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By Email Only

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Re: Title VI Complaint Regarding Disparate Impacts of State Water Board Policies and Practices in the San Francisco Bay/Sacramento-San Joaquin Delta

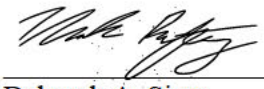
Dear Director Dorka:

We write on behalf of our clients – [redacted] – to submit the attached Complaint pursuant to Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d et seq. ("Title VI") and the nondiscrimination regulations of the Environmental Protection Agency (the "EPA"), 40 C.F.R. Part 7. The Complaint alleges that policies and practices of Recipient California State Water Resources Control Board, including but not limited to its failure to review and update water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta ("Bay-Delta"), have disparately impacted Native tribes and Delta communities of color. The Complaint is part of a joint submittal with a Petition for Rulemaking invoking the EPA's oversight authority to adopt water quality standards for the Bay-Delta that comply with the Clean Water Act.

Complainants respectfully request that the EPA: (1) immediately and thoroughly investigate the State Water Board's noncompliance with Title VI of the Civil Rights Act related to its actions and inactions on water quality standards in the Bay-Delta; (2) engage with affected parties, including Complainants during Title VI investigations and in crafting remedies; (3) withhold federal permits and approvals for major water export infrastructure, such as the Delta Conveyance Project, in the Bay-Delta and its headwaters until the State Water Board achieves compliance with Title VI; (4) withhold approval of water quality standards that have been crafted through exclusionary policymaking processes; and (5) terminate or withhold State Water Board funding if the Board fails to come into compliance with Title VI.

We look forward to engaging with your Office throughout the investigatory process.

Sincerely,



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BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

TITLE VI COMPLAINT AND PETITION FOR RULEMAKING FOR PROMULGATION OF BAY-DELTA WATER QUALITY STANDARDS	**Pursuant to Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d et seq. and 40 C.F.R. § 7.120; the Administrative Procedure Act, 5 U.S.C. § 553(e); and the Clean Water Act, 33 U.S.C. § 1313(c)(4)(B)**

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INTRODUCTION

Complainant-Petitioners (b)(6) Privacy, (b)(7)(C) Enf. Privacy [redacted] respectfully submit this (1) Civil Rights Complaint under Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d et seq. ("Title VI") and the nondiscrimination regulations of the U.S. Environmental Protection Agency (the "EPA"), 40 C.F.R. Part 7; and (2) Petition for Rulemaking under the Administrative Procedure Act, 5 U.S.C. § 551 et seq. ("APA"), and the Clean Water Act, 33 U.S.C. § 1251 et seq. ("CWA"). For well over a decade, Recipient State Water Resources Control Board (the "State Water Board" or "Board") has failed to uphold its statutory duty to review water quality standards in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (the "Bay-Delta") and update standards to ensure compliance with the CWA's ameliorative objectives. Inadequate standards left in place by these failures have allowed Bay-Delta

waterways to descend into ecological crisis, with the resulting environmental burdens falling most heavily on Native tribes and other communities of color.

On October 17, 2022, President Biden commemorated the 50th anniversary of the CWA by celebrating its role in taking the Nation's waters from a state of "crisis" to one in which "[o]nce dead rivers . . . are now flourishing with wildlife" and "[s]acred waters that Tribal Nations have relied on for generations are clean again."[1] The President could not have had the Bay-Delta in mind. Its waterways are plagued by dangerously low flows, native fish die-offs, high water temperatures, encroaching salinity, and overgrowths of toxic algae or cyanobacteria known as harmful algal blooms ("HABs"). The State Water Board could restore the estuary by providing for water from the surrounding mountains to flow unimpeded into and through Bay-Delta waterways, but instead it prevents more than half of that water from reaching the San Francisco Bay every year.

The ecological crisis in the Bay-Delta, like California's water rights regime, is rooted in white supremacy. Native tribes stewarded Bay-Delta waterways and headwaters for thousands of years until state-sponsored genocide, forced displacement, and broken treaty promises stripped tribes of their land and water access. 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, based on the colonial mantra of "first in time, first in right." In the process, the state trammeled on the inherent rights of Native tribes to Bay-Delta water. At the same time, California law barred people of color from owning land, and thereby acquiring accompanying water rights, well into the 20th century. The cumulative result is a system that favors the diversion and export of water for use in far-flung locales over ecological health and human welfare in the Bay-Delta itself.

Today, the State Water Board's violations of laws intended to restore the integrity of the waterways perpetuate this history of dispossession and environmental racism. The CWA requires the Board to review water quality standards every three years through a public process. It requires that water quality criteria protect beneficial uses of water bodies. And it requires standards grounded in sound scientific rationale. The Board has failed on all fronts. It last initiated comprehensive review of Bay-Delta water quality standards over a decade ago. It

[1] President Joseph R. Biden Jr., A Proclamation on the 50th Anniversary of the Clean Water Act (Oct. 17, 2022), https://www.whitehouse.gov/briefing-room/presidential-actions/2022/10/17/a-proclamation-on-the-50th-anniversary-of-the-clean-water-act/.

has delayed review while the State engages in private negotiations over export allowances with powerful water rights claimants, excluding tribes and communities of color that would be impacted by resulting standards from the decision-making process. Meanwhile, it has maintained outdated standards – last updated in 1995 – that fail to protect beneficial uses in Bay-Delta waterways or account for tribes' reserved rights and interests.

The impacts of these failures have fallen disproportionately on Native tribes and communities of color. For instance, Complainant-Petitioner (b)(6) Privacy, (b)(7)(C) Enf. Privacy cannot perform cultural, religious, and subsistence practices in the Bay-Delta's HAB-contaminated waters, nor can it access riparian resources essential to tribal identity. Collapse of the Bay-Delta's native fisheries impairs Complainant-Petitioner (b)(6) Privacy, (b)(7)(C) Enf. Privacy ability to exercise its religion and way of life, which depends on the once bountiful Chinook salmon in Bay-Delta headwaters. Communities of color in South Stockton, where Complainant-Petitioner (b)(6) Privacy, (b)(7)(C) Enf. Privacy is based, cannot use and enjoy adjacent waterways because of HABs and chronically low flows. Instead, the health risks of HABs layer on top of outsized environmental burdens already borne by these communities.

Complainant-Petitioners urge the EPA to correct these harms by: (1) initiating a Title VI investigation into the State Water Board's discriminatory water management policies and practices in the Bay-Delta; and (2) initiating a rulemaking to adopt CWA-compliant water quality standards for the Bay-Delta, including designating Tribal Beneficial Uses and adopting flow-based, temperature, and HAB criteria that protect beneficial uses and tribal reserved rights.

PARTIES

I. Complainant-Petitioners

A. (b)(6) Privacy, (b)(7)(C) Enf. Privacy

The (b)(6) Privacy, (b)(7)(C) Enf. Privacy is an Indigenous tribe with ancestral homelands spanning seven counties in Northern California – Sacramento, El Dorado, Amador, Yolo, Placer, Sutter, and Yuba – and the watersheds of multiple Delta waterways, including the Sacramento River, American River, Feather River, Bear River, and Cosumnes River. The Tribe has stewarded and used resources from the Delta for sustenance, medicine, transportation, shelter, clothing, and

ceremony, among other cultural, religious, and subsistence uses, since time immemorial.

The 600 present-day members of the (b)(6) Privacy, (b)(7)(C) Enf. Privacy are descendants of the (b)(6) Privacy, (b)(7)(C) Enf. Privacy Indians who thrived in California's fertile Central Valley for thousands of years before contact with Europeans. The Tribe is also descended from ten native Hawaiians who were forcibly brought to Nisenan territory in 1839 by John Sutter, a Swiss land baron who enslaved hundreds of Indigenous people at his Sacramento Valley ranch. The Tribe's deep connection to Delta waterways was severed when its members were forced from their ancestral villages through colonization, disease, state-sponsored violence, and privatization of tribal land. In 1920, the Secretary of the Interior purchased the 160-acre (b)(6) Privacy, (b)(7)(C) Enf. Privacy Rancheria east of Sacramento in El Dorado County and placed it into trust for the displaced Tribe. This landlocked Rancheria, disconnected from both waterways and roadways, was inaccessible to the Tribe for decades and is far from the waterways that traditionally sustained the Tribe and its way of life.

The Tribe's removal from ancestral waterways eroded its identity, traditional knowledge, and cultural practices. In recent years, the Tribe has been returning to Delta waterways, reclaiming its culture, and healing the alienation of many tribal members from the water. In 2017, the Tribe founded a Traditional Ecological Knowledge program to restore connections to cultural resources, spiritual practices, and traditional ways of life. The program has reeducated tribal members about who they are and where they are from by teaching them how to make regalia, food, clothing, shelter, and modes of transportation from the natural resources found along Delta waterways.

As part of the Traditional Ecological Knowledge program, the Tribe purchased a small tract of land in 2020 at its ancestral village site of (b)(6) Privacy, (b)(7)(C) E where the (b)(6) Privacy, (b)(7)(C) Enf River and the (b)(6) Privacy, (b)(7)(C) Enf. Privacy River meet. The land is in present-day Verona, California, just north of Sacramento. Despite regaining this limited riparian access to ancestral waterways, the degraded condition of the Delta impedes the Tribe's long-sought reconnection and reeducation efforts. HABs increasingly prevent tribal members from accessing the water for fishing or ceremonial purposes. And traditional riparian resources like tule, a long grassy plant that tribal members use for everything from baskets to boats, either no longer exist or are unsuitable for use because of the polluted state of the water.

B. [redacted]

The [redacted] are an Indigenous tribe whose identity and existence are intertwined with the headwaters of the Bay-Delta. In the [redacted] language, [redacted] translates to "[redacted] reflecting the Tribe's identification with its ancestral homelands along the [redacted] River lying between the [redacted] Rivers. Traditionally, the [redacted] historical territory spanned the upper [redacted] River watersheds, which provide freshwater flows into the Bay-Delta. These waters have sustained the life and spirituality of the Tribe since time immemorial.

[redacted] culture and identity are inextricably connected with the [redacted] or Chinook salmon, which once flourished in the Bay-Delta's waterways. In the Tribe's creation story, the [redacted] gave the [redacted] their voice, and the Tribe in turn promised to always speak for the [redacted]. The [redacted] and the [redacted] have depended on each other for thousands of years – the [redacted] speaking for, caring for, and protecting the salmon, and the salmon giving themselves to the [redacted] for sustenance. Ceremonies, songs, dances, and prayers about the relationship between the [redacted] and the [redacted] are the fabric of [redacted] culture, religion, and spirituality.

Damming and diversion of Bay-Delta waters and poor water quality have contributed to the near extinction of Chinook salmon, thereby threatening the continued existence of the [redacted] as a People. This existential threat layers on top of centuries of state-supported campaigns and projects to remove the [redacted] from their historic homelands and divest them of their relationship to the water. These efforts culminated in construction of the Central Valley Project's Shasta Dam in the 1930s and 40s, which flooded over 90% of the [redacted] historical village sites, sacred sites, burial sites, and cultural gathering sites while blocking the [redacted] from migrating into Bay-Delta headwaters to spawn. The continued reliance on Central Valley Project exports and degradation of Bay-Delta water quality impair the ability of Chinook salmon to reestablish their natural migratory pathways into [redacted] homelands.

C. [redacted]

[redacted] is a 501(c)(3) non-profit organization dedicated to bringing multifaceted equity to Stockton, California, a city of 320,000 residents on

the eastern edge of the Delta along the San Joaquin River.[2] Stockton is one of the most diverse cities in America,[3] with a population 44% Hispanic, 21% Asian, 12% Black, and 19% non-Hispanic white.[4] About a third of the city's residents live in South Stockton, a historically underserved and under-resourced area where many of the city's Black, Asian, and Hispanic communities reside.[5]

(b)(6) Privacy, (b)(7)(C) Enf. Privacy was founded in 1999 to advocate for the historic preservation and revitalization of South Stockton's (b)(6) Privacy, (b)(7)(C) Enf. Privacy community. Once home to the largest population of Filipinos in the world outside the Philippines, (b)(6) Privacy, (b)(7)(C) Enf. Privacy was decimated in the 1970s when the California state government, supported by Stockton city officials, constructed the Crosstown Freeway directly through the community, demolishing homes and displacing residents.

(b)(6) Privacy, (b)(7)(C) Enf. Privacy continues to advocate for the interests of South Stockton residents through programs addressing education, environment, redevelopment, and public health.[6] (b)(6) Privacy, (b)(7)(C) Enf. Privacy recognizes that the health and well-being of the communities it represents are tied to the health and resiliency of the Bay-Delta, and it has frequently engaged the State Water Board on the need to improve water quality standards. These improvements are a critical part of larger efforts to correct the effects of historical marginalization, institutionalized racism, and harmful public policy experienced by South Stockton residents.

D. (b)(6) Privacy, (b)(7)(C) Enf. Privacy

(b)(6) Privacy, (b)(7)(C) Enf. Privacy is a 501(c)(3) non-profit organization based in Stockton, whose mission is to ensure the health of the Bay-Delta so that fisheries, communities, and family farming can thrive there again. It works to protect water quality, improve access to clean waterways, and reduce flood and drought impacts resulting from climate change, particularly in communities of color. To achieve this mission, (b)(6) Privacy, (b)(7)(C) Enf. Privacy advocates for the interests of local and marginalized

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[2] U.S. Census Bureau, *Quickfacts: Stockton City, California*, https://www.census.gov/quickfacts/stocktoncitycalifornia (last visited Nov. 17, 2022).

[3] Gaby Galvin, *America's Most Diverse City is Still Scarred by its Past*, U.S. News & World Rep. (Jan. 22, 2020), https://www.usnews.com/news/cities/articles/2020-01-22/stockton-california-americas-most-diverse-city-is-still-scarred-by-its-past.

[4] U.S. Census Bureau, *supra* note 2.

[5] Galvin, *supra* note 3; *see also* Michelle Anderson, *The Fight to Save the Town: Reimaging Divided America* 40-41 (2022).

[6] (b)(6) Privacy, (b)(7)(C) Enf. Privacy

Delta stakeholders to ensure that they have a meaningful voice in water management decisions affecting the well-being of their communities.

Many of [redacted] 75,000 members live in or near the Bay-Delta and have a strong personal interest in ensuring healthy freshwater flows to support a thriving ecosystem, safe recreation, safe and sustainable drinking water, and a clean environment. Restore the Delta has advocated before the State Water Board for improved Bay-Delta water quality standards and the restoration of instream flows for over fifteen years.

E. [redacted]

[redacted] is a 501(c)(3) organization dedicated to restoring clean and plentiful flows and fish habitat, removing dams, and improving water quality throughout Northern California watersheds so that the region's fish-dependent tribes and communities can thrive. [redacted] is also dedicated to fighting emergent threats on rivers, such as new dams, diversions, and pipelines, and empowering communities affected by diversions and poor water management to fight for rivers and salmon.

[redacted] works with over a dozen California tribes with an interest in water quality and fisheries-related decisions, as well as with tribal members directly. [redacted] advisory board is chiefly comprised of leaders and members of tribes from the Northern California watersheds in which the organization works – including Complainant-Petitioners [redacted] and who depend on healthy and sustainable surface water flows for spiritual, cultural, subsistence, and recreational purposes.

To achieve its mission, [redacted] publicly advocates before state and federal agencies to prevent excessive diversions and dewatering of Bay-Delta waterways, their headwaters, and other Northern California waterways of vital importance to tribes; to restore natural instream flow conditions; and to allow regeneration of healthy fish habitat. [redacted] has been involved in submitting written comments and public testimony on efforts to update the Bay-Delta Plan on several occasions. [redacted] has also participated in the public comment periods for related water quality decisions that impact the Bay-Delta, including basin plan review processes, CWA section 303(d) listings,

temperature management plans, and emergency drought standards. In all these public proceedings, (b)(6) Privacy, (b)(7)(C) Enf. Privacy advocates for the rights and interests of tribes in the Bay-Delta and its headwaters as well as the (b)(6) Privacy, (b)(7)(C) Enf. Privacy in the Klamath River Basin, which has been engineered to artificially feed the Bay-Delta.

II. Recipient

The California State Water Resources Control Board exercises "the adjudicatory and regulatory functions of the state in the field of water resources" in California.[7] The State Water Board and the nine regional water quality control boards are the principal state agencies "with primary responsibility for the coordination and control of water quality."[8]

The State Water Board is responsible for formulating and adopting "state policy for water quality control."[9] Regional boards develop water quality control plans that adhere to this policy, subject to approval by the State Water Board.[10] The Board may also formulate its own water quality control plans, which supersede any conflicting regional plans.[11] The State Water Board has exercised this authority to manage water quality standards for the Bay-Delta since 1978.[12]

LEGAL BACKGROUND

I. Title VI of the Civil Rights Act

Title VI of the Civil Rights Act of 1964 states that "[n]o person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."[13] Title VI itself

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[7] Cal. Water Code § 174.
[8] Cal. Water Code § 13001.
[9] Cal. Water Code § 13140.
[10] *Id.*; *see also* Kenneth A. Manaster & Daniel P. Selmi, 2 California Environmental Law & Land Use Practice § 31.06 (2022) ("Regional water quality control plans developed by the regional water boards are required to conform to the state water policy established by the State Water Board and are not effective until approved by the State Water Board.").
[11] Cal. Water Code § 13170.
[12] Cal. State Water Res. Control Bd. *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* 4 (Dec. 13, 2006), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/wq_control_plans/2006wqcp/docs/2006_plan_final.pdf.
[13] 42 U.S.C. § 2000d.

prohibits policies and practices that are intentionally discriminatory, while the EPA's implementing regulations additionally prohibit facially neutral policies and practices that produce disparate impacts.[14] This prohibition includes both affirmative acts and failures to take action or adopt policy since "inaction can exert a disproportionate adverse effect."[15] Specific prohibitions set forth in the EPA's implementing regulations include, among others, denying a person any service, aid, or other benefit of a program or activity; restricting a person in any way from enjoyment of a privilege enjoyed by others; subjecting a person to separate treatment in any way; and denying a person or any group the opportunity to participate as a member of any integral planning or advisory body.[16]

The EPA and other federal agencies must investigate and resolve complaints alleging Title VI violations against entities they fund.[17] The EPA's External Civil Rights Compliance Office ("ECRCO") fulfills this responsibility by investigating and resolving complaints alleging civil rights violations by EPA-funded entities. [18]

Any person who believes that he, she, or a specific class of persons has been discriminated against in violation of Title VI and the EPA's implementing regulations may file a complaint.[19] ECRCO must then conduct a preliminary investigation within 20 days of receipt to determine whether to accept the complaint.[20]

ECRCO attempts to resolve complaints informally whenever possible.[21] If a Title VI violation is established and the recipient fails to come into voluntary compliance, the EPA may "terminate, or refuse to award or to continue" financial assistance to the recipient.[22] The EPA may also "use any other means authorized by law" to obtain compliance, including referring the matter to the U.S. Department of Justice.[23]

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[14] 42 U.S.C. § 2000d; 40 C.F.R. § 7.35(b).
[15] U.S. Dep't of Just., *Title VI Legal Manual* § 7-12 (2021).
[16] 40 C.F.R. 7.35(a).
[17] 42 U.S.C. § 2000d-1.
[18] Env't Prot. Agency, *Case Resolution Manual* i (2021), https://www.epa.gov/sites/default/files/2021-01/documents/2021.1.5_final_case_resolution_manual_.pdf.
[19] 40 C.F.R. § 7.120.
[20] 40 C.F.R. § 7.120(d).
[21] 40 C.F.R. § 7.120(d)(2).
[22] 40 C.F.R. § 7.130(a).
[23] *Id.*

II. Clean Water Act and Porter-Cologne Act

The federal Clean Water Act, 33 U.S.C. § 1251 et seq., and California's Porter-Cologne Water Quality Control Act, Cal. Water Code § 13000 et seq. ("Porter-Cologne Act"), together govern water quality standards in California.

The CWA is a "comprehensive water quality statute designed 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters'"[24] through "a partnership between the States and the Federal Government."[25] The CWA requires that States establish water quality standards for each water body within their jurisdiction, consisting of beneficial uses and scientifically-based criteria to protect those uses.[26] States must review the standards every three years, holding public hearings and, "as appropriate, modifying and adopting standards" to meet the Act's objectives.[27] The EPA, in turn, exercises its oversight authority to: (1) approve or disapprove any new or revised state standard and oversee appropriate corrective action; and (2) independently promulgate new or revised federal water quality standards *whenever* it determines that such standards are necessary to meet the requirements of the CWA.[28]

The Porter-Cologne Act implements the CWA in California.[29] The goal of the Porter-Cologne Act is "to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible."[30] Under the Porter-Cologne Act, "the people of the state have a primary interest in the conservation, control, and utilization of the water resources of the state, and . . . the quality of all the waters of the state shall be protected for use and enjoyment by the people."[31] The Porter-Cologne Act designates the State Water Board as the "state water pollution control agency" for purposes of the CWA.[32] Like

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[24] *PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700, 704 (quoting 33 U.S.C. § 1251(a)).
[25] *Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992).
[26] 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. § 131.11(a)(1).
[27] 33 U.S.C. § 1313.
[28] 33 U.S.C. § 1313(c)(3)-(4); 40 C.F.R. § 131.5.
[29] *City of Arcadia v. State Water Res. Control Bd.*, 135 Cal. App. 4th 1392, 1405 (2006).
[30] *Id.*
[31] *Id.*
[32] *Id.* § 13160.

the CWA, the Porter-Cologne Act requires all state water quality control plans to be "periodically reviewed."[33]

FACTUAL AND PROCEDURAL BACKGROUND

The Bay-Delta is a "critically important natural resource for California and the nation."[34] It comprises the Delta, formed by the convergence of two of the state's longest rivers – the Sacramento and the San Joaquin – and the San Francisco Bay. Together, they form the "most valuable wetland ecosystem and estuary on the west coast of North and South America."[35] Nearly half the surface water in California starts as rain or snow within the vast Bay-Delta watershed.[36] When allowed to remain in the system, this water flows through the Delta into the Suisun Marsh and Suisun Bay, emptying into the San Francisco Bay and out into the Pacific Ocean.[37]

The State of California has transformed the ecology and the human tapestry of the Bay-Delta. The estuary was once a place of natural abundance – the rivers teeming with salmon and sustaining a broad array of wildlife and plants that Native tribes carefully stewarded for thousands of years. Yet violence against Native tribes by and with support of the State forcibly dispossessed tribes of their lands and access to Bay-Delta waterways and headwaters. Fueling this dispossession, the State oversaw and eventually codified a water rights regime that failed to recognize prior tribal rights and – accompanied by discriminatory property laws – excluded communities of color through much of the 20th century. In lieu of sustainable use and stewardship by Native tribes, the State has intensively diverted and exported Bay-Delta waters under claim of right to far-flung locales for largely agricultural use, leading the increasingly freshwater-starved estuary into ecological crisis. Today, waterways have grown stagnant, fish stocks are plummeting, and harmful algal blooms are proliferating. These repercussions acutely impact Native tribes and disadvantaged communities of color in the Bay-Delta and its headwaters in a continuing cycle of discrimination.

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[33] Cal. Water Code § 13240.
[34] Cal. Water Code § 85002.
[35] *Id.*
[36] Env't Prot. Agency, *San Francisco Bay Delta: About the Watershed*, https://www.epa.gov/sfbay-delta/about-watershed (last visited Dec. 11, 2022).
[37] *Id.*

I. California's History of State-Sponsored Genocide and Racial Discrimination

Prior to colonization, Native Californians in the Bay-Delta and its headwaters developed a way of life inextricably linked to the health of the waterways.[38] "California's natural bounty, coupled with California Indians' ingenious ability to maximize and use that abundance, supported a population of perhaps 310,000 people before the arrival of Europeans,"[39] a number that may have been much higher. The Delta alone was home to at least 10,000 Indigenous residents, comprising four distinct language groupings and numerous tribes and communities, with many more tribes and tens of thousands more tribal members residing throughout the San Francisco Bay and Bay-Delta headwaters.[40] Indigenous peoples historically harvested over 500 Delta plant species for various uses.[41] By relying on traditional ecological knowledge to enhance fish habitat, reduce pathogens, and tend to culturally important species, the region's Indigenous residents maintained a healthy and vibrant Bay-Delta for millennia.[42]

Starting in the mid-1800s, the nascent California state government led a program of genocide that forcibly removed Native tribes from their ancestral lands.[43] As the State has since recognized, its relationship with the tribes "was fraught with violence, exploitation, dispossession and the attempted destruction of tribal communities."[44] In 1851, California's first Governor proclaimed that "a war of

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[38] Exhibit E, Attachment, A, Declaration of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ¶¶ 8-10 [hereinafter "Decl. of (b)(6) Privacy, (b)(7)(C) (b)(6) Privacy, (b)(7)(C)"]; *see also* Kent Lightfoot & Otis Parrish, *California Indians and Their Environment: An Introduction* (2009).

[39] Benjamin Madley, *An American Genocide: The United States and the Californian Indian Catastrophe*, 1846-1873 at 23 (2017).

[40] Joy Zedler & Michelle Stevens, *Western and Traditional Ecological Knowledge in Ecocultural Restoration*, 16 S.F. Estuary & Watershed Sci. 3 (2018).

[41] Cal. Delta Stewardship Council, *Amended Delta Plan Chapter 4: Protect, Restore, and Enhance the Delta Ecosystem* 4-8 (2022), https://deltacouncil.ca.gov/pdf/delta-plan/2022-06-29-chapter-4-protect-restore-and-enhance-the-delta-ecosystem.pdf.

[42] *Id.*

[43] *See generally* Madley, *supra* note 39; *see also* Cal. State Water Res. Control Bd., Resolution No. 2021-0050: Condemning Racism, Xenophobia, Bigotry, and Racial Injustice and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-Racism 2 (2021), https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2021/rs2021_0050.pdf.

[44] Office of Governor Gavin Newsom, Executive Order N-15-19 (June 18, 2019), https://tribalaffairs.ca.gov/wp-content/uploads/sites/10/2020/02/Executive-Order-N-15-19.pdf (recognizing that "the State historically sanctioned over a century of depredations and prejudicial policies against California Native Americans").

extermination will continue to be waged between the two races until the Indian race becomes extinct."[45]

Both the California state government and the United States Congress played a direct role in dispossessing Native tribes of their lands and inherent rights to access and use waterways.[46] In 1850, the newly established California Legislature passed a law cruelly titled "Act for the Government and Protection of Indians," which removed tribes from their traditional lands, separated Indigenous children from their families, and created a system of indentured servitude as punishment for minor crimes.[47] A year later, Congress adopted the California Land Claims Act, which created a two-year window to claim property derived from land grants by the Spanish or Mexican governments.[48] Because tribes had already been removed from their ancestral lands or were unaware of the Act and its implications, the California Lands Claim Act was used to deny tribes their "legal interest in . . . their aboriginal lands."[49] Meanwhile, California governors called for, and the state subsidized, militia campaigns against Indigenous peoples throughout the 1850s.[50] By the mid-1850s, "[a] new era of increasingly lethal state-sponsored Indian killing had begun as the US government, state legislators, militiamen, and vigilantes perfected the killing machine."[51]

State and federal duplicity in treaty negotiations furthered the dispossession of Indigenous communities. Between 1851 and 1852, tribes across much of California were compelled to sign 18 treaties with the Federal government that would have ceded their ancestral lands in exchange for reservations.[52] But after lobbying by California legislators and business interests, the U.S. Senate refused to

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[45] *Id.*
[46] Madley, *supra* note 39, at 14 (explaining that state and federal "lawmakers played a key role in th[e] genocide" against Native Californians "by stripping them of legal rights, by making anti-Indian crimes extremely difficult to prosecute, and by refusing to ratify treaties signed by federal agencies and California Indian leaders that could have restrained the violence").
[47] Act for the Government and Protection of Indians, 1850 Cal. Stat. 408.
[48] California Land Claims Act, 9 Stat. 631 (1851); *See also* Paul Wallace Gates, *Land and Land Law in California* 25 n.1 (1991).
[49] Advisory Council on Cal. Indian Policy, *Historical Overview Report: Special Circumstances of California Indians* 5 (1997) [hereinafter "ACCIP"].
[50] Madley, *supra* note 39, at 212 (recounting that elected "California leaders continued spewing the rhetoric of inevitable extermination and genocide" in the early 1850s).
[51] *Id.* at 234.
[52] ACCIP, *supra* note 49, at 5.

ratify the treaties, instead placing them under an injunction of secrecy for over 50 years.[53] Although many of the signatory tribes were unaware that the treaties had not been ratified and their inherent title to the lands remained intact, state and federal officials nonetheless acted as if the lands had been ceded, opening them up for settlement by non-Natives without establishing the negotiated reservations.[54] When Natives who had left their ancestral lands for negotiated reservations returned after the reservations were nullified by the Senate, they found that their lands had been appropriated.[55] The government's duplicity rendered Native tribes "landless"[56] and robbed them of federal reserved water rights that would have adhered to the treaty reservations.[57]

The government has also dispossessed tribes by flooding tribal homelands without recompense.[58] For example, the U.S. Bureau of Reclamation completed construction of Shasta Dam in 1945 as a part of the Central Valley Project, flooding over 90% of the [redacted] Tribe's historical village sites, sacred sites, and cultural gathering sites.[59] Today, the remaining [redacted] sites are at risk from proposals to expand the reservoir by raising the dam even higher.[60]

California's hybrid water rights system emerged as yet another tool to further the dispossession and alienation of tribes. California courts in the mid-1800s recognized two classes of surface water rights under state law: riparian rights, which adhere to formal ownership of property contiguous with a water source, and appropriative rights, which adhere to the first (non-Indigenous) person

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[53] *Id.*
[54] ACCIP, *supra* note 49, at 5; *see also* Madley, *supra* note 39, at 211 (recounting that many Native Californians "had relocated to provisions reservations" in accordance with the treaty provisions).
[55] Madley, *supra* note 39, at 212.
[56] ACCIP, *supra* note 49, at 7.
[57] Madley, *supra* note 39, at 168 ("The eighteen treaties comprised evidence related to a deceitful crime of vast proportions and documented a mass betrayal."); *see also Winters v. United States* 207 U.S. 564 (1908) (recognizing that United States implicitly reserves for tribes the amount of water necessary to fulfill the purpose of an Indian reservation when it withdraws land from the public domain to establish the reservation).
[58] Cal. Dep't of Water Res., *Division of Safety of Dams*, https://water.ca.gov/programs/all-programs/division-of-safety-of-dams (last visited Dec. 15, 2022).
[59] Exhibit E, Attachment B, Declaration of [redacted] ¶ 27 [hereinafter "Decl. of [redacted]
[60] *See* Bureau of Reclamation, *Shasta Dam and Reservoir Enlargement Project*, https://www.usbr.gov/mp/ncao/shasta-enlargement.html (last updated Mar. 24, 2022).

to divert water and put it to so-called beneficial use.[61] Neither category of right accommodates tribal claims based on millennia of water use and stewardship nor Native tribes' continuous occupation of land prior to colonization and displacement. Instead, by encouraging competition to divert and export water, California's water rights regime has done inherent violence to tribal culture, identity, and ways of life. The State Water Board has recognized that "watersheds are now primarily managed through large-scale diversion of water for municipal, industrial, agricultural, and commercial beneficial uses to the detriment of traditional, local, and cultural uses and without compensation, recognition, or replacement."[62]

Communities of color in the Delta were also excluded from rights to water throughout the first century of California statehood, even as they formed the backbone of California's burgeoning agricultural and industrial economy. Asian immigrants – primarily of Chinese, Japanese, and Filipino descent – worked across the Delta in a range of agricultural capacities throughout the late 19th and early 20th centuries.[63] In the years preceding the Great Depression, Filipino workers comprised over 80% of the workforce harvesting asparagus, one of the Delta's signature agricultural exports.[64] Likewise, Black farmworkers were recruited by local farm owners to the San Joaquin Valley in the late 1800s to grow cotton. Over 40,000 Black Americans lived in the Valley by 1950.[65] State and municipal governments responded to the growing presence of people of color in the agricultural sector by adopting racist laws and policies that barred many people of color from property ownership and helped form segregated cities.[66]

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[61] *See Irwin v. Phillips,* 5 Cal.140, 146-47 (1855) (endorsing principle of prior appropriation, or "first in time, first in right," as establishing priority for appropriative rights); *see also Lux v. Haggin*, 69 Cal. 255, 390-92 (1886) (recognizing common law right of riparian proprietors to use of water in adjacent streams).

[62] Cal. State Water Res. Control Bd., *supra* note 43, at 3.

[63] Sucheng Chan, *Chinese Livelihood in Rural California: The Impact of Economic Change, 1860-1880*, 53 Pac. Hist. Rev. 273, 293 (1984); Robert Higgs, *Landless by Law: Japanese Immigrants in California Agriculture to 1941*, 38 J. Econ. Hist. 205, 206-07 (1978); Dawn Mabalon, *Little Manila is in the Heart: The Making of the Filipina/o American Community in Stockton, California* 69 (2013).

[64] Mabalon, *supra* note 63, at 69.

[65] Michael A. Eissinger, *The Transplantation of African Americans and Cotton Culture to California's Rural San Joaquin Valley During the Nineteenth and Twentieth Centuries* 8-9 (2009) (Master's Thesis, Cal. State Univ., Fresno).

[66] *See generally* Michael A. Eissinger, *Re-Collecting the Past: An Examination of Rural Historically African American Settlements across the San Joaquin Valley* (2017) (Ph.D. dissertation, Univ. of Cal., Merced).

To prevent Asian – particularly Japanese – immigrants from owning and controlling farmland, the California Legislature adopted the racially discriminatory Alien Land Law in 1913, reenacted and strengthened by voter initiative in 1920.[67] The law barred "aliens ineligible to citizenship" from owning and leasing property in California at a time when the U.S. Congress had denied naturalization rights to nearly all nonwhite immigrants through the Naturalization Act of 1870.[68] The combined result was that, until the Alien Land Law's repeal in 1952, nonwhite immigrants in California were unable to own property or thereby obtain water rights under state law.[69] This was also the law's purpose. A 1920 voter pamphlet endorsing reauthorization of the Alien Land Law stated that the statute's "primary purpose is to prohibit Orientals who cannot become American citizens from controlling our rich agricultural lands."[70]

Restricted from acquiring property, Asian immigrants and other people of color in the Delta sought refuge in cities like Stockton, but racially restrictive covenants, the discriminatory lending practice known as "redlining," and other forms of de jure and de facto segregation forced them into the most disinvested neighborhoods.[71] Redlining maps produced by the government-sponsored Home Owners' Loan Corporation designated much of South Stockton grade D, or red, deeming the areas hazardous for bank lending.[72] The maps described one South Stockton neighborhood with significant Asian and Black populations as "infested with subversive racial influences."[73] In another area with many Latino, Black, and Asian residents, the maps stated that "[t]he best that can be hoped for . . . is that it will develop into a business or industrial section."[74]

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[67] Alien Land Law, 1913 Cal. Stat. 206; *see also Oyama v. California* 332 U.S. 633, 658-59 (1948) (Murphy, J., concurring) (discussing the evidence of racial prejudice underlying the Alien Land Law).
[68] Naturalization Act of 1870, 16 Stat. 254.
[69] Exhibit F, Attachment F, *Water Curtailment Cases Amicus Br*. 30-35.
[70] *Sei Fujii v. State of California*, 38 Cal.2d 718, 735 (1952).
[71] *See* Robert K. Nelson, et al., *Mapping Inequality: Redlining in New Deal America: Stockton, CA*, https://dsl.richmond.edu/panorama/redlining/#loc=13/37.956/-121.337&city=stockton-ca (last visited Dec. 14, 2022); *see generally* Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated America* (2017).
[72] Nelson, *supra* note 71.
[73] *Id.*
[74] *Id.*

The legacy of state-sponsored violence against Indigenous Californians and de jure segregation manifests today in a wide range of persistent environmental injustices. As the State Water Board has recognized, "the impacts of federal, state, and local decision-making and policies made decades ago continue to impose challenges for Black, Indigenous, and people of color communities, which still grapple with the lasting effects of historical racial inequities stemming from those governmental decisions and policies."[75] For example, historically redlined communities are "generally associated with worse environmental conditions and greater population vulnerability to the effects of pollution today."[76] The 10% most highly polluted areas in California are 90% Black, Native, and people of color.[77] According to the State Water Board, race has become "the strongest predictor of water and sanitation access" in the state.[78]

II. The Transformation of Bay-Delta Hydrology

While the State waged a campaign of genocide and dispossession against Native tribes and legislated segregation for communities of color, it also facilitated the hydrological overhaul of the Bay-Delta to benefit nascent mining, agricultural, and industrial interests. These changes had dramatic effects on Bay-Delta ecosystems. The Bay-Delta's natural runoff patterns changed as hillsides were denuded for mining and logging while wetlands and floodplains were drained for conversion to agricultural production.[79] The peat soils that remained were compacted, oxidized, and eroded, thereby inducing large amounts of sediment to wash into Bay-Delta waterways.[80] Meanwhile, the construction of a vast network of tidal channels isolated individual waterways from each other and their adjacent habitats – preventing channels from naturally meandering over time, hastening flow velocities, and disrupting the natural interconnectedness of Bay-Delta

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[75] Cal. State Water Res. Control Bd., *supra* note 43, at 3.
[76] *Id.* at 1.
[77] *Id.* at 2.
[78] *Id.* at 4.
[79] The Bay Institute, *San Francisco Bay: The Freshwater-Starved Estuary* 8 (Sept. 2016), https://cawaterlibrary.net/wp-content/uploads/2016/09/Freshwater_Report.pdf.
[80] *Id.* at 9; Cal. State Water Res. Control Bd., *Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem* 27 (2010), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf.

waterways.[81] By the early 1900s, about 95% of native ecosystems and vegetation communities in the Delta had disappeared.[82]

The diversion and export of water from the Bay-Delta radically reduced freshwater flow volumes and altered natural flow cycles "at the expense of natural estuarine processes."[83] In-Delta diversion began as early as 1869 with reclamation of Sherman Island and grew in the ensuing decades in proportion to the area of reclaimed marshland.[84] By 1917, increasing upstream diversions linked especially to the explosion of rice cultivation in the Sacramento Valley had initiated unprecedented salinity intrusion into the Delta.[85] Reduction in flows hastened in the 1920s as irrigated agriculture exploded, Bay Area cities grew, and the region experienced a decade of sustained drought.[86]

The construction and operation of the massive Central Valley Project from the 1940s and 50s (including the Shasta Dam on the Sacramento River and Friant Dam on the San Joaquin River), followed by the State Water Project in the 1960s and 70s, further transformed flow hydrology.[87] Together these projects are the single largest extractor of Bay-Delta freshwater and comprise the world's largest water storage and conveyance system.

The construction of the Central Valley Project's Trinity River Division ("TRD") exemplifies the government's audacious modification of California flow hydrology, and its consequences for California tribes. The Trinity River is the largest tributary to the Klamath River, which empties directly into the Pacific Ocean at Requa, California, north of Eureka. The Trinity and Klamath Rivers "once teemed with bountiful runs of salmon and steelhead," which have "defined the life and culture of the (b)(6) Privacy, (b)(7)(C) Enf. Privacy Tribes."[88] Both Tribes retain tribal fishing and hunting rights – secured to them in the establishment of their

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[81] Cal. Delta Stewardship Council, *supra* note 41, at 4-13.
[82] *Id.* at 4-12.
[83] *Id.* at 4-15.
[84] Contra Costa Water Dist., *Historical Fresh Water and Salinity Conditions in the Western Sacramento-San Joaquin Delta and Suisun Bay, Technical Memorandum WR10-001* at A-10 (2010), https://cawaterlibrary.net/wp-content/uploads/2017/10/swrcb_ccwd2010.pdf.
[85] *Id.* at 45, A-10.
[86] The Bay Institute, *supra* note 79, at 9.
[87] *Id.*; *see generally* Tim Stroshane, *Drought, Water Law, and the Origins of California's Central Valley Project* (2016).
[88] U.S. Dep't of Interior, *Record of Decision: Trinity River Mainstem Fishery Restoration, Final Environmental Impact Statement/Environmental Impact* (2000).

reservations along the Klamath River – that are immune from state regulation or interference.[89]

Following adoption of the Trinity River Act of 1955,[90] the Bureau of Reclamation led the construction of the TRD's expansive new diversion and storage facilities that largely rerouted the natural flow of the Trinity River from the Klamath River watershed into the Bay-Delta, conveying it through the Clear Creek Tunnel into Whiskeytown Lake and on into the Sacramento River. As a result, the Trinity River is legally classified as part of the "Delta tributary watershed" despite lacking any natural hydrological connection to the Bay-Delta.[91] The TRD's Trinity and Lewiston Dams directly eliminated 109 miles of important salmonid habitat above Lewiston, California, and diversions to the Sacramento River have decimated the Trinity's native fish populations and habitat.[92]

Since the 1950s, the State has entertained successive efforts to build a massive new State Water Project conveyance system to siphon even more water from the Bay-Delta, sending it to farms and cities in the south. These proposals began with the California Water Plan, continued with a proposed Peripheral Canal in the following decades, and assumed new forms with successive proposals for an underground conveyance system in the past ten years.[93] Its most recent iteration, the Delta Conveyance Project, would construct a single 40-mile tunnel with two intake facilities, conveying a significant portion of Sacramento River flows underneath the Delta for largely agricultural uses to the south.[94]

The upshot of all these state and federal export projects is drastically reduced flows into and through the Bay-Delta. Around 31% of inflow is diverted before it ever reaches the Bay-Delta.[95] Some of this water is returned to Bay-Delta tributaries through wastewater effluent or agricultural return flows, though at

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[89] *Id.* at 4; *see Arnett v. Five Gill Nets* (1975) 48 Cal.App.3d 454, 461 (recognizing that Indians on the Klamath River Reservations "had fishing rights derived from Congress" and that "State qualifications of those traditional rights was precluded by force of the Supremacy Clause").
[90] Trinity River Act, Pub. L. No. 84-386, 69 Stat. 719 (1955).
[91] Cal. Water Code § 78647.4(b).
[92] U.S. Dep't of Interior, *supra* note 88, at 1.
[93] John Hart, *A Century of Delta Conveyance Plans*, https://cawaterlibrary.net/a-century-of-delta-conveyance-plans/ (last visited Dec. 14, 2022).
[94] Cal. Dep't of Water Res., *Delta Conveyance Project: Draft Environmental Impact Report* 3A-6 (2022), https://cadwr.app.box.com/s/vm5r7atxcnnbnc0vvzldrhq514x4619y.
[95] Cal. Delta Stewardship Council, *A More Reliable Water Supply for California* 83 (2018), https://deltacouncil.ca.gov/pdf/delta-plan/2018-04-26-amended-chapter-3.pdf.

degraded quality.[96] The State Water Project and Central Valley Project together export 5.1 million acre-feet per year from the Bay-Delta, accounting for 24% of inflows.[97]

The combined effects of upstream diversions and water exports have cut annual outflow from the Bay-Delta by half or more relative to unimpaired conditions.[98] In dry conditions, diversions and exports reduce annual flows by more than 65%.[99] In certain months, reduction in outflows exceeds 80%.[100] According to the State Water Board, under certain conditions, "flows are completely eliminated or significantly reduced at certain times in some streams in the [Bay-Delta] watershed, and a significant portion of the inflows that are provided to the [Bay-Delta] are exported without contributing to [Bay-Delta] outflows."[101]

This is so despite massive import of water from the Trinity River. Between the inception of its full operation in 1964 and 2000, TRD exports of Trinity River water to the Sacramento River averaged 75% of the Trinity River natural flow, or roughly 988,000 acre-feet per year.[102] In some years, diversion to the Sacramento River basin reached as high as 90% of annual Trinity River inflow.[103] Since 2000, Trinity River exports have been limited by a U.S. Department of Interior decision requiring variable annual instream flows for the Trinity River from the TRD ranging from 369,000 acre-feet in critically dry years to 815,000 acre-feet in extremely wet years.[104]

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[96] *Id.*
[97] *Id.*
[98] Cal. State Water Res. Control Bd., *supra* note 80, at 28 (reporting that outflows were reduced on average by 48% relative to unimpaired conditions between 1986 and 2005).
[99] Cal. State Water Res. Control Bd., *Scientific Basis Report in Support of New and Modified Requirements for Inflows from the Sacramento River and its Tributaries and Eastside Tributaries to the Delta, Delta Outflows, Cold Water Habitat, and Interior Delta Flows* 1-5 (2017), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/PCFFA&IGFR/part2/pcffa_168.pdf.
[100] *Id.*
[101] Cal. State Water Res. Control Bd., *July 2018 Framework for the Sacramento/Delta Update to the Bay-Delta Plan* 6 (2018), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/sed/sac_delta_framework_070618%20.pdf.
[102] U.S. Dep't of Interior, *supra* note 88, at 20.
[103] *Id.*
[104] *Id.* at 2.

III. The Ecological Crisis in the Bay-Delta

Freshwater flow reductions have caused a cascade of ecological impacts in the Bay-Delta, including altered salinity levels, higher water temperatures, changes to water circulation patterns, increased concentration of pollutants, alteration of dissolved oxygen and other water quality parameters, disruption of fish migratory routes and nursery conditions, and habitat loss.[105] Poorly managed releases from upstream dams and reduced inflows coupled with diversion and export of water also alter peak, base, and pulse flows to which aquatic species are adapted.[106]

Among these changes, reduced flows affect how far inland the low salinity zone between seawater and freshwater (referred to as "X2") lies. When diversions reduce river flows, this X2 location shifts inland, raising overall salinity levels in the Bay-Delta.[107] Shifting the X2 location also reduces food availability for native fish.[108] For example, the National Marine Fisheries Service ("NMFS") predicts that reduced Delta outflow and the X2 shift will suppress the Delta Smelt's access to one of its preferred food sources, the copepod *Eurytemora affinis*.[109]

Water diversions have also caused water temperatures in salmon natal streams to rise above levels required for their spawning and survival.[110] Full reservoirs tend to stratify into layers of warm water near the surface, with colder water toward the bottom.[111] When reservoirs lose water to diversions, they warm more quickly because of a higher surface area-to-volume ratio.[112] Downstream, depleted rivers equilibrate more quickly with the surrounding air.[113] Fish embryos are particularly at risk from warm water. As temperatures rise, embryos within eggs require more oxygen, but their ability to take in more is limited by the rate of

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[105] *See, e.g.*, Cal. State Water Res. Control Bd., *supra* note 101, at 6.
[106] *Id.*
[107] The Bay Institute, *supra* note 79, at iii-iv.
[108] Letter from Justin Ly, U.S. Nat'l Oceanic and Atmospheric Admin., to Eileen Sobeck, Cal. State Water Res. Control Bd. (May 6, 2022), https://www.waterboards.ca.gov/drought/sacramento_river/docs/exhibit-c-protest-shasta-tmp.pdf.
[109] *Id.*
[110] The Bay Institute, *supra* note 79, at 47.
[111] *See* Yifan Cheng et. al., *Reservoirs Modify River Thermal Regime Sensitivity to Climate Change: A Case Study in the Southeastern United States*, 56 Water Res. Rsch. 1 (2020).
[112] *Id.* at 11.
[113] Env't Prot. Agency, *EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards* 7 (2003), https://nepis.epa.gov/Exe/ZyPDF.cgi/P1004IUI.PDF?Dockey=P1004IUI.PDF.

diffusion across the egg surface.[114] Adults are also at risk from increased disease transmission and other stressors.[115] In 2021, many in the Bay-Delta did not survive long enough to reproduce.[116] Meanwhile, on the Trinity River, water temperatures reach dangerous levels whenever Trinity Reservoir storage drops below 1.2 million acre-feet.[117] The reservoir has been below that level for nearly 18 straight months.[118]

The changes to stream hydrology and water quality caused by reduced flows have caused fish populations to plummet, "with many species currently on the verge of extinction."[119] According to the State Water Board, the best available science demonstrates that current flow conditions, if not corrected, will result in permanent impairment to the Bay-Delta's native fish and wildlife populations as well as other public trust resources.[120]

Among those at greatest risk are the six native Bay-Delta species listed as threatened or endangered under the federal or California Endangered Species Acts: Delta smelt, longfin smelt, green sturgeon, Central Valley steelhead, winter-run Chinook salmon, and spring-run Chinook salmon.[121] For example, the San Joaquin basin experienced "an 85 percent net loss in returning adult fall-run Chinook salmon from 1985 to 2017."[122] According to the State Water Board, "the magnitude of diversions out of the Sacramento, San Joaquin, and other rivers feeding into the

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[114] Benjamin Martin et al., *The Biophysical Basis of Thermal Tolerance in Fish Eggs*, 287 Proc. Royal Soc'y B: Biological Sci. 1 (2020), https://doi.org/10.1098/rspb.2020.1550.
[115] Env't Prot. Agency, *supra* note 113, at 5, 7.
[116] Scott Wilson, *California's Disappearing Salmon*, Wash. Post (Sept. 13, 2021), washingtonpost.com/nation/interactive/2021/california-disappearing-salmon/ ("Of the estimated 16,000 spring-run Chinook that made the journey . . . about 14,500 have died, nearly all of them before spawning.").
[117] Ly, *supra* note 108.
[118] Cal. Dep't of Water Res., *Trinity Lake (CLE): Daily Data*, https://cdec.water.ca.gov/dynamicapp/QueryDaily?s=CLE&d=&span=1month (last visited Dec. 14, 2022).
[119] Cal. State Water Res. Control Bd., *supra* note 99, at 1-5.
[120] *See id.* ("The best available science . . . indicates that [existing legal requirements in Revised Water Rights Decision 1641 and biological opinions addressing Delta smelt and salmonids] are insufficient to protect fish and wildlife.").
[121] Cal. State Water Res. Control Bd., *Order Conditionally Approving a Petition for Temporary Urgency Changes to License and Permit Terms and Conditions Requiring Compliance with Delta Water Quality Objectives in Response to Drought Conditions* 6 (2021), https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/docs/2021/20210601_swb_tuco.pdf.
[122] Cal. State Water Res. Control Bd., *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* 1 (2018), https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf.

Bay-Delta is a major factor in the ecosystem decline."[123] Since the Water Board issued this assessment in 2018, the San Joaquin fall salmon run has decreased by another 50%.[124] A typical Chinook salmon population cohort replacement rate is greater than 8, but the cohort replacement rate on the Stanislaus River in the San Joaquin Basin is less than 0.2.[125] For reference, "[a]ny cohort replacement rate less than 1.0 is trending toward extinction."[126]

Delta smelt and longfin smelt have fared even worse. They are now "at such low levels that they are difficult to detect in the estuary."[127] In 2021, the California Department of Fish and Wildlife detected a single Delta smelt in the Sacramento Deep Water Ship Channel during the entirety of its spring-time sampling.[128] It has not detected any Delta smelt in autumn-time sampling since October 2017.[129]

Reliance on Trinity River diversions for Bay-Delta flows has caused similar fishery collapse on the Trinity and Klamath Rivers. During the first decade of Trinity River Division operations, diversions to the Central Valley averaged nearly 90% of the upper Trinity River basin inflow; fish populations plummeted by 60 to 80% and fish habitat by 80 to 90%.[130] During the first four weeks of spawning in November 2021, high temperatures of water released from Lewiston Dam destroyed approximately 75% of Coho salmon eggs at the Trinity River Hatchery and similar proportions of protected wild Coho salmon eggs; even lower Trinity Reservoir levels this year may raise fish mortality even higher.[131]

In addition to devastating fish populations, insufficient instream flows have facilitated the spread of HABs throughout the Bay-Delta. HABs are the product of low freshwater flows, poor water circulation, and high water temperatures, combined with excess nutrients from agricultural runoff and wastewater and bright

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[123] *Id.*
[124] Cal. Dep't of Fish and Wildlife, *California Central Valley Chinook Escapement Database Report* 12-13 (2022).
[125] Letter from Tomas Torres, U.S. Env't. Prot. Agency, to Jeanine Townsend, Cal. State Water Res. Control Bd. 3 (Dec. 29, 2016), https://www.epa.gov/sites/default/files/2017-02/documents/us_epa_comments_phase_1_bay-delta_wqcp_update_12.29.16_0.pdf.
[126] *Id.*
[127] Cal. State Water Res. Control Bd., *supra* note 121, at 7-8
[128] Letter from Joshua Grover, Cal. Dep't of Fish and Wildlife, to Diane Riddle, Cal. State Water Res. Control Bd. (Apr. 1, 2022), https://www.waterboards.ca.gov/drought/tucp/docs/2022/20220401_letter_cdfw.pdf.
[129] Cal. Dep't of Fish and Wildlife, *Monthly Abundance Indices*, dfg.ca.gov/delta/data/fmwt/indices.asp (last visited Dec. 15, 2022).
[130] U.S. Dep't of Interior, *supra* note 88, at 5.
[131] Ly, *supra* note 108.

sunlight.[132] Since their emergence in the Bay-Delta in 1999, HABs have become pervasive. In 2021 alone, the State Water Board confirmed 46 HAB incidents in the Bay-Delta.[133] Because the HAB count relies on voluntary public reporting, the actual number of incidents was likely much higher.

HABs cause a litany of harms to aquatic ecosystems and animals.[134] The World Health Organization considers cyanobacterial toxins to be "among the most toxic naturally occurring compounds."[135] HABs consume oxygen and prevent light from reaching underwater plants.[136] When the algal blooms die, their decomposition consumes even more dissolved oxygen.[137] Reduced oxygen and light lead to dead zones and reduce key food sources for fish and wildlife higher up the food chain.[138] In summer 2022, a massive HAB known as a red tide took over large swaths of San Francisco Bay, killing tens of thousands of fish.[139] Cyanotoxins have also proven fatal to marine mammals, livestock, and pets.[140]

Cyanotoxins are similarly dangerous to people, who may be exposed by drinking, swimming, or bathing in affected waters, eating contaminated fish or shellfish, or inhaling aerosolized particles.[141] Symptoms of exposure to cyanotoxins

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[132] *See* Jayne Smith et al., *California Water Boards' Framework and Strategy for Freshwater Harmful Algal Bloom Monitoring: Full Report with Appendices* 1-3 (2021), https://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/1141_FHABStrategy_FullReport.pdf.

[133] Cal. Delta Stewardship Council, *Harmful Algal Blooms*, https://viewperformance.deltacouncil.ca.gov/pm/harmful-algal-blooms (last updated Feb. 23, 2022).

[134] U.S. Env't Prot. Agency, *Cyanobacterial Harmful Algal Blooms (CyanoHABs) in Water Bodies*, https://epa.gov/cyanohabs (last updated Apr. 26, 2022).

[135] Ingrid Chorus & Martin Welker, *Introduction to Toxic Cyanobacteria in Water: A Guide to Their Public Health Consequences, Monitoring and Management* 2 (Ingrid Chorus & Martin Welker eds., 2021).

[136] U.S. Env't Prot. Agency, *The Effects: Dead Zones and Harmful Algal Blooms*, https://www.epa.gov/nutrientpollution/effects-dead-zones-and-harmful-algal-blooms (last updated Jan. 31, 2022).

[137] *Id.*

[138] *Id.*

[139] Tara Duggan, *San Francisco Bay's Huge Algae Bloom is Over. But Experts Are Worried About More Mass Fish Kills in the Future*, S.F. Chron. (Oct. 1, 2022), https://www.sfchronicle.com/bayarea/article/sf-bay-algae-bloom-17479011.php.

[140] U.S. Env't Prot. Agency, *Health Effects from Cyanotoxins*, https://www.epa.gov/cyanohabs/health-effects-cyanotoxins (last updated Aug. 3, 2022); *see also* Melissa Miller et al., *Evidence for a Novel Marine Harmful Algal Bloom: Cyanotoxin (Microcystin) Transfer from Land to Sea Otters*, 5 PLoS One e12576 (2010), https://doi.org/10.1371/journal.pone.0012576.

[141] U.S. Ctr. for Disease Control and Prevention, *Facts about Cyanobacterial Blooms for Poison Center Professionals*, https://www.cdc.gov/habs/materials/factsheet-cyanobacterial-habs.html (last updated Nov. 28, 2022).

can range from mild skin rashes to gastrointestinal and respiratory distress.[142] High levels of exposure can have other severe health consequences, including damage to the central nervous system and liver.[143] According to the Centers for Disease Control, "[t]here are no known antidotes to cyanotoxins or specific treatments for illnesses caused by cyanobacteria and their toxins."[144]

For these reasons, the State Water Board and the California Office of Environmental Health Hazard Assessment ("OEHHA") frequently warn that water bodies are dangerous to swim in because of HABs.[145] Such HAB-related advisories and closures have increased each year since 2015, and peak late-summer events have more than tripled in that time.[146] Nevertheless, warnings by local public health departments remain sporadic and often provide little notice for recreational and subsistence anglers.[147]

IV. State Water Board Failures to Update Bay-Delta Water Quality Standards and EPA Engagement

Since adoption of the first Water Quality Control Plan for the Bay-Delta (the "Bay-Delta Plan" or "Plan") in 1978, the State Water Board has assumed primary authority for establishing and maintaining water quality standards for the Bay-Delta. But despite a statutory mandate to review the standards every three years, the Board has done so only a handful of times since 1978. In the past, the EPA has exercised its oversight authority to shape water quality standards in the Bay-Delta when confronted with significant lapses by the Board.

After the State Water Board first attempted to update water quality standards for the Bay-Delta in 1991, the EPA denied the Plan's revised fish and wildlife objectives because they failed to protect estuarine habitat and other fish

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[142] U.S. Ctr. for Disease Control and Prevention, *Avoid Harmful Algae and Cyanobacteria*, https://www.cdc.gov/habs/be-aware-habs.html (last visited Nov. 16, 2022).
[143] *Id.*
[144] U.S. Ctr. for Disease Control and Prevention, *supra* note 141.
[145] Cal. State Water Res. Control Bd., *HAB Reports Map*, https://mywaterquality.ca.gov/habs/where/freshwater_events.html (last updated Oct. 21, 2022).
[146] U.S. Env't Prot. Agency, *Tracking CyanoHABs: Mapping Harmful Algal Blooms Reported in U.S. Fresh Waters*, https://storymaps.arcgis.com/stories/d4a87e6cdfd44d6ea7b97477969cb1dd (last updated Nov. 29, 2022).
[147] Exhibit E, Attachment E, Declaration of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ¶ 16 [hereinafter "Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ("Even when blue- green algal blooms are visibly present, it is very uncommon to see any noticing of public health hazards to warn residents and those fishing and recreating in and around these waterways of the health risks from HABs.").

and wildlife beneficial uses.[148] When the State Water Board did not adopt the EPA's proposed standards,[149] the EPA promulgated its own final standards in January 1995, which remain on the books today.[150] The State Water Board's eventual 1995 update of the Bay-Delta Plan incorporated an agreement between the State and the federal government on principles underlying management of the Bay-Delta watershed.[151]

Since 1995, the State Water Board has modified the Bay-Delta Plan only once, in 2006.[152] Even then, the Board made only minor modifications to the 1995 Bay-Delta Plan's implementation program, leaving water quality standards, including flow objectives, untouched.[153] The 2006 Bay-Delta Plan, like the one before it, is implemented through Water Rights Decision 1641 ("D-1641"). Adopted in December 1999 and revised in March 2000, D-1641 assigns primary responsibility for meeting water quality objectives to the federal Bureau of Reclamation and state Department of Water Resources.[154]

In 2008, the Board recognized that the 2006 Plan was failing to protect fish and wildlife beneficial uses, and it announced that it would review water quality standards through a two-part process.[155] Phase I would determine salinity and flow objectives for the southern Delta and San Joaquin River, while Phase II would determine standards to protect native fish and wildlife in the Sacramento River, the Delta, and associated tributaries.[156]

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[148] Cal. State Water Res. Control Bd., *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* 5 (May 1995), https://www.epa.gov/sites/default/files/2014-12/documents/ca-sanfrancisco-bay.pdf.
[149] *Id.*
[150] Water Quality Standards for Surface Waters of the Sacramento River, San Joaquin River, and San Francisco Bay and Delta of the State of California, 60 Fed. Reg. 4664 (Jan. 24, 1995).
[151] Cal. State Water Res. Control Bd., *supra* note 148, at 7.
[152] Cal. State Water Res. Control Bd., Resolution 2018-0059: Adoption of Amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary and Final Substitute Environmental Document 1 (2018), https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/rs2018_0059.pdf.
[153] *Id.*; *see also* Cal. State Water Res. Control Bd., *supra* note 80, at 18.
[154] Cal. State Water Res. Control Bd., Revised Water Right Decision 1641 at 130 (2000), https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf
[155] *See* Cal. State Water Res. Control Bd., Resolution No. 20008-0056: Strategic Workplan for Activities in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary 1 (2008), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/strategic_plan/docs/baydelta_workplan_final.pdf.
[156] *Id.*

In 2009, the Board initiated the review process for updating Phase I water quality standards.[157] Nearly a decade later, in December 2018, the Board approved Phase I amendments to the Bay-Delta Plan, with new and revised flow objectives for the Lower San Joaquin River and a revised south Delta salinity water quality objectives.[158] However, the Board resolved that implementation of Phase I plan amendments required "subsequent regulatory actions."[159] The Board gave the California Natural Resources Agency until the following March to complete "a Delta watershed-wide agreement, including potential flow and non-flow measures" for the Tuolumne River.[160] This deadline was not met. On August 8, 2022, the Board issued a revised Notice of Preparation and California Environmental Quality Act Scoping Meeting for a proposed regulation to implement the Phase I objectives, but it has yet to publish draft language.[161] As a result, Phase I amendments have not been implemented.

Meanwhile, in October 2017, the State Water Board released a Fact Sheet and a Scientific Basis Report outlining its recommendations for the Phase II update and assuring the public that it "plan[ned] to complete [the Bay-Delta Plan update] process without further delay."[162] Nine months later, the Board released a framework document describing the Phase II update process, which projected that the Board would release a draft staff report on comprehensive Phase II amendments in 2018.[163] At the time of this filing, the Board has neither released a Phase II staff report, nor convened public hearings on Phase II amendments. Nor has it initiated government-to-government consultation with affected tribes on Phase II standards in accordance with Assembly Bill 52 and the Board's own Tribal

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[157] Cal. State Water Res. Control Bd., *supra* note 152, at 2.
[158] Cal. State Water Res. Control Bd., *supra* note 122, at 3.
[159] Cal. State Water Res. Control Bd., *supra* note 152, at 7.
[160] *Id.*
[161] Cal. State Water Res. Control Bd., *Notice of Preparation and California Environmental Quality Act Scoping Meeting* (2022), https://www.waterboards.ca.gov/public_notices/notices/20220715-implementation-nop-and-scoping-dwr-baydelta.pdf.
[162] Cal. State Water Res. Control Bd., *Fact Sheet: Phase II Update of the Bay-Delta Plan: Inflows to the Sacramento River and Delta and Tributaries, Delta Outflows, Cold Water Habitat and Interior Delta Flows* 1 (2017), https://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/201710_phaseII_factsheet.pdf; Cal. State Water Res. Control Bd., *supra* note 99.
[163] Cal. State Water Res. Control Bd., *supra* note 101, at 1-2.

Consultation Policy.[164]

The State Water Board has also made clear its intent to delay updating the Phase II Bay-Delta water quality standards to allow the California state government to complete private negotiations of voluntary agreements regarding Bay-Delta Plan flow measures.[165] On March 29, 2022, the California Natural Resources Agency released a Voluntary Agreement Memorandum of Understanding, executed by California state agencies, the U.S. Bureau of Reclamation, and a subset of Bay-Delta stakeholders – contractors, water districts, and water authorities – that export Bay-Delta freshwater flows.[166] The Memorandum calls on the State Water Board to include the Voluntary Agreements as a pathway in the eventual Bay-Delta Plan's program of implementation for salmon and fish viability objectives.[167]

The Voluntary Agreement Memorandum purports to achieve these objectives by making specific additional tributary flow and Bay-Delta outflow commitments as well as habitat restoration obligations. However, the current proposed framework would reduce the amount of additional Bay-Delta outflow that would be required from a 2017 proposal of 1.3 million acre-feet to less than 500,000 acre-feet per year on average – about a quarter of the reductions that would be necessary to restore the health of the Bay-Delta, according to the State Water Board's 2018 analysis.[168]

In lieu of timely updating the standards to protect beneficial uses, the State Water Board has adopted a pattern and practice of waiving outflow restrictions, salinity objectives, and temperature controls during continuing and increasingly

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[164] *See* Pub. Res. Code §§ 21080.3.1(b), 21084.3.
[165] *See* Cal. State Water Res. Control Bd., *Proposals for Voluntary Agreements to Update and Implement the Bay-Delta Plan* (2022), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/proposed_voluntary_agreements.html; *see also, e.g.*, Cal. State Water Res. Control Bd., *supra* note 152 (encouraging stakeholders to reach voluntary agreements and recording its plan to consider voluntary agreements as part of a plan to implement amended water quality standards).
[166] Cal. Nat. Res. Agency, *Memorandum of Understanding Advancing a Term Sheet for the Voluntary Agreements to Update and Implement the Bay-Delta Water Quality Control Plan, and Other Related Actions* (2022), https://resources.ca.gov/-/media/CNRA-Website/Files/NewsRoom/email-items/VoluntaryAgreementMOUTermSheet20220329_SIGNED-20220811.pdf.
[167] *Id.* at 2-3.
[168] Doug Obegi, *Honey, the VAs Shrunk the Delta Flows*, NRDC (Apr. 11, 2022), https://www.nrdc.org/experts/doug-obegi/honey-i-shrunk-delta-flows-aka-voluntary-agreements.

frequent extreme drought conditions.[169] At the request of the California Department of Water Resources and U.S. Bureau of Reclamation, the Board issued temporary urgency change orders in 2014, 2015, and 2021. On April 4, 2022, it again waived certain Bay-Delta outflow requirements over protests by Complainant-Petitioner Restore the Delta and many other groups.[170] The State Water Board took this approach even though the 2006 Bay-Delta Plan and Water Rights Decision D-1641 include criteria specific to low-flow seasons and conditions.[171] This approach also contradicts the Board's own statements that water quality objective waivers are "not sustainable for fish and wildlife and that changes to the drought planning and response process are needed to ensure that fish and wildlife are not unreasonably impacted in the future and to ensure that various species do not go extinct."[172]

The State Water Board has likewise granted successive requests by the Bureau of Reclamation to waive temperature controls on the Sacramento River,[173] even though these waivers have resulted in significant fish kills in the Sacramento River basin and in the Trinity and lower Klamath Rivers. The Bureau of Reclamation's May 28, 2021 Sacramento River Temperature Management Plan ("TMP") for that year resulted in a "record low egg-to-fry survival rate of 2.6%" for endangered winter-run Chinook salmon in the Sacramento River basin, with only 0.4% of viable eggs successfully surviving to reach the Delta as smolts.[174] On May 6, 2022, the Board conditionally approved a 2022 TMP over protests by

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[169] *See,* State Water Res. Control Bd., *State Water Project and Central Valley Project Temporary Urgency Change Petition*, https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/index.html (last visited Nov. 16, 2022); Cal. State Water Res. Control Bd., Order Setting Terms and Conditions for Fishery Protection and Setting a Schedule for Completion of Tasks (1990) [hereinafter "Order 90-5"], https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/1990/wro90-05.pdf.

[170] *See* Cal. State Water Res. Control Bd., *State Water Project and Central Valley Project Temporary Urgency Change Petition* (last visited Dec. 14, 2022), https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/index.html.

[171] *See* Cal. State Water Res. Control Bd., *supra* note 152.

[172] Cal. State Water Res. Control Bd., Water Rights Order 2015-0043 at 39 (Jan. 19, 2016), https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2015/wro2015_0043.pdf.

[173] *See* Order 90-5, *supra* note 169; Cal. State Water Res. Control Bd., *State Water Project and Central Valley Project Temporary Urgency Change Petition*, (last visited Dec. 14, 2022), https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/tucp/index.html.

[174] Cal. State Water Res. Control Bd., Order WR 2022-0095 at 18-19 (2022), https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/orders/2022/wro2022_0095.pdf.

environmental groups, fishery advocates, and Complainant-Petitioners [redacted] that the TMP would result in unreasonable impacts on salmon fisheries, among other concerns.[175] The NMFS also faulted the TMP for failing to mention the impacts of its reliance on diversions from the Trinity River, which would result in violations of water temperatures objectives.[176] It further projected the TMP could cause up to 58% mortality of endangered winter-run Chinook salmon eggs in the Sacramento River, and greater than 75% mortality of Coho salmon eggs in the Trinity River basin.[177]

On May 24, 2022, Complainant-Petitioners submitted a Petition for Rulemaking to the State Water Board calling on it to update Bay-Delta water quality standards.[178] After the Board denied the Petition on June 24,[179] Complainant-Petitioners submitted a Request for Reconsideration on August 22.[180] The Board again denied the Request for Reconsideration on September 21, 2022.[181]

Over a decade ago, the EPA started to explore ways to improve CWA implementation in the Bay-Delta. In 2011, it released an Advance Notice of Proposed Rulemaking for Water Quality Challenges in the Bay-Delta, seeking public input on how the EPA could achieve water quality and aquatic resource protection goals.[182] In 2012, the EPA released an Action Plan to address these water quality challenges. The Action Plan recognized that "CWA programs are not

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[175] Letter from Eileen Sobeck to Kristin White RE Order 90-5 Sacramento River Draft Temperature Management Plan 1 (May 6, 2022), https://www.waterboards.ca.gov/drought/sacramento_river/docs/20220506-final-tmp-response.pdf.
[176] *See* Env't Prot. Agency, *Advance Notice of Proposed Rulemaking: Water Quality Challenges in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (2011), https://www.epa.gov/sites/default/files/documents/baydelta-final-sfbde-anpr-factsheet.pdf.
[177] Letter from Justin Ly, NOAA, to Eileen Sobeck, State Water Resource Control Bd., RE Comments on Reclamation's Draft Sac River Temperature Management Plan (Apr. 27, 2022), Ex. C to Natural Resources Defense Council et. al., *Objection to and Protest of the Shasta Temperature Management Plan Submitted Pursuant to Water Rights Order 90-5* (May 6, 2022), https://www.waterboards.ca.gov/drought/sacramento_river/docs/exhibit-c-protest-shasta-tmp.pdf.
[178] Exhibit E, May 24, 2022 Petition for Rulemaking to State Water Resources Control Board [hereinafter "Exhibit E"].
[179] Exhibit F, June 24, 2022 State Water Resources Control Board Letter Denying Request for Rulemaking [hereinafter "Exhibit F"].
[180] Exhibit G, August 22, 2022 Request for Reconsideration of Rulemaking Decision Denying Petition to State Water Resources Control Board [hereinafter "Exhibit G"].
[181] Exhibit H, September 21, 2022 State Water Resources Control Board Letter Denying Request for Reconsideration [hereinafter "Exhibit H"].
[182] *See* Env't Prot. Agency, *Advance Notice of Proposed Rulemaking: Water Quality Challenges in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary* (2011), https://www.epa.gov/sites/default/files/documents/baydelta-final-sfbde-anpr-factsheet.pdf.

adequately protecting Bay Delta Estuary aquatic resources."[183] It also called on the State Water Board to "expeditiously review, modify, and implement estuarine habitat standards in the Bay Delta [] Plan to more fully protect aquatic species."[184] In April 2016, Complainant-Petitioner [redacted], together with a coalition of environmental organizations, sent the EPA a letter petitioning the agency to "initiate proceedings to develop and adopt sufficiently protective new water quality standards for the [Bay-Delta], in light of the continuing failure of the California State Water Resources Control Board to do so, as required by the Clean Water Act."[185] The EPA did not respond to the request.

TITLE VI COMPLAINT

I. The State Water Board's failure to update Bay-Delta water quality standards disproportionately impacts Native tribes and communities of color in the Bay-Delta watershed.

The State Water Board's actions and inactions in the Bay-Delta have caused worsening ecological damage that is disproportionately harming Native tribes and communities of color in violation of Title VI.

To establish a prima facie case of disparate impact discrimination, the EPA must (1) identify the specific policy or practice at issue; (2) establish adversity/harm; (3) establish disparity; and (4) establish causation.[186] American Indians are among the racial groups protected from discrimination under Title VI.[187]

Disparity exists where "a disproportionate *share* of the adversity/harm [is] borne based on race, color, or national origin."[188] The EPA may conduct its disparity analysis by aggregating multiple protected groups – such as comparing a policy's differential impact on all "nonwhite" persons relative to "white" persons.[189]

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[183] Env't Prot. Agency, *Water Quality Challenges in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: EPA's Action Plan* 1 (2012), https://www.epa.gov/sites/default/files/documents/actionplan.pdf.
[184] *Id.* at 10.
[185] Exhibit I, April 5, 2016 Coalition Letter to Regional Administrator Jared Blumenthal RE State of California's Failure to Update Bay-Delta Water Quality Standards [hereinafter "Exhibit I"].
[186] Env't Prot. Agency, *External Civil Rights Compliance Office Compliance Toolkit* 8 (2017); Dep't of Just., *supra* note 15, at 9.
[187] 40 C.F.R. § 7.25.
[188] Dep't of Just., *supra* note 15, at 16.
[189] *Id.* at 17-18.

Agencies "have a great deal of discretion in establishing discriminatory impact standards" and deciding what impacts to investigate and address.[190] Disparity may be shown through statistics or "by evidence of impact on specific individuals."[191]

At the complaint stage, a complainant need only establish jurisdiction, in part by alleging discriminatory acts that, if true, would establish a Title VI violation. The "EPA will investigate the allegations . . . even absent specific supporting evidence from a complainant."[192]

The EPA should exercise its investigatory authority here. First, the State Water Board's failures to maintain CWA-compliant water quality standards have disproportionately harmed Native tribes by impairing tribes' access to fish, riparian resources, and waterways essential to their sustenance, ceremony, religion, and identity. Second, the same failures have caused outsized harms to Bay-Delta communities of color, who are particularly vulnerable to HABs, the loss of fisheries, and other forms of ecological damage. Third, by substituting closed-door negotiation of voluntary agreements for an open public process, the State Water Board has excluded tribes and communities of color from decision-making on water quality standards.

A. The EPA has jurisdiction over this Complaint

The EPA considers four jurisdictional requirements when it decides whether to accept a Title VI complaint.[193] This Complaint meets all four requirements.

First, the complaint must be, and is, in writing.[194]

Second, the complaint must "allege[] a discriminatory act(s) that, if true, may violate EPA's nondiscrimination regulation (40 C.F.R. § 7.120)."[195] As detailed below, Complainant-Petitioners allege multiple State Water Board failures that have caused adverse impacts disproportionately experienced by Native tribes and communities of color.

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[190] *Id.* at 5.
[191] *Id.* at 19.
[192] Env't Prot. Agency, *supra* note 186, at 3.
[193] Env't Prot. Agency, *supra* note 18, at 5.
[194] *Id.*
[195] *Id.*

Third, the complaint must identify an applicant for, or a recipient of, EPA financial assistance as the entity that committed the alleged discriminatory act.[196] If any part of an agency is extended financial assistance, all of its operations are subject to Title VI requirements.[197] Federal financial assistance includes "[g]rants and loans of Federal funds."[198] The Recipient State Water Board received nearly $800M from EPA in 2022, and it is therefore subject to Title VI requirements.[199]

Finally, the complaint must be received within 180 days of the alleged discriminatory act, or a continuing systematic policy or practice of discrimination.[200] There are multiple continuing violations that make this Complaint timely.

First, the Board has failed to fully review Bay-Delta water quality standards for well over a decade in violation of state and federal statutory requirements. Second, the Board has failed to update water quality standards for most of the Bay-Delta, implement updated Phase I standards, or reduce water diversions and exports except on a temporary emergency basis. The Board continues these policies and practices despite acknowledging that existing standards are inadequate, and that diversions and exports have helped cause and continue to drive the Bay-Delta's ecological crisis. Third, in lieu of moderating exports, the Board has adopted a pattern and practice of waiving existing water quality standards during increasingly persistent extreme drought conditions, to the detriment of fish, wildlife, and other riparian resources. Fourth, the Board has delayed the statutorily required policymaking process to accommodate private negotiations, thereby suspending opportunities for public participation and comment, and it has failed to adequately consult with Native tribes in the decision-making process.

In addition, this Complaint is filed within 180 days of September 21, 2022, when the Board denied Complainant-Petitioners' Request for Reconsideration of the State Water Board's denial of their Petition for Rulemaking, originally filed on May 24, 2022.[201]

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[196] *Id.*
[197] 42 U.S.C. § 2000d-4a(1).
[198] 28 C.F.R. § 42.102(c).
[199] Recipient Profile: Water Resources Control Board, California, https://www.usaspending.gov/recipient/6622cef5-5e79-0729-863d-42c9a5fde8dd-C/latest (last visited Nov. 10, 2022).
[200] Env't Prot. Agency, *supra* note 18, at 5.
[201] *See* Exhibits E and H.

The EPA may also consider other prudential factors before accepting a complaint, such as whether allegations are grounded in fact, ripe for review, or can be resolved through alternative means, such as a recipient's internal grievance procedures.[202] These factors support acceptance of this Complaint, which alleges detailed facts describing an ongoing pattern and practice that has resulted in discriminatory impacts. Complainant-Petitioners have also already sought, and been denied, recourse through the State Water Board, thereby exhausting administrative remedies with the Recipient.[203]

B. The State Water Board's mismanagement of the Bay-Delta has disproportionately harmed Native tribes.

The State Water Board's failure to update the Bay-Delta Plan, its failure to moderate water exports except during periods of extreme drought, and its repeated waiver of water quality protections through temporary urgency change orders have caused ecological damage that adversely and disparately harms Native tribes in violation of Title VI of the Civil Rights Act.

As discussed above, it is well established that the State Water Board has delayed obligatory review of the Bay-Delta Plan by well over a decade, instead retaining water quality standards that both the Board and the EPA recognize fail to protect beneficial uses and periodically waiving existing standards in response to temporary urgency change petitions. These outdated water quality standards also fail to account for and ensure protection of tribal reserved rights and tribal cultural uses of surface waters.[204] Further, except on a temporary basis in response to emergency drought conditions, the Board has declined to exercise its authorities to regulate or restrict water exports to preserve public trust resources or prevent unreasonable use of water. This is so even though the public trust doctrine "imposes a duty of continuing supervision over the taking and use of . . . appropriated water"[205] and even though the California Water Code affirmatively requires the Board to "take all appropriate proceedings or actions . . . to prevent . . . unreasonable use . . . of water in this state."[206]

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[202] *Id.*
[203] *See* Exhibits E through H.
[204] *See* Petition for Rulemaking, Section II.B., *infra.*
[205] *Nat. Audubon Society*, 33 Cal.3d 419, 426 (1983) (explaining that the state must "consider the effect of [water] diversions upon interests protected by the public trust, and attempt, so far as feasible, to avoid or minimize any harm to those interests); *see also Light v. State Water Res. Control Bd.*, 226 Cal.App.4th 1463, 1489 (2014) (holding that the duty to protect the public trust applies to riparian and pre-1914 appropriative rights, as well as permitted appropriate water rights).
[206] Cal. Water Code § 275; *see also* Cal. Const. art. X, § 2 (codifying the reasonable use doctrine).

These policies and practices have devastated native fish populations and riparian resources, impaired waterway access, and facilitated the proliferation of HABs. Since the Bay-Delta Plan was last updated in 2006, freshwater flows to the estuary have continued to decline in both "amount and variability, creating persistent artificial drought conditions."[207] These changes to flow levels and variability, along with resulting salinity incursion and increase in water temperatures, disrupt the specific conditions that native Bay-Delta fish species require to survive and procreate. The State Water Board acknowledges that native fish species "have been significantly impacted by these reductions in flows" and related impacts on water quality, "with many species on the verge of extinction."[208] Likewise, inadequate instream flows, and resulting water stagnation and warming temperatures, have contributed to the spread of HABs throughout the Bay-Delta.

Impacts of poor Bay-Delta water quality have had a uniquely devastating effect on Native tribes in the Bay-Delta and its headwaters. "The disparate effect of a recipient's policy or practice is sometimes so obvious or predictable that comparative statistics are simply unnecessary to draw the requisite connection between the policy and harm to a Title VI protected group."[209] Such is the case here. Collapsing fish populations, loss of riparian resources, and proliferation of HABs uniquely harm Native tribes by impairing their exercise of cultural, religious, and subsistence activities and thereby compromising cultural survival.

First, the collapse of native fish populations causes a profound injury unique to Indigenous communities, because fish are integral to their identity and inextricably woven into their cultural, religious, spiritual, and subsistence traditions.

This unique harm is evident in the experiences of Complainant-Petitioner (b)(6) Privacy, (b)(7)(C) Enf. Privacy. In the words of (b)(6) Privacy, (b)(7)(C) Enf. Privacy (b)(6) Privacy, (b)(7)(C) Enf. Privacy, "the salmon and the rivers that sustain them are the lifeblood of the tribe."[210] In the creation story of the (b)(6) Privacy, (b)(7)(C) Enf. Privacy or Chinook salmon, gave the Tribe their voice, and in return the tribes "promised to

[207] San Francisco Estuary Partnership, *State of the Estuary* 12 (2019), https://www.sfestuary.org/wp-content/uploads/2019/10/State-of-the-Estuary-Report-2019.pdf.
[208] Cal. Water Res. Control Bd., *supra* note 99, at 1-5.
[209] Dep't of Just., *supra* note 15, at 19.
[210] Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ¶ 37.

always speak for" the [redacted].[211] "Side by side, the [redacted] have depended on each other for thousands of years – the [redacted] speaking and caring for and trying to protect the salmon, and the salmon giving of themselves to the [redacted] to provide sustenance throughout the year."[212] The [redacted] consider the [redacted] sacred: "Ceremonies, songs, dances, and prayers of the relationship between the salmon and the [redacted] are intricately woven into the very fabric of [redacted] culture and spirituality."[213]

For decades the construction of Shasta Dam has blocked the migration of the [redacted] into the [redacted] homeland in the Bay-Delta headwaters. While the Tribe works to create a passageway for the salmon, it is aware that "the salmon will not return to [the tribe's] headwaters if they cannot survive the migration through the Delta due to low flows and high temperatures."[214] The [redacted] "will not survive as a People if the [redacted] do not return to [the tribe's] homeland."[215]

Tribes along the Trinity and Klamath have likewise endured profound cultural injury – and injury to their reserved fishing and hunting rights – as a result of Trinity River imports into the Bay-Delta. The Trinity and Klamath Rivers' once bountiful runs of salmon and steelhead have "defined the life and culture of the [redacted] Tribes since time immemorial."[216] "The fishery resources supported commercial and subsistence economies for the Indians and also played a significant role in their religious beliefs."[217] TRD diversions have dramatically reduced flows in the Trinity and Klamath Rivers, lowering Trinity Reservoir storage levels and raising the temperature of water released into the Trinity River from Lewiston dams. These high temperatures jeopardize the spawning and survival of salmonids relied on by the tribes.[218] Loss of the fisheries,

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[211] *Id.* ¶ 5.
[212] *Id.*
[213] *Id.*
[214] *Id.* ¶ 31.
[215] *Id.*; *see also* Exhibit E, Attachment C, Declaration of [redacted] ¶ 12 (describing "a genocidal effort against us to keep the salmon from our rivers").
[216] Dep't of the Interior, *Record of Decision: Trinity River Mainstem Fishery Restoration Final Environmental Impact Statement/Environmental Impact Report* 4 (2000).
[217] *Id.*
[218] *See, e.g.*, NOAA Fisheries, *Scientists Improve Predictions of How Temperature Affects the Survival of Fish Embryos* (Dec. 6, 2016), https://www.fisheries.noaa.gov/news/scientists-improve-predictions-how-temperature-affects-survival-fish-embryos.

and ensuing changes to traditional diet, "lead[] to a loss of culture and identity" for tribal members.[219]

The collapse of fish populations also threatens the food sovereignty of tribes and the health of their members. Complainant-Petitioners [redacted] report that fish, once a staple of their diets, have disappeared from the waterways. For the [redacted], the rivers were the tribe's "grocery store. . . . Salmon, striper, catfish, sturgeon, eel, lamprey, and all other fish in the Sacramento area were part of their diet."[220] The collapse of native fish populations and the unhealthy condition of remaining fish create food insecurity for tribes.[221] These impacts are especially severe for Native people, who rely on fishing for sustenance to a greater extent than the overall population.[222]

At the same time, loss of fisheries has contributed to health issues for tribal members, including obesity, diabetes, and cardiovascular disease.[223] For instance, "[d]ata from the 2005 [redacted] Health and Fish Consumption Survey show that the loss of the most important food source, the Spring Chinook Salmon run, is directly linked to the appearance of epidemic rates of diabetes in [redacted] families," which are nearly four times the national average.[224] Loss of native food sources is also associated with high rates of heart disease and hypertension for members of the [redacted] tribe.[225]

These health impacts extend to the loss of mental, emotional, cultural, and spiritual health benefits of harvesting and eating traditional food sources.[226] The [redacted] Tribe, for instance, suffers from a suicide rate nearly *14 times* the national

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[219] Kari M. Norgaard, *The Effects of Altered Diet on the Health of the Karuk People* 4 (Nov. 2005), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/PCFFA&IGFR/part2/pcffa_195.pdf.

[220] Decl. of [redacted] ¶ 9.

[221] Norgaard, *supra* note 219, at 3.

[222] *See* Cal. Reg'l Water Quality Control Bd., Cent. Valley Region, *Tribal Beneficial Use Designations: A Primer to the Basin Plan Amendment Process* 7 (2022), https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/tribal_beneficial_uses/tbu_r5_bpaprimer.pdf ("California Native American Tribes have potential for increased exposure to water pollutants . . . through tribal traditional and cultural practices and subsistence fishing."); Decl. of [redacted] 16 (describing the Tribes' effort to bring youth to the Verona area on a fishing trip as part of its "work to restore traditional diets and food sovereignty").

[223] Decl. of [redacted] ¶ 31.

[224] Norgaard, *supra* note 219, at 3.

[225] *Id.*

[226] *Id.*

average.[227] This rash of suicides has been linked to the loss of native fisheries and the ensuing damage to tribal identity and culture.[228]

Second, the loss of habitat and riparian resources along waterways has impaired Delta tribes' access to traditional cultural and religious implements. For the (b)(6) Privacy, (b)(7)(C) Enf. Privacy the "rivers were . . . a source of [their] ancestors' spiritual and religious practice, providing materials for traditional regalia, cultural practices, and sites for ceremony."[229] The Tribe traditionally crafted regalia for use in tribal ceremonies from resources found along the rivers: headpieces from feathers of waterfowl, skirts from willows, dogbane, and other river plants, adornments from shells gathered from the rivers.[230] As tribal members reestablish their connection to ancestral waters, they are increasingly unable to find these essential riparian resources and when they do, the resources are often "not safe to gather and use because of water quality issues."[231] For example, habitat loss and water quality decline have limited the prevalence of tule, a long grassy plant that tribal members have used for everything from regalia to transportation to shelter,[232] and which the U.S. Army Corps of Engineers designated as a "cultural keystone species."[233] At the same time, tribal members cannot use medicinal plants for fear of contamination.[234]

Third, the proliferation of HABs has impeded Native religious and cultural practices. Complainant-Petitioner (b)(6) Privacy, (b)(7)(C) Enf. Privacy 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.[235] Neither of these practices can take place when HABs are present.[236] According to (b)(6) Privacy, (b)(7)(C) Enf. Privacy HABs "are becoming more and more of an obstacle for [the tribe] every year in accessing traditional

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[227] *See* Joe Mozingo, *How a Remote California Tribe Set Out to Save Its River and Stop a Suicide Epidemic*, L.A. Times (May 19, 2017), https://www.latimes.com/local/california/la-me-salmon-demise-yurok-suicides-20170519-htmlstory.html.
[228] *Id.*
[229] Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ¶ 10.
[230] *Id.*
[231] *Id.* ¶ 15.
[232] *Id.*
[233] *See* U.S. Army Corps of Engineers, *Tule Restoration Alliance*, https://www.spa.usace.army.mil/Missions/TNTCX/Traditional-Ecological-Knowledge/Tule-Restoration-Alliance/ (last visited Nov. 30, 2022); Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ¶ 15.
[234] Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ¶ 13.
[235] Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy ¶ 32.
[236] *Id.*

cultural resources, furthering the alienation already posed by the Delta's degraded state."[237] HABs have forced the cancellation of tribal fishing trips designed to teach youth about traditional diets and food sovereignty.[238] And "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."[239]

The continuing decline in water quality results in unique injury to Bay-Delta tribes: It perpetuates the legacy of colonization, marginalization, and genocide that has marked the California state government's relationship with Native tribes since the mid-1800s. And it compromises the continuing existence of tribes as a People. As [redacted] explains:

> [The [redacted] are the survivors of disease, colonization, genocide and removal. We return to [redacted], [redacted], and other important sites to remember, reconnect, teach, learn, and restore. We cannot do this work without healthy rivers – the lands, plants, fish, and animals that connect me and my Tribe to our ancestors and that are interwoven with my culture, religion, and identity cannot exist if there is not enough water in the Sacramento River and its tributaries to create the conditions needed to support life. If [Bay-Delta] water quality continues to deteriorate, I fear that the resources and landscapes we are working so hard to restore our connection to will become increasingly unsuitable for use or disappear altogether. Such loss would amount to cultural genocide for our Tribe.[240]

C. The State Water Board's policies and practices have disproportionately harmed communities of color.

The State Water Board's policies and practices have also caused disproportionate adverse impacts for disadvantaged communities of color in the Bay-Delta. Stagnant waterways, HABs, and declining fish populations layer on top of existing inequities, creating a range of environmental, health, and economic harms that disproportionately impact this protected class and make them more vulnerable to climate risks. This is especially clear in South Stockton.

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[237] Decl. of [redacted] ¶ 16.
[238] *Id.*
[239] *Id.* ¶ 17.
[240] *Id.*

Communities of color in South Stockton already endure some of the worst environmental conditions in California due to a constellation of transportation infrastructure and heavy industry sites which create high air pollution impacts.[241] According to CalEnviroScreen, multiple census tracts in South Stockton – all within a half-mile of Bay-Delta waterways – score in the 96th through 99th percentiles of all California communities for overall pollution burdens, meaning that these communities suffer from more pollution exposure than up to 99% of the rest of the state.[242] Parts of South Stockton are also among the most disadvantaged communities in the country.[243] For example, residents of the census tract where Complainant-Petitioner (b)(6) Privacy, (b)(7)(C) Enf. Privacy is based are in the 99th percentile nationally for air pollution, the 85th percentile for asthma, and the 92nd for proximity to Superfund sites.[244] The same census tract is in the 91st percentile for number of low-income households and in the 95th percentile for linguistic isolation, which refers to the proportion of households where "no one over 14 speaks English very well."[245]

Because of these vulnerabilities, ecological damage to Bay-Delta waterways causes especially pronounced harms for disadvantaged communities of color. Low flows cause HABs to become especially concentrated in waterways in and around Stockton, where poor water circulation, high summer water temperatures, and high nutrient levels create ideal conditions for blooms.[246] According to (b)(6) Privacy, (b)(7)(C) Enf. Privacy Executive Director and co-founder of (b)(6) Privacy, (b)(7)(C) Enf. Privacy HABs "spread like a lime green film across the surface of the water, starting where the Shipping Channel dead ends and extending out toward the San Joaquin River, giving off a smell of slowly rotting grass."[247]

HABs cause outsized aesthetic, economic, spiritual, and health impacts to the area's residents. Because of the legacy of discriminatory urban planning decisions and ongoing industrial development, South Stockton has relatively little greenspace

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[241] Exhibit E, Attachment, D, Declaration of (b)(6) Privacy, (b)(7)(C) Enf. Priva ¶ 14 [hereinafter "Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy
[242] *See* Cal. Office of Env't Health Hazard Assessment, *CalEnviroScreen Version 4.0*, https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40 (last visited Dec. 14, 2022).
[243] *See* White House Council on Env't Quality, *Climate and Economic Justice Screening Tool*, https://screeningtool.geoplatform.gov/en/#22/37.94502384/-121.2722151 (last visited Dec. 14, 2022).
[244] *Id.*
[245] *Id.*
[246] Exhibit B, Declaration of (b)(6) Privacy, (b)(7)(C) Enf. Privac ¶ 6 [hereinafter "Decl. of (b)(6) Privacy, (b)(7)(C) Enf. Privacy
[247] Decl. of (b)(6) Privacy, (b)(7)(C) ¶ 17.

and is particularly prone to the heat island effect.[248] During the summer, residents of South Stockton often try to escape the heat by using the city's waterways, only to encounter HABs. As a Stockton resident and [redacted] employee put it:

> "The people living closest to the waterways often belong to environmental justice communities that suffer the most from air and water pollution. They don't have the money to pay for air conditioning. They cannot afford to go somewhere else during the summer's sweltering heat. . . . The sad truth is that the waterways hurt more than they help."[249]

Waterways and riparian buffers could help absorb heat, reduce temperature disparities, and mitigate the effects of climate change. Instead, South Stockton's waterways create new health risks for an already vulnerable community.[250]

These activities and the proximity of South Stockton residential areas to the waterways put these residents at disproportionately high risk of inhaling airborne toxins from HABs, which can be mobilized by wind and travel for miles, exacerbating respiratory problems like asthma.[251] In some cases, the contact with HABs is especially direct. High school students regularly run around the banks of McLeod Lake during physical education classes, mere feet from the blooms.[252] One student reported that she and her classmates occasionally had to cover their noses and mouths because smells were so bad.[253] Since Stockton residents suffer from some of the highest asthma rates nationwide, these students and other residents are uniquely vulnerable to health impacts from aerosolized HAB particles.[254]

HABs also pose particular health risks to the community's unhoused residents. South Stockton's Mormon Slough, for instance, is home to a large encampment of unhoused residents who use the Shipping Channel and San Joaquin River for basic needs like hygiene, sanitation, and subsistence fishing.[255] These

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[248] *Id.* ¶ 21.
[249] Exhibit C, Declaration of [redacted] ¶ 4 [hereinafter "Decl. of [redacted]
[250] *See id.* ¶ 21.
[251] *See* Kirkpatrick et al., *Inland Transport of Aerosolized Florida Red Tide Toxins*, 9 Harmful Algae 186, 186 (2010); Decl. of [redacted] 18; Kris Freeman, *Seasick Lungs: How Airborne Algal Toxins Trigger Asthma Symptoms*, 113 Env't Health Perspectives 632 (2005).
[252] Decl. of [redacted] ¶ 2.
[253] Exhibit A, Declaration of [redacted] ¶ 3 [hereinafter "Decl. of [redacted]
[254] *See, e.g.*, Decl. of [redacted] ¶ 18.
[255] Decl. of [redacted] ¶ 17.

residents risk ingesting or coming into direct contact with the toxic blooms and suffering severe health effects.

The state of the waterways further impairs economic opportunities in Stockton, one of the country's most economically distressed cities.[256] According to a [redacted] community organizer and government liaison, Stockton residents "avoid certain areas like downtown because the HABs smell so bad."[257] These foul odors render waterways inaccessible, impair tourism, decrease property values, and increase drinking-water treatment costs.[258] As [redacted] 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."[259] 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."[260]

Other residents of color in Stockton describe HABs as a source of alienation from the waterways that run through their hometown.[261] According to a [redacted] lifelong Stockton resident, many of her community members do not even know what the Bay-Delta is.[262] For residents who are familiar with its waterways, the Bay-Delta "now instills a feeling of disgust"[263] and makes them wonder whether "recreational trips are safe any longer or will be available in the future."[264]

[redacted] recent efforts symbolize these difficulties. The organization received a State Coastal Conservancy 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 has been unable to carry out the programming almost a full

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[256] *See* Econ. Innovations Grp., *The 2016 Distressed Communities Index: An Analysis of Community Well-Being Across the United States* 26 (2016), https://eig.org/wp-content/uploads/2016/02/2016-Distressed-Communities-Index-Report.pdf.
[257] Exhibit D, Declaration of [redacted] ¶ 8 [hereinafter "Decl. of [redacted]
[258] Walter Dodds et al., *Eutrophication of U.S. Freshwaters: Analysis of Potential Economic Damages*, 43 Env't Sci. & Tech. 12 (2009).
[259] Decl. of [redacted] ¶ 19.
[260] Decl. of [redacted] ¶ 3.
[261] *See id.* ¶ 8-9; Decl. of [redacted] ¶ 2; Decl. of [redacted] 2.
[262] Decl. of [redacted] ¶ 2.
[263] Decl. of [redacted] ¶ 5.
[264] Decl. of [redacted] ¶ 7.

year after receiving the grant.[265] 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.[266]

In addition, people of color in Stockton and throughout the Bay-Delta are disparately impacted by declining and contaminated fish populations due to their outsized reliance on subsistence fishing practices. An estimated 24,000 to 40,000 subsistence fishing visits are made to the Delta annually.[267] Subsistence fishers throughout the Bay-Delta, many of whom are immigrants and/or people of color,[268] experience loss of food supply as fish populations decline. Impaired Bay-Delta water quality also puts them at heightened risk of exposure to contaminants that accumulate in waterways and in the fish they consume.[269] Indeed, OEHHA advises against consumption of 25 separate fish species in the Sacramento River and Northern Bay-Delta and 12 fish species in the Central and South Bay-Delta based on the presence of PCBs, mercury, and other toxins. OEHHA also advises against consumption of all fish and shellfish species in the Port of Stockton.[270]

D. The State Water Board has excluded Native tribes and communities of color from participation in the policymaking process around the Bay-Delta Plan.

The Clean Water Act and Porter-Cologne Act both envision the Bay-Delta Plan review process as a vehicle for public participation in setting water quality standards. The triennial review mandated by the CWA requires "public hearings for the purpose of reviewing applicable water quality standards and, as appropriate, modifying and adopting standards."[271] Likewise, the Porter-Cologne Act requires a noticed public hearing prior to adoption of any water quality control plan.[272] Furthermore, under California law, the State Water Board has an obligation to engage in government-to-government consultation with tribes whose rights and

[265] Decl. of [redacted] ¶ 9.
[266] *Id.*
[267] Barbara Barrigan-Parrilla et al., *The Fate of the Delta: Impacts of Proposed Water Projects and Plans on Delta Environmental Justice Communities* 54 (2018) [hereinafter, "Fate of the Delta"], https://www.restorethedelta.org/wp-content/uploads/The-Fate-of-the-Delta-final.pdf.
[268] Fraser Shilling et al., *Contaminated Fish Consumption in California's Central Valley Delta*, 110 Env't Rsch. 334, 335, 337 (2010).
[269] Fate of the Delta, *supra* note 267, at 54-55.
[270] *See* Cal. Office of Env't Health Hazard Assessment, *Fish Advisories*, https://oehha.ca.gov/fish/advisories (last visited Nov. 25, 2022).
[271] 33 U.S.C. § 1313(c)(1).
[272] Cal. Water Code § 13244.

interests will be affected by decisions about Bay-Delta water management.[273] Federal law similarly requires that the State take tribal reserved rights into account in setting water quality standards.[274] By delaying the rulemaking process for updating water quality standards, the State Water Board has denied Native tribes and communities of color the ability to participate in the policymaking process around water quality standards in the Bay-Delta.

Worse still, the State Water Board has delayed this public process to accommodate private negotiations of export allowances through the voluntary agreement process. Voluntary agreement negotiations are not open to tribes that depend on sustainable flows in Bay-Delta waterways. Nor are they open to key Bay-Delta stakeholders like Complainant-Petitioners [redacted] and [redacted], which advocate for the interests of disadvantaged communities of color affected by low flows and the resulting ecological harms. Confidentiality agreements further shield negotiations from public input and shroud them in secrecy.[275] When the Board did eventually extend an invitation to non-party stakeholders, including Complainant-Petitioner [redacted], to engage in any discussion about the voluntary agreements, it did so nearly two months after the voluntary agreement framework had been settled and with only three days' notice.[276] Further, the invitation was limited to workshops on "implementation of the [voluntary agreement] program."[277]

Although the Voluntary Agreements Memorandum frames the agreements as an implementation pathway for an updated Bay-Delta Plan, it is clear that the agreements will determine water quality standards themselves. The current proposal would increase annual outflows by only 500,000 acre-feet per year above the D-1641 baseline, far less than the 1.3 million acre-feet proposed in the 2017 Voluntary Agreements Framework and only a fraction of the increased flows that the Board has concluded are necessary to protect public trust uses.[278] Given that

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[273] Cal. Pub. Res. Code §§ 21080.3.1(b), 21084.
[274] Water Quality Standards Regulatory Revisions to Protect Tribal Reserved Rights, 87 Fed. Reg. 74361 (proposed Dec. 5, 2022) (to be codified at 40 C.F.R. pt. 131) (disapproving Maine standard).
[275] *See* Nat. Res. Def. Council, *Common Interest and Confidentiality Agreement* (2019), https://www.nrdc.org/sites/default/files/media-uploads/va_water_user_common_interest_agreement.pdf.
[276] Decl. of [redacted] ¶ 24.
[277] *Id.*
[278] *See Memorandum of Understanding Advancing a Term Sheet for the Voluntary Agreements to Update and Implement the Bay-Delta Water Quality Control Plan, and Other Related Actions* at App. 1 (detailing proposed new contributions to Delta outflow), https://resources.ca.gov/-/media/CNRA-Website/Files/NewsRoom/Voluntary-Agreement-Package-March-29-2022.pdf; Obegi, *supra* note 168.

the Voluntary Agreement Memorandum purports to define the obligations of the largest organizations diverting and exporting Bay-Delta water, the Bay-Delta Plan's water quality standards will need to be organized around voluntary agreement commitments. By the time the agreements are brought to the Board for approval, public participation would be irrelevant – with water quality standards predetermined by the closed-door negotiations.

PETITION FOR RULEMAKING

II. The EPA should exercise its oversight authority to directly correct flawed Bay-Delta water quality standards.

Under the CWA, water quality standards must be sufficient to "protect the public health or welfare, enhance the quality of water and serve the purposes of" the Act.[279] Water quality standards comprise "the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses."[280] Water quality criteria must be "based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use."[281] It is well established that minimum flow requirements constitute water quality standards under the CWA.[282] As the Supreme Court has recognized, any distinction between water quality and water quantity is artificial, since, in many cases, "water quantity is closely related to water quality; a sufficient lowering of the water quantity in a body of water could destroy all of its designated uses."[283]

Under California law, the State government manages waters in the public trust.[284] The State Water Board "has an affirmative duty to take the public trust

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[279] 40 C.F.R. § 131.3 (i).
[280] 33 U.S.C. § 1313(c)(2)(A).
[281] 40 C.F.R. § 131.11(a)(1).
[282] *See* Env't Prot. Agency, *Decision Document of the United States Environmental Protection Agency: Review of the South Caroline Surface Water Withdrawal, Permitting, Use and Reporting Act of 2010 and S.C. Code Ann. Regs. Section 61-119 Under Section 303(c) of the Clean Water Act* 11 (May 20, 2022) (disapproving minimum instream flow hydrological criteria on the grounds that they "allow significant reduction of flows without any discernible sound scientific rationale and do not protect designated uses for water bodies to which they apply" in violation of federal regulations governing water quality standards); *PUD No. 1 of Jefferson Cty. v. Wash. Dep't of Ecology* 511 U.S. 700, 713-21 (1994).
[283] *PUD No. 1 of Jefferson Cty. v. Wash. Dep't of Ecology* 511 U.S. 700, 719 (1994) (explaining that, under the CWA, "reduced stream flow, *i.e.*, diminishment of water quantity, can constitute water pollution").
[284] *See* Cal. Water Code § 102 ("All water within the State is the property of the people of the State . . . .").

into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible."[285] "The concept of a public use is flexible, accommodating changing public needs."[286] The Sacramento-San Joaquin Delta Reform Act of 2009 affirmed the application of these doctrines to the Bay-Delta, directing that "the longstanding constitutional principle of reasonable use and the public trust doctrine shall be the foundation of state water management policy and are particularly important and applicable to the [Bay-Delta]."[287]

The EPA exercises ultimate oversight authority to ensure that water quality standards comply with the CWA. Anytime the EPA determines that new or revised water quality standards are necessary to meet CWA requirements – regardless whether the state has submitted standards for approval – it must promulgate federal standards for the applicable waterway.[288] The EPA has exercised this authority at least five times since 1987, including once in California.[289]

The EPA should exercise this oversight authority to promulgate new federal water quality standards for the Bay-Delta. Current water quality standards violate the CWA in two respects. First, flow-based and temperature criteria fail to ensure the protection of beneficial uses, a problem compounded by the lack of a surface water standard for HABs. Second, existing criteria are no longer based on a sound scientific rationale. The EPA should initiate a rulemaking to bring water quality standards in the Bay-Delta into compliance with the CWA, at least on an interim basis until the State Water Board adopts and receives federal approval for updated standards. Federal standards in the Bay-Delta should include the designation of Tribal Beneficial Uses ("TBUs") as well as new water quality criteria that restore appropriate flows and temperatures and protect the Bay-Delta estuary against the proliferation of HABs.

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[285] *Nat'l Audubon Soc'y v. Superior Court*, 33 Cal. 3d 419, 446 (1983); *See also* Cal. Water Code § 1243.5.
[286] *Env't Law Found. v. State Water Res. Control Bd.*, 26 Cal. App. 5th 844, 857 (2018).
[287] Cal. Water Code § 85023.
[288] 33 U.S.C. § 1313(c)(4)(B).
[289] 40 C.F.R. § 131.43 (establishing nutrient standards in Florida); *Metro. St. Louis Sewer Dist. v. U.S. EPA,* No. 4:10-CV-2103 (CEJ), 2012 WL 685334, at *2 (E.D. Mo. Mar. 2, 2012) (establishing standards for segments of the Mississippi River in Missouri); 40 C.F.R. § 131.38 (establishing standards for toxic pollutants in California); 40 C.F.R § 131.35 (establishing water quality standards for the Colville Indian Reservation); EPA, Final Rule, Water Quality Standards for the Surface Waters of the Commonwealth of Kentucky, 52 Fed. Reg. 9102, 9102-03 (Mar. 20, 1987) (establishing chloride standards in Kentucky). The EPA also partially rejected the State's 1991 Bay-Delta water quality standards and promulgated its own standards in 1995.

A. The EPA has jurisdiction to hear this Petition for Rulemaking.

The EPA has authority to hear this Petition for Rulemaking under the APA and Section 303 of the CWA. The APA provides any interested person a right to petition federal agencies for rulemaking.[290] Membership organizations may petition federal agencies on behalf of their interested members.[291] Section 303(c)(4)(B) of the CWA in turn requires the EPA to adopt federal water quality standards whenever it determines that existing water quality standards are non-compliant.[292]

Here, Complainant-Petitioners each have concrete and immediate interests in improving water quality standards in the Bay-Delta. The [redacted] depend on healthy Bay-Delta ecosystems for their cultural and religious practices. Complainant-Petitioners [redacted] have a vested interest in improved water quality standards that would deliver cultural, recreational, economic, and health benefits to their members and constituents.

B. Water quality criteria in the Bay-Delta Plan fail to protect designated beneficial uses and tribal rights and interests.

Existing water quality criteria fail to protect a wide range of beneficial uses designated under the 2006 Bay-Delta Plan. Water quality criteria must be adequate to protect, among other designated beneficial uses: shellfish harvesting; commercial and sport fishing; warm and cold freshwater habitat, migration of aquatic organisms; spawning, reproduction, and/or early development; estuarine habitat; wildlife habitat; and rare, threatened, or endangered species.[293] They must also protect both contact and non-contact water recreation and municipal and domestic water supply.[294] Existing flow-based criteria, in particular, are falling well short.

As discussed above, inadequate instream flows impair the unique conditions that native fish species require to survive and procreate. Among other things, inadequate freshwater flows impede the ability of migratory fish to reach spawning habitat. They also disrupt temperatures and salinity regimes to which native fish

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[290] 5 U.S.C. § 553(e).
[291] *See* 5 U.S.C. § 551(2); *Defenders of Wildlife v. Gutierrez*, 532 F.3d 913 (2008).
[292] 33 U.S.C. § 1313(c)(4)(B).
[293] Cal. State Water Res. Control Bd., *supra* note 12, at 8.
[294] *Id.*

are adapted.[295] For instance, high water temperatures attributable to low instream flows reduce the number of salmon surviving to adulthood, impacting beneficial uses, including cold freshwater habitat and spawning, reproduction, and/or early development. Meanwhile, alterations to the X2 location and salinity variability have allowed invasive non-native plant and animal species to take over and also decreased food supplies for fish, negatively impacting estuarine habitat, wildlife habitat, and rare, threatened, or endangered species beneficial uses.[296] In 2021, the State Water Board itself conceded that its San Joaquin Basin flow standards "have been inadequate to support fish and wildlife beneficial uses."[297]

Water quality criteria also fail to protect a wide range of beneficial uses that protect human use and enjoyment of the waterways. For example, declining fish populations have reduced opportunities for shellfish harvesting and commercial and sport fishing. Wildlife decline from low flows and poor water quality interferes with the Bay-Delta's many wildlife-centered recreational activities. Stagnant waterways have also made it easier for contaminants and nutrients to accumulate and contribute to the proliferation of HABs.[298] These trends directly impair the water contact recreation beneficial use, which becomes unsafe and inadvisable when blooms are present. The aerosolization of HAB particles, as well as the foul-smelling odors they give off, also impair non-contact recreation near affected bodies of water. Further, low flows increase the stress on drinking water supplies – such as the City of Stockton's drinking water treatment plant, which sits downstream of a wastewater treatment plant that discharges into the Delta. Reductions in flows and degradation of water quality raise the cost of producing clean water and compromise drinking water access for lower-income residents. Such costs are imposed on Stockton residents as well as residents of small community water systems in the Delta, the city of Antioch, and Contra Costa Water District.

Finally, existing state water quality standards fail to ensure protection of tribal rights and interests, including tribal reserved rights. The federal government has a "distinctive obligation of trust . . . in its dealings" with American Indian

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[295] *See* The Bay Inst., *supra* note 79, at 19.
[296] *Id.*
[297] Cal. State Water Res. Control Bd., *Letter to Kristin White: Water Rights Decision 1641 San Joaquin River Flows Compliance* 2 (Apr. 7, 2021), https://www.waterboards.ca.gov/waterrights/water_issues/programs/compliance_monitoring/sacramento_sanjoaquin/docs/2021/20210407_swbltr.pdf.
[298] Fate of the Delta, *supra* note 267, at 54-55.

tribes.[299] These obligations extend to the EPA, which time and again has affirmed its "obligation to honor and respect tribal rights and resources protected by treaties" and other sources of federal law.[300] This includes ensuring that water quality standards protect tribal reserved rights.[301] The EPA recently affirmed its commitment to help deliver on the federal government's trust responsibility to Native tribes "by supporting tribal nations as they protect and steward their waters."[302]

Here again, existing water quality standards for the Bay-Delta fall short. The standards do not take into account and protect reserved rights of tribes in the Delta and its headwaters. They do not account for and protect against impacts of diversions from the Trinity River – legally classified as part of the "Delta tributary watershed" – on the reserved water and fishing rights of tribes in the Klamath River Basin.[303] Nor do they consider and accommodate more broadly the traditional, cultural, and subsistence uses that tribes like Complainant-Petitioners (b)(6) Privacy, (b)(7)(C) Enf. Privacy continue to make of Bay-Delta waterways and headwaters despite centuries of depredation and broken treaty promises.

C. Existing water quality criteria are no longer based on the best available science.

Under the CWA and the EPA's implementing regulations, states must adopt water quality criteria "based on sound scientific rationale."[304] If a state's water quality criteria do not reflect the best available science, the state has failed to comply with the CWA, and the EPA may initiate its own rulemaking to bring the

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[299] *Seminole Nation v. United States*, 316 U.S. 286 (1942) (recognizing that the federal government has "charged itself with moral obligations of the highest responsibility and trust" toward tribes).
[300] Gina McCarthy, Env't Prot. Agency, *Commemorating the 30th Anniversary of the EPA's Indian Policy* (Dec. 1, 2014), https://www.epa.gov/sites/default/files/2015-05/documents/indianpolicytreatyrightsmemo2014.pdf; *see also* Water Quality Standards Regulatory Revisions to Protect Tribal Reserved Rights, 87 Fed. Reg. 74361.
[301] *See* Water Quality Standards Regulatory Revisions to Protect Tribal Reserved Rights, 87 Fed. Reg. 74365 (reciting EPA's 2015 disapproval of human health criteria adopted by State of Maine for failure to adequately protect sustenance fishing designated use based in part on tribal reserved rights).
[302] Env't Prot. Agency, *Strengthening the Nation-to-Nation Relationship with Tribes to Secure a Sustainable Water Future* 1 (2021), https://www.epa.gov/system/files/documents/2021-10/2021-ow-tribal-action-plan_508_0.pdf.
[303] *See Baley v. United States*, 942 F.3d 1312 (Fed. Cir. 2019).
[304] 40 C.F.R. § 131.11(a)(1).

state into compliance.[305] The State Water Board has failed to maintain water quality criteria that reflect the best available science regarding flow standards, HABs, and water temperatures.

First, the State Water Board has not followed the best available science on flow-based water quality criteria. The State Water Board stated over a decade ago that restoring "environmental variability in the Delta is fundamentally inconsistent with continuing to move large volumes of water through the Delta for export."[306] It further concluded that the "drinking and agricultural water quality requirements of through-Delta exports, and perhaps even some current in-Delta uses, are at odds with the water quality and variability needs of desirable Delta species."[307] A robust body of research on the importance of flows to the Delta ecosystem reinforces these conclusions.[308]

A vital piece of that research is the State Water Board's own report identifying flows that would be required to protect the public trust. The Board found that from around 1990 to 2010, flows were:

- approximately 30% of unimpaired flows in drier years to almost 100% in wetter years for Delta outflows;
- around 50% of unimpaired Sacramento River inflow from April to June; and
- around 20% of unimpaired flow in drier years to almost 50% in wetter years for San Joaquin River inflows.[309]

By contrast, the Board determined that to "preserve the attributes of a natural variable system to which native fish species are adapted," criteria need to provide for:

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[305] *See* 33 U.S.C. § 1313(c)(4)(B).
[306] Cal. State Water Res. Control Bd., *supra* note 80, at 6.
[307] *Id.*
[308] *See, e.g.,* Cal. Dep't of Fish and Game, *Effects of Delta Inflow and Outflow on Several Native, Recreational, and Commercial Species* 1, 6-8 (2010), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/PCFFA&IGFR/part2/pcffa_146.pdf; Gregory Reis et al., *Clarifying Effects of Environmental Protections on Freshwater Flows to—and Water Exports from—the San Francisco Bay Estuary,* 17 S.F. Estuary & Watershed Sci. (2019), https://doi.org/10.15447/sfews.2019v17iss1art1; James Cloern et al., *On the human appropriation of wetland primary production*, 785 Sci. Total Env't (2021), https://www.sciencedirect.com/science/article/pii/S0048969721021677.
[309] Cal. State Water Res. Control Bd., *supra* note 80, at 5.

- 75% of unimpaired Delta outflow from January through June;
- 75% of unimpaired Sacramento River inflow from November through June; and
- 60% of unimpaired San Joaquin River inflow from February through June.[310]

The State Water Board pointed out that these flows do not take into account other beneficial uses of water.[311] But that does not detract from the Board's conclusion that these flow criteria are "necessary to protect public trust resources" based on the "best available scientific information."[312]

More recently, in 2018, the State Water Board proposed a range of 45-65% of full unimpaired flow for Phase II of the Bay-Delta Plan, with 55% as a starting point for decision-making.[313] The Board noted that "benefits consistently occur at flows of 55% of unimpaired flow and higher, and are absent or very modest at 45% of unimpaired flow and lower."[314] Four and a half years after releasing these findings, the Board has not yet implemented them by updating Phase II standards.

Second, the State Water Board has failed to implement water quality criteria to reflect the best available science on cyanobacteria, the microorganisms that can produce HABs.[315] The Bay-Delta Plan lacks any numeric or narrative water quality criteria for cyanobacteria in surface waters.[316] The State Water Board has started to develop criteria that would protect drinking water, but drinking-water standards do not protect surface water beneficial uses.[317] At the same time, current flow-based standards maximize inflows between February and June,[318] rendering them insufficient to address the significant portion of HABs that proliferate in late summer.[319]

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[310] *Id.*
[311] *Id.* at 2.
[312] *Id.* at 1.
[313] Cal. State Water Res. Control Bd., *supra* note 80, at 2.
[314] *Id.* at 10.
[315] Env't Prot. Agency, *supra* note 134.
[316] *See* 40 C.F.R. § 131.11(b) (defining numerical values and narrative criteria as acceptable forms of water quality criteria when states develop standards).
[317] *See* Cal. State Water Res. Control Bd., *Cyanobacteria and Cyanotoxins in Drinking Water*, https://www.waterboards.ca.gov/drinking_water/programs/habs/ (last updated Aug. 12, 2019) (making no mention of cyanotoxin health risks from recreational uses).
[318] Cal. State Water Res. Control Bd., *supra* note 122, at 25.
[319] Env't Prot. Agency, *Climate Change and Harmful Algal Blooms*, https://www.epa.gov/nutrientpollution/climate-change-and-harmful-algal-blooms (last updated Jan.

This year, the State Water Board itself lamented that "[t]he lack of regulatory measures has impaired the effectiveness of immediate and long-term event response to HAB events, statewide monitoring, and data to inform management decisions to begin addressing the causes of HABs, ongoing impacts, and mitigation efforts."[320] Nevertheless, the State Water Board has stated that it will not have a policy addressing HABs for at least 8 to 10 years, even as the need for one becomes more urgent due to drought and climate change.[321] In the meantime, public health officials lack guidance on when to issue HAB warnings for a particular waterway, and the effectiveness of HAB monitoring and detection programs remains uneven across the state.

By failing to develop water quality criteria focused on the prevention of HABs, the State Water Board ignores a growing body of scientific literature on the public health and ecological impacts of cyanotoxins.[322] The Board also ignores recommendations that the EPA published in 2019 for recreational ambient water quality criteria for two toxins produced by cyanobacteria, which the EPA stated could be used to establish water quality standards under the CWA.[323]

Third, the State Water Board has ignored the best available science on temperature management. It approved the U.S. Bureau of Reclamation's 2022 Temperature Management Plan even though the TMP results in temperatures that adversely affect salmon.[324] The 2022 TMP estimated a temperature-dependent mortality of 52-58%, far greater than the NMFS 2017 suggested maximum of 30%,

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5, 2022) ("Harmful algae usually bloom during the warm summer season or when water temperatures are warmer than usual.").

[320] Cal. State Water Res. Control Bd., *Legislative Mandated Report: 2022 Water Code Section 13182(a) Comprehensive Report* 7 (2022), https://www.waterboards.ca.gov/water_issues/programs/swamp/docs/2022/2022-legislative-mandated-report-final.pdf.

[321] *Id.*

[322] *See, e.g.,* Env't Prot. Agency, *Health Effects from Cyanotoxins*, https://www.epa.gov/cyanohabs/health-effects-cyanotoxins (last updated Aug. 3, 2022).

[323] Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin, 84 Fed. Reg. 26,413, 26,413 (June 6, 2019).

[324] Letter from Eileen Sobeck, Cal. State Water Res. Control Bd., to Kristen White (May 6, 2022), https://www.waterboards.ca.gov/drought/sacramento_river/docs/20220506-final-tmp-response.pdf; Doug Obegi et al., *Letter to Eileen Sobeck RE Objection to and Protest of the Shasta Temperature Management Plan Submitted Pursuant to Water Rights Order 90-5* (May 6, 2022), https://www.waterboards.ca.gov/drought/sacramento_river/docs/nrdc-et-al-protest-shasta-tmp-5-6-22.pdf.

even in critically dry years.[325] NMFS modeling also indicated that the TMP would result in average water temperatures over 60 degrees in the Sacramento River at Clear Creek in October and November, far exceeding a State Water Board prohibition on water temperatures over 56 degrees that would be detrimental to the fishery.[326]

D. The EPA should designate Tribal Beneficial Uses for the Bay-Delta and update water quality criteria to ensure CWA compliance.

The EPA should exercise its oversight authority to align Bay-Delta water quality standards with the goals of the CWA. This requires updating both beneficial use designations to protect tribal uses of the waterways and water quality and flow criteria to protect the full range of beneficial uses.

First, the EPA should designate Tribal Beneficial Uses for Bay-Delta waterways. Recognizing TBUs as "a key initial step towards protecting uses of water by California Tribes and the public,"[327] the State Water Board established and defined three categories of TBUs in 2017 for incorporation into water quality standards statewide: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB).[328] But the Board has declined to designate TBUs for Bay-Delta waterways, stating that it will await action by the Regional Water Quality Control Boards even though the State Water Board has assumed authority since 1978 for making beneficial use designations under the Bay-Delta Plan.[329] TBUs are of vital importance to tribes in the Bay-Delta and its headwaters to ensure protection of important cultural, spiritual, and subsistence practices, particularly as the government's breach of treaty promises compromised many tribes' ability to assert reserved rights. The EPA should use the State's TBU definitions to designate TBUs for Bay-Delta waterways directly.

Second, the EPA should remedy inadequate water quality criteria for the Bay-Delta to bring them into compliance with the CWA. The State Water Board

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[325] Nat. Res. Def. Council, Notice of Petition for Reconsideration of the State Water Resources Control Board's May 6, 2022 Approval of the Shasta Temperature Management Plan (2022), https://www.waterboards.ca.gov/drought/sacramento_river/docs/petition-for-reconsideration-of-approval-of-shasta.pdf.
[326] *Id.*
[327] Cal. State Water Res. Control Bd., *Tribal Beneficial Uses Guidance Document* 2 (2022), https://www.waterboards.ca.gov/tribal_affairs/docs/2022/tbu-basin-amendment-09202022.pdf.
[328] *Id.*
[329] *See* Exhibit F at 8.

has failed to follow its own scientific analysis on flow requirements for over a decade. The EPA should correct the Board's inaction by promulgating its own water quality criteria for flows in the Bay-Delta. It should promulgate surface water criteria for HABs in light of the widespread and increasing nature of this problem and its impairment of multiple beneficial uses. And it should promulgate temperature criteria to protect native fish species on the verge of extinction.

RELIEF REQUESTED

For the foregoing reasons, Complainant-Petitioners respectfully request that the EPA:

- Immediately and thoroughly investigate the State Water Board's noncompliance with Title VI of the Civil Rights Act related to its actions and inactions on Bay-Delta water quality standards.

- Engage with affected parties, including Complainant-Petitioners during Title VI investigations and in crafting remedies.

- Withhold federal permits and approvals for major water export infrastructure, such as the Delta Conveyance Project, in the Bay-Delta and its headwaters until the State Water Board achieves compliance with Title VI and the CWA.

- Withhold approval of water quality standards that have been crafted through exclusionary policymaking processes.

- Terminate or withhold State Water Board funding if the Board fails to come into compliance with Title VI.

- Designate Tribal Beneficial Uses for Bay-Delta waterways or direct the State Water Board to do so.

- Promulgate flow-based and temperature water quality criteria for waterways covered by Phase II of the Bay-Delta Plan update that protect beneficial uses and are based on the best available science.

- Promulgate surface water quality criteria for cyanotoxins in Bay-Delta waterways that protect, at minimum, recreational, fish and wildlife,

municipal, and tribal beneficial uses. These criteria should provide a basis to trigger public health notifications when dangerous levels of cyanotoxins are present.

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Respectfully submitted,

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