate money, does not result in significant state costs or require the appropriation of funds, and will cause no significant reduction in revenues.

COMMENTS:

- 1) **Purpose of this bill.** The author argues “Clear jurisdiction and certainty are key for new energy technologies that are necessary to California meeting its clean energy and climate change requirements. Some long duration energy storage projects that utilized compressed air and water are facing uncertainty as to which agency is responsible for reviewing their projects and issuing their permits. If they are regulated as dams, because they have a pond of water onsite, they face millions of dollars and years of delays.... [This bill] ensures the California Energy Commission (CEC) can use its long-standing authority and process to review compressed air energy storage projects and their various components including retention ponds.... Under [this bill] water storage ponds at compressed air storage facilities will be permitted and regulated in the same manner as wastewater treatment ponds because both pond types are nearly identical in volume, how they are engineered, and how they are built.”
- 2) **Background.** Since 1929, the State of California has regulated and supervised dams to prevent failure, safeguard life, and protect property. Any structures that meet the definition of “dam” (see #2 under Existing Law, above) are considered “jurisdictional dams” and are subject to regulation and oversight by DSOD within DWR. There are more than 1,200 jurisdictional dams in California. DSOD ensures dam safety by:
 - Reviewing and approving dam enlargements, repairs, alterations, and removals to ensure that the dam appurtenant structures are designed to meet minimum requirements;
 - Performing independent analyses to understand dam and appurtenant structure performance. These analyses can include structural, hydrologic, hydraulic, and geotechnical evaluations;
 - Overseeing construction to ensure work is being done in accordance with the approved plans and specifications;

- Inspecting each dam on an annual basis to ensure it is safe, performing as intended, and is not developing issues. Roughly one-third of these inspections include in-depth instrumentation reviews of the dam surveillance network data; and
- Periodically reviewing the stability of dams and their major appurtenances in light of improved design approaches and requirements, as well as new findings regarding earthquake hazards and hydrologic estimates in California.

Certain types of structures (e.g., those that are smaller and impound water principally for agricultural purposes) are exempt from oversight by DSOD. This bill adds another exemption for storage ponds associated with the Willow Rock Energy Storage Center in eastern Kern County.

Dam safety fees. A dam or reservoir operator must submit an application to DSOD for the construction of a new dam or reservoir and the repair, alteration, or removal of an existing dam or reservoir. To cover its costs in reviewing applications, DSOD assesses a filing fee on a sliding scale that is a percentage of the estimated cost of the project as follows:

| Estimated cost of construction or alteration | Percentage | Maximum total fee |
|---|-------------------|--------------------------|
| First \$1 million | 3.25% | \$32,500 |
| Next \$4 million | 2.5% | \$100,000 |
| Next \$15 million | 2% | \$300,000 |
| Next \$30 million | 1.75% | \$525,000 |
| Next \$100 million | 1.25% | \$1,250,000 |
| Next \$350 million | 0.75% | \$2,625,000 |
| All costs in excess of \$500 million | 0.5% | variable |

DSOD also assesses annual fees on jurisdictional dams to cover its ongoing oversight and regulation of dams and reservoirs. The annual fees are based on a formula that fluctuates from year-to-year based on DSOD's costs. For FY 2024-25 and FY 2025-26 the base annual fee is \$1,195 plus \$280 per foot of dam height plus an additional charge for "critical appurtenant structures," if applicable. Neither of the DSOD filing fees or annual fees would apply to the Willow Rock Energy Storage Center (Willow Rock) project affected by this bill given that the project has availed itself of CEC's in lieu permitting process (see discussion below), but these fees provide context regarding the cost of dam safety oversight.

CEC Application for Certification (AFC) process. The Warren-Alquist Act, enacted in 1974, established CEC as the state's primary energy policy and planning agency. One of its key provisions is to grant CEC the exclusive authority to license and certify thermal power plants with a generating capacity between 50 and 100 megawatts (MW). This approval process, known as AFC, ensures that proposed power plants meet environmental, public health, and safety standards while aligning with California's broader energy and environmental policies. AFC is an "in lieu" permitting process that involves rigorous evaluation, including environmental impact assessments, public participation, and coordination with local, state, and federal agencies to ensure responsible energy development. Projects that use CEC's AFC process need not obtain additional permits from other state, regional, or local agencies

or federal agencies, to the extent permitted by federal law. The thermal plants that can avail themselves of the AFC process include:

- Natural gas-fired power plants (including combined-cycle and peaking plants);
- Geothermal plants;
- Solar thermal power plants (e.g., concentrated solar power plants); and
- Biomass or biogas facilities (waste-to-energy plants).

Willow Rock project. The Willow Rock project is going through the AFC process at CEC. According to CEC, Willow Rock is a proposed compressed air energy storage facility in Kern County. The project site is on undeveloped land in an area zoned for “Limited Agriculture.” The area surrounding the project boundary is largely undeveloped with very sparse residential development; the nearest residence is approximately 0.8 miles northwest of the northwest corner of the Willow Rock project site.

Willow Rock is a 520 MW gross (500 MW net) and 4,160 megawatt-hour (MWh) gross (4,000 MWh net) facility using Hydrostor, Inc.’s proprietary, advanced compressed air energy storage technology. The facility would consist of four power turbine trains and each train would share a common set of thermal storage tanks (hot and cold water), as well as the air storage cavern. Willow Rock would interconnect to Southern California Edison’s Whirlwind Substation located southwest of Willow Rock via a new approximately 19-mile 230-kilovolt generation-tie line.

According to Willow Rock’s fact sheet provided by Hydrostor (sponsor of this bill), “Hydrostor’s technology relies on a man-made, fully lined retention pond which maintains the pressure of the compressed air in the underground cavern. The pond has no hydrologic connection to surface water or groundwater, will contain less than 600 [AF] of water, and will have a small berm six feet high from finished grade. 45 [AF] of water, or 15 million gallons of water, will be held above the finished grade, and all water in the pond can be emptied into the cavern if necessary.”

Although Hydrostor argues that this pond is not a dam, CEC and DSOD staff have indicated that the reservoir falls within the definition of “dam.” As such, the retention pond feature of Willow Rock is subject to the same design, construction, and inspection requirements as other dams. CEC states that it will consult with DSOD through the AFC process to address dam safety requirements and standards relevant to Willow Rock.

- 3) **Arguments in support.** Hydrostor, Inc. asserts that this bill is necessary to allow for the timely completion of the Willow Rock project, a long duration energy storage project that uses new technology and will help California meet its clean energy goals: “forcing this important energy storage facility into two permitting application processes when the CEC has sole jurisdictional authority for the Willow Rock project is not warranted. To ensure that Willow Rock can move forward to provide energy storage needed to ensure a more reliable grid and to integrate renewable energy into the generation mix and for the Project to meet ongoing procurement and financing requirements, it is imperative that a final decision by the CEC be made in 2025.”

- 4) **Related legislation.** AB 639 (Soria) of the current legislative session exempts specific weirs on the Kings River that have at least three feet of freeboard from regulation and oversight by DSOD. AB 639 is pending in engrossing and enrolling.

SB 122 (Committee on Budget and Fiscal Review), Chapter 51, Statutes of 2023, is the public resources trailer bill for the 2023-24 fiscal year. Among other provisions, SB 122 increases the application fee for the enlargement, repair, alteration or removal of an existing dam or reservoir and authorizes DWR to adopt regulations to adjust the application filing fees to ensure the fees cover DWR's reasonable costs in processing applications.

AB 1164 (Flora), Chapter 943, Statutes of 2022, exempts "regulating basins," as defined, from regulation and oversight by DSOD.

AB 727 (Flora) of 2019 would have exempted structures that are 20 feet or less in height, owned or operated by a public agency, and used principally for impounding water for agricultural use from regulation and oversight by DSOD. AB 727 was held in the Senate Natural Resources and Water Committee.

AB 1270 (Gallagher), Chapter 3, Statutes of 2018, repealed previous provisions of law related to dam safety and inspection, and instead, among other things, added specific requirements for DSOD to inspect dams, reservoirs, and appurtenant structures on an annual and bi-annual schedule based on hazard classification.

REGISTERED SUPPORT / OPPOSITION:

Support

Hydrostor, Inc. (sponsor)
Ava Community Energy Authority

Opposition

None on file

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