

Comments by the Delta Tribal Environmental Coalition
Shingle Springs Band of Miwok Indians, Winnemem Wintu Tribe, Little Manila Rising,
and Restore the Delta

**August 2026 Final Draft Bay-Delta Plan Update, Staff Report, and Substitute
Environmental Document**

September 18, 2026

I. Introduction

Shingle Springs Band of Miwok Indians, Winnemem Wintu Tribe, Little Manila Rising, and Restore the Delta (collectively, the Delta Tribal Environmental Coalition, or “DTEC”) submit the following comments on the August 2026 Final Draft Bay-Delta Plan update (“Bay-Delta Plan” or “Plan”), Staff Report, and Substitute Environmental Document (“SED”). DTEC reasserts and incorporates by reference its prior public comments submitted in this proceeding—DTEC’s January 19, 2024 comments on the 2023 Draft Staff Report and SED (“DTEC Comments on SED”), DTEC’s January 10, 2025 comments on the October 2024 Draft Water Quality Control Plan (“DTEC Comments on 2024 Draft Plan”), and DTEC’s February 2, 2026 comments on the December 2025 Draft Water Quality Control Plan (“DTEC Comments on 2025 Draft Plan”).¹ This letter addresses both the failure of the State Water Resource Control Board (“State Water Board” or “Board”) to remedy previously identified deficiencies in the Plan, as well as the specific changes, additions, and deletions reflected in the current Final Draft Plan.

The Board’s planned reliance on privately negotiated Voluntary Agreements (VAs) has reached a predictable dead end, as the Bureau of Reclamation and Westlands Water District have now indicated that they will walk away from the VAs if the updated Plan is approved.² This late-stage collapse exposes the fundamental flaw in wasting eight years pursuing voluntary, secret deals that give powerful water districts regulatory exemptions while offering inadequate flow commitments. This delay—driven by the pursuit of unviable VAs—leaves Bay-Delta waterways regulated under outdated 1995 standards rather than protecting the estuary. As a result, the ongoing degradation inflicts outsized harm on Tribes, fishing interests, and disadvantaged environmental justice communities, many of which DTEC represents and all of whom are deliberately excluded from the process. With the VAs’ primary federal and agricultural partners

¹ DTEC also joins in and incorporates by reference the comments by San Francisco Baykeeper et al.

² See Westlands Water District, *Westlands Water District to End Participation in Bay-Delta Program Absent Reversal by the State* (Sep. 4, 2026), <https://wwd.ca.gov/wwd-media/press-release-9-4-2026/> [hereinafter “Westlands Statement”] (Exhibit A hereto); Letter from Aubrey J.D. Bettencourt, U.S. Bureau of Reclamation, to State Water Res. Control Bd., *re: August 2026 Draft Water Quality Control Plan—Reclamation’s Principal Concerns* (Sep. 4, 2026), <https://www.usbr.gov/mp/docs/cgb-actingcommissioner-letter-statewaterresourcescontrolborad-reclamationconcerns-20260904.pdf> [hereinafter “Bureau Letter”] (Exhibit B hereto).

threatening to pull out entirely, the Board’s continued reliance on this flawed framework is indefensible.

In this comment, DTEC emphasizes and provides additional evidence to support concerns about ongoing procedural and civil rights violations, as well as Clean Water Act and Porter-Cologne Act statutory violations. DTEC will also describe multiple points in which there are significant deficiencies in the SED for the Final Draft Plan under the California Environmental Quality Act, Public Resources Code § 21000 et seq. (“CEQA”).

DTEC is disappointed that, after such delay, the Board is now proceeding in a manner that fails to address major problems to ensure meaningfully improved flows in the watershed. The failure to address these problems is a violation of the Porter-Cologne Water Quality Control Act, Clean Water Act, CEQA, and federal and state duties owed to Tribes and disadvantaged communities, including the Board’s duty to safeguard public trust resources. Additionally, the choice to use legally flawed voluntary agreements to implement the Plan reinforces exclusionary governance and undercuts efforts to protect disadvantaged communities and Tribal beneficial uses. Further, the Board has failed to uphold its obligations under the Clean Water Act to address harmful algal blooms (HABs) in the Delta and promulgate HABs standards. It has also failed to consult with Tribes to develop and evaluate less harmful project alternatives. Instead of catering to uncooperative contractors, the Board must abandon the failing VA framework and enact strong, enforceable water quality standards based in science and the Traditional Ecological Knowledge (TEK) of the waterways’ original stewards.

DTEC expands on these and other concerns with the Board’s proposed Final Draft Plan, Staff Report, and SED in the comments below.

II. Ongoing Procedural Violations

A. Premature Plan Advancement Amid Unresolved Federal Title VI Investigation

Pursuant to Title VI of the Civil Rights Act of 1964, state law, and its own Racial Equity Resolution, the Board is legally obligated to assure that its actions do not exacerbate existing racial inequities in either purpose or practical effect. Because any federal financial assistance extends Title VI compliance duties to all operations of a recipient agency—and given that the Board receives substantial annual funding from the U.S. Environmental Protection Agency (“EPA”)—the Board must adhere to federal non-discrimination mandates across all programmatic activities, including updating the Plan.

On December 16, 2022, DTEC filed a Title VI Civil Rights Complaint and Petition for Rulemaking with the EPA. DTEC established that out-of-date water quality standards have directly driven the proliferation of toxic HABs, the collapse of native fish species, and the

degradation of riparian ecosystems, imposing severe, disproportionate burdens on Bay-Delta Sovereign Tribes and Communities of Color. The EPA accepted the Complaint for investigation on August 8, 2023.

Although the parties agreed to seek informal resolution through facilitated negotiations, and the EPA tolled its deadline to issue preliminary findings of discrimination to accommodate the negotiations, the Board has stalled these proceedings for years without executing an informal resolution agreement. Following months of informal facilitation sessions between Complainants, the State Water Board, and the EPA (including two full-day in-person facilitation sessions, three hybrid facilitation sessions, and numerous exchanges) and further ensuing negotiations between EPA and the Board, the EPA provided the Board with a proposed informal resolution agreement in November 2024 arising from these negotiations. Nearly two years later, the Board has failed to execute the agreement with the EPA and declined to respond to any of Complainants' communications urging it to act on the negotiated terms. Proceeding to advance the Plan while the federal investigation remains open and colorable allegations of discrimination against the Board unresolved, and without adopting the structural remedies negotiated in the informal resolution process, constitutes a serious breach of the State's legal and moral obligations to Tribes and disadvantaged communities that has the effect of incorporating ongoing discriminatory practices into long-term Delta governance.

a. Violations of AB 2108 / Water Code 13149.2(b) Environmental Justice Requirements

Under California Water Code section 13149.2(b), the Board must conduct targeted outreach and issue explicit findings regarding environmental justice impacts, Tribal considerations, and racial equity prior to adopting regional or statewide water quality control plans. The Plan fails to satisfy these statutory mandates across three critical components:

- **Programmatic Failure Regarding Water Supply Adjustments and the 35% Export Ceiling:** The Plan fails to conduct the required equity analysis or issue statutory findings under section 13149.2(b) regarding how the export parameters in Table 3—which permit State Water Project and Central Valley Project export facilities to divert 35% of Delta inflow from February through June (and up to 45% of Delta inflow during dry Februarys)—disproportionately harm disadvantaged communities and Tribes. By framing export limits primarily through the lens of agricultural and municipal water supply availability rather than assessing the attendant environmental justice impacts of reduced Delta outflow, the Board neglects its duty to evaluate how high export levels aggravate HABs, degrade drinking water quality, and deplete local fisheries relied upon by local communities. The lack of explicit, evidence-based findings demonstrating that these export allowances do not

perpetuate environmental injustice constitutes a statutory violation under Water Code section 13149.2(b). Given that the Board is proposing to modify the export limits (by, for instance, increasing the February export limit) and integrate them into a substantially revised Plan, the Board cannot hide behind its 2006 Bay-Delta Plan to avoid making these findings for this new and superseding one.³

- **Arbitrary Re-Omission of T-SUB and SUB Beneficial Uses:** Despite the State Water Board's prior adoption of the T-SUB beneficial use definitions in 2017, the draft Plan arbitrarily fails to designate or establish protective water quality objectives for T-SUB and SUB within the Delta watershed. Under AB 2108 (codified at Wat. Code § 13149.2), the Board must issue explicit findings on how its planning decisions affect Tribal considerations and racial equity. Omitting T-SUB and SUB protection from the Plan's operational rules and flow objectives directly undermines the sovereign cultural and nutritional rights of California Tribes and low-income subsistence fishers. Without explicit designation, monitoring, and flow protections tailored to sustain safe, consumable fish populations, the Plan fails to meet the core mandate of Water Code section 13149.2(b).
- **Exclusionary Voluntary Agreement Process:** The Board's reliance on the exclusionary Voluntary Agreement (VA) process violates Water Code section 13149.2(b). By shaping the Plan's flow and habitat parameters through closed-door, private negotiations restricted to senior water rights holders, the Board unlawfully bypassed meaningful, early engagement with environmental justice communities, Tribes, and communities of color. Securing terms in secret with historically privileged water users prior to public review reduces statutory outreach to a post hoc formality, depriving impacted communities of an authentic role in decisions affecting their water quality and cultural resources. Furthermore, by framing water quality objectives around the minimal water volumes senior rights holders voluntarily agree to surrender, rather than what science and Traditional Ecological Knowledge require, the Board locks in historical racial disparities in water access and exacerbates severe environmental justice burdens, such as toxic HABs in vulnerable downstream communities. Because the VA framework prioritizes private contractual preferences over equitable resource protection, the Board cannot lawfully make the affirmative, evidence-based findings of racial equity and environmental justice required by Water Code section 13149.2(b).

³ Compare Final Draft Bay-Delta Plan at 20 (Table 3) with Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary at 15 (Table 3) (Dec. 13, 2006), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/wq_control_plans/2006wqcp/docs/2006_plan_final.pdf. .

III. Substantive Civil Rights and Anti-Discrimination Statutory Violations (Title VI & Gov. Code 1135)

The State Water Board's adoption of the August 2026 Final Draft Bay-Delta Plan update and SED would violate Title VI of the federal Civil Rights Act of 1964, the Equal Protection Clause of the Fourteenth Amendment, and California Government Code sections 11135 and 11139. Under these civil rights mandates, recipients of state and federal funds are strictly prohibited from administering programs in a manner that subjects protected classes to discrimination or causes an unlawful disparate adverse impact based on race, color, or national origin. These violations occur alongside an active federal investigation by the EPA under EPA File No. 01RNO-23-R-9, which was initiated after DTEC filed a Title VI complaint in December 2022. Despite participating in informal resolution sessions, the Board has failed to act on the proposed resolution agreement pending since November 2024, opting instead to advance an exclusionary planning process. Furthermore, the Board's adoption of the Plan violates Assembly Bill 2108, which mandates concise, programmatic findings on environmental justice, Tribal impacts, and racial equity prior to adoption—findings the Board omitted.

A. Unlawful Disproportionate Adverse Impact

By omitting enforceable numeric HAB standards and meaningful instream flow requirements, the Board knowingly causes an unlawful discriminatory effect on Native American Tribes and Communities of Color. The Board failed to adopt the EPA's 2019 Clean Water Act Section 304(a) recommended human health ambient water quality criteria for microcystins and cylindrospermopsin without providing valid scientific or legal justification under federal regulations. The resulting proliferation of toxic blooms, driven by low flows and high residence times, severely harms environmental justice communities in South Stockton, which rank in the 99th and 100th percentiles for cumulative environmental burdens under CalEnviroScreen 4.0. These cyanotoxins create severe public health risks for unhoused populations relying on surface waters, degrade local air quality through secondary organic aerosols, and suppress tribal ceremonial gathering and subsistence practices. Rejecting the scientifically supported unimpaired flow objectives in favor of unmeasurable narrative fish viability goals leads to flow drawdowns as low as 35% during dry periods—far below the 75% unimpaired flow requirement identified in the Board's own 2010 Delta Flow Criteria Report. Because tribal and non-tribal subsistence fishing are both well-established existing uses in the Bay-Delta, the Clean Water Act requires the State Water Board to ensure their protection irrespective of their formal designation.⁴ A

⁴ See 40 C.F.R. §§ 131.10(g)-(h), 131.12(a)(1) ("Existing instream water uses and the level of water quality necessary to protect the existing use shall be maintained and protected."); Env't Prot. Agency, Office of Water, Letter to State of Oklahoma, Att. (Aug. 11, 2008), <https://www.epa.gov/sites/default/files/2014-10/documents/existinguse-smith-lee-letter.pdf>, <https://www.epa.gov/sites/default/files/2014-10/documents/existinguse-smith-lee-letter.pdf> (setting forth EPA's interpretation of existing uses protections under Clean Water Act).

September 2020 DWR survey shows that 90% of disadvantaged community respondents consume Delta fish four or more times per week, establishing subsistence fishing as an important existing use for Delta communities.⁵ Degradation of water quality and native salmon runs directly impairs tribal and non-tribal subsistence fishing—existing uses the Board must reasonably protect, yet that are ignored by the VAs and WSAs—thereby violating the anti-discrimination mandates in federal and state civil rights laws.⁶

B. Discriminatory Exclusions in Voluntary Agreements

The Healthy Rivers and Landscapes Voluntary Agreements are the product of an inherently discriminatory process that systematically excludes Tribes and Communities of Color while substantively delegating public trust authority to private diverters. California’s history of state-sponsored genocide, unfulfilled treaties, and racial land restrictions stripped Tribes and people of color of ancestral lands and associated water rights, leading to modern water governance where 90% of water rights holders and district directors are white. By negotiating the Voluntary Agreements in closed-door sessions restricted exclusively to these historical water rights holders, the State incorporated historical racial discrimination directly into modern policy. Native American Tribes and environmental justice organizations were shut out of these non-disclosure-agreement-bound negotiations, and the Board attempted to bypass formal government-to-government consultation under Assembly Bill 52 (codified at Pub. Res. Code §§ 21080.3.1 et seq. and 21084.2) by falsely claiming an exemption based on a 2012 Notice of Preparation. Substantively, the Plan replaces statutory water quality mandates with private contracts, exempting major diverters—such as the San Joaquin River Exchange Contractors and Feather River Settlement Contractors—from contributing flow or funding, adhering to temperature management plans, and meeting cold-water habitat objectives. This unlawful delegation conflates regulatory duties under the Porter-Cologne Act with private water rights negotiations, forcing the public to pay hundreds of millions of taxpayer dollars to purchase small water increments and reversing the legal obligation of private diverters to avoid harming public trust resources.

The Westlands Statement and the Bureau Letter threatening withdrawal from the VAs reveal the fundamental legal and ethical flaws in substituting these privately negotiated contractors for open, science-based regulatory governance. As DTEC explained in its prior comments, the Board effects an unconstitutional delegation of authority when it “(1) leaves the resolution of fundamental policy issues to others or (2) fails to provide adequate direction of the implementation of that policy.”⁷ To avoid an unlawful delegation, the Board must retain ultimate

⁵ See Cal. Dept. of Water Resources, Your Delta Your Voice Environmental Justice Community Survey (May 2021), available at https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP_EJSurvey-Report-5-28-2021_Final_508.pdf.

⁷ *People ex rel. Lockyer v. Sun Pac. Farming Co.*, 77 Cal.App.4th 619, 633-34 (2000).

⁷ *People ex rel. Lockyer v. Sun Pac. Farming Co.*, 77 Cal.App.4th 619, 633-34 (2000).

authority to formulate and exercise governing standings and impose adequate “safeguard which insure that the delegate does not act arbitrarily.”⁸ Westlands and the Bureau appear not to understand these bedrock constitutional duties when they insist that the Board remove the necessary though still woefully insufficient guardrails it has put in place to ensure reporting, oversight, and consistency of the VAs with standards the Board administers. Indeed, the Bureau is explicit that it will only remain in the VAs if the Board abdicates its oversight role entirely, allowing the VA parties to proceed with their negotiated “multi-party governance structure” that relegates the Board to mere observer.

This exchange reveals the fatal flaw at the heart of the Board’s acceptance of the VAs: The VA parties negotiated these agreements in private, without involvement of Tribes, Delta communities, or the Board itself in an effort to sidestep oversight from the very body the legislature has charged with overseeing water quality and water rights in the state. Having struck a deal amongst themselves, the VA parties have no interest in even the modest efforts by the Board to avoid unconstitutional delegation of its authority to the VA parties if it means changing the terms of the deal they struck or subjecting them to regulatory scrutiny.⁹ The VAs were and remain private contracts. They should never have been considered a substitute for mandatory public process and science-based governance, and they most certainly cannot be adopted now.

IV. Clean Water Act and Porter-Cologne Statutory Violations

A. The Final Draft’s Narrative Water Quality Objectives are Incapable of Meeting Clean Water Act and Porter-Cologne Act Requirements

DTEC is disappointed that after so many years of delay, the Board is proceeding in a manner that not only fails to ensure meaningfully improved flows in the watershed, but also violates the Porter-Cologne Act, Clean Water Act, and federal and state duties it owes to Tribes and disadvantaged communities.

Under the Porter-Cologne Act, the State Water Board must establish water quality objectives in water quality control plans that will ensure the reasonable protection of beneficial uses.¹⁰ And under the Clean Water Act, the Board has a legally mandated duty to reasonably protect beneficial uses and base water quality criteria on “sound scientific rationale.”¹¹ The Final Draft’s narrative interior flow objectives fail to meet both. As DTEC explained at length in prior

⁸ *Id.* (quoting *Wilkinson*, 144 Cal.App.3d at 442).

⁹ See Bureau Letter at 1 (accusing the Board of failing to “honor the 2022 Memorandum of Understanding and Term Sheet” negotiated by the VA Parties); Westlands Statement (opining that “[t]he final draft moves the HRL Program back toward the regulatory approach it was created to replace”).

¹⁰ Wat. Code § 13241.

¹¹ 40 C.F.R. § 131.11(a)(1).

comments, and the Board acknowledges in its own responses, when flows follow the natural hydrograph and return closer to unimpaired flow levels, all native Bay-Delta species benefit, as do the communities that depend on Bay-Delta ecology. Flows are the “‘master variable’ driving geomorphic, biological, chemical process important to aquatic ecosystems.”¹² The Final Staff Report underscores this: “Generally, the higher the flows up to 100 percent of unimpaired flow . . . the greater the expected benefits are for native species and the ecosystem. . . .”¹³ The Final Staff Report further explains that “[t]he more frequently a species flow is met, the more favorable conditions are to support the beneficial use.”¹⁴ Sufficient flows are critical to avoiding and mitigating spread of harmful algal blooms, which, as explained below, impair fish and wildlife, recreational, and Tribal beneficial uses, among others. Without adequate flows, the range of processes necessary for functioning aquatic systems suffer. In turn, beneficial uses that depend on a functional ecology are impaired.

As demonstrated in both DTEC’s previous comments and the Final Staff Report, sound scientific rationale supports the need for a higher flow standard to protect native species, maintain the health of the watershed, and reasonably protect beneficial uses. Thus, in light of the best available science and TEK regarding Bay-Delta waterways, and the needs of native fish species, as well as the exigency of the ecological crisis in the Bay-Delta, DTEC continues to advocate for a flow objective of 65% unimpaired flow coupled with a reasonable adaptive range with management strategies that implement a functional flows approach to protect instream beneficial uses, including coldwater habitat. DTEC discusses the lack of sound scientific rationale undergirding these standards at length at pages 46 to 48 of its January 19, 2024 comment.

DTEC also continues to object to the Board’s December 2025 Draft Plan revision, continued here, that moves unimpaired flow standards from water quality standards, where they belong, to the program of implementation. The Board’s responses to comments¹⁵ do not contest the Clean Water Act’s requirement that the Board adopt numeric flow criteria where possible, and revert to narrative criteria only where “numerical criteria cannot be established or to supplement numerical criteria.”¹⁶ The Board’s adoption of numerical standards in the proposed implementation plan evinces that they can be readily established as water quality standards. As does the Board’s adoption of a 40% unimpaired flow objective, with an adaptive range of 30% to 50% on the San Joaquin River tributaries in Phase 1. Thus, the Board’s December 2025 revision

¹² CA SWRCB- Web Support, June 7, 2023 State Water Resources Control Board Meeting, YouTube (June 7, 2023), <https://www.youtube.com/watch?v=DxfPFqJfSn4> (featuring Emily Moloney’s presentation at 1 hour, 37 minutes).

¹³ Final Staff Report at 3-117.

¹⁴ Final Staff Report at 3-127.

¹⁵ Final Staff Report Common Response 1.2 at 10.

¹⁶ 40 CFR 131.11(b)(2).

is a straightforward violation of the Clean Water Act, and the Board invites judicial intervention by refusing to correct it.

B. The Proposed Changes to the Delta-Bay Plan Violate the Requirement that Water Quality Objectives Ensure the Reasonable Protection of Beneficial Uses

Along with the lack of sound scientific rationale, the Final Staff Report's proposed changes to the Bay-Delta Plan also continue to contravene the Porter-Cologne Act's requirement for reasonable protection of beneficial uses.¹⁷ For example, the Report fails to explain whether or how the narrative Delta Interior Flow objectives will ensure flows necessary to support and maintain the natural production of viable native fish populations. The Report's analysis leaves out critically imperiled species like the Chinook Salmon, Delta Smelt, and California White Sturgeon, and makes no effort to explain whether the increases over baseline it does consider will come anywhere close to reasonable protection of beneficial uses (versus a modest slowing of existing pathways to extinction). The Board's proposal also makes no effort to quantify benefits to other essential riparian species like tule, willow, cochina (mugwort), and cottonwood necessary to protect Tribal Beneficial Uses, or to mitigation of HABs and improvement of other water quality parameters necessary to satisfy recreational beneficial uses.

The Board's proposal ultimately rejects a 65% unimpaired flow requirement because maintaining cold water resources and managing water supply becomes "more challenging." However, "challenging" water management is not a bar to creating adequate water quality objectives. The Porter-Cologne Act acknowledges the difficulties of water management and still mandates that water quality objectives consider "[w]ater quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area."¹⁸ At 65% unimpaired inflows, the Board can create water quality conditions that protect downstream beneficial uses while managing upstream water storage concerns. This is particularly so if, as commenters recommend, the Board pairs the 65% unimpaired flow objective with a reasonable adaptive range and adaptive management strategies premised on a functional flows approach.

C. Tribal Subsistence Fishing is Integral to Tribal Tradition and Culture

DTEC continues to support the Board's proposal to designate Tribal Tradition and Culture (CUL) as a beneficial use within the Bay-Delta on a watershed-wide basis to protect the significance of salmon within tribal culture and to recognize that native fish populations are central to the "cultural, spiritual, ceremonial, and traditional rights and lifeways" of Tribes in the

¹⁷ Wat. Code § 13241.

¹⁸ Wat. Code § 13241(c).

Bay-Delta watershed.¹⁹ However, the Board specifically fails to acknowledge that for many Tribes, including those party to this comment, subsistence fishing is integral to and indistinguishable from culture, heritage, and tradition. For these Tribes, the protection of culture inherently implies protection for how Tribes have sustained themselves and their ways of life for generations. The definitions of Tribal Subsistence Fishing (T-SUB) and CUL uses further emphasize this overlap. The final draft Plan defines CUL as uses of water that support cultural and other activities, including “fishing . . . or consumption of natural aquatic resources, including fish, shellfish, vegetation, and materials.”²⁰ The Board’s contradictory refusal to designate T-SUB and Subsistence Fishing (SUB) for the Bay-Delta, which are used “to meet needs for subsistence,” notwithstanding its designation of CUL, is baffling.²¹ This is even more so as the State’s own studies recognize subsistence fishing as a well-established and widespread existing use in the Bay-Delta.²² As such, the State Water Board is legally obligated to ensure that T-SUB and SUB are “maintained and protected” irrespective of the Board’s refusal to formally designate them in this Plan.²³

As previously shared in DTEC’s January 10, 2025 comment, the Winnemem Wintu has provided extensive evidence to the Board that Nur (salmon) are integral to tribal tradition, culture, and identity. In the words of Winnemem Wintu Government Liaison Ponte Tewis (Gary Mulcahy),

The Nur are at the center of Winnemem Wintu cultural and spiritual life. They were also once the staple of our diet, sustaining us throughout the year. The salmon are gone now, as our other traditional food stocks. Our people now suffer among the highest rates of diabetes of any population in the United States. Obesity and heart disease are common. Our inability to access the salmon and for the salmon to access our watershed are destroying our bodies as well as our spiritual and cultural existence.²⁴

The Winnemem Wintu and the Nur have depended on each other for thousands of years—the Winnemem speaking for, caring for, and protecting the salmon, and the salmon giving themselves to the Winnemem for sustenance. Ceremonies, songs, dances, and prayers about the relationship between the Nur and the Winnemem Wintu are the fabric of Winnemem Wintu culture, religion, and spirituality. A similar ethic of reciprocal care-taking with native plants and animals is true for other Tribes up and down the Bay-Delta watershed. The Board therefore cannot meaningfully protect CUL without similar T-SUB and SUB watershed-wide

¹⁹ Final Staff Report Common Response 11.1 at 16.

²⁰ Final Draft Bay Delta Plan at 10.

²¹ *Id.* (defining T-SUB and SUB specifically “to meet needs for sustenance”).

²² See *supra* notes 4-5 and accompanying text.

²³ 40 C.F.R. § 131.12(a)(1).

²⁴ DTEC Comment on Dec. 2025 Draft Bay-Delta Plan at 31 (Jan. 10, 2025).

designations and protections as subsistence fishing uses are integral to, and inseparable from, cultural uses of water. The Board further undercuts its designation of CUL by failing to evaluate whether water quality objectives must change to protect it, instead assuming that fish and wildlife beneficial uses are synonymous with CUL. Per DTEC's previous comments on this issue,²⁵ which the Board did not respond to,²⁶ the Board must commit to a framework and assured timeline for evaluating necessary changes to protect the Tribal Beneficial Uses (TBUs).

D. The Board Violates the Clean Water Act and Porter-Cologne Act by Deferring T-SUB Designations to the Regional Water Boards

Along with failing to adequately protect CUL, the Board violates the Clean Water Act and Porter-Cologne Act by deferring T-SUB designations to the regional water boards. The law does not permit the Board to defer designations to another body at a future time. The Board's justification for deferring T-SUB designations, that it could result in risks of human health from consumption of noncommercial fish at higher rates,²⁷ misunderstands the law. Designated uses are forward-looking, taking into account values and practices to be preserved for a water body "whether or not they are being attained."²⁸ The Board's Draft Guidance on Designating Tribal Beneficial Uses furthers this point by noting that the "Water Boards are . . . required to protect beneficial uses that are actually occurring in the waterbody, even if those uses have not been formally designated yet, or if a water quality objective hasn't been adopted yet."²⁹ Here, there is ample evidence that subsistence fishing, including tribal subsistence fishing, is a historical and existing use and one that must be attained in the watershed.³⁰ The Board has no excuse for not designating the entire interconnected watershed for SUB and T-SUB, and then adopting water quality objectives to ensure that subsistence fishing uses are safely attained.

In addition, the Board does not address the problems that arise from a case-by-case designation of T-SUB and SUB, nor does it respond to DTEC's comments that this approach subjects subsistence uses to unjustifiable different treatment from commercial uses. The Board's case-by-case approach imposes an unjustified and inequitable burden on Tribes seeking protection for subsistence practices that are integral to their culture and identity. As the Staff Report itself acknowledges, "[a] case-by-case approach requires the tribe to participate and provide evidence related to the tribe's beneficial uses at every Water Board proceeding that could adversely affect the Tribe's beneficial uses."³¹ This approach results in differential

²⁵ *Id.* at 28–30.

²⁶ See Final Staff Report Common Response 11.1 at 16.

²⁷ *Id.* at 17.

²⁸ 40 C.F.R. 131.3(f).

²⁹ State Water Resources Control Board, *Draft Guidance on Designating Uses: Tribal Beneficial Uses* at 13 (2026) https://www.waterboards.ca.gov/tribal_affairs/docs/draft-guidance-tribal-beneficial-uses.pdf.

³⁰ See *supra* note 5.

³¹ Final Staff Report Common Response 11.1 at 17.

treatment between tribal subsistence fishing and other commercial fishing uses, which are not subject to the same recurring burden of establishing their existence and right to protection at each Board proceeding that could adversely affect those uses. This case-by-case framework also fails to account for the watershed-wide, millennia-old nature of tribal sustenance practices and creates no assurance that segment-specific T-SUB and SUB designations will ever be completed. As a result, Tribes may be left without meaningful protection for subsistence fishing uses that are integral to and inseparable from cultural uses of water.

The Board's CUL designation is critical, but the Board fails to adopt water quality objectives to sufficiently protect it—and fails to respond to DTEC's comments that a "viability" objective will not sufficiently do so. Implementing TBUs in the Plan is an important step towards ensuring that the cultural, spiritual, and subsistence traditions practiced by Tribes throughout the Bay-Delta watershed since time immemorial can persist in the face of existential threats posed by the Bay-Delta's degraded quality, which will be further heightened by climate change. The State Water Board has an opportunity through the TBUs designation and implementation process to meaningfully center Tribes and TEK in its management of Bay-Delta water resources. If TBUs are actually protected, the benefits of a healthier Bay-Delta ecosystem will not only serve Tribes, but will also extend to all Californians who rely on the water, species, and landscapes supported by this unique ecosystem.

DTEC commends the Board for adding the important commitment to consider "TEK in a full and complementary way alongside non-indigenous approaches."³² Incorporating TEK alongside other forms of knowledge and expertise is essential to inclusive governance of Bay-Delta watershed water quality and to ensuring that decision-making is well informed and responsive to the interconnected needs of the watershed and its communities. If the Board is truly committed to this practice, it would finalize TBU designations for the Bay-Delta and actively partner with Tribes to ensure that water quality standards are established in a manner that will ensure protection of TBUs.

E. The Failure to Adopt HAB Standards Violates the Clean Water Act and Adversely Impacts Public Health

HABs are a serious and significant public health concern that have proliferated in the Delta for the past several decades due to inadequately managed water quality. When people are exposed to the toxins from Harmful Algal Blooms (HABs), "adverse health effects may range from a mild skin rash to serious illness or in rare circumstances, death."³³ Despite these known adverse effects on human health, as well as the health of Bay-Delta fish and wildlife, the Board

³² Final Draft Bay-Delta Plan at 124.

³³ *What Are the Effects of HABs: Human Health Effects Caused by the Most Common-Toxin producing HABs Species*, EPA (Jan. 23, 2026), <https://www.epa.gov/habs/what-are-effects-habs>.

proposes additional monitoring requirements and studies as mitigation measures instead of adopting clear water quality objectives for HABs. This not only fails to address the cause of harmful algal blooms, but it plainly violates the Clean Water Act as the Board provides no justification for failing to adopt numeric HAB standards recommended by the EPA.

While DTEC supports the Board’s improvements to the monitoring plan, including the specific language regarding the Partner Monitoring HABs strategy, the lack of language in this section that would establish water quality standards for HABs undercuts the usefulness of monitoring. Monitoring is an important tool and developing it is a step in the right direction; however, HABs are a direct threat to public health, and more initiative must be taken by the Board to meet its obligations to govern water to address this critical concern. In addition, monitoring is only useful when it is measured against something. While there is available science (including that undergirding EPA’s recommended objective) establishing what “protective” and “harmful” mean in this context, the Board has nonetheless refused to use that knowledge to set HABs objectives and is instead relying on information gathering that provides no meaningful measure against which to evaluate HABs.

As DTEC has brought to the Board’s attention, “[t]hese mitigation measures [proposed by the Board] would not address the flow and water quality conditions that cause the formation of harmful algal blooms, nor would these mitigation measures reduce or ameliorate the proliferation of harmful algal blooms in the Bay-Delta that impair beneficial uses.”³⁴ The Board begins to address DTEC’s comment in the Final Staff Report by identifying specific steps for developing HAB water quality objectives and a program of implementation, yet none of these commitments appear in the Bay-Delta Plan itself. Without incorporating these protections into the Plan, the Board does not establish meaningful or enforceable water quality criteria for HABs, despite their essential role in addressing major health concerns, protecting beneficial uses of the watershed, and adhering to the Board’s statutory obligations under the Clean Water Act.

In 2019, the EPA responded to the growing threat imposed by harmful algal blooms by issuing recommended criteria for HABs under section 304(a) of the Clean Water Act. The EPA developed these criteria to protect human health, swimming, and other recreational activities in HABs-affected watersheds like the Bay-Delta. Under the Clean Water Act, the Board must adopt EPA’s recommended criteria parameters, or, if declines to do so, provide a reasonable explanation for not doing so that is consistent with the Clean Water Act.³⁵ Yet other than acknowledging the existence of EPA’s recommended criteria, the Final Staff Report provides no discussion of their applicability to Bay-Delta waterways or its reasons for refusing to adopt the EPA’s recommended criteria. The State Water Board can do this “by adopting criteria based on

³⁴ DTEC Comment on Dec. 2025 Draft Bay-Delta Plan at 27 (Jan. 2, 2026).

³⁵ 84 Fed. Reg. § 26414 (2019); 40 CFR § 130.20(a).

(1) the EPA’s recommended criteria, (2) the EPA’s criteria modified to reflect local conditions, or (3) other scientifically defensible methods.”³⁶ The Board has done none of the above.

Without a HABs objective, the Board will lack a meaningful framework to assess HABs’ widespread harms, allowing those harms to worsen unchecked. The State Water Board must do better. The lack of care and consideration for the water quality of the watershed, the adverse impacts HABs impose on Tribes and disadvantaged communities in particular, and the impairment of beneficial uses are inexcusable. To rectify this, The State Water Board should establish an enforceable numeric water quality objective, based on the best available science, that protects human health from harmful algal blooms.

F. The Staff Report Fails to Fully Identify and Discuss the Detrimental Impacts of HABs on Beneficial Uses

Equally important to the lack of specific water quality criteria, the Final Staff Report fails to adequately discuss the impacts of HABs on recreational uses and TBUs. Already, harmful algal blooms are causing substantial adverse effects to Delta communities. For many of these communities, access to the watershed for recreational activities is directly related to health and wellbeing. Water is a means of connection and community. Yet, harmful algal blooms threaten that connection, transforming local waterways from places of recreation and gathering into sources of concern and exclusion. For example,

DTEC member Little Manila Rising received a grant to implement a kayaking program for Stockton youth to explore Bay-Delta waterways. But, because of the proliferation of HABs throughout Stockton adjacent portions of the San Joaquin River, the organization [was] unable to carry out the programming for almost a full year after receiving the grant. The organization has also been forced to travel significant distances and allocate burdensome amounts of funding for transportation to access water safe enough for recreational activities – costs that lower income Stockton residents often cannot bear.³⁷

The proliferation of HABs in the Delta has not only had a significant impact on the way environmental justice communities such as Stockton residents have been able to engage with the watershed, but also the economy. Stockton is already one of the most economically distressed cities in the country, and the foul odors and inaccessibility of the waterways resulting from the harmful algal blooms have only added to the economic distress the city is facing. This distress did not come out of thin air; it was created and perpetuated by the State. Redlining and other

³⁶ 84 Fed. Reg. § 26414 (2019).

³⁷ DTEC Comment on Bay-Delta 2023 Draft Staff Report at 82 (Jan.19, 2024).

state policies created a deep residential and economic divide that still has profound impacts on the city today. This history is still alive and present in Stockton, and the intentional failure to create specific water quality criteria for HABs is yet another way the State is restricting access to valuable resources such as water and hindering economic advancement.

As Dillon Delvo, Executive Director of Little Manila Rising, explains:

[u]nlike many water front communities that have beautiful waterways that are economic drives, [South Stockton] waterways are toxic and inaccessible. They are something that residents and would-be tourists run from rather than gravitate toward. These impacts also feed into the idea that the area is ‘unworthy of economic and recreational improvement . . . [,] a narrative that is ingrained and keeps Stockton stagnant, just like our waterways.’³⁸

In addition to the suppressed recreational use of the waterways and hindered economic advancement in Stockton, HABs also suppress Tribal Beneficial Uses. The Final Staff Report lacks meaningful discussion of the impacts of HABs on Tribal Beneficial Uses despite their damaging and widespread effects. Harmful algal blooms uniquely injure Native Tribes as their cultural practices, religious traditions, and identities are often tied to the waterways their ancestors have lived in relationship with since time immemorial.

The consequences of this omission are evident in the firsthand experiences of tribal members. For example, Gary Mulcahy, Government Liaison for the Winnemem Wintu Tribe, and Malissa Tayaba, Vice Chair for the Shingle Springs Band of Miwok Indians, describe how HABs have disrupted tribal cultural practices and relationships with the waterways:

Winnemem Wintu’s coming-of-age ceremonies involve swimming across a river near a sacred rock, and water blessings consist of cupping river water in their hands and placing it on their heads and hearts. Neither of these practices can take place when HABs are present.

According to Vice Chair Malissa Tayaba:

HABs are becoming more and more of an obstacle for [the tribe] every year in accessing traditional cultural resources, furthering the alienation already posed by the Delta’s degraded state. HABs have forced the cancellation of tribal fishing trips designed to teach youth about traditional diets and food sovereignty. And

³⁸ *Id.* (citation omitted).

even if [tribal members] could catch fish, they knew they could not eat them because of the risk of toxic exposure from the harmful algal blooms.³⁹

The proliferation of HABs in the Bay-Delta interferes with tribal practices and ceremonies that are deeply rooted in the waterways and hold profound cultural and spiritual significance. Despite the impact HABs are having on tribal communities, Tribes cannot simply move elsewhere or change the location of site-specific cultural practices and ceremony to escape these devastating effects. Thus, the State Water Board's decision not to establish specific water quality criteria for HABs, or adequately engage with the degradation of Tribal Beneficial Uses, once again threatens Native communities' existence and livelihoods, exemplifying California's continued practice of marginalizing Native peoples. To begin rectifying these harms and taking more meaningful steps toward protecting Native Tribes, the State Water Board must take responsive and effective action in adopting specific and effective water quality criteria for HABs.

V. Among the Numerous CEQA Deficiencies Are Defective Baselines, Fractured Review, Unanalyzed Demand, and Failure to Conduct Tribal Consultation Under AB 52

The Board has failed to comply in multiple respects with the demands of CEQA in its environmental review of the draft Plan. A legally sufficient environmental analysis requires a stable project description; the project description in this Plan is becoming less certain and less stable draft by draft. By failing to provide a clear and stable project description and analyze the Plan holistically, the Board's environmental analysis thwarts an informed understanding of the whole project's environmental effects and relies on shifting and incomplete baselines.

As a result, the Board's consideration of whether to approve the Plan is based on incomplete information and unknowable future processes like VA implementation and failure to undertake government-to-government Tribal consultation as required by the law. These uncertainties render the SED unable to accurately inform decision-makers and the public of the Project's likely environmental impacts because it contemplates—but does not properly evaluate—numerous foreseeable future project stages and demands. These serious deficits violate CEQA and deprive both decision-makers and the public of an informed assessment of the Plan and its likely impacts.

A. The Board has Failed to Analyze the Project Holistically and Base its Environmental Analysis on a Stable Project Description

³⁹ *Id.* (citation omitted).

To comply with CEQA, the Board must provide “an accurate, finite, and stable description” of the proposed project.⁴⁰ The purpose of this provision is to allow for meaningful public understanding of and participation in environmental review of proposed agency actions and informed decision-making; a shifting and uncertain project description thwarts both.⁴¹ The SED continues to suffer from project description errors due to a lack of clarity about how the VAs will work, shifting descriptions of the Project between drafts, unclear unimpaired flow objectives, and remaining questions about whether the Board’s review was truly holistic in identifying the impacts of major current and future artificial intelligence (AI) data center and infrastructure operations.

DTEC urges the Board to provide more clarity and stability in its flow objectives, which remain ambiguous. For example, the Board asserts that it will identify how unimpaired flows are calculated as more information becomes available, such as through DWR’s Bulletin 120.⁴² Without this knowledge ahead of project approval, the public cannot meaningfully comment on the Plan and its environmental implications. The Board can alleviate some of the lack of clarity by making flow objectives explicit and further clarifying that the 55% unimpaired flow requirement applies to major projects under Board consideration including the Sites Reservoir and the Delta Conveyance Project.

The Plan also exacerbates uncertainty because VAs with certain water users may be used in place of regulatory text. If this were not unjust enough, the Board also acknowledged the VAs may impact objectives because they are dependent on how and whether the VAs are implemented but has made no effort to expound upon potential compliance locations, parameters, time periods, values, and other dimensions, or explain how this would affect other water quality objectives. Key components of the VA portion of the Plan are left to chance because they are to be worked out in the future; in particular, the Board cannot say who will be subject to VAs or who will be subject to the regulatory pathway. The upshot is that the Plan as a whole, and its program of implementation in particular, is inherently unstable and uncertain and foreseeable environmental impacts cannot be evaluated in time to meaningfully inform development or adoption of mitigation and project alternatives, all of which contravenes CEQA and its goals. Further, the withdrawal of the Westlands Water District and threatened withdrawal of the Bureau threatens to collapse this implementation pathway altogether.

⁴⁰ *Washoe Meadows Cmnty. v. Dept. of Parks & Recreation*, 17 Cal.App.5th 277, 287 (2017) (quoting *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 192-93 (1977) (explaining that an “accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR”).

⁴¹ See CEQA Guidelines § 15201; *Washoe Meadows v. Dept. of Parks & Recreation* at 285 (“Informed public participation is essential to environmental review under CEQA.”); *San Joaquin Raptor Rescue Ctr. v. County of Merced*, 149 Cal.App.4th 645, 656 (2007) (“when an EIR contains unstable or shifting descriptions of the project, meaningful public participation is stultified.”).

⁴² Final Draft Plan at 47.

The Board is still planning to adopt the VAs as a core component of the Plan but without any clarity on what the VA pathway will look like in practice, which water users will be under it, and what its practical effects on flows and habitat investments will be. This leaves the public and Tribes guessing about and unable to participate in review and decision-making and the Board unable to render an informed decision, as CEQA requires.

B. Cumulative Impact Analysis

DTEC challenges modified implementation timelines that evaluate the VA pathway in isolation without modeling combined outflow reductions from concurrent infrastructure operations, including the Sites Reservoir and the Delta Conveyance Project. In failing to account for these Project components, the Board leaves significant and unnecessary uncertainty around controls that would apply to these potential new and modified water rights.

The Board's failure to consider the cumulative effects of the Plan and other related projects like the Sites Reservoir and DCP together is made more severe by the Board's failure to consider the environmental effects of Phase I, Phase II, and the program of implementation together. These failures—together with the uncertain VAs and minimum inflow objectives—mean that the public is again unable to understand the full scope and effects of the Project together with unrelated projects, as CEQA's cumulative impact assessment requirements mandate.⁴³ The Board also violates CEQA in failing to respond to comments on the Plan's shortcomings in these and other respects in its environmental review.⁴⁴ With piecemeal construction and evaluation of the Bay-Delta Plan and inadequate responses to comments, the Board continues to threaten the legal viability of the long-overdue update.

C. The Board's Omission of Hyperscale Industrial Demands, Including for AI Data Centers, Violates CEQA

As climate change promises reduced and less reliable water supplies, accompanied by temperature changes and other variables that are increasing stressors on the water system, AI is posing an unanalyzed new threat to water quality in the Delta. DTEC challenges the Plan's failure to evaluate the consumptive water and thermal impacts of artificial intelligence data centers under construction or projected to be built in the Plan area. The omission of this highly consequential use renders the mass-balance projections in the Plan defective and constitutes a CEQA violation. Further, the Board's failure to adopt clear numerical criteria is egregious because this mounting stressor on water supply and demand exacerbates existential threats to the

⁴³ CEQA Guidelines § 15130.

⁴⁴ Common Response 7.1.

Delta ecosystem and its imperiled fish and wildlife populations and makes adoption of clear and enforceable numeric standards all the more important.

The growth of AI infrastructure should not be cause for the Board to inflate its overall consumptive demand projections—which are already improperly used to rationalize inadequate instream flow protections. Rather, the Board must account for how the intensive, highly localized water extractions of data centers alter the timing, location, and quality of return flows, deplete local cold-water reserves, and exacerbate water quality degradation. Incorporating this major component of forecasted water demand is essential for the Plan to comprehensively address consumptive diversions. In addition to compromising the quality and reliability of the Board’s environmental review, as discussed above, the Board’s failure to accurately project diversion is a problem under the Porter-Cologne Act because the Board fails to base its water quality criteria on comprehensive and “sound scientific rationale.”⁴⁵

The SED provides no specific information about how it accounts for the major and rapid rise in the creation and energy demands of AI data centers. The massive energy demands of AI processing tend to lead to increased water use and/or reliance on fossil-fuel backups, worsening regional air pollution.⁴⁶ The implications of data center buildout should be a major consideration in the SED in light of the fact that three data center facilities are already supplying AI services in the Delta.⁴⁷ Instead, the SED ignores data centers entirely. The Board’s failure to incorporate existing and forecasted AI infrastructure development into its evaluation of water demand and other metrics in the SED—and to respond to comments on its failure to address AI in its SED—are clear violations of CEQA.

D. The Board has failed to conduct legally required government-to-government consultation with Tribes under AB 52

Because the Board failed to engage in meaningful consultation with Tribal Nations, it should not adopt the POI and instead should develop a Tribal engagement plan to support

⁴⁵ Wat. Code § 13241; 40 C.F.R. § 131.11(a)(1).

⁴⁶ Restore the Delta, *The Environmental Justice Implications of Artificial Intelligence Infrastructure in the Sacramento-San Joaquin Delta* (Jan. 15, 2026), <https://restorethedelta.org/wp-content/uploads/Restore-the-Delta-AI-White-Paper.pdf> (Exhibit C hereto). See also Lawrence Berkeley Nat’l Lab., *2024 United States Data Center Energy Usage Report* (2024), <https://eta.lbl.gov/publications/2024-lbnl-data-center-energy-usage-report>; Cecilia Marrinan, *Data Center Boom Risks Health of Already Vulnerable Communities*, Tech Pol’y Press (June 12, 2025), <https://www.techpolicy.press/data-center-boom-risks-health-of-already-vulnerable-communities/>; Mahmut Kandemir, *Why AI Uses So Much Energy — and What We Can Do About It*, Penn State Inst. for Energy & Env’t Blog (Apr. 8, 2025), <https://iee.psu.edu/news/blog/why-ai-uses-so-much-energy-and-what-we-can-do-about-it>.

⁴⁷ Restore the Delta, *The Environmental Justice Implications of Artificial Intelligence Infrastructure in the Sacramento-San Joaquin Delta* (Jan. 15, 2026), <https://restorethedelta.org/wp-content/uploads/Restore-the-Delta-AI-White-Paper.pdf>.

development of a robust implementation in collaboration with Tribes. The Board should also ensure that government-to-government consultation is initiated at the inception of all future triennial reviews and Plan updates so this failure does not become a recurring issue. The Plan should describe in detail how the Board will incorporate input received during government-to-government consultations with Tribes into its evaluation and decision-making in these forthcoming processes. This should include a requirement that the Board provide a written description of outcomes of the consultation to each Tribe following consultation, including how input was incorporated and made actionable by the Board.

DTEC appreciates the Board's efforts to integrate tribal decision-making and self-governance into the Plan throughout the process of its development. However, DTEC remains concerned about the Plan and underscores that it does not sufficiently respect Tribes' legal status as sovereigns through consultation and incorporation of Indigenous Knowledge.

AB 52 was adopted to "establish a meaningful consultation process between California Native American Tribal Governments and lead agencies."⁴⁸ Consultation means the "meaningful and timely process of seeking . . . the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement" while "respect[ing] . . . each party's sovereignty."⁴⁹ CEQA further requires that this consultation include, at a Tribe's request, meaningful consideration of the Tribe's perspectives on "alternatives to the project, recommended mitigation measures, or significant effects" to tribal cultural resources or other important considerations.⁵⁰ This consultation cannot be deemed concluded until either the Tribe and agency have reached an agreement, or one party acting in good faith concludes a reasonable agreement was unreachable.⁵¹ Likewise, the agency cannot approve a proposed project under CEQA until consultation is finished.

Native American Tribes have suffered for generations because of the mismanagement of water resources in the Bay-Delta. The ecological crisis in the Bay-Delta is a result of state-sponsored genocide, forced displacement, and broken treaty promises that stripped Tribes of their land and water access.⁵² Ignoring millennia of tribal use and stewardship, the State accorded rights to non-Natives to divert water from its natural course under the doctrine of prior appropriation, and in doing so, crushed the inherent rights of Tribal Nations to Bay-Delta water. At the same time, California law barred people of color from owning land well into the 20th

⁴⁸ Stats. 2014, Ch. 532, § 1(b)(2).

⁴⁹ *Koi Nation of Northern California v. City of Clearlake*, 109 Cal. App. 5th 815, 825-26 (2025).

⁵⁰ Pub. Res. Code § 21080.3.2, subd. (a).

⁵¹ Pub. Res. Code § 21080.3.2, subd. (b).

⁵² See, e.g., Stephanie L. Safdi, *Indigenous Water Governance and the Clean Water Act*, 45 STAN. ENVTL. L. J. 1, 15-26 (2026), https://law.stanford.edu/wp-content/uploads/2026/04/01_SEV_45_1_Safdi.pdf (describing the way in which "state violence is woven into California water law and mediates Tribes' ability to claim rights to water under both state and federal law" and to participate in water governance); *id.* at 57-77 (discussing designation and protection of TBUs and implementation of Tribal co-governance approaches designed with Tribes as an important, and legally and morally compelled, step toward repair).

century, thereby preventing them from acquiring accompanying water rights. As a result of this history, AB 52, Executive Order B-10-11, and other statutory requirements, the State is required to conduct Tribal consultation to ensure the State does not exacerbate the continuing effects of these harms. Nonetheless, the State Water Board has not initiated, let alone completed, formal consultation with Tribes under AB 52 for the Plan.

The Board previously asserted that it was not required to consult Tribes in this process because AB 52 consultations requirements do not apply to SEDs—as opposed to full CEQA environmental impact analyses.⁵³ This was wrong. The Board has since changed its argument. The Board now argues that consultation was not required here because it issued a notice of its intent to develop an EIR before AB 52 went into effect, despite not beginning the environmental analysis until many years later.⁵⁴ The Board should have initiated and facilitated AB 52 consultation from that point onward.

The Board’s responses in Common Response 11.1 fail to appreciate the difference between Executive Order B-10-11 consultation and consultation under AB 52 to inform an environmental analysis, nor did they sufficiently respond to the assertion that the Board should have held tribal consultation because it did not begin environmental analysis until after AB 52 went into effect, and thus was required to comply with AB 52. The argument that the Board can bypass consultation because it has kept its legally required update pending for over a decade is troubling and undercuts the Board’s commitment and legal obligation to engage with Tribes.

DTEC again calls upon the Board to undertake meaningful government-to-government consultation on all components of the Bay-Delta Plan update and implement Tribes’ feedback meaningfully before any final Plan is approved and environmental review is certified.

VI. Public Trust Violations and Unreasonable Timelines

The Board’s Plan and its implementation program unlawfully delay ecological recovery and surrender state regulatory oversight, violating the Board’s non-delegable affirmative duties under the Public Trust Doctrine and California Constitution, Article X, Section 2. Under established public trust jurisprudence, the State holds sovereign, continuous supervisory authority over the navigable waters of the Bay-Delta watershed and must affirmatively protect public trust resources—including native fish populations, water quality, and aquatic

⁵³ Letter from Cal. State Water Res. Control Bd., to Mss. Sivas et al., *Re: Denial of Request for Reconsideration Pursuant to Government Code § 11340.7, subdivision (c)...* *Denying Petition to Review and Revise Bay-Delta Water Quality Standards* (Sep. 21, 2022), <https://www.restorethedelta.org/wp-content/uploads/2022-09-21-FINAL-Denial-of-Stanford-Reconsideration-Request.pdf>.

⁵⁴ Common Response 11.1 at 23.

ecosystems—whenever feasible.⁵⁵ By adopting multi-decade implementation delays and transferring critical decision-making authority over flow and habitat administration to private entities, the Board abdicates its trust responsibilities and undermines statutory protections established under the California Endangered Species Act (CESA) and the federal Endangered Species Act (ESA).

A. Invalidation of Multi-Decade Recovery Timelines

The Plan's extended implementation schedules, which defer meaningful instream flow requirements and native fish recovery outcomes out to 2050, constitute an unlawful delay that violates the Board's public trust mandates and statutory recovery duties under CESA and the ESA.⁵⁶ Delaying implementation of protective flow standards for nearly three decades while imperiled species—such as the Winter-run and Spring-run Chinook Salmon, Central Valley Steelhead, and Delta Smelt—hover on the brink of extinction is legally indefensible. The Public Trust Doctrine requires immediate, proactive protection of imperiled trust assets to prevent permanent collapse, not extended deferrals conditioned on future, voluntary measures.

Similarly, under CESA and the ESA, regulatory agencies cannot adopt management frameworks that perpetuate conditions causing take, severe population declines, or jeopardizing the continued existence of listed species.⁵⁷ Allowing continued flow drawdowns to as low as 35% of unimpaired flow during dry periods over a multi-decade timeframe guarantees further habitat degradation, elevated water temperatures, and catastrophic toxic HABs. Deferring necessary flow restoration to 2050 unlawfully prioritizes senior agricultural and municipal diversions over the immediate survival and recovery mandates dictated by state and federal law.

B. Non-Delegable Public Trust Obligations

The Plan unlawfully abdicates the Board's regulatory authority by delegating primary outflow management, habitat restoration governance, and water quality oversight to private VA governance bodies. Under the Public Trust Doctrine, the State Water Board's duty to evaluate, manage, and protect public trust resources is non-delegable; it cannot be contracted away, conditioned on voluntary compliance, or subordinated to private water rights holders.⁵⁸ The Voluntary Agreements construct a governance structure where senior diverters and private entities—such as the San Joaquin River Exchange Contractors and Feather River Settlement Contractors—exercise decisive control over instream flow contributions, cold-water pool

⁵⁵ *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419, 425–26 ("the core of the public trust doctrine is the state's authority as sovereign to exercise a continuous supervision and control over the navigable waters of the state... [and] to protect public trust uses whenever feasible").

⁵⁶ Final Draft Plan at 100.

⁵⁷ 16 U.S.C. § 1536(a) [ESA Section 7(a)], Cal. Fish & Game Code §§ 2052 & 2053.

⁵⁸ *Nat'l Audubon Soc'y v. Superior Court*, 33 Cal. 3d 419, 437, 441 (1983).

management, and habitat projects. By granting these private governance bodies operational discretion over temperature management plans and carryover storage requirements below reservoirs, the Board effectively transforms a mandatory public trust duty into a negotiated, private compromise. Reversing the legal obligation of private diverters by requiring the public to subsidize incremental water purchases and habitat projects unlawfully conditions public trust protections on the consent of the very entities diverting the resource.

VII. Conclusion

Decades after the current Bay-Delta water quality standards were developed, the Board is finally on the verge of updating standards that have proven to be incapable of meeting the needs of the ecosystem and its communities. This is particularly important considering the increasingly erratic climate and the long-overdue recognition of racism and colonialism baked into water quality and water rights administration, particularly in this region. DTEC welcomes the Board's investment in achieving this long-delayed update and its acknowledgment of the importance of TEK in water governance. Still, DTEC remains concerned about the many missed opportunities reflected in the Board's proposed Plan to ensure that standards are consistent with the Board's legal duties, commitments to racial equity, and capable of restoring an imperiled ecosystem to one resilient to the changing climate and increases in industrial demand.

DTEC urges the Board to reconsider its investment in adopting the unlawful, inequitable, and unworkable VAs and instead proceed with a straightforward adoption of numeric instream flow standards supported by science and TEK. DTEC further urges the Board to adopt HABs standards to address this major risk to the health and welfare of local environmental justice communities with urgency. Finally, DTEC urges the Board to make good on its commitment to the Delta's original stewards to reclaim their role in governance over the Delta's water resources through robust partnership with the State, starting with government-to-government tribal consultation.

Respectfully Submitted,

/s/ 

Allie McMullen, Student Attorney

Eli Calhoun, Student Attorney

Samantha Gove, Student Attorney

Danna Castro Galindo, Student Attorney

Justin Saint-Loubert-Bie, Student Attorney

Joseph Brau, Supervising Attorney
Stephanie L. Safdi, Supervising Attorney
Environmental Justice Law and Advocacy Clinic
Jerome N. Frank Legal Services Organization
127 Wall Street
New Haven, CT 06511

Counsel for Delta Tribal Environmental Coalition

/s/ Gary Mulcahy

Gary Mulcahy
Government Liaison
Winnemem Wintu Tribe

/s/ Malissa Tayaba

Malissa Tayaba
Vice Chair
Shingle Springs Band of Miwok Indians

/s/ Gloria Alonso Cruz

Gloria Alonso Cruz
Environmental Justice Advocacy Coordinator
Little Manila Rising

/s/ Barbara Barrigan-Parrilla

Barbara Barrigan-Parrilla
Executive Director
Restore the Delta

EXHIBIT A



Westlands
Water District

You are here: [Home](#) / Press Release (9-4-2026)

Press Release (9-4-2026)

September 4, 2026

For Immediate Release

Contact: pubaffairs@wwd.ca.gov

(559) 241-6233

Westlands Water District to End Participation in Bay-Delta Program Absent Reversal by the State

Fresno, CA – Westlands Water District will not continue in the Healthy Rivers and Landscapes (HRL) Program under the terms set out in the State Water Resources Control Board's final draft Bay-Delta plan. The final draft retains the HRL name while abandoning the commitments the parties negotiated in 2022.

Formerly known as the Voluntary Agreements, the HRL Program grew out of a March 2022 Memorandum of Understanding (MOU) among state, local, and federal agencies and public water agencies after multiple years of analysis and collaboration. This innovative agreement envisioned the development of a comprehensive, basin-wide, science-based alternative to traditional regulation: one intended to improve environmental health and species conservation while providing water reliability for California communities and farms.



Westlands committed to that approach because it paired new flows with habitat restoration at scale, provided dedicated funding, and established a rigorous science program, all under a governance structure built to adjust management actions as the science developed. Those elements remain the right foundation for the Bay-Delta. The final draft released on August 19 keeps the HRL name but changes the terms of the agreement, departing from what the parties negotiated to the point that the Program's purpose is no longer achievable.

Since 2022, water agencies including Westlands have participated in good faith, devoted significant time and resources to negotiations, and submitted detailed comments as the draft water quality control plan evolved, ensuring it remained consistent with the agreement memorialized in the 2022 MOU. Throughout this process, the State Water Resources Control Board has included elements in successive drafts that undercut the comprehensive, science-based approach embodied in the 2022 MOU. Despite repeatedly raising detailed concerns, the issues remain unresolved, and the agencies' comments have been rejected rather than meaningfully addressed. The final draft moves the HRL Program back toward the regulatory approach it was created to replace.

Reversing that outcome requires the State to honor its agreement. Absent a final plan that honors the 2022 commitments in full, Westlands' participation in the HRL Program will end.

Statement of Allison Febbo, General Manager, Westlands Water District:

"The Healthy Rivers and Landscapes Program was built on sound science and a shared commitment to improve environmental outcomes while strengthening water-supply reliability for California's farms and communities. That was the promise of the 2022 agreement Westlands supported. Unfortunately, the final draft has moved significantly away from both the substance and collaborative spirit of that agreement, abandoning the balance the parties spent years working to achieve. Westlands cannot support a program that has departed so significantly from its original purpose. Westlands remains committed to comprehensive, science-based solutions and will pursue other viable pathways that prioritize water security, reliable supplies, and a sustainable future for our growers and Central Valley communities."

###**About Westlands Water District**

Westlands Water District is recognized as a world leader in agricultural water conservation and has served the farmers and rural communities on the west side of Fresno and Kings counties for more than seven decades. As stewards of one of California's most precious natural resources, Westlands continually invests in conservation and champions farmers deploying innovative irrigation methods based on the best available technology.

EXHIBIT B



United States Department of the Interior

BUREAU OF RECLAMATION
Washington, DC 20240



IN REPLY REFER TO:

CGB-100

1.1.02

VIA ELECTRONIC MAIL ONLY

State Water Resources Control Board
Division of Water Rights
Attn: Bay-Delta & Hearing Branch
P.O. Box 100
Sacramento, California 95812-0100

Subject: August 2026 Draft Water Quality Control Plan—Reclamation's Principal Concerns

Dear Chair Esquivel:

The Bureau of Reclamation (Reclamation) writes to express its serious concern with the State Water Resources Control Board's August 2026 Draft Water Quality Control Plan (Draft Plan) for the Bay-Delta. The Draft Plan, as written, threatens reliability of water supplies that support not only the Central Valley Project (CVP), but the entire fabric of California's agricultural economy, rural communities, urban centers, and natural vitality. Millions of people and businesses depend on the certainty and reliability of these water supplies. Federal, State, and local water projects represent generations of investment and partnership, they feed the nation and the world, supply our cities and communities, and generate the power that keeps the economy running. Deliveries from those projects are not abstract entitlements. They are the purpose of the CVP and State Water Project (SWP).

This letter states Reclamation's principal policy objections. Detailed technical comments are attached.

The standard for any Bay-Delta pathway is straightforward: water for people, gold-standard science, adaptive management, and measurable results—not process, delay, or undefined flow targets presented as progress.

The Draft Plan does not honor the 2022 Memorandum of Understanding and Term Sheet (2022 MOU). The 2022 MOU represented a collaborative, integrated approach—combining enforceable flow and habitat commitments, program certainty, and adaptive management. The Draft Plan keeps the HRL label and changes the terms of the agreement. It unilaterally redefines the baseline for additive flows and outflows increasing obligations for HRL parties beyond what was set forth in the 2022 MOU. It requires additional CVP and SWP export reductions of 125 TAF in dry and below-normal years and 175 TAF in above-normal years, and sets a regulatory default of 55 percent unimpaired flow. Neither pathway contains a durable mechanism that protects CVP contract performance – water for families, farms, communities. The backstop is more water, not the portfolio the parties negotiated in 2022.

The Draft Plan directly regulates federal reservoirs through carryover storage targets enumerated therein, and subject to Executive Director approval of temperature management strategies. The Draft also treats later lawful federal operations as a deficit to be repaid in more HRL water. State law cannot impose gatekeeping approval that conditions operations of federal reservoirs or Reclamation's temperature-management obligations under the Endangered Species Act and federal project purposes. Reclamation will continue to operate Shasta and the CVP under the governing Biological Opinion, Records of Decision, project purposes, and Executive Order 14181.

Finally, the Draft Plan centralizes decision-making authority in the Board's Executive Director, sidelining the collaborative, multi-party governance structure that was a cornerstone of 2022 MOU. Whether in the collaborative framework of the MOU or the proposed governance structure in the current Draft Plan, we want to be clear: a federal Record of Decision or biological opinion does not require State Board staff permission to be implemented.

These elements put the Board on a collision course to proscribe CVP operations that are inconsistent with and frustrate the purposes of federal directives for the project.

Reclamation and partners throughout the State recognized an opportunity to work with the State Board in this Draft Plan update that would provide certainty for water users while still ensuring protection of native fish and wildlife through integrated flow and habitat measures. The current draft plan reflects more of what has come to be expected from the State Board – executive and regulatory overreach, questionable legal authority, and continued downward pressure on water users throughout the state.

Reclamation cannot support or participate in a process that disregards federal law, undermines negotiated certainty, and threatens the viability of the CVP. If the Board proceeds on this path, Reclamation will:

- Cease any further participation or funding under HRLs or similar state pathways that do not protect CVP contract supplies and project purposes;
- Immediately begin review of outdated water right permit conditions that do not align with current conditions or science;
- Advance updated long-term operations decisions and, where warranted, reinstate Endangered Species Act consultation to secure greater operational flexibility consistent with law;
- Maximize deliveries under existing authorities and recent Records of Decision that have already shown the capacity to increase average annual supplies when operations are aligned with project purposes;
- Accelerate infrastructure that restores and expands conveyance capacity of federal, state, and local conveyance facilities to take advantage of water supply when it is available;
- Modernize and optimize critical infrastructure that increases real wet water storage; and

- Insist on science and modeling that accurately distinguish Project effects from the dominant drivers of environmental conditions throughout the CVP and that measure real species' benefits rather than assuming them from flow volumes alone.

Our objective is clear: Improve water supply outcomes for all of California while incorporating robust, measurable species protection through the best available tools and science. We will do this by keeping federal project infrastructure and contractual supplies intact, consistent with the federal purposes of the CVP and the national interest in food security, rural economic stability, and resilient water and power systems.

The Board's current approach is not sustainable. We urge the Board to restore the foundational elements of the 2022 MOU, provide the certainty and clarity necessary for effective water management, and abandon the unworkable Unimpaired Flow (UIF) pathway. Reclamation stands ready to support pathways for the reasonable protection of beneficial uses that protect and enhance water supply reliability for the CVP and California, but cannot support a plan that disregards federal law, negotiated certainty, and sound judgment.

Sincerely,

Aubrey J.D. Bettencourt
Principal Deputy Commissioner
Exercising the Delegated Authority of the Commissioner
Bureau of Reclamation

cc: Secretary, Department of the Interior
Assistant Secretary – Water and Science
Director, California Department of Water Resources
CVP contractor leadership as appropriate

EXHIBIT C

The Environmental Justice Implications of Artificial Intelligence Infrastructure in the Sacramento–San Joaquin Delta

Prepared by Restore the Delta

The Environmental Justice Implications of Artificial Intelligence Infrastructure in the Sacramento–San Joaquin Delta

Table of Figures

Executive Summary

1. Introduction

- 1.1 About Restore the Delta
- 1.2 Context of a Region Already Under Pressure
- 1.3 Existing Facilities

2. Understanding AI Data Centers

- 2.1 What is AI and AI Infrastructure?
- 2.2 The AI Data Center Boom in the U.S

3. AI's Resource Requirements

4. AI's Extraordinary Water Demands

- 4.1 Water-Stressed Siting Patterns
- 4.2 Delta Groundwater, Surface Water, and Water Quality Impacts
- 4.3 Governance Gaps: Water Rights and Following the SGMA for AI Facilities

5. Energy Requirements

- 5.1 Energy Intensity of AI Operations
- 5.1 Large Energy Burden

6. Land Use

- 6.1 AI, Land Use, and “Green Cities”
- 6.2 Environmental Justice and Broken Public Access

7. Climate Implications

- 7.1 Emissions
- 7.2 Overlapping Burdens in Disadvantaged Communities

8. Ecological Disruption

- 8.1 Aquatic Habits Under Threat
- 8.2 Cultural Erosion

9. Policy Landscape

Appendices

Table of Figures

Figure 1. Delta Smelt Near Extinction (Sommer, 2015)	1
Source: TRCP – “Data Centers, Energy, and Water: What Hunters and Anglers Need to Know”	
Figure 2. Air Pollution Percentiles in Disadvantaged Communities in the San Joaquin	2
Source: Office of Environmental Health Hazard Assessment (OEHHA), <i>CalEnviroScreen 4.0</i> Map.	

Executive Summary

The infrastructure for artificial intelligence (AI) is growing quickly across the United States, and the Sacramento–San Joaquin Delta is becoming a popular place for new data centers to be built. AI technologies could be good for research, but their infrastructure, especially massive data centers, could be bad for the environment and for communities on the front lines. This white paper is the first in-depth look at how AI-driven industrial expansion could change the Delta region's water, energy, land use, wildlife, and community health. It also sets out Restore the Delta's position on the impact on resource requirements. AI data centers need a lot of water and power. [A typical 100-megawatt data center in the U.S. may consume about 2 million liters of water per day.](#)¹ This puts even greater stress on the Delta's already overdrawn groundwater basins and fragile surface water systems. Training and running AI models also take a huge amount of power. In 2023, data centers used 4.4% of the electricity in the U.S. By 2028, that number is expected to jump to 6.7–12%, mostly because of the growth of AI. These demands put the dependability of the grid at risk, boost energy bills for customers, and add to greenhouse gas emissions and local air pollution in areas that are already dealing with the effects of many industries.

AI infrastructure is already being built in the Delta, with Stockton, Pittsburg, and Tracy all hosting AI workloads. AI data centers are part of a huge industrial change in California's water hub, along with other big projects like the projected Delta Conveyance tunnel, large-scale carbon sequestration sites, and new urban growth. These changes could make long-standing inequalities worse. Many proposed and current data centers are located near low-income communities that already have high levels of pollution, little political power, and strong cultural links to Delta ecosystems.

The ecological hazards are just as bad. More water withdrawals, thermal pollution, and habitat loss put species like Delta smelt and Chinook salmon in even more jeopardy. These species are very important to the environment and culture, especially for Indigenous communities. The

¹ Leonardo Nicoletti, Michelle Ma & Dina Bass, “AI Is Draining Water From Areas That Need It Most,” *Bloomberg*, May 8, 2025, <https://www.bloomberg.com/graphics/2025-ai-impacts-data-centers-water-data/>

extinction of these species endangers biodiversity, cultural continuity, and traditional ecological knowledge.

California does not have a complete set of rules for AI infrastructure, even though these effects are big. Water rights law doesn't cover high-volume, evaporative industrial water use. The Sustainable Groundwater Management Act (SGMA) lets overdraft continue for decades. CEQA isn't set up yet to handle the combined, ongoing needs of AI facilities. And the state hasn't yet set standards for resource use, emissions, or community protections that are specific to AI. Governor Newsom's 2024 veto of SB 1047, which said that more coordination was needed, leaving California without a dedicated way to keep an eye on high-risk AI systems or the space they need to work.

Restore the Delta believes that this is a very important time for the region. If policymakers don't act quickly and focus on the needs of the community, AI infrastructure might make water shortages worse, speed up the degradation of ecosystems, put more stress on the electrical grid, and make environmental injustices worse in some of California's most overworked areas. Before large-scale AI development becomes entrenched, proactive governance based on transparency, ecological stewardship, Tribal sovereignty, and fair public involvement is necessary.

This white paper is both an instructional tool and a call to action for lawmakers, environmental justice campaigners, Tribal governments, and Delta communities to set guiding principles now, while there is still time to make decisions.

1. Introduction

1.1 About Restore the Delta

Restore the Delta is a nonprofit based in Stockton, California, dedicated to protecting the cultural, environmental, and economic vitality of the San Joaquin Delta region. Based in the Sacramento-San Joaquin Delta since 2006, our organization works in the areas of public education, program and policy development, and outreach so that all Californians recognize the Sacramento-San Joaquin Bay Delta as part of California's natural heritage, deserving of protection and restoration. With over 75,000 followers, our work spans water quality monitoring, flood and land restoration, sustainable agriculture, youth engagement, water policy, and carbon and energy policy and project analysis.

Our Carbon and Energy Program evaluates emerging climate technology industries in the Delta region, with a focus on environmental and economic risks, public health implications, and community benefits. We collaborate with carbon removal and energy industries, government agencies, national labs, and community-based organizations to develop research and policy solutions grounded in environmental justice.

Restore the Delta is writing this paper at an interesting inflection point before large scale AI transforms the region. To preface this conversation we define data centers as a physical location that stores computing machines and their related hardware equipment and artificial intelligence while AI is defined as technology that allows machines and computers to mimic human abilities like learning, understanding, solving problems, making decisions, being creative, and operating independently. An AI data center is a purpose-built computing facility that provides infrastructure for running artificial intelligence applications .

While AI-scale data centers have not yet spread across the region, early developments signal a trajectory that requires proactive engagement rather than reactive response. Industry analyses identify the region as an [emerging strategic location for data centers](#)² with potential to [develop into a regional data center hub](#)³. AI infrastructure is already operating in the Delta. Stockton's Nautilus floating data center has been hosting AI workloads (tasks that AI machines execute, such as learning from data or making predictions) since 2023. These jobs need enormous computers that need a lot of power and water. Additionally, [Avaio Digital Partners](#)⁴ received approval to build the 340,000-square-foot, 92-megawatt Perseus Data Center in Pittsburg, where the Sacramento and San Joaquin Rivers converge. Construction was set to begin in 2025, and development is already underway. The Delta's proximity to Silicon Valley, existing transmission infrastructure, available industrial land and relatively affordable real estate compared to the Bay Area, and water access make it an increasingly attractive target for an industry experiencing explosive nationwide growth.

1.2 Context of a Region Already Under Pressure

The Sacramento-San Joaquin Delta serves as the heart of California's water and agricultural system, supplying water to approximately 27 million people and irrigating 3 million acres of farmland. The Delta is becoming ground zero for an unprecedented convergence of mega-development projects. A billionaire-backed 400,000-person city is [planned in Solano County farmland](#)⁵. Plans for a tunnel costing upwards of [\\$100 billion are underway that would](#) stretch for 45 miles beneath the Delta, bypass flow through the Delta to divert more water south. [There are also permit applications for carbon storage wells to inject millions of tons of carbon dioxide deep underground](#).⁶ Now, data centers could rise beside century-old pear orchards and generations

² DataCenters.com. (n.d.). *Stockton data centers – United States: California / Stockton*. Retrieved [Nov, 2025], from <https://www.datacenters.com/locations/united-states/california/stockton#:~:text=Stockton%2C%20located%20in%20California%27s%20Central,estate%20prices%20and%20less%20congestion>

³ Fourrage, L. (2025, June 1). *This Month's Latest Tech News in Stockton, CA – Saturday May 31st 2025 Edition*. Nucamp. Retrieved [insert retrieval date], from <https://www.nucamp.co/blog/this-months-latest-tech-news-in-stockton-ca--saturday-may-31st-2025-edition>

⁴ Scheier, R. (2025, March 26). *Developers look to new frontiers for data centers in the home region of AI*. CoStar News. <https://www.costar.com/article/1281372940/developers-look-to-new-frontiers-for-data-centers-in-the-home-region-of-ai>

⁵ California Forever. (n.d.). *Company*. Retrieved [Nov, 2025], from <https://www.californiaforever.com/company/>

of family farms, their massive cooling systems consuming water that Delta ecosystems and communities depend upon to preserve an already collapsing system. The convergence of these multiple large-scale development projects in the Delta, represents significant industrial transformation that could fundamentally alter California's water hub.

1.3 Existing Facilities

We identified three facilities in the Stockton region that are presently accommodating AI workloads. First is the Cogent Data Center, situated at 3807 Coronado Avenue in Stockton. The facility is now set up like a typical co-location data center, where businesses rent space for their servers. The Nautilus Stockton facility, located at 1002 Embarcadero in the Port of Stockton, is a floating data center on the San Joaquin River that utilizes sophisticated water-cooling systems to support high-density computing, including AI activities. Lastly, the Rowan Matterhorn facility, situated at 19900 Byron Road in Tracy, serves as a high-performance computing center that amalgamates AI and cloud applications with traditional data center duties. These sites collectively demonstrate the integration of AI infrastructure into the region's overarching technical and industrial landscape.

2. Understanding AI Data Centers

2.1 What is AI and AI Infrastructure?

Artificial Intelligence (AI) refers to computer systems that learn from massive amounts of data to perform tasks like generating text and images, making predictions, or powering automated systems. AI infrastructure refers to the industrial facilities, data centers with specialized computers, massive cooling systems, and power infrastructure which are needed to build and run these systems.

2.2 The AI Data Center Boom in the U.S

The rapid expansion of AI applications has triggered significant infrastructure development. More than [160 new AI data centers have been constructed across water-stressed regions of the United States in the past three years, representing a 72% increase](#)⁷ from the previous three-year period. This growth reflects the technology industry's efforts to deploy AI capabilities at scale.

At the core are data centers which are warehouse-sized buildings housing thousands of high-powered computer servers running 24/7. A single facility can span hundreds of thousands of square feet and consume as much water as a small city and as much electricity as tens of thousands of homes.

⁶ U.S. Environmental Protection Agency. *Class VI Wells Used for Geologic Sequestration of CO₂*. 2024. <https://www.epa.gov/uic/class-vi-wells-used-geologic-sequestration-co2>

⁷ Leonardo Nicoletti, Michelle Ma & Dina Bass, "AI Is Draining Water From Areas That Need It Most," *Bloomberg*, May 8, 2025, <https://www.bloomberg.com/graphics/2025-ai-impacts-data-centers-water-data/>

AI facilities are more energy-intensive than traditional data centers. Building an AI system like ChatGPT requires enough electricity to power 4,500 homes for an entire year. Running these systems to answer users' questions consumes even more energy over time. These facilities require constant cooling, which is why they use millions of gallons of water that is largely lost to evaporation rather than returned to local water systems.

The fast growth of AI applications has led to major infrastructural improvements all around the United States. In the last three years, more than 160 new AI data centers have been built in areas that don't have enough water. This is a 70% rise from the last three years. This speed-up is caused by both the growing need for AI services and large federal investments, such the [CHIPS and Science Act of 2022](#)⁸, which invested tens of billions of dollars into making semiconductors, doing AI research, and building better computers. These incentives have sped up the use of AI by making it easier to get the technology and boosting the amount of work that can be done in the US. At the same time, tax breaks from the state, easier permitting processes, and ongoing private-sector investment from big IT companies have contributed to an unparalleled building boom. These dynamics have led to a nationwide race to improve AI capabilities on a large scale, frequently faster than local natural resource planning processes.

3. AI's Resource Requirements

AI operations demand substantial resources across multiple categories:

Category	Description	Environmental Impact
Computational Power	AI applications require specialized processors (Graphic Processing Units (GPUs) and Tensor Processing Units (TPUs)) that consume significantly more electricity than traditional computer chips while generating substantial heat that must be continuously managed (<i>see Cooling Systems</i>).	High energy demands increase greenhouse gas emissions which adds stress to the local regional grid and pollution to the air.

⁸ Congressional Research Service. (2023). *The CHIPS and Science Act: An overview of its provisions and implementation*. <https://www.congress.gov/bill/117th-congress/house-bill/4346>

Cooling Systems	The intensive heat generated by AI computing equipment requires sophisticated cooling infrastructure, primarily relying on evaporative cooling systems that consume large quantities of water.	Water-intensive cooling exacerbates local water scarcity especially in water scarce regions that can strain municipal water supplies or impact aquatic ecosystems. These cooling systems can also change the quality of the water. For example, the water that is put back into rivers or canals may be hotter or have chemicals from the cooling process, which can hurt fish and delicate habitats.
Network Infrastructure:	AI applications require high-speed, low-latency network connections to serve millions of simultaneous users, demanding robust telecommunications infrastructure	The expansion of fiber-optic cables and network towers increases the need for land-use, often affecting surrounding habitats.
Physical Space	AI data centers require large industrial facilities with specialized electrical systems, backup power generation, and security systems.	Construction and land conversion can lead to habitat loss, increased man-made infrastructure, and long term alterations to micro-climates.

Table 1: Important Parts of AI Applications and How They Affect the Environment

4. AI's Extraordinary Water Demands

AI infrastructure places extreme demands on water resources through data center cooling systems. Recent research reveals the staggering scale of AI's water consumption. An average 100-megawatt data center consumes approximately 2 million liters of water per day, equivalent to the water consumption of about 6,500 households. This consumption is expected to rise dramatically as AI facilities expand, with global data center water consumption projected to increase from 560 billion liters annually to approximately 1,200 billion liters by 2030.

Each AI query requires significantly more water than traditional internet searches. Training a single large language model like ChatGPT can consume approximately 185,000 gallons of fresh water, while a typical user session (10-50 prompts) uses about half a liter of water per interaction. Training is when AI systems employ supercomputers to process a lot of data. This stage needs a lot of water and electricity to keep the equipment cold, which is why it's important for local populations and ecosystems. When billions of daily queries are considered, the cumulative impact becomes enormous.

4.1 Water-Stressed Siting Patterns

[Bloomberg analysis reveals a troubling pattern.](#)⁹ Approximately two-thirds of new data centers built or in development since 2022 are located in areas already experiencing high levels of water stress. Five states alone account for 72% of new AI data centers in high-stress areas, with tech companies increasingly choosing locations with ample energy resources and favorable regulations often at the expense of water availability.

More than [160 new AI data centers have been constructed across the US in the past three years in water-stressed regions](#), representing a 70% increase from the prior three-year period. This trend reflects the industry's prioritization of energy costs and real estate over water sustainability considerations.

4.2 Delta Groundwater, Surface Water, and Water Quality Impacts

The Sacramento-San Joaquin Delta's position makes AI facility water consumption particularly problematic. The aquifer in the Sacramento-San Joaquin basin is already severely overdrafted. As shown in table 1 above, data centers rely heavily on evaporative cooling systems, where approximately 80% of drawn water is evaporated as steam, compared to residential water usage which loses only 10% to evaporation. This consumptive use permanently removes water from local hydrological systems, unlike residential or some industrial uses where water can be treated and returned.

AI data centers present considerable concerns to local water supplies, affecting both their quantity and quality. Heightened groundwater extraction to satisfy facility requirements during peak operations may expedite local aquifer depletion, jeopardizing long-term water security for adjacent communities. Simultaneously, surface water diversions create direct competition with established agricultural and environmental requirements, imposing further pressures on an

⁹ Bloomberg News. (2025, May 8). *AI is draining water from the areas that need it most.* <https://www.bloomberg.com/graphics/2025-ai-impacts-data-centers-water-data/>

already overallocated water system. Resource conflicts can be especially severe in areas such as the Delta, where competing demands are significantly influenced by seasonal fluctuations and extended drought periods.

In addition to quantity, concerns around water quality exacerbate these challenges. Thermal pollution from facility discharges can modify temperature patterns in waterways, increasing the risk to vulnerable Delta species. The combination of existing development demands and climate change consequences generates a cumulative effect that diminishes ecological resilience and community access to clean water. The intersection of depletion, diversion, and pollution highlights the necessity of incorporating robust water-use regulations and environmental protections into the design and permitting processes for AI infrastructure.

4.3 Governance Gaps: Water Rights and Following the SGMA for AI Facilities

In California, AI data centers do not have any unique rights to water. Instead, the rules that govern the area where they labor determine how much water they can get. Most places in the Sacramento-San Joaquin Delta get their water through municipal or industrial service connections. This means that the water supplier, not the facility, has the seniority of the water right. [Municipal water agencies use a mix of surface water rights, contracts, and groundwater extraction to do their jobs. They also decide how to divide up the water among business customers.](#)¹⁰

When facilities pump groundwater directly, they do so as appropriate users, not overlaying users, because industrial groundwater pumping is considered a non-overlaying commercial use. In California, agricultural and environmental uses come before appropriative rights. Junior users can keep pumping, though, unless a curtailment or GSA-imposed limit is in place.

Even though these rights are further down the list, data centers can still take a lot of groundwater because SGMA's rules are long-term and will be put into place gradually. [SGMA says that dangerously overdrafted basins must become sustainable by 2040. There are only five-year interim goals and no immediate ban on overdraft.](#)¹¹ So, as long as agencies show "measurable progress" toward long-term sustainability, overdraft can continue to be allowed.

DWR found problems with groundwater-dependent ecosystems, minimum thresholds, and the accuracy of water budgets in many Groundwater Sustainability Plans (GSPs) filed by GSAs in the San Joaquin Valley and Delta region. GSAs can keep pumping even when DWR asks for changes to be made. The State Water Resources Control Board has only put one basin, [the Tulare Lake Subbasin, on probation thus far, which shows how slowly SGMA is being enforced.](#)

¹⁰ California Water Code § 10727.2 (2024). Retrieved from <https://law.justia.com/codes/california/code-wat/division-6/part-2-74/chapter-6/section-10727-2/>

¹¹ State Water Resources Control Board. (n.d.). *Home page*. Retrieved [Month Day, Year], from <https://www.waterboards.ca.gov/>

SGMA lets pumping continue until at least 2040, and industrial users have fewer immediate constraints than irrigated agriculture. This means that AI facilities can keep extracting a lot of groundwater even when the basin is stressed. This lack of governance lets data centers that need a lot of water compete with agricultural, municipal, Tribal, and ecological needs, especially in places like the Delta where water scarcity, overdraft, and subsidence threats are already quite severe.

5. Energy Requirements

5.1 Energy Intensity of AI Operations

According to the US department of energy, Energy Intensity is measured by the quantity of energy required per unit output or activity, so that using less energy to produce a product reduces the intensity. AI operations consume extraordinary amounts of energy, fundamentally changing data center electricity demands. Lawrence Berkeley National Lab and MIT Technology Review analysis reveals that data centers now consume 4.4% of all US electricity, a figure that could triple to 12% by 2028 due to AI expansion depending on adoption rates and efficiency improvements.¹² Additionally, the total data center electricity usage climbed from 58 TWh in 2014 to 176 TWh in 2023 and is estimated to increase between 325 to 580 TWh by 2028.

Training a single large language model like GPT-4 requires over 50 gigawatt-hours of energy, enough to power San Francisco for three days or 4,500 homes for an entire year.

The energy intensity varies dramatically by AI application. While individual queries may seem minimal, the aggregate burden reveals stark environmental justice implications as billions of daily interactions compound into massive electricity demands that disproportionately impact the communities hosting data center infrastructure. AI facilities are more energy-intensive than traditional data centers. Running these systems to answer users' questions consumes even more energy over time. Other AI applications that use energy include text generation, Image generation and video generation.

5.1 Large Energy Burden

Large energy loads can stress local grid infrastructure and may trigger utility rate increases or demand charges affecting all ratepayers. Communities already spending 6-10%+ of income on energy face additional pressure. Peak demand from facilities can drive up time-of-use rates for a region already experiencing high energy burden. The Sacramento-San Joaquin Delta's electrical infrastructure already faces pressure. In recent years, residents have seen rolling blackouts, especially over the summer,signifying that an increased load from AI facility

¹² Shehabi, A., Smith, S. J., Hubbard, A., Newkirk, A., Lei, N., Siddik, M. A. B., Holecek, B., Koomey, G., Masanet, E. R., & Sartor, D. A. (2024, December 20). *2024 United States Data Center Energy Usage Report*. Lawrence Berkeley National Laboratory. <https://escholarship.org/uc/item/32d6m0d1>

development would only exacerbate the issue further. California's renewable energy integration goals require careful load management, but AI facilities' constant, inflexible power demand creates grid stability challenges.

AI facilities need uninterrupted 24/7 power supply, rendering them unable to reduce usage during peak demand intervals. This poses considerable concerns to grid dependability, as concentrated high-demand activities can exert substantial pressure on transmission systems. The integration of renewable energy becomes increasingly challenging, as the continuous electricity consumption from AI facilities does not correspond with the fluctuation of solar and wind generation. Accommodating increased loads will certainly need expensive modifications to the transmission system, exacerbating the strain on the regional grid. The expansion of AI activities increases the likelihood of peak demand conflicts, since these facilities compete with agricultural, residential, and other vital users for scarce electricity during crucial hours.

Professor Mahmut Kandemir [from Penn State](#)¹³ notes that by 2030-2035, data centers could account for 20% of global electricity use, putting "immense strain on power grids." The Delta's existing electrical infrastructure was not designed to accommodate such concentrated industrial loads.

6. Land Use

6.1 AI, Land Use, and "Green Cities"

AI is changing the landscape of our communities by the enhancement of decision making in urban planning, agriculture, and environmental management.

A diverse use of land use is critical for urban sustainability, functional segregation, and zoning policies. The integration of AI into urban design and planning is heading towards a new era of "green" cities, promising more sustainable environments¹⁴. As urban areas expand and new innovations are being created, it enhances new complex planning methods that cross out the traditional methods. AI applications in land use and sustainability can help manage resources more efficiently, but they also raise¹⁵ issues about energy intensity, data privacy, and the possibility of making unfair planning systems even worse. To make cities "green" or "smart," we need to be able to clearly weigh the environmental and social costs and benefits.

¹³ Penn State College of Engineering. (2025, May 31). *How universities can reduce AI's environmental impact* [LinkedIn post]. LinkedIn. https://www.linkedin.com/posts/penn-state-engineering_pennstateeeecs-pennstateengineering-aisustainability-activity-7338304962063425538-yfvA/

¹⁴ Yue, Y., Yan, G., Lan, T., Cao, R., Gao, Q., Gao, W., Huang, B., Huang, G., Huang, Z., Kan, Z., Li, X., Liu, D., Liu, X., Ma, D., Wang, L., Xia, J., Yang, X., Zhou, M., Yeh, A. G.-O., Guo, R., & Claramunt, C. (2025). *Shaping future sustainable cities with AI-powered urban informatics: Toward human-AI symbiosis*. Computational Urban Science, 5, Article 31. <https://doi.org/10.1007/s43762-025-00190-0>

¹⁵ San Francisco Estuary Partnership. (2024). *Environmental Justice 2.0 for the Bay-Delta Estuary: Lessons learned from EJ expert-government agency partnerships and models for the future* [Report]. Oakland Community Hub. https://www.sfestuary.org/wp-content/uploads/2024/08/For-distribution_Estuary_EJ_Report_2024.pdf

6.2 Environmental Justice and Broken Public Access

The environmental consequences of AI data centers are apparent, although their social and justice aspects are frequently neglected. [Numerous operations are located in Delta communities such as disadvantaged neighborhoods of the Sacramento-San Joaquin Delta region that are already experiencing compounded challenges, including air pollution, water contamination, and pesticide exposure.](#)

[Many AI infrastructure projects move forward without proper environmental review or genuine community engagement¹⁶.](#) For example, in Northern Virginia, which has one of the largest data center hubs in the United States., residents say that huge AI-powered facilities were approved and built with little information about how much water and energy they would use. This happened without proper public hearings, even though there was clear opposition from the neighborhood and concerns about the environment. Even when the facility conducts file reports, they often use broad or aggregated metrics that obscure peak demand and drawdown from shared water sources. [In several cases across](#) the United States, data centers have been approved without proper consent nor public hearings despite the potential to reshape the Delta.¹⁷

7. Climate Implications

7.1 Emissions

The Sacramento-San Joaquin Delta faces compounded climate risks from various pollution sources and is ranked one of the highest concentrations in the state of California. The concentration of AI facilities could exacerbate heat island effects, as thermal output alters local microclimates and worsens urban heat stress. Communities with limited access to green space and cooling infrastructure are more vulnerable, demonstrating how facility site considerations overlap with environmental justice concerns. These same communities are frequently disproportionately exposed to air pollution, and extra emissions from AI activities risk exacerbating existing health problems.

The effects go beyond direct facility emissions. Increased truck traffic from construction, equipment delivery, and maintenance adds to transportation-related emissions and local congestion. These constraints are especially apparent in places already overburdened by freight corridors and industrial transportation, exacerbating pollution and injustice. At the same time, the high electricity demand of AI facilities may increase dependency on natural gas power

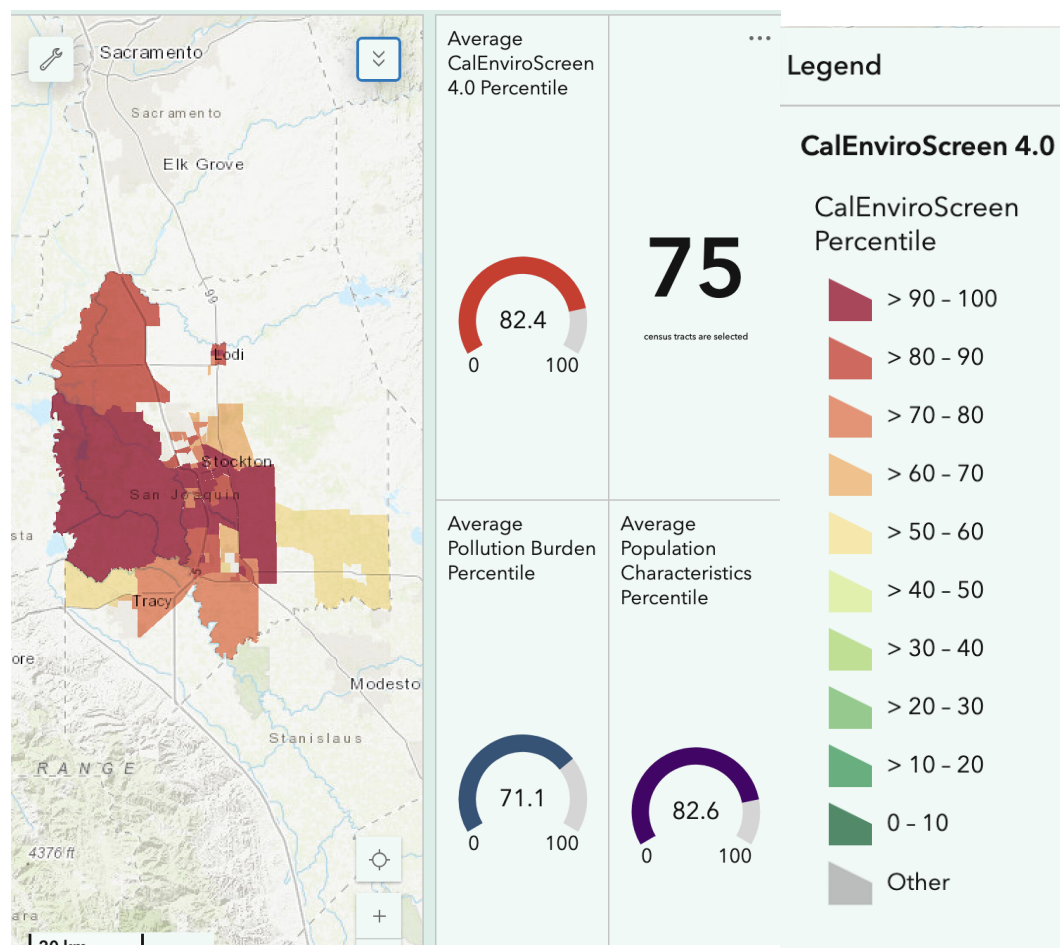
¹⁶ Del Rey, J. (2025, May 2). *The hidden costs of AI: Data centers are disturbing neighborhoods, straining power grids, and polluting the air.* Business Insider. <https://www.businessinsider.com/data-centers-northern-virginia-noise-air-pollution-cost-2025-5>

¹⁷ Centre for Biological Diversity. (2024, December 2). *Lawsuit pushes California city to reevaluate data center's environmental harms* [Press release]. Centre for Biological Diversity. <https://biologicaldiversity.org/w/news/press-releases/lawsuit-pushes-california-city-to-reevaluate-data-centers-environmental-harms-2024-12-02/>

plants when renewable supply is insufficient. [This dependency increases both greenhouse gas emissions and localized air pollution like NOx, PM2.5, and SO2, undercutting climate goals and burdening neighboring populations.](#)¹⁸

7.2 Overlapping Burdens in Disadvantaged Communities

[CalEnviroScreen](#)¹⁹ indicates that these regions predominantly consist of low-income populations and communities of color, where citizens possess minimal ability to impact land-use decisions. Figure 2 below highlights the air pollution burden in the Sacramento-San Joaquin delta. The increased pressure from high-water-use infrastructure threatens to exacerbate inequality, imposing disproportionate costs on vulnerable communities such as South Stockton while providing minimal, if any, benefits.



¹⁸ Union of Concerned Scientists. (2024). *Who really pays for data centers powered by fossil fuels?* <https://blog.ucsusa.org/maria-chavez/who-really-pays-for-data-centers-powered-by-fossil-fuels/>

¹⁹ California Office of Environmental Health Hazard Assessment (OEHHA), *CalEnviroScreen 4.0 — Maps & Data*, accessed November 13, 2025, <https://oehha.ca.gov/calenviroscreen/maps-data>

Figure 2: [Air Pollution Percentiles in Disadvantaged Communities in the San Joaquin Area According to OEHHA](#)

8. Ecological Disruption

8.1 Aquatic Habits Under Threat

The Sacramento–San Joaquin Delta harbors California's most endangered aquatic species, such as the Delta smelt, Chinook salmon, and green sturgeon. These species serve as crucial ecological indicators and possess profound cultural and spiritual importance for Tribal nations with ancient connections to the Delta. In addition, the energy and water requirements of AI infrastructure exacerbate thermal pollution and water diversion, jeopardizing already vulnerable aquatic ecosystems. Data centers extract millions of gallons of water everyday for cooling, while elevated temperatures and diminished streams undermine the fragile predator-prey dynamics essential for sustaining fish populations.

AI data centers produce a lot of waste heat, and their cooling systems use a lot of water, which can raise the temperature of the water around them and lower the amount of dissolved oxygen that is important for aquatic life. These thermal discharges, together with other stresses like agricultural runoff and changes in flow regimes, break up habitats and put cold-water species in even more risk. Decreases in smelt and salmon diminish nutrient cycling, facilitate the introduction of exotic species, and destabilize the aquatic food web, ultimately jeopardizing biodiversity and water quality across the Delta system.



Figure 1: [Delta Smelt Near Extinction \(Sommer, 2015\)](#)

8.2 Cultural Erosion

For numerous Indigenous and Delta-based societies, aquatic creatures are vital relatives integral to rituals, nourishment, and ecological management. The current industrialization of the Delta, to which AI-related infrastructure is a component, jeopardizes these linkages. The decline of salmon runs and indigenous fish caused by thermal discharges, groundwater depletion, and heightened salinity undermines intergenerational knowledge associated with fishing, preparation, and storytelling. This loss undermines cultural resilience and impairs communal ties to ancestral lands and rivers.

Before European and American colonization, the San Joaquin Delta thrived in ecosystems and numerous Native American tribes such as the Yokuts and Miwoks peoples. The native people of the Delta possessed a deep understanding of the land, employing practices like controlled burns, pruning to manage animals and plants. Settlers began farming in the Delta around the mid 1800s, transforming most of the wetlands into agricultural land via diking and draining. By the 1930s, the wetlands were diverted. In addition to irrigation, the Sacramento and San Joaquin rivers led to summer water depletion during the 1900s. With that being said, If we continue to abuse the Delta, we would suffer through various crises such as public health.

The Delta now stands at a crossroads and unplanned water and resource use would greatly impact the foundation of California's water system and the millions who depend on it.

9. Policy Landscape

California currently lacks comprehensive environmental policies specifically addressing AI infrastructure development, despite the state's leadership in both environmental protection and technology regulation. This represents a policy gap at a time when AI deployment is expanding rapidly. [In 2024, the Legislature introduced several bills aimed at creating oversight frameworks for AI systems and large computing facilities including SB 1047²⁰](#), which proposed transparency, safety, and reporting requirements for high-risk AI models. Governor Newsom ultimately vetoed SB 1047, citing concerns about regulatory overlap and the need for federal coordination, leaving the state without a dedicated oversight mechanism for AI infrastructure.

Existing environmental review processes under the California Environmental Quality Act (CEQA) were designed for traditional industrial development and may not adequately address the unique characteristics of AI infrastructure, including continuous high water consumption.

²⁰ California Legislature. (2024). *SB 1047: Safe and Secure Innovation for Frontier Artificial Intelligence Models Act*. Retrieved from <https://leginfo.ca.gov>

patterns, constant electricity demand, and cumulative impacts from multiple facilities operating simultaneously.

California's climate policies, including [AB 32 \(Global Warming Solutions Act of 2006\)](#) and [SB 32 \(which extends emissions reduction goals to 2030\)](#)²¹ established policies for reducing greenhouse gas emissions but do not specifically address the rapid growth in electricity demand from AI operations or provide guidance for integrating AI energy needs with renewable energy planning.

Water rights and allocation systems operate under laws established decades ago and may not account for the scale and permanence of AI facility water consumption during drought conditions when water becomes increasingly critical for competing uses.

Appendices

Glossary

Term	Definition
Artificial Intelligence (AI)	AI is a form of science technology by the creation of computers and machines that can learn and act in a humanizing way. It would involve data that can exceed what humans can analyze.
Megawatts	A unit of power equal to one million watts used to measure rate of production or consumption. This measurement can be used to measure the energy rate of a power plant or a large facility using electricity.
Joules	A measurement that quantifies energy and the work done to transfer it.
GPT 4	A large multimodal language model developed by OpenAI. It can be used to process text, images, and documents.
TerraWatt hour	Terawatt hours, abbreviated as TWh, is a unit of energy representing one trillion watt hours
Training an AI model	Training is when an AI system "learns"

²¹ Carrilho, M. (2025, November 6). *California's Assembly Bill 32 (AB 32): California's AB 32 sets global benchmark for climate action and carbon markets*. Net Zero Compare. <https://netzerocompare.com/policies/californias-assembly-bill-32-ab-32>

	by looking at a lot of data and finding patterns, answering questions, or making predictions.

References

Bloomberg News. (2025, May 8). *AI is draining water from the areas that need it most*. <https://www.bloomberg.com/graphics/2025-ai-impacts-data-centers-water-data/>

California Forever. (n.d.). *Company*. Retrieved November 2025, from <https://www.californiaforever.com/company/>

California Legislature. (2024). *SB 1047: Safe and Secure Innovation for Frontier Artificial Intelligence Models Act*. <https://leginfo.legislature.ca.gov>

California Office of Environmental Health Hazard Assessment. (2025). *CalEnviroScreen 4.0 — Maps & Data*. <https://oehha.ca.gov/calenviroscreen/maps-data>

California Water Code § 10727.2 (2024). <https://law.justia.com/codes/california/code-wat/division-6/part-2-74/chapter-6/section-10727-2/>

Carrilho, M. (2025, November 6). *California's Assembly Bill 32 (AB 32): California's AB 32 sets global benchmark for climate action and carbon markets*. Net Zero Compare. <https://netzerocompare.com/policies/californias-assembly-bill-32-ab-32>

Centre for Biological Diversity. (2024, December 2). *Lawsuit pushes California city to reevaluate data center's environmental harms* [Press release]. <https://biologicaldiversity.org/w/news/press-releases/lawsuit-pushes-california-city-to-reevaluate-data-centers-environmental-harms-2024-12-02/>

Congressional Research Service. (2023). *The CHIPS and Science Act: An overview of its provisions and implementation*. <https://www.congress.gov/bill/117th-congress/house-bill/4346>

DataCenters.com. (n.d.). *Stockton data centers – United States: California / Stockton*. Retrieved November 2025, from <https://www.datacenters.com/locations/united-states/california/stockton>

Del Rey, J. (2025, May 2). *The hidden costs of AI: Data centers are disturbing neighborhoods, straining power grids, and polluting the air*. Business Insider. <https://www.businessinsider.com/data-centers-northern-virginia-noise-air-pollution-cost-2025-5>

Fourrage, L. (2025, June 1). *This Month's Latest Tech News in Stockton, CA – Saturday May 31st 2025 Edition*. Nucamp. <https://www.nucamp.co/blog/this-months-latest-tech-news-in-stockton-ca--saturday-may-31st-2025-edition>

Lawrence Berkeley National Laboratory. (2025, January 15). *Berkeley Lab report evaluates increase in electricity demand from data centers*. Building Technology & Urban Systems Division. <https://buildings.lbl.gov/news/berkeley-lab-report-evaluates-increase-electricity-demand-data-centers/>

Penn State College of Engineering. (2025, May 31). *How universities can reduce AI's environmental impact* [LinkedIn post]. LinkedIn. https://www.linkedin.com/posts/penn-state-engineering_pennstateeecs-pennstateengineering-aisustainability-activity-7338304962063425538-yfvA/

Ren, S., & Luers, A. (2025, September 10). *The real story on AI's water use—and how to tackle it*. IEEE Spectrum. <https://spectrum.ieee.org/ai-water-usage>

San Francisco Estuary Partnership. (2024). *Environmental Justice 2.0 for the Bay-Delta Estuary: Lessons learned from EJ expert-government agency partnerships and models for the future*. Oakland Community Hub. https://www.sfestuary.org/wp-content/uploads/2024/08/For-distribution_Estuary_EJ_Report_2024.pdf

Scheier, R. (2025, March 26). *Developers look to new frontiers for data centers in the home region of AI*. CoStar News. <https://www.costar.com/article/1281372940/developers-look-to-new-frontiers-for-data-centers-in-the-home-region-of-ai>

Shehabi, A., Smith, S. J., Hubbard, A., Newkirk, A., Lei, N., Siddik, M. A. B., Holecek, B., Koomey, G., Masanet, E. R., & Sartor, D. A. (2024, December 20). *2024 United States Data Center Energy Usage Report*. Lawrence Berkeley National Laboratory. <https://escholarship.org/uc/item/32d6m0d1>

State Water Resources Control Board. (2025). *Home page*. <https://www.waterboards.ca.gov/>

U.S. Department of Energy. (2024, December 20). *DOE releases new report evaluating increase in electricity demand from data centers*. <https://www.energy.gov/articles/doe-releases-new-report-evaluating-increase-electricity-demand-data-centers>

U.S. Environmental Protection Agency. (2024). *Class VI Wells Used for Geologic Sequestration of CO₂*. <https://www.epa.gov/uic/class-vi-wells-used-geologic-sequestration-co2>

Union of Concerned Scientists. (2024). *Who really pays for data centers powered by fossil fuels?* <https://blog.ucsusa.org/maria-chavez/who-really-pays-for-data-centers-powered-by-fossil-fuels/>

White & Case LLP. (2025). *AI Watch: Global regulatory tracker — United States*. <https://www.whitecase.com/insight-our-thinking/ai-watch-global-regulatory-tracker-united-states>

Yue, Y., Yan, G., Lan, T., Cao, R., Gao, Q., Gao, W., Huang, B., Huang, G., Huang, Z., Kan, Z., Li, X., Liu, D., Liu, X., Ma, D., Wang, L., Xia, J., Yang, X., Zhou, M., Yeh, A. G.-O., Guo, R., & Claramunt, C. (2025). *Shaping future sustainable cities with AI-powered urban informatics: Toward human-AI symbiosis*. Computational Urban Science, 5, Article 31.
<https://doi.org/10.1007/s43762-025-00190-0>