Indigenous Water Governance and the Clean Water Act

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Cultural lifeways for many Indigenous communities in the United States are intimately tied to water. Nationally, the Clean Water Act of 1972 is the principal framework for regulation of water quality. The core purpose of the Act is to ensure water quality–and, by extension, water quantity–sufficient to protect designated uses, including but extending beyond familiar fishable, swimmable, and drinkable uses. Though uses protected under the Act can be seen as expressions of social and ecological values, the cultural dimensions of these water uses have generally been underappreciated.

This paper excavates requirements and possibilities for Indigenous water governance under the Clean Water Act, centering on the work of the Act's water quality standards provisions. Previous scholarship in this area has focused on Indigenous water governance within Tribal territorial jurisdiction–particularly through Tribal promulgation of on-reservation water quality standards under Treatment-as-a-State authority or federal gap-filling standards for Indian country. This paper extends this scholarship by looking to Indigenous water governance beyond Indian country. Doing so is imperative, as Tribal cultural, ceremonial, and subsistence practices involving water remain rooted in ancestral territories over which Tribes often do not exercise formal regulatory governance and which are increasingly imperiled by conflicts over water allocation under conditions of mounting scarcity. The failure to formally recognize Tribal cultural uses of ancestral waterways, both practically and in the

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law, continues to marginalize Tribes and Tribal water uses in decision-making over the nation's waterways.

In this paper, I posit that the Clean Water Act contains important mechanisms to advance the exercise of Indigenous cultural sovereignty over ancestral waterways beyond the jurisdictional bounds of Indian country. These mechanisms include calibration of water quality standards to protect Tribes' off-reservation reserved rights to aquatic resources and designation of Tribal cultural uses as uses to be protected through state and federal water quality standards for Tribes' ancestral waterways, including through instream flow standards and other functional flow controls. Though these mechanisms are underappreciated aspects of Clean Water Act administration, there are strong arguments that protecting Tribal reserved rights and cultural uses is legally required in water quality standard-setting, as well as ethically and ecologically imperative. These also function as much-needed pathways toward meaningful co-governance of water resources and exercise of Traditional Ecological Knowledge in regulation of ancestral waterways in furtherance of cultural and ecological continuity.

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I. INTRODUCTION

> Ki-ku (water) is life. Ki-ku is a relation. Ki-ku connects us. Past, present, future. Upstream, downstream. Below ground, above ground. All Ki-ku is connected. All water is connected.
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> - Statement of Tribal Elders, Buena Vista Rancheria of Me-Wuk Indians[1]

> The ownership of water, as a substantive and valuable property, distinct, sometimes, from the land through which it flows, has been recognized by our Courts; and this ownership, of course, draws to it all the legal remedies for its invasion.
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> - *McDonald v. Bear River & Auburn Water & Mining Company*[2]

California is a land defined by water. Drive an hour east of San Francisco into the San Joaquin River Delta—the ancestral homeland of the Miwok, Nisenan, and Maidu people[3]—and you can feel it in the complex of rivers, channels, reservoirs, lakes, and residual wetlands that drain, carve, and periodically inundate the landscape. Water melting from snowpack in the high Sierra Nevada mountains, if left to its own devices, flows through a maze of streams, tributaries, and drainage basins into the mighty Sacramento River in the north or the San Joaquin River meandering from the south.[4] These rivers, California's longest, converge to form the Delta—a vast network of interior floodplains and freshwater marshes from which Sierra snowmelt passes into the Suisun Bay before spilling into the Pacific Ocean via the San Francisco Bay. Together, the San Francisco Bay and San Joaquin Delta (the Bay-Delta) comprise the largest estuary on the west coast of the Americas, home to a vast diversity of plant and animal life and tens of millions of residents.[5]

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1. Emily Moloney, Water Coordinator, Buena Vista Rancheria of Me-Wuk Indians, Presentation before Cal. State Water Res. Control Bd., *June 7, 2023 State Water Resources Control Board Meeting*, at 1:39:59 (YouTube, June 7, 2023), https://www.youtube.com/watch?v=DxfPFqJfSn4.

2. McDonald v. Bear River & Auburn Water & Mining Co., 13 Cal. 220, 232 (1859).

3. *See* Delta Stewardship Counsel, Information Item: California Native American Tribal Listening Session, 1 (Apr. 27, 2023), https://www.deltacouncil.ca.gov/pdf/council-meeting/meeting-materials/2023-04-27-item-10-Tribal-listening-session.pdf.

4. *About the San Francisco Bay-Delta Watershed*, U.S. ENV'T PROT. AGENCY (July 2, 2025), https://www.epa.gov/sfbay-delta/about-watershed.

5. CAL. STATE WATER RES. CONTROL BD., DRAFT STAFF REPORT/SUBSTITUTE ENVIRONMENTAL DOCUMENT IN SUPPORT OF POTENTIAL UPDATES TO THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY FOR THE SACRAMENTO RIVER AND ITS TRIBUTARIES, DELTA EASTSIDE TRIBUTARIES, AND

Today, the Bay-Delta is in a state of ecological and political crisis—over-appropriated, over-diverted, over-simplified, and at risk of calamities like irreversible salinity intrusion and levee collapse.[6] A half century of State and Federal water projects, combined with upstream and in-Delta diversions, has cut the flow of freshwater by half in the average year, and up to 80 percent in dry years.[7] In parts of the Delta and its headwaters, where flows are heavily exported and diversions have scant oversight, waterways sometimes run backward or stop running altogether.[8] Diminished outflows have decimated native fish species, six of which are listed as threatened or endangered, and produced wholesale closures of commercial and recreational fisheries.[9] Pollutant discharge from farms, industry, and cities has vastly altered the biochemical makeup of waterways. With climate change prolonging droughts and creating a hotter, less predictable climate, the pressure on Bay-Delta flows has only intensified. Struggles over Bay-Delta water allocation appear in the California state government's contested proposal to expand Bay-Delta water storage and conveyance infrastructure,[10] in a

DELTA 7.16-2-7.16-4 (2023), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/2023/staff-report/ch07-16-pop.pdf; U.S. ENV'T PROT. AGENCY, *supra* note 4.

6. DELTA STEWARDSHIP COUNCIL, THE DELTA PLAN 3-4, 10-11 (2013), https://deltacouncil.ca.gov/pdf/delta-plan/2013-ch-01.pdf.

7. 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.

8. *See, e.g.*, Ian James, *How a 'Death Trap' for Fish in California's Water System Is Limiting the Pumping of Supplies*, L.A. TIMES (May 2, 2024, at 7:35 AM PT), https://www.latimes.com/environment/story/2024-05-02/inside-the-california-operation-to-keep-water-flowing; Raymond Zhong, *They Abducted a River in California. And Nobody Stopped Them*, N.Y. TIMES (Jan. 23, 2024), https://www.nytimes.com/2024/01/18/climate/california-merced-river-dry.html.

9. Endangered and Threatened Wildlife, 50 C.F.R. § 17.11 (2025); s*ee* CAL. STATE WATER RES. CONTROL BD., DEVELOPMENT OF FLOW CRITERIA FOR THE SACRAMENTO-SAN JOAQUIN DELTA ECOSYSTEM 31-32, 39-40 (Aug. 3, 2010), https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf (discussing evidence of the role of alterations to the natural flow regime in impairing survival and abundance of native Delta fish species).

10. *See, e.g.*, CAL. STATE WATER RES. CONTROL BD., NOTICE OF ASSIGNMENT AND PRE-HEARING CONFERENCE (June 19, 2024), https://www.waterboards.ca.gov/water_issues/programs/administrative_hearings_office/docs/2024/2024-06-19-dcp-notice-of-assignment.pdf (initiating hearings on California Department of Water Resources application for changes in water rights to construct and operate 45-mile underground tunnel to convey Sacramento River water south of the Delta); CAL. STATE WATER RES. CONTROL BD.,

pending Federal investigation into the State's violations of the civil rights of Tribal Nations and communities of color in its governance of Bay-Delta water quality,[11] and in a controversial decision by the U.S. Bureau of Reclamation in December 2025 to increase exports of Delta waters by up to 400,000 acre-feet per year.[12]

In the crosshairs of these struggles are Tribal Nations who have considered Bay-Delta waters their lifeblood for thousands of years. Before Spanish soldiers and Franciscan missionaries began building the Spanish mission system in the late 1700s, hundreds of thousands of Native peoples stewarded the waterways and the life they sustained from the headwaters of the Delta to the receiving waters of the Bay.[13] Though the American Indian population declined considerably under Spanish, Russian, and Mexican colonization,[14] the beginnings of California statehood in the 1850s initiated a period of State violence so deliberate and vast that California's Governor recently labeled it "genocide" in a formal apology to California Tribes.[15] In addition to erecting racial codes that denied

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AMENDED NOTICE OF PUBLIC HEARING AND PRE-HEARING CONFERENCE (June 5, 2024), https://www.waterboards.ca.gov/water_issues/programs/administrative_hearings_office/docs/2024/2024-06-05-amended-notice-of-public-hearing.pdf (initiating hearings on application for new water right to divert 1.5 million acre feet per year from Sacramento River and its tributaries to new reservoir).

11. *See* Shingle Springs Band of Miwok Indians et al., Title VI Complaint and Petition for Rulemaking for Promulgation of Bay-Delta Water Quality Standards (U.S. Env't Prot. Agency Dec. 16, 2022), available at https://www.restorethedelta.org/wp-content/uploads/2022-12-16-Bay-Delta-Complaint-and-Petition.pdf [hereinafter "Title VI Complaint"]. The Title VI Complaint and related communications and decisions are also available on the U.S. Environmental Protection Agency's External Civil Rights Docket at https://www.epa.gov/external-civil-rights/external-civil-rights-docket.

12. U.S. BUREAU OF RECLAMATION, RECORD OF DECISION: LONG-TERM OPERATION OF THE CENTRAL VALLEY PROJECT AND STATE WATER PROJECT 4 (Dec. 4, 2025), https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=57167 (providing for increase in annual Central Valley Project water deliveries by up to 180,000 acre-feet and State Water Project deliveries by up to 220,000 acre-feet over the approved 2024 plan). The Record of Decision purports to respond to Executive Order 14181, issued in the first days of the second Trump Administration, directing the Secretary of Interior to increase deliveries of Delta water. Exec. Order No. 14181, *Emergency Measures to Provide Water in California and Improve Disaster Response in Certain Areas*, 90 Fed. Reg. 8747 (Pres. Jan. 24, 2025).

13. BENJAMIN MADLEY, AN AMERICAN GENOCIDE: THE UNITED STATES AND THE CALIFORNIA INDIAN CATASTROPHE 1846-1873 16-32 (2016).

14. *Id.* at 3.

15. Jill Cowan, '*It's Called Genocide': Newsom Apologizes to the State's Native Americans*, N.Y. TIMES (July 19, 2019), https://www.nytimes.com/2019/06/19/us/newsom-native-american-apology.html; *see* Cal. Exec. Order N-15-19 (2019) (apologizing for the "many instances of violence, maltreatment and neglect California inflicted on Tribes"); *see generally*

Indians citizenship, freedom of movement, participation in politics, and access to courts and funding campaigns of Indian slaughter, the newly established State government persuaded the U.S. Senate to adopt a policy of refusing to ratify treaties with California Tribes.[16] This history has produced a fractured patchwork of Indian country in the Bay-Delta, comprised largely of scattered rancherias established in the 20th century. These rancherias are often distant from ancestral waterways, covering only a fraction of negotiated reservations and an even smaller fraction of ancestral lands.[17] Tribes throughout the Bay-Delta nevertheless persist in ceremonial, spiritual, subsistence, and other cultural water uses intrinsic to Tribal law, identity, and the exercise of Tribal cultural sovereignty.[18] They do so despite obstacles to accessing ancestral waterways, the "slow violence" of water quality degradation,[19] and loss of culturally central fish, wildlife, and plant species dependent on water flows.

This paper situates water quality degradation like that seen in the Bay-Delta—including impairment of water flows—as an expression of colonialism. Parallel to the de jure erasure of Indigenous culture throughout much of the 19th and into the 20th centuries, degradation of water quality under the regulatory oversight of State and Federal authorities constitutes a form of cultural hegemony, marked by the suppression of Tribal cultural uses of ancestral waterways and the exclusion of Tribes from water governance. Undoing this harm will require locating robust mechanisms for Tribal Nations to take the lead in safeguarding cultural uses of ancestral waterways, particularly in the face of increasing water scarcity.

This paper turns to the federal Clean Water Act of 1972 for solutions. The thesis of this paper is that even as it bears the imprint of colonial histories, the Clean Water Act enables—and in many

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MADLEY, *supra* note, at 13.

16. *See infra* Part II.B.

17. *See id.* References in this paper to "Indian country" are to "Indian country" as defined by federal statute, which includes, *inter alia*, all reservation land and Indian allotments. *See* 18 U.S.C. § 1151 (Westlaw 2025).

18. By "cultural water uses," I mean to include subsistence, ceremonial, spiritual, and other traditional and customary practices rooted in the distinct and evolving traditions of Tribal communities. *See infra* Part IV.B. For a rich discussion on Tribal "culture" as foundation for Tribal sovereignty, *see* Wallace Coffey & Rebecca Tsosie, *Rethinking the Tribal Sovereignty Doctrine: Cultural Sovereignty and the Collective Future of Indian Nations*, 12 STAN. L. & POL'Y REV. 191 (2001).

19. *See* ROB NIXON, SLOW VIOLENCE AND THE ENVIRONMENTALISM OF THE POOR 2 (2011).

instances requires—recognition and protection of Tribal cultural water uses, and integration of Tribes as co-regulators, in ways that can soften that imprint.[20] Previous scholarship has examined the consequences for Tribal self-determination of 1987 amendments that authorize qualifying federally recognized Tribes to be treated in the same manner as States for purposes of promulgating water quality standards within their territorial jurisdiction.[21] This paper extends that literature to locate possibilities for protection of Tribal water uses through State and Federal water quality standards *beyond* Tribes' territorial jurisdiction.[22] Doing so, I contend, is legally and morally imperative—particularly in states like California where refusal to enter into treaty relationships with Tribes has sharply contracted Indian country and made continued Tribal uses of ancestral waterways especially vulnerable. Protecting Tribal water uses through water quality standards also requires the leadership and active collaboration of Tribes to shape water quality controls attentive to evolving cultural water uses and Indigenous knowledge of watershed ecology and water flows.

This paper proceeds in four parts. Part II uses the Bay-Delta as a case study to examine relational meanings of water and water-based practices in the traditions of Native communities, which contrast with the notion of water as property encoded in Western water law. This part then touches on the colonial history of California in its early decades of statehood to show how differentiated Tribal claims to regulatory authority and protections for cultural practices under the Clean Water Act emerged.

Part III introduces the Clean Water Act as a vehicle for repair. It first considers the legislative history and structure of the Act's

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20. *See generally infra* Part III.A.

21. *See, e.g.*, Elizabeth Ann Kronk Warner, *Tribes as Innovative Environmental "Laboratories*," 86 U. COLO. L. REV. 789, 855 (Apr. 14, 2015); William H. Rodgers Jr., *Treatment as Tribe, Treatment as State: The Penobscot Indians and the Clean Water Act*, 55 ALA. L. REV. 815, 843 (2004); Edmund J. Goodman, *Indian Tribal Sovereignty and Water Resources: Watersheds, Ecosystems and Tribal Co-Management*, 20 J. LAND, RES. & ENV'T L. 185 (2000); James M. Grijalva, *Ending the Interminable Gap in Indian Country Water Quality Protection*, 45 HARV. ENV'T L. REV. 1, 3 (2021).

22. In a similar vein, Professor Michelle Bryan has considered amendment of State water codes to protect sacred Tribal water uses. Michelle Bryan, *Valuing Sacred Tribal Waters Within Prior Appropriation*, 57 NAT. RES. J. 139, 179 (2017). And environmental attorney Paula Goodman Maccabee has considered how Section 401 of the Clean Water Act could be used to protect Tribal reserved rights in ceded territories. Paula Goodman Maccabee, *Tribal Authority to Protect Water Resources and Reserved Rights Under Clean Water Act Section 401*, 41 WM. MITCHELL L. REV. 618 (2015).

water quality standards provisions, which reveal a Congress focused on restoring non-consumptive values in water. Next, it argues that Congress intended to provide for the regulation of water quantity as a dimension of water quality, even if doing so will have incidental effects on the exercise of state water rights. This part then examines the expansion of the Act's horizontal federalism to embrace Tribes as co-regulators with primary authority over water quality in Indian country and considers the consequences of this authority for Tribal self-determination and protection of cultural water uses within Tribes' territorial jurisdiction.

Part IV turns to applications of the Clean Water Act to protect Tribal cultural uses of water outside Indian country. This part examines two pathways where this work is already happening through the Clean Water Act: (1) Federal insistence that States harmonize their water quality standards with Tribal reserved rights, as codified in a rule promulgated by the U.S. Environmental Protection Agency (EPA) during the Biden Administration,[23] and (2) proposals by California Tribes, taken up by State regulators, to designate Tribal cultural practices as protected uses for the Bay-Delta watershed and other waterbodies throughout the state. Together, these pathways show that States already have obligations to integrate protections for Tribal cultural uses into water quality controls outside Indian country, as well as broad discretion to determine how best to do so—discretion that they should exercise in service of cooperative governance with Tribes.

Part V considers implications of applying the Clean Water Act to protect Tribal cultural uses of ancestral waterways for Tribal political autonomy and self-determination. Attentive to the risks of coopting Tribes into a dominant legal framework and codifying bias in regulation, this Part argues that consistency with the principle of Tribal self-determination requires sustained, collaborative partnership with Tribal Nations and Native people when integrating Tribal cultural uses into water quality standards. This part also considers the benefits of this partnership for developing instream flow criteria informed by Traditional Ecological Knowledge[24]—criteria which this paper posits will be uniquely suited to restoring

23. Water Quality Standards Regulatory Revisions to Protect Tribal Reserved Rights, 89 Fed. Reg. 35717 (May 2, 2024) (to be codified at 40 C.F.R. pt. 131); *see infra* Part IV.A. (discussing pending litigation over the rule).

24. For discussion of Traditional Ecological Knowledge (TEK) and its role in collaborative resource governance, see *infra* Part V.

watershed health and human relationships with waterways in the face of mounting water scarcity and climate change.

This paper makes three contributions to existing scholarship: First, it shows how Tribal rights to use and govern water continue to be mediated by historic injustice and colonial behaviors. Second, it argues that fulfilling the ameliorative purposes of the Clean Water Act and respecting constitutional obligations to Tribes with reserved rights requires weaving protections for Tribal cultural uses into State and Federal water quality standards. Third, this examination investigates how environmental statutes organized around cooperative federalism can foster cultural pluralism. The vision of cultural pluralism I offer accommodates Tribes' unique claims to cultural continuity rooted in ancestral lands and waters as well as their participation in co-designing regulations that will provide for this continuity. This examination adds to an emerging body of scholarship on Tribal co-governance of ancestral lands and waters by revealing possibilities within cooperative federalist statutes.[25]

II. COLONIZATION OF WATER

It is well-documented that public lands and conservation laws and policies "went hand-in-hand with policies that eliminated American Indian presence on the land."[26] The same can be said of the development of water law in western states, which similarly denied inherent authority of Tribal Nations to organize relationships with water in ancestral lands and made legally invisible the prior use of waterways by Tribes since time immemorial. Applying this lens, it becomes possible to more clearly see the plural ontological

25. *See, e.g.*, Gerald Torres, *Decolonization: Treaties, Resources Use, and Environmental Conservation*, 91 U. COLO. L. REV. 709 (2020); Charles Wilkinson, *"At Bears Ears We Can Hear the Voices of Our Ancestors in Every Canyon and on Every Mesa Top": The Creation of the First Native National Monument*, 50 ARIZ. ST. L.J. 317 (2018); Kekek Jason Stark, et al., *Re-Indigenizing Yellowstone*, 22 WYO. L. REV. 397 (2022).

26. Sarah Krakoff, *Public Lands, Conservation, and the Possibility of Justice*, 53 HARV. C.R.-C.L. L. REV. 213, 228 (2018). For several of the many accounts of the role of federal land and conservation policies in dispossessing American Indians and undercutting Tribal sovereignty, *see* Sarah Krakoff, *Settler Colonialism and Reclamation: Where American Indian Law and Natural Resources Law Meet*, 24 COLO. NAT. RESOURCES, ENERGY & ENV'T L. REV. 261, 262 (2013); MICHAEL ALBERTUS, LAND POWER: WHO HAS IT, WHO DOESN'T, AND HOW THAT DETERMINES THE FATE OF SOCIETIES 65, 71 (2025); MARK DAVID SPENCE, DISPOSSESSING THE WILDERNESS: INDIAN REMOVAL AND THE MAKING OF THE NATIONAL PARKS (1999).

meanings of water that competed in the decades of western expansion, as well as the selective ratification by the courts of a conception of water as property to which rights could attach. The making of property in water was, in Professor Robert Cover's parlance, a story of "pain and death,"[27] as proponents of an extractive mining economy persuaded the courts to reify principles that served their commercial purposes, eclipsing alternative interpretations antithetical to Western notions of property. Putting the making of property in water in historical context reveals the selective elevation of these meanings by courts and legislatures to be neither inevitable nor complete; Tribal Nations continue to engage with water and enact formal and informal law governing relationships with water which challenge the foundation of Western water law.

This section lays the groundwork for the ensuing discussion of the Clean Water Act. First, it considers customary Tribal water uses as expressions of norms, law, and identity. In this way, demands for recognition of Tribal cultural uses of water can be understood, in the language of philosopher James Tully, as "aspirations for appropriate forms of self-government"—that is, to exercise the community's own law and tradition.[28] Next, I touch on the history of state and federal Indian policy in the early decades of California statehood and its relationship to the development of water law. This account shows that the law of prior appropriation—hammered out in California gold mining camps and adopted by the courts to organize claims to consumptive uses of water—went hand-in-hand with the exclusion of Tribes from ancestral homelands and suppression of Tribal relational values in water. At the same time, state and federal action severely contracted Indian country in California, resulting in limited and uneven Tribal jurisdiction over ancestral waterways. These colonial processes produced highly varied territorial sovereignty between Tribes—some obtained reservation lands covering parts of ancestral waterways, others were left with shards of trust land removed from ancestral waterways entirely, and many lacked federal recognition and therefore formal territorial sovereignty altogether. This history shows why statutory amendments authorizing Federal regulators to treat Tribes in the same manner as States for water quality regulation (so-called Treatment-as-a-State,

27. Robert M. Cover, *Violence and the Word*, 95 YALE L.J. 1601, 1601 (Jul., 1986) (making a broader point about the centrality of violence to legal interpretation).

28. JAMES TULLY, STRANGE MULTIPLICITY: CONSTITUTIONALISM IN AN AGE OF DIVERSITY 4 (1995).

or "TAS" authority)[29] and the reserved rights doctrine[30] have limited reach for Tribes in California, as throughout much of the country.

In this section, I focus on the experiences of Tribes in the California Bay-Delta. This is not because the Bay-Delta is a singular site of suppression of Indigenous water practices or struggles for cultural self-preservation. Far from it.[31] Rather, considering the immense diversity of Tribal Nations, cultural practices, and colonial experiences, it is useful to embed this account in a specific geographic. The Bay-Delta also supports the case for integrating Tribal cultural uses into state water quality standards. At least twenty-one Tribal Nations, eleven of which are federally recognized, connect their histories to the Sacramento-San Joaquin Delta and continue to rely on Delta waterways and riparian resources for cultural, ceremonial, and subsistence practices.[32] Like all other Tribes in the state, Bay-Delta Tribes do not have treaty protections for water uses or fishing and gathering activities, and they have limited land bases in which to exercise regulatory jurisdiction. Consequently, as will be explored in Part IV, Tribes in California have led the way in showing that state water quality standards can and should be used to protect Tribal cultural water uses beyond Tribes' territorial jurisdiction.

A. *Water as Life*

All uses of water communicate meaning. This is because, as Professor Robert Cover has taught, each of us, inescapably, "inhabit[s]

29. *See Tribes Approved for Treatments as a State*, U.S. ENV'T PROT. AGENCY, *(TAS)*, https://www.epa.gov/Tribal/Tribes-approved-treatment-state-tas. *See* discussion *infra* Part III.C.

30. *See* discussion *infra* Part IV.A.

31. For discussion of a few of the countless examples of struggles for Indigenous water governance beyond the Bay-Delta, see, for instance, Robin Kundis Craig, *Tribal Water Rights and Tribal Health: The Klamath Tribes and the Navajo Nation During the COVID-19 Pandemic*, 16 ST. LOUIS U. J. HEALTH L. & POL'Y 35, 45-50 (2022); Allison M. Dussias, *At the Margins: Border Tribes' Struggles to Protect Reservation Lands, Waters, and Communities*, *in* TRIBES, LANDS, AND THE ENVIRONMENT 120-30 (Sarah Krakoff & Ezra Rosser, eds., 2012); Jennifer Harkovich, Note, *Arizona v. Navajo Nation and Systemic Failures in the Tribal Water Allocation Scheme*, 35 FORDHAM ENV'T L. REV. 30, 30-31 (2024).

32. *See, e.g.*, Delta Protection Commission, Management Plan: Sacramento-San Joaquin Delta National Heritage Area, Public Review Draft 27 (Feb. 5, 2024), https://delta.ca.gov/wp-content/uploads/2024/02/DeltaNtnlHrtgAreaDrftMngmnt-Plan508.pdf. Many more Tribal Nations, including the Winnemem Wintu Tribe whose leaders are cited below, have homelands in the headwaters of the Delta.

a *nomos*–a normative universe. We constantly create and maintain a world of right or wrong, of lawful and unlawful, of valid and void."[33] Practices, from the everyday act of sipping a glass of water or going for a swim, to spiritual ceremonies involving immersion in water, are only legible when understood in relation to this normative universe. Thus, as Cover observed, "[t]here is a difference between sleeping late on Sunday and refusing the sacraments, between having a snack and desecrating the fast on Yom Kippur, between banking a check and refusing to pay your income tax."[34] Such practices take on ritualistic and normative significance only within a unique cultural context.

When communities develop rules or norms governing uses of water, they engage in a process that Cover refers to "jurisgenesis," or the creation of legal meaning. It is a mistake to view customary practices or rituals as "less than true peers of the 'real' law, assumed to consist of positive enactments such as statutes and constitutions or pronouncements from government officials such as judges."[35] Rather, it is cultural communities—or, in Cover's parlance, "autonomous interpretive communities"—which generate legal meaning. The political state does not so much produce meaning as selectively elevate or suppress it when the state engages in judicial interpretation and other acts of formal lawmaking or when it exercises more direct forms of institutional violence.[36] Indeed, the diminishment of Indigenous custom as "crude," "primitive," and superstitious has been deployed throughout the development of Federal Indian Law to justify political and cultural subjugation of Native Peoples.[37]

When custom and ritual are dignified as law, it becomes easier to understand the significance of water-based practices in Native

33. Robert M. Cover, *The Supreme Court, 1982 Term – Forward: NOMOS and Narrative*, 97 HARV. L. REV. 4, 4 (1983).

34. *Id.* at 8.

35. Judith Resnik, *Living Their Legal Commitments: Paideic Communities, Courts, and Robert Cover*, 17 YALE J.L. & HUMAN. 17, 24-25 (2005).

36. *See id.* (observing that "[t]he jurisgenerative principles by which legal meaning proliferates in all communities never exist in isolation from violence. Interpretation always takes place in the shadow of coercion.").

37. *See* United States v. Sandoval, 23 U.S. 28, 39 (1913) (identifying Pueblo people as Indians subject for purpose of exercise of federal power over their lands because they were "[a]lways living in separate and isolated communities, adhering to primitive modes of life, largely influenced by superstition and fetichism, and chiefly governed according to the crude customs inherited from their ancestors."); *see* Johnson v. M'Intosh, 21 U.S. 543, 590 (1823) (portraying Tribes as "fierce savages, whose occupation was war, and whose subsistence was drawn chiefly from the forest" in subjugating aboriginal to federal title).

traditions as well as the depth of injury to Tribal autonomy when such practices are suppressed. Tribal Nations engaged in jurisgenesis for millennia before colonial occupation. This meaning-making continues as Tribal Nations reconstitute Native identity and reconsolidate Tribal authority in the wake of a centuries-long campaign of genocide and cultural suppression.[38]

In contrast to the Western view of water "as a resource" or a "commodity to be bought and sold," the traditions of many North American Tribal Nations consider water a living entity with spiritual qualities.[39] Anishinabek scholar Deborah McGregor records that the First Nation elders she interviewed in Ontario, Canada reported "without exception . . . that water *is* life. Elders did not state merely that water is closely associated with life, or that it is part of life, but rather that water is life itself."[40] A similar ontological view is reflected in the statement quoted above by elders of the Buena Vista Rancheria of Me-Wuk Indians, whose ancestral territory spans the lower San Joaquin River, and who describe water as a living entity, relation, and connector.[41] As Professor Rebecca Tsosie has explained, these relational conceptions of water prominent in Indigenous societies are rooted in epistemologies which tend to "operate within a holistic understanding of the rules and responsibilities that govern the relations between people and all components of the natural world, whether human or non-human."[42]

For many Native communities in the Bay-Delta and its headwaters, water flows and the practices they support are constitutive of Tribal identity. Addressing major confluences of waterways in her Tribe's ancestral homelands in the Delta, Vice Chair of the Shingle

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38. *See* Rebecca Tsosie, *Indigenous People and Environmental Justice: The Impact of Climate Change*, 78 U. COLO. L. REV. 1625, 1664 (endorsing the view that "indigenous claims to sovereignty are unique in the sense that they are primarily a 'jurisgenerative demand on the part of indigenous peoples to live by a law of their own choosing and creation'" (quoting Robert A. Williams, Jr., *Sovereignty, Racism, Human Rights: Indian Self-Determination and the Post-Modern World Legal System*, 2 REV. OF CONST. STUD. 146, 149 (1995))).

39. Deborah McGregor, *Tradition Knowledge and Water Governance: The Ethic of Responsibility*, 10 ALT.: AN INT'L J. INDIGENOUS PEOPLES 493, 496 (2014).

40. *Id.* at 501; *see also* Nicole J. Wilson & Jody Inkster, *Respecting Indigenous Water Governance, Ontologies, and the Politics of Kinship on the Ground*, 1 ENV'T & PLANNING E: NATURE & SPACE 516, 524 (2018) (reporting that Yukon First Nations elders spoke of water "as a living entity, with the person-like quality of agency referred to as a 'spirit.' From this perspective water not only enables human life by meeting physical needs, but water *is* life or alive.").

41. *See* Moloney, *supra* note 1.

42. Rebecca Tsosie, *Indigenous Peoples and Epistemic Injustice: Science, Ethics, and Human Rights*, 87 WASH. L. REV. 1133, 1138 (2012).

Springs Band of Miwok Indians Malissa Tayaba explains: "These confluences are not only the location of important village sites; they also symbolize the interconnectivity of our rivers, mirroring our interconnectivity with the water and the life it gives to us, the land, and all living beings."[43] Further north, in the headwaters of the Bay-Delta, the Winnemem Wintu Tribe draws its name and collective identity from the water that flows through the Tribe's ancestral homelands: Winnemem Wintu translates literally to Middle Water People.[44]

Such conceptions of water express an ethic of mutual responsibility governing the relationship between people and the water.[45] This ethic is taught through the creation story of the Winnemem Wintu Tribe. As told by Winnemem Wintu government liaison Gary Mulcahy (Ponte Tewis), the Winnemem Wintu "were brought forth from a sacred spring on Mt. Shasta."[46] Initially, the Winnemem were helpless and voiceless:

But the Salmon, which we call the *Nur*, took pity on us and gave us their voice, and in return we promised to always speak for them. Side by side, the Winnemem Wintu and the *Nur* have depended on each other for thousands of years — the Winnemem speaking and caring for and trying to protect the salmon, and the salmon giving of themselves to the Winnemem to provide sustenance throughout the year.[47]

The ethic this tradition describes has been characterized as a "kincentric ecology," which understands people and non-human relatives "as part of extended networks of kinships or kin

43. Declaration of Vice Chair Malissa Tayaba, ¶ 9 [hereinafter "Tayaba Decl."], Attachment A to Little Manila Rising et al., Petition for Rulemaking to Review and Revise Bay-Delta Water Quality Standards (Cal. State Water Res. Control Bd. May 24, 2022), included as Exhibit E to Title VI Complaint, *supra* note 11.

44. Declaration of Gary Mulcahy, ¶ 3 [hereinafter "Mulcahy Decl."], Attachment B to Little Manila Rising et al., Petition for Rulemaking to Review and Revise Bay-Delta Water Quality Standards (Cal. State Water Res. Control Bd. May 24, 2022), included as Exhibit E to Title VI Complaint, *supra* note 11.

45. *See* Kyle Whyte, *Indigenous Environmental Movements and the Function of Governance Institutions*, *in* OXFORD HANDBOOK OF ENVIRONMENTAL POLITICAL THEORY 564, 570 ("Water . . . has responsibilities to humans and other forms of life as a party within a system of relationships."); McGregor, *supra* note 39, at 501 ("First Nations are not simply concerned about water, but have specific responsibilities to protect water."); *see* Sibyl Diver, Mehana Vaughan, Merrill Baker-Médard, and Heather Lukacs, *Recognizing 'Reciprocal Relations' to Restore Community Access to Land and Water*, 13 INT'L J. OF THE COMMONS 400, 403-06 (2019) (reviewing literature on ethic of reciprocity in Indigenous place-based epistemologies).

46. Mulcahy Decl., *supra* note 44, at ¶ 5.

47. *Id.*

relationships."[48] In Native communities that hold a kincentric view of water and the life it supports, this belief system gives rise to "specific protocols or rules for behavior in relation to water."[49] These include ceremonial practices "as a way to show respect for water."[50] For instance, members of the Shingle Springs Band craft regalia using resources collected at traditionally important sites along Delta waterways for ceremonial practices.[51] Members of the Winnemem Wintu Tribe practice respect for water through blessings that involve cupping water from the river in their hands and placing it on their heads and hearts.[52] The Winnemem Wintu coming of age ceremony requires girls to swim across the river to a sacred rock.[53] Winnemem "[c]eremonies, songs, dances, and prayers" center the relationships between the salmon and the Winnemem, expressing a responsibility for mutual caretaking.[54]

Tribal identity and law are also bound up in the life that water flows sustain. In the Bay-Delta, as throughout much of the American west, fish and, in particular, salmon "are crucial for native peoples' sustenance" and for "subsistence, in the sense of a culture or way of life with economic, spiritual, social, and physical dimensions."[55] In the words of Winnemem Wintu Chief Caleen Sisk, "if the salmon are going extinct, we can only guess that so will we."[56]

B. *Water as Property*

Development of both California Indian policy and state water law has beyond a doubt "taken place in a field of pain and death.'"[57]

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48. Wilson & Inkster, *supra* note 40, at 524; *see also* Rebecca Tsosie, *Tribal Environmental Policy in an Era of Self-Determination*, 21 VT. L. REV. 225, 330 (1996) (identifying in "indigenous systems of ethics" a "focus on values of community, connectedness, a relationship to specific geographic places, a relationship to future generations, and reciprocity with the natural world").

49. Wilson & Inkster, *supra* note 40, at 525.

50. *Id.*

51. Tayaba Decl., *supra* note 43, at ¶ 10.

52. Mulcahy Decl., *supra* note 44, at ¶ 32

53. *Id.*

54. *Id.*

55. Catherine O'Neill, *Variable Justice: Environmental Standards, Contaminated Fish, and "Acceptable" Risk to Native Peoples*, 19 STAN. ENV'T L.J. 3, 5 (2000).

56. Little Manila Rising et al., Petition for Rulemaking to Review and Revise Bay-Delta Water Quality Standards 49 (Cal. State Water Res. Control Bd. May 24, 2022), Exhibit E to Title VI Complaint, *supra* note 11.

57. Sarah Krakoff, *Law, Violence, and the Neurotic Structure of American Indian Law*, 49 WAKE FOREST L. REV. 743, 744 (2014) (quoting Cover, *supra* note 27, at 1601); *see* Cover,

Providing anything close to an adequate account of the history is beyond the scope of this paper. In touching on this history, my purpose here is to show how state violence is woven into California water law and mediates Tribes' ability to claim rights to water under both state and federal law. This history also explains why Tribes are differentially situated in relation to the Clean Water Act depending on the presence and location of trust lands.

In the first decades of statehood, California law toggled between racial paradigms that borrowed ideas from the antebellum south to facilitate the extraction of coerced labor from Native people and that aimed to erase Native identity and sovereignty altogether.[58] In 1849, California's Constitutional Convention expressly denied Native people the right to vote, jettisoning Mexican laws that had enfranchised Indians.[59] The following year, the California Legislature adopted, in its first legislative session, a law ironically titled "Act for the Government and Protection of Indians," which, among other things, provided for Indian children to be separated from their families; authorized Indian convict leasing; legalized corporal punishment of Indians; authorized "white person[s]" to divest Indians from their land; excluded Indian testimony against a "white man" in criminal proceedings; authorized arrest of Indians for vagrancy; and outlawed cultural burning practices.[60] In

supra note 27, 1601 (arguing that legal interpretation both "occasion[s] the imposition of violence upon others" and "constitute justifications for violence which has already occurred or which is about to occur.").

58. *See, e.g.*, Kimberly Johnston-Dodds, *Early California Laws and Policies Related to California Indians*, CAL. RSRCH. BUR. 6, 8-12 (Sep. 2002), https://tribalaffairs.ca.gov/wp-content/uploads/sites/10/2024/11/2002-Early-California-Laws-and-Policies-Related-to-California-I.pdf (describing early California statutes which defined Indian racial identity according to blood quantum and provided for enslavement of Indians); MADLEY, *supra* note 13, at 145-56 (discussing creation of statewide Indian pass system that resembled the contemporaneous slave pass system in the antebellum south); Advisory Council on Cal. Indian Policy, The ACCIP Historical Overview Report: The Special Circumstances of California Indians 6-7 (1997) (documenting State policy in 1850s and 60s California which "resembled the 'black codes' adopted by the slave states as a means to control both free blacks and bondsmen."); Gerald Torres, *Nepantla/Coatlicue/Conocimiento*, 121 MICH. L. REV. 1147, 1153 (2023) (describing the California Legislature's efforts to define whiteness "as a technique to control and discipline a population whose agency was feared.")

59. Cal. Const. art. II, § 1 (1849) (extending the franchise to "[e]very white male citizen" over the age of 21 while allowing for the Legislature to admit Indians and their descendants to the suffrage by a two-thirds concurrent vote); *see* MADLEY, *supra* note 13, at 149-56 (discussing contentious debates about Indian enfranchisement during the California Constitutional convention).

60. An Act for the Government and Protection of Indians, 1850 Cal. Stat. 408-10, §§ 14, 16, 20 (1850); MADLEY, *supra* note 13, at 158.)

practical effect, the law codified a system of Indian slavery in colonial California.[61] Subsequent laws ensured the exclusion of Indians from participation in the legal system by barring Indians from serving on juries, as witnesses in civil and criminal proceedings, and as attorneys.[62]

In parallel, the State government rejected the federal policy of treating with Tribal Nations as political sovereigns and of consolidating Tribal homelands through treaties.[63] Between 1851 and 1852, the federal government negotiated with—or compelled—Tribes in California to sign eighteen treaties providing for cession of all ancestral lands (presumed to encompass the entire state of California) in exchange for 8.5 million acres of reservation land.[64] But in February 1852, the California State Senate concluded that the fully executed treaties "committed an error in assigning large portions of the richest mineral and agricultural lands to the Indians, who did not appreciate the land's value."[65] At the behest of the State Senate delegation, in a secret session, the U.S. Senate refused to ratify the treaties and placed them "under an injunctive of secrecy" which was not lifted for 53 years, well after termination of the treaty-making period in 1871.[66] With treaties off the table, state-funded massacres of California Indians accelerated in the decades that followed.[67] Meanwhile, new federal laws encouraged

61. *See* Advisory Council on Cal. Indian Policy, *supra* note 58, at 6.

62. MADLEY, *supra* note 13, at 159-60.

63. *See* Michael C. Blumm, *Retracting the Discovery Doctrine: Aboriginal Title, Tribal Sovereignty, and Their Significance to Treaty-Making and Modern Natural Resources Policy in Indian Country*, 28 VT. L. REV. 713 (2004); *Cf.* Torres, supra note 58, at 1151 (describing treaty tradition inherited from British colonialism as "a device for regulating Native people even as the wars of extermination continued").

64. Advisory Council on Cal. Indian Policy, *supra* note 58, at 5. Other accounts put the amount of treaty-reserved land at 7.5 million acres. *See* Johnston-Dodds, *supra* note 58, at 23; MADLEY, *supra* note 13, at 165 (recording 19 reservations totaling 7,488,000 acres); William Wood, *The Trajectory of Indian Country in California: Rancherias, Villages, Pueblos, Mission, Ranchos, Reservation, Colonies, and Rancherias*, 44 TULSA L. REV. 317, 339 n. 119 (2008) (reasoning that the discrepancy in these estimates "might be explained by the fact that the lands ceded in these treaties were unspecified").

65. *A History of American Indians in California: 1849-1879*, NAT'L PARK SERV., https://www.nps.gov/parkhistory/online_books/5views/5views1c.htm (last visited Aug. 1, 2025).

66. *In re* Wilson, 30 Cal. 3d 21, 33 (1981); *see* Nell Jessup Newton, *Federal Power Over Indians: Its Sources, Scope, and Limitations*, 132 U. PA. L. REV. 195, 206 n. 55 (1984).

67. *See* MADLEY, *supra* note 13, at 170-72. In March 1853, Congress authorized establishment of five short-lived military reservations for California Indians, amounting to not more than one sixtieth of the acreage promised by the treaties and without full army protection. *Id.* at 170. In 1864, Congress passed the Four Reservations Act, though only three

settlement by white settlers of unceded Tribal lands. The 1862 Homestead Act, for example, granted adult citizen heads of households 160 acres of public lands after five years of continuous residence; citizenship was not available to most American Indians until 1924.[68] The combined result of these and other policies was that, as U.S. Indian Affairs Commissioner John Collier recounted in 1935, California Indians "were totally deprived of land rights. They were outlawed and all treated as wild animals, shot on sight . . . Their life was outlawed and their whole existence was condemned . . . and they died."[69]

Once the eighteen unratified treaties were made public in 1904, Congress responded to public pressure to address the severe distress of California Indians by appropriating funds to acquire isolated parcels for "homeless California Indians."[70] By this point, the California Indian population had been reduced by formal estimates to only 16,000 people, many or most of whom lacked permanent homes.[71] The land acquisition program led to the creation of around 82 scattered rancherias, many of which did not "provide proper home sites, irrigable land, water supply, and other necessities" and which were often distant from ancestral homelands and village sites.[72] Allotment and termination further fractured reserved lands.[73]

The situation of Tribes in the Delta is illustrative. Following the

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reservations—the Hoopa Valley, Tule River, and Round Valley Reservations—were created. Advisory Council on Cal. Indian Policy, *supra* note 58, at 7. According to MADLEY, the "legal exclusion of California Indians from California society," combined with the government's refusal to create a durable reservation system in the state, "was a crucial enabler of mass murder." MADLEY, *supra* note 13, at 171.

68. The Homestead Act of 1862, ch. 75, 12 Stat. 392, repealed by Pub. L. No. 94-579, tit. VII, § 702, 90 Stat. 2787 (1976); Indian Citizenship Act of 1924, Pub. L. No. 68-175, ch. 232, 43 Stat. 253 (codified as amended at 8 U.S.C. § 1401 (2012)).

69. MADLEY, *supra* note 13, at 171 (quoting U.S. Senate, Hearings Before the Committee on Indian Affairs 6, 74th Cong. 1st Sess. on S. 1793 (1935)).

70. *Id.*

71. Edward D. Castillo, *Short Overview of California Indian History*, CAL. NATIVE AM. HERITAGE COMM'N, https://nahc.ca.gov/native-americans/california-indian-history/ (last visited Aug. 1, 2025); *see* County of Amador v. U.S. Dep't of Interior, 872 F.3d 1012, 1015 (9th Cir. 2017) (recounting that by 1900 "most Native Americans lived either in remote settlements or on the edges of towns. They were largely destitute and often lacked permanent homes.").

72. Advisory Council on Cal. Indian Policy, *supra* note 58, at 12.

73. *Id.* at 13-14. The 1958 federal Rancheria Act terminated 38 California Rancherias, 27 of which have since been restored by court decision or settlements and two others by Congress. Advisory Council on Cal. Indian Policy, The Continuing Destructive Effects of the Termination Policy on California Indians 18 (Sept. 1997).

Senate's refusal to ratify treaties with California Tribes, Tribes in the Delta, as throughout most of the state, lacked federally recognized land reservations.[74] In 1915, the Department of Interior's Bureau of Indian Affairs dispatched Special Agent John Terrell to identify homeless Indians and negotiate land purchases for their benefit.[75] In 1920, the Department purchased a 160-acre landlocked rancheria for the displaced Shingle Springs Band of Miwok Indians, located roughly 40 miles from the Tribe's ancestral villages on the Sacramento River."[76] The rancheria land of the Me-Wuk Indians of Buena Vista Rancheria comprises 67 acres set aside in trust in 1927.[77] Other Delta Tribes fared less well. Terrell reached an agreement in 1915 to purchase 40 acres for the Ione Band, but the transaction was never consummated.[78] It was not until 2012 that the Department of Interior agreed to set aside land in trust for the Band south of the Shingle Springs Rancheria.[79] Further south, the Chicken Ranch Rancheria of the Me-Wuk Indians comprises only 2.85 acres.[80] The Department of Interior set aside land in trust for the Auburn Band of Maidu and Miwok Indians in 1917. However, the rancheria was terminated by the 1953 Rancheria Act, and all but 2.8 acres were sold off. It took an act of Congress in 1994 to reestablish the Tribe's federal recognition and authorize new land to be taken into trust for the Tribe.[81]

State and federal Indian policy also accounts for the exclusion of Tribes and their interests from the development of formal law governing control of water resources in the early decades of statehood. Alongside riparian rights derived from English common law,[82] California courts layered on a new law of prior appropriation that allocates water rights based on prior and continued diversion

74. Advisory Council on Cal. Indian Policy, *supra* note 58, at 6-8.

75. *County of Amador*, 872 F.3d at 1016.

76. Tayaba Decl., *supra* note 43, at ¶ 2.

77. *Tribal History*, BUENA VISTA RANCHERIA OF ME-WUK INDIANS, https://bvTribe.com/Tribal-history.php (last visited Feb. 18, 2025).

78. *County of Amador*, 872 F.3d at 1016-17.

79. *Id.*

80. *About the Chicken Ranch Rancheria Me-Wuk Indians of California*, CHICKEN RANCH RANCHERIA, https://chickenranchrancheria.org/about (last visited Feb. 18, 2025).

81. *Our History*, UNITED AUBURN INDIAN COMMUNITY, https://www.auburnrancheria.com/about-us/our-history-1/ (last visited Feb. 18, 2025).

82. The California Supreme Court's landmark decision in *Lux v. Haggin*, 69 Cal. 255 (1886), held that California automatically established the riparian rights of landowners to use surface water on parcels contiguous with a waterway when it adopted the common law in 1850.

of water from its natural watercourses for use on non-riparian parcels.[83] The doctrine of prior appropriation has its origins in the California goldfields following the discovery of gold in Coloma, California, in 1848. As gold became both more valuable and more scarce, miners began to assert exclusive rights—or mining claims—organizing where established miners and new entrants had the right to dig.[84] With increasing need for dispute resolution, miners formalized rules and procedures through mining camp codes, which governed mineral claims and conduct within their respective localities.[85] By the mid-1850s, judicial pronouncements from the newly established state court system had begun to supplant unofficial law of the camps while absorbing its norms.[86]

While Native people were barred from accessing California's nascent court system,[87] miners used it extensively to manage their internal water disputes. Among the very first cases heard by the newly established California courts were a series of disputes between miners testing the existence, priority, and limitations on rights to divert and use water in service of competing mining enterprises.[88] The California Supreme Court formalized prior appropriation doctrine in 1855 in settling one such mining dispute in *Irwin v. Phillips*.[89] The Court in that case was tasked with resolving priority of use between a miner who claimed seniority from being the first-in-time diverter, and a downstream miner who asserted seniority under the riparian rights doctrine by applying water solely to a parcel contiguous with the stream.[90] Although the Court dodged resolving seniority between riparian and appropriative rights as a general matter, it left no doubt as to the validity of the claimed appropriative right.[91] In doing so, the Court adopted as a matter of

83. People v. Shirokow, 26 Cal.3d 301, 307 (1980); *see also* Cal. Water Code § 1201 (2025).

84. MARK KANAZAWA, GOLDEN RULES: THE ORIGINS OF CALIFORNIA WATER LAW IN THE GOLD RUSH 83 (2015).

85. *Id.* at 129.

86. *Id.* at 183.

87. *See* Johnston-Dodds, *supra* note 58, at 5-9 (reviewing early California state laws that undermined court access and due process for Native peoples).

88. *See, e.g.*, Eddy v. Simpson, 3 Cal. 249 (1853); *see also* MARC KANAZAWA, *supra* note 84, at 188-89. For discussion of ratification of prior appropriation by the California courts and its subsequent spread across western states, see Lawrence J. MacDonnell, *Prior Appropriation: A Reassessment*, 18 U. DENV. WATER L. REV. 228, 243-62 (2015).

89. *See, e.g.*, Irwin v. Phillips, 5 Cal. 140 (1855).

90. *Id.* at 142-43.

91. *Id.* at 146 (recognizing the "rights of those who, by prior appropriation, have

California common law the rules of prior appropriation developed by California miners. Observing that "Courts are bound to take notice of the political and social conditions of the country, which they judicially rule," the Court noted that prior appropriative rights have become "[s]o fully recognized . . . that without any specific legislation conferring, or confirming them, they are alluded to and spoken of in various acts of the Legislature in the same manner as if they were rights which had been vested by the most distinct expression of the will of the law makers."[92]

These and other early court decisions elaborating California water law extended no protection to prior uses of water being made by Tribal Nations before this new economy took root. In dignifying miners' commercial traditions, the courts eclipsed Tribal relational water values and effectively excluded Tribes from participation in the state water-rights framework. Indeed, prior appropriation rules were structured to make it all but impossible for Tribes to bring claims based on prior use and occupancy. Until recently, beneficial use in California water law meant solely consumptive use; a right could neither be attained nor retained to keep water flowing in its natural watercourse for cultural, ecological, or other non-consumptive purposes.[93] And even if it could, an appropriative water right is deemed forfeited if the appropriator stops putting it to beneficial use for a five-year period—a limitation which prevents Tribes from making claims based on historical appropriations.[94]

California Tribes that have attempted to enter the priority scheme based on prior land occupancy have fared no better. In his

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taken the water from their natural beds").

92. *Id.* at 146.

93. California amended its Water Code in 1991 to allow appropriators to petition to dedicate consumptive rights to instream uses. CAL. WATER CODE § 1707; *see generally* Cynthia Covell, *A Survey of State Instream Flow Programs in the Western United States*, 1 U. DENV. WATER L. REV. 177, 184 (1998) (surveying late 20th century reforms to state prior appropriation codes that established instream flow programs).

94. *See, e.g.*, Smith v. Hawkins, 110 Cal. 122 (1895) (applying the five-year period for forfeiture of prescriptive rights to loss of appropriative water rights); North Kern Water Storage Dist. v. Kern Delta Water Dist.,147 Cal. App.4th 555, 559 (2007) ("[D]ue to the scarcity of water generally in California, its society importance, and the peculiar nature of common and multiple rights to water from the same watercourse, the courts have recognized that water rights may be forfeited through nonuse under certain circumstances."); Millview Cnty. Water Dist. v. State Water Res. Control Bd., 229 Cal. App. 4th 879, 889 (2014) ("[A]ppropriators must 'use it or lose it."). Common law rulings on forfeiture of prior appropriative rights were codified in the California Water Code. *See* CAL. WATER CODE § 1241.

seminal 1823 decision in *Johnson v. M'Intosh*, Justice Marshall both recognized aboriginal title vested in Tribal Nations by occupancy of land since time immemorial and deemed it "necessarily diminished" by colonial conquest.[95] As a purely possessory interest, aboriginal title is subject to fee title vested in the United States as the conquering sovereign and can be extinguished "at the United States' pleasure."[96] Although Congress's intent to extinguish aboriginal title must be "plain and unambiguous," courts have read federal intent to extinguish title into a startling range of actions.[97] In California, courts have held that the failure of Tribes to present land claims to the California Land Commission under the 1851 California Land Claims Act extinguished aboriginal title for every Tribe in the state, even though the Act contained no express language directed at extinguishment.[98] Pressed with ambiguities in this law, courts shored up extinguishment by reading federal intent to extinguish into a "century-long course of conduct" aimed at suppressing Indian rights of ownership and occupancy.[99] Courts found evidence of intent to extinguish in the forcible displacement of Native peoples and in the small monetary awards doled out by the federal Indian Claims Commission to compensate California Tribes for the dispossession of their lands.[100] Deeming fishing and

95. Johnson v. M'Intosh, 21 U.S. 543, 574 (1823). The Marshall Court simultaneously adopted the Doctrine of Discovery from the European Law of Nations as a way of settling title to Indian lands and transmuted it into a law of conquest, which had the effect of reducing Tribal territorial sovereignty to mere occupancy; *see* ROBERT A. WILLIAMS, JR., LIKE A LOADED WEAPON: THE REHNQUIST COURT, INDIAN RIGHTS, AND THE LEGAL HISTORY OF RACISM IN AMERICA 56 (2005).

96. Pueblo of Jemez v. United States, 350 F. Supp. 3d 1052, 1093 (D.N.M. 2018); *In re* Wilson, 30 Cal. 3d at 25 ("Indian title connotes only a permissible right to occupy land, fee title to the land resting with the United States government.").

97. *See* United States v. Santa Fe Pac. R. Co., 314 U.S. 339, 347 (1941) ("[W]hether it be done by treaty, by the sword, by purchase, by the exercise of complete dominion adverse to the right of occupancy, or otherwise," the "justness" of the exclusive right of the United States to extinguish Indian title "is not open to inquiry by the courts"). Bruce Flushman and Joe Barbierie have described the courts' approach to assessing extinguishment as a "cumulative impact' analysis," through which courts have discerned a policy to extinguish in a series of events that together effected Indian removal and vast divestment of land and resources. Bruce S. Flushman & Joe Barbieri, *Aboriginal Title: The Special Case of California*, 17 PAC. L.J. 391, 418-19 (1986).

98. *See* Barker v. Harvey, 181 U.S. 481, 489-90 (1901); United States v. Title Ins. & Trust Co., 265 U.S. 472, 482-87 (1924); United States *ex rel.* Chunie v. Ringrose, 788 F.2d 638, 644 (9th Cir. 1986). For an in-depth discussion of these cases, *see generally* Hon. Barbara A. McAuliffe, *Stolen or Lawful?: A Case Review of an Indian Tribe's Claim to Aboriginal Land in California*, 49 CAL. W. INT'L L.J. 1 (2018).

99. United States v. Gemmill, 535 F.2d 1145, 1149 (9th Cir. 1976).

100. *Id.*

hunting rights incidental to occupancy, courts have found these rights to also have been destroyed along with title.[101] Appropriation of land to which a Tribe claims aboriginal title is entitled to no constitutional recompense.[102]

Meanwhile, the Senate's policy of refusing to ratify treaties with California Tribes means that no California Tribe has been able to claim rights to lands reserved to them by treaty,[103] nor fishing, hunting, or water rights reserved by treaty.[104] Many Tribes in the state obtained homelands reserved to them in trust by later federal instrument, as well as water rights and water-dependent fishing and hunting rights reserved to Tribes as part of the establishment of the reservation.[105] Even so, Indian country in California today—amounting to some 450,000 acres of rancherias, reservations, colonies, villages, and allotments—covers less than one percent of the state and only about five percent of land that had been set aside for Tribal Nations under the 1850s treaties.[106] As lopsided as they were,[107] had those treaties been ratified, Tribes across the state would be able to assert reserved water rights superior to all subsequent appropriations, as well as water-dependent rights to fish, hunt, and gather that attached to reservations.

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101. *In re* Wilson, 30 Cal. 3d at 27.

102. *See* Tee-Hit-Ton Indians v. United States, 348 U.S. 272, 279 (1955) (according to the Court, aboriginal title is "not a property right but amounts to a right of occupancy which the sovereign grants and protects against intrusion by third parties but which right of occupancy may be terminated and such lands fully disposed of by the sovereign itself without any legally enforceable obligation to compensate the Indians").

103. Treaties in many parts of the west reserved fractions of Tribal ancestral lands in a trust held by the federal government for the benefit of Tribes as Tribal homelands. Professor Gerald Torres aptly describes States as "tribal sovereignty's most dogged enemy due to competition over local resources and control of local populations," as expressed in myriad state efforts to deny Tribal sovereignty over reserved lands over treaty rights to access Tribal lands outside trust lands. *See* Torres, *supra* note 25, at 717-19.

104. The Supreme Court in United States v. Winans, 198 U.S. 371 (1905), affirmed off-reservation fishing rights reserved to the Yakima Nation by treaty. Three years later, the Court held in Winters v. United States, 207 U.S. 564 (1908), that a treaty reserving land in trust to a Tribe as a homeland also impliedly reserves the quantum of water necessary to effectuate the reservation's purpose.

105. *See generally* Wood, *supra* note 64, at 341-62 (reviewing erratic trajectory through which the government accorded Indian country status to certain lands through various colonial categories).

106. *Id.* at 339, 363.

107. *See* MADLEY, *supra* note 13, at 165 (recounting that "[w]hite violence was also a major consideration in some Indian leaders' decision-making" in agreeing to surrender nearly all their land "in return for promises of protection, clothing, blankets, tools, food, education, and nineteen federal reservations").

The upshot is that Bay-Delta water governance today, as throughout much of the country, carries forward the cultural and political subordination of Tribes. Six Bay-Delta native fish species traditionally relied on by Tribes for sustenance and ceremony are listed as threatened or endangered, and commercial and recreational fisheries in the Bay-Delta have been regularly closed in recent years.[108] Mercury contamination from legacy mining, as well as industrial discharges and air deposition, has resulted in fish advisories limiting or foreclosing consumption of many remaining Delta fish species.[109] Toxin-producing harmful algal blooms resulting from low flows, elevated water temperatures, and high nutrient loading increasingly limit human contact with Delta waters, particularly in dry years when blooms occasionally blanket stagnant reaches of rivers in a malodorous green film.[110] These and other changes to Bay-Delta ecology suppress Tribal cultural practices involving water contact while elevating health risks for Tribal members who persist in subsistence fishing and other cultural practices that expose them to water pollutants and contaminated fish tissue.[111] At the same time, Bay-Delta Tribes have little formal role in water governance. As discussed below, no Bay-Delta Tribe has yet been authorized to directly develop and administer water quality standards under the Clean Water Act.[112] Their inability to assert state or federal water rights on a significant scale has also limited Tribal control over water resources and marginalized Tribes in

108. 50 C.F.R. § 17.11; *Pacific Fishery Management Council Recommends Limited Recreational Ocean Salmon Season, Continued Closure for Commercial Salmon Fishing off California*, CAL. DEP'T OF FISH & WILDLIFE (Apr. 15, 2025), https://wildlife.ca.gov/News/Archive/pacific-fishery-management-council-recommends-limited-recreational-ocean-salmon-season-continued-closure-for-commercial-salmon-fishing-off-california
(recommending closure of California's commercial salmon fisheries for third year in a row).

109. *See Hazard Assessment, Delta Central and South*, (Nov. 16, 2022), https://oehha.ca.gov/fish/advisories/delta-central-and-south-0.

110. *See Harmful Algal Blooms*, DELTA STEWARDSHIP COUNCIL (last updated Feb. 26, 2025), https://viewperformance.deltacouncil.ca.gov/pm/harmful-algal-blooms.

111. *See Tribal Beneficial Use Designations: A Primer to the Basin Plan Amendment Process*, CAL. REG'L WATER QUALITY CONTROL BD., CENT. VALLEY REGION 7 (2022) ("California Native American Tribes have potential for increased exposure to water pollutants . . . through Tribal traditional and cultural practices and subsistence fishing."); Tayaba Decl., *supra* note 43, at ¶ 17 ("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 of cultural genocide for our Tribe.").

112. *See infra*, Part III.C; *Tribes Approved for Treatments as a State (TAS)*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/Tribal/Tribes-approved-treatment-state-tas.

state negotiations with appropriators over instream flow controls.[113]

In honing in on possibilities in the Clean Water Act to redress marginalization of Tribes in water governance, I do not mean to suggest that such possibilities do not also exist in state law. Much scholarly and political attention has been paid to reforming prior appropriation doctrine to embrace modern problems and values, including by authorizing dedication of state water rights to instream uses for ecological purposes.[114] At least one scholar, Professor Michelle Bryan, has made a compelling case that the protection of Tribal sacred waters and religious and spiritual traditions connected to them ought to be included in these reforms.[115] Other opportunities to reconcile non-consumptive values with state water rights schemes already exist in state law: for instance, applications of California's constitutional proscription on unreasonable and wasteful uses of water[116] and of the public trust doctrine to safeguard public resources and values, from fishing to ecological and aesthetic integrity.[117] Mobilizing these tools may go some way toward addressing the expressive indignity of according prior claims to colonial-era miners rather than the lands' original occupants and to make state water rights administration more compatible with non-consumptive values.

The Clean Water Act, however, remains a particularly important site for redress because it overlays a regulatory structure organized around non-consumptive values and cooperative

113. *See, e.g.*, CTR. FOR LAW, ENERGY & THE ENV'T, *Five Guiding Principles for* Effective *Voluntary Agreements: A Case Study on VAs for Water and Habitat in California's Bay-Delta Watershed*, BERKELEY L. SCH. 21 (Jan. 2024), https://www.law.berkeley.edu/wp-content/uploads/2024/01/Five-Principles-for-Voluntary-Agreements_Full_2024-01-18.pdf (noting that Tribes were among parties "conspicuously absent" from negotiations over water quality measures to achieve biological goals for the Bay-Delta watershed).

114. *See, e.g.*, Bryan, *supra* note 22, at 142 (positing that prior appropriation, "for all its faults, has revealed a surprising capacity to accommodate uses of emerging social value"); Gregory Hobbs, *Ecological Integrity, New Western Myth: A Critique of The Long's Peak Report*, 24 ENV'T 157, 165 (2017) ("Prior appropriation law has been remarkably adaptable in recognizing new uses while protecting existing ones."); Clifford Lee et al., *Updating California Water Laws to Address Drought and Climate Change* (Feb. 3, 2022), https://pcl.org/wp-content/uploads/2024/05/Updating-California-Water-Laws-to-Address-with-Drought-and-Climate-Change-1-1.pdf (recommending changes to California Water Code).

115. *See* Bryan, *supra* note 22, at 139.

116. Cal. Const. art. X, § 2.

117. *See generally* Alex Tallchief Skibine, *Towards a Trust We Can Trust: The Role of the Trust Doctrine in the Management of Tribal Natural Resources*, *in* TRIBES, LAND, AND THE ENVIRONMENT (Sarah Krakoff and Ezra Rosser, eds., 2012).

federalism onto colonial-era state water law. As discussed below, the statute's drafters codified their intent to preserve state primacy over water rights allocation but were aware of and expressly accepting of incidental limitations that water quality regulation would pose on those rights in fulfillment of the statute's ameliorative purposes. Combined with Congress's integration of Tribes as co-regulators over reservation and trust lands, these and other dimensions of the statute have opened significant space for experimentation by state, Tribal, and federal regulators in integrating protections for Tribal cultural uses in and outside of Indian country into the Act's administration. The following Part shows why the Clean Water Act makes this possible.

III. THE CLEAN WATER ACT, REGULATION OF WATER QUANTITY AS QUALITY, AND TRIBAL WATER GOVERNANCE IN INDIAN COUNTRY

With the Clean Water Act now in its fifty-third year, there is plenty of reason to ask whether the statute is equipped to address today's ecological and normative challenges. Professor Jonathan Adler has toyed with the idea that the statute has become if not totally, "at least somewhat obsolete"—ill-equipped to address the realities of climate change and nonpoint source pollution and inattentive to modern monitoring and control technologies.[118] These arguments for statutory obsolesce tend to ignore the important function of the Act as a firmly established instrument for Tribal self-governance.

The project of this paper is not to ask how the statute might be rewritten to accommodate Indigenous water governance but rather to examine the possibilities that Congress has already structured into it. This Part looks first at the history and architecture of the statute's water quality standards provisions, which I argue reveal a Legislature focused on prioritizing non-consumptive values and federal oversight as a corrective to widespread post-World War II water quality degradation. It then shows that water quality regulation under the Act embraces regulation of water quantity, which I return to in Part V.B in exploring water quality criteria, such as minimum instream flow controls, that could help protect availability of Tribal cultural resources. Finally, this section considers implications of Congress's TAS amendments for Tribal self-

118. Jonathan Adler, *The Clean Water Act at 50: Is the Act Obsolete?*, 73 CASE W. RES. L. REV. 207, 228 (2022).

determination and governance in Indian country. While assimilation into a federal legal framework risks bending Indigenous self-governance toward dominant norms, Tribes that have exercised TAS authority have successfully tailored water quality standards to accommodate culturally-specific values and traditions.[119] These experiences provide important lessons for the administration of state water quality standards beyond Indian country, which I turn to in Part IV.

A. *History and Architecture of Water Quality Standards*

The modern Clean Water Act was enacted in 1972 through extensive amendments to the 1948 Federal Water Pollution Control Act. Prior to WWII, water quality regulation was regarded as principally a state or local government function.[120] Knowledge about water-borne communicable diseases emerging in the early 20th century increased federal appetite to address public health dimensions of water pollution. Early federal efforts had focused on specific water pollution issues—such as dumping of refuse into navigable waterways (the 1899 Rivers and Harbors Act) and control of oil discharges (the Oil Pollution Act of 1924).[121] But as wartime industrial activities accelerated discharge of pollutants into waterways, Congress turned its attention to elaborating a more expansive federal water pollution control scheme.

The first congressional attempt to broadly regulate water quality came with the Water Pollution Control Act of 1948.[122] Although it declared federal jurisdiction over "the waterways of the Nation,"

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119. *See, e.g.*, Kronk Warner, *supra* note 21; James M. Grijalva, *Control and Accountability: the Twin Dimensions of Tribal Sovereignty Necessary to Achieve Environmental Justice for Native America*, *in* TRIBES, LAND, AND THE ENVIRONMENT 27-33 (Sarah Krakoff & Ezra Rosser, eds., 2012) (addressing the work of Tribal water quality regulation within the Clean Water Act's cooperative federalism scheme in filling a regulatory gap in Indian country and allowing Tribes' to exercise their own value judgments in crafting regulatory standards).

120. *See generally* William Andreen, *The Evolution of Water Pollution Control in the United States – State, Local, and Federal Efforts, 1789-1972: Part II*, 22 STAN. ENV'T L.J. 215 (2004) (tracing early efforts to develop state-level regulatory and enforcement authority over water quality in the decades leading up to WWII).

121. *See id.* at 220-25.

122. Federal Water Pollution Control Act of 1948, Pub. L. 80-845, 62 Stat. 1155 (1948) (hereinafter "1948 Act"); *see* Frank J. Barry, *The Evaluation of the Enforcement Provisions of the Federal Water Pollution Control Act: A Study of the Difficulty in Developing Effective Legislation*, 68 MICH. L. REV. 1103, 1104 n.4 (1970) (observing that "[t]here had been many earlier federal statutes dealing with specific water pollutions problems," such as the Rivers and Harbors Act of 1899 and the Oil Pollution Act of 1924).

the 1948 Act nevertheless represented a rather tepid effort to expand the federal role in water quality control.[123] The Act limited federal enforcement to court-ordered abatement of pollution in interstate waters, and only then when it could be shown that the pollution endangered the "health or welfare" of persons in a neighboring state.[124]

The concept of water quality standards was first put on the table during deliberations on 1956 amendments, aimed at strengthening the federal role in regulation and enforcement. In an article tracing the evolution of federal water pollution control, Professor Frank Barry explains that through the 1956 amendments, "[f]or the first time it was formally proposed that Congress adopt a more traditional enforcement procedure by establishing water quality standards so that pollution would be defined in advance of any abatement action."[125] Though this initial proposal never made it out of committee, Congress integrated it into the statute a decade later with the passage of the 1965 Water Quality Act, which provided for the establishment of water quality standards for all interstate waters.[126]

The legislative history of the 1965 amendments reflects Congress's intent to protect a much more expansive set of values than reflected in the 1948 Act; it also reflects Congress's recognition that realizing these values will sometimes require imposing limits on water diversions and other activities that reduce flows. For instance, a January 1965 report by the Senate Committee on Public Works noted, in describing the purpose of the water quality standards provisions, that "[it] will be necessary for us to use many rivers for multiple purposes, including industrial, agricultural, recreational, public water supply, and fish and wildlife uses" and called for "[e]conomic, health, esthetic, and conservation values" all to be taken into account in establishing water quality standards.[127] Then-

123. 1948 Act § 1, 62 Stat. at 1155.

124. *Id.* § 2(d)(1), 62 Stat. at 1156. That Act defined "interstate waters" narrowly as "waters that flow across, or form a part of, State boundaries." *Id.* § 10(e), 62 Stat. at 1161. Excluded from this scope were intrastate waters, most coastal waters, and many international boundary waters–together amounting to some 22,000 of the estimate 26,000 water bodies in the United States. Andreen, *supra* note 120, at 238 n. 137.

125. Barry, *supra* note 122, at 1111.

126. Water Quality Act of 1965, Pub. L. No. 89-234, 79 Stat. 903 (Oct. 2, 1965) (amending the Federal Water Pollution Control Act to . . . "require establishment of water quality criteria").

127. S. REP. NO. 89-10, at 8 (1965).

Secretary of the Interior Stewart L. Udall, in a letter to the Senate Chairman of the Committee on Public Works, likewise explained that the core goal of the amendment would be to "establish a positive national water control policy of keeping our Nation's water as clean as possible as opposed to the negative policy of attempting to use the full capacity of those waters for waste assimilation."[128] He went on to note that "to meet the needs of our natural resources, such as fish and wildlife, and provide the necessary environment for water-based recreation, we will require increased, not diminished quantities of clean water."[129]

Like their predecessors, the 1965 and subsequent pre-1972 amendments continued to rely on case-by-case lawsuits for abatement to attain water quality standards and continued to make federal authority to bring an action for abatement contingent on State authorization, unless it could be shown that a discharge originating from one state endangered the health or welfare of persons in another state.[130] The result was an "almost total lack of enforcement," with "only one case reach[ing] the courts in more than two decades."[131] In 1972, when Congress adopted the modern Clean Water Act, it extended the 1965 water quality standards provisions at the heart of the prior legislation while overhauling the law's implementation and enforcement structure with the goal of assuring attainment of water quality standards and preventing degradation.

The role that water quality standards would come to play in the 1972 amendments was by no means certain. The Senate version of the bill would have "eliminate[d] over a period of time the concept of water quality standards and instead depend[ed] completely on effluent limitations based on the best available technology or better."[132] By contrast, the House bill proposed to extend the water quality standards provisions from existing law, pairing them with the new permitting and enforcement provisions. EPA Administrator William Ruckelshaus came out in strong support of the House bill, urging Congress to "build on existing foundations of water

128. Legislative History of the Water Quality Act of 1965, Pub. L. No. 89-234, 79 Stat. 903, *reprinted in* LEGISLATIVE HISTORY OF THE WATER QUALITY ACT OF 1965, at 8 (1965).

129. *Id.*

130. *See* Barry, *supra* note 122, at 1116-22 (critiquing narrow federal enforcement provisions in pre-1972 amendments).

131. S. REP. NO. 92-414, at 5 (1971).

132. *Water Pollution Control Legislation: Hearing on H.R. 11895 and H.R. 11896 Before the H. Comm. on Pub. Works*, 92d Cong. 1183 (1971) (statement of William Ruckelshaus, EPA Adm'r).

quality standards" while strengthening enforcement mechanisms to assure standards would be achieved.[133] The House bill won out, and water quality standards thus continue to supply a values-based foundation to water quality control nationwide.[134]

The 1972 amendments declare it the objective of the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the nation's waters," with the aim of achieving levels of water quality that provide for protection of fish, shellfish, wildlife, and recreation by July 1, 1983.[135] To meet these objectives, Section 303 mandates establishment of water quality standards for all "navigable waters" within all fifty states.[136] Water quality standards "serve as a description of the desired water quality for particular water bodies," as well as the basis for a number of Clean Water Act programs.[137] Water quality standards initially had two components: "designated uses of the navigable waters involved" as well as "water quality criteria for such waters based upon such uses."[138] Amendments in 1987 added a third element: an antidegradation policy to assure that water quality remains adequate to maintain existing instream water uses for all covered water bodies.[139] Overall, the standards must be sufficiently stringent to "protect the public health or welfare, enhance the quality of water and serve the purposes" of the Act.[140]

The Act reflects an expansive legislative vision of uses and

133. *Id.*

134. *See* Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. 29497 (May 5, 2023) (to be codified at 40 C.F.R. pts. 131, 230, 233) ("[Water Quality Standards] are the foundations of the water quality-based pollution control programs required by the [Clean Water Act].").

135. 33 U.S.C. § 1251(a) (Westlaw 2025).

136. 33 U.S.C. § 1313(e)(3) (Westlaw 2025); *see* Sackett v. Env't Prot. Agency, 143 S. Ct. 1322 (2023).

137. Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. at 29497.

138. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, § 303, 86 Stat. 816, 848 (1972) (current version at 33 U.S.C. § 1313 (Westlaw 2025)).

139. 40 C.F.R. §§ 131.6, 131.12(a) (2025); 33 U.S.C. § 1313(d)(4)(B) (Westlaw 2025) (allowing revisions to water quality standards and effluent limitations only if "such revision is subject to and consistent with the antidegradation policy established under this section"); *cf.* 40 C.F.R. § 131.12(a) (2025) (providing that "[w]here the quality of the water exceeds levels necessary to support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the States finds . . . that allowing lower water quality is necessary to accommodate important economic and social development in the area in which the waters are located").

140. 40 C.F.R. § 131.3(i) (2025).

values to be protected for water bodies. Under Section 101(a)(2), water quality standards must provide, "wherever attainable," for the protection and propagation of fish, shellfish, and wildlife and for recreation in and on the water;[141] EPA has also interpreted Section 101(a)(2) to encompass uses that provide "for the protection of human health when consuming fish, shellfish, and other aquatic life."[142] In addition to objectives prescribed by Section 101(a)(2), Section 303(a)(2) requires States and authorized Tribes, when establishing water quality standards for any given waterbody or segment, to "tak[e] into consideration their use and value" for a nonexhaustive set of purposes, including "public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes."[143] Designated uses are forward-looking, reflecting values and practices to be preserved for each water body "whether or not they are being attained" at the time the standards are adopted.[144] According to EPA, "[d]esignated uses establish, and communicate to the public, the environmental management objectives and water quality goals for the state or authorized Tribe's waters."[145] A State or Tribe may only remove a designated use from the list if it supports its decision with a "use attainability analysis" showing that attaining the use is not feasible because of specified factors, such as the existence of naturally-occurring pollutant concentrations that prevent attainment.[146]

Water quality criteria, in turn, consist of numeric and/or

141. 33 U.S.C. § 1251(a)(2) (Westlaw 2025).

142. Water Quality Standards Regulatory Revisions, 80 Fed. Reg. 51020, 51024 (Aug. 21, 2015); *see also* Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. 29503 (May 5, 2023).

143. 33 U.S.C. § 1313 (Westlaw 2025); 40 C.F.R. § 131.10 (2025).

144. 40 C.F.R. § 131.3(f) (2025). EPA's regulations define "existing uses" as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards." 40 C.F.R § 131.3(e) (2025). EPA considers designated uses to "focus on the attainable condition while existing uses focus on the past or present condition" of a waterbody. Advance Notice of Proposed Rulemaking on the Water Quality Standards Regulation, 63 Fed. Reg. 36742, 36748 (July 8, 1998).

145. Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. at 29502-03.

146. 40 C.F.R. § 131.10(g) (2025). EPA's regulations require a use attainability analysis for removal of any designated use specified in Section 101(a)(2) of the Act 40 C.F.R. § 131.10(j) (2025); for removal of non-101(a)(2) uses, a use attainability is not required to revise or remove the use but State and authorized Tribes must submit documentation "justifying how its consideration of the use and value of water for those uses . . . appropriate supports the State's action, which may be satisfied through a use attainability analysis." 40 C.F.R. § 131.10(k) (2025).

narrative statements "representing a quality of water that supports a particular use."[147] Criteria should be set such that when they "are met, water quality will generally protect the designated use."[148] Under Section 304, EPA develops and periodically updates a set of recommended numeric criteria for adoption by States and Tribes based on EPA's assessment of the "latest scientific knowledge."[149] States and authorized Tribes must consider EPA's recommended criteria in adopting and revising water quality criteria but may modify them "to reflect site-specific conditions" or apply "[o]ther scientifically defensible methods" to derive numeric values.[150]

Development of water quality standards is left principally to States and, as discussed below, authorized Tribes, but with a supercharged federal oversight role to assure consistency with the Act's objectives. Section 303(a) required States without compliant water quality standards to promulgate standards within 180 days of the Act's effective date of October 18, 1972 and submit them to the EPA Administrator for approval. If EPA determines that standards are not consistent with the Act's requirements, it must notify the State of changes needed to bring the standards into compliance and promulgate superseding federal standards if the State fails to adopt compliant standards within 90 days.[151] The Act also recognizes the need for water quality standards to evolve with uses, values, and conditions: Under Section 303(c), each State or authorized Tribe must hold public hearings no less than every three years to review water quality standards and, as appropriate, adopt new or modified ones, subject to EPA approval.[152] Further, if the EPA Administrator determines at any time that "a revised or new standard is necessary to meet the requirements of" the Act, the Administrator must prepare and publish regulations setting out the new or revised federal water quality standards.[153] The Act preserves State

147. 40 C.F.R. § 131.3(b) (2025). For an overview of numeric and narrative criteria, see Julie Furr Youngman, *Water, Water Anywhere?: Protecting Water Quantity in State Water Quality Standards*, 94 IND. L.J. 1613, 1624 (2019).

148. 40 C.F.R. § 131.3(b) (2025).

149. 33 U.S.C. § 1314(a) (Westlaw 2025).

150. 40 C.F.R. § 131.11 (2025); *see* 40 C.F.R. § 131.20(a) (2025) (requiring States to "provide an explanation" to the EPA when it submits its triennial review if the "State does not adopt new or revised criteria for parameters for which EPA has published new or updated CWA Section 304(a) criteria recommendations").

151. 33 U.S.C. § 1313(a)(2) (Westlaw 2025).

152. 33 U.S.C. § 1313(c)(1) (Westlaw 2025).

153. 33 U.S.C. § 1313(c)(4) (Westlaw 2025).

authority to adopt more stringent water quality controls but prohibits States from adopting or enforcing effluent limitations and other performance standards that are less stringent than corresponding federal ones.[154]

The recent history of Bay-Delta water quality control is instructive. In 1991, EPA partially disapproved California's proposed water quality standards for the Bay-Delta for failure to adequately protect estuarine habitat and other fish and wildlife beneficial uses.[155] When the State failed to adopt EPA's proposed corrective standards, the EPA promulgated its own federal standards in January 1995.[156] In a coordinated interagency effort, California subsequently adopted a comprehensive Bay-Delta water quality control plan later that year, which EPA approved under section 303(c).[157] Since 2009, the State has been working to update its Bay-Delta water quality control plan.[158] EPA also has pending before it a December 2022 petition to make an Administrator's determination under Section 303(c)(4) that the State's existing standards are failing to meet Clean Water Act requirements and to directly promulgate federal standards akin to its 1995 action.[159]

The Act provides a number of mechanisms for States and authorized Tribes to implement and enforce water quality standards.

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154. 33 U.S.C. § 1370 (Westlaw 2025).

155. 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, 4666 (Jan. 24, 1995).

156. *Id.* at 4664.

157. *Id.*; *see* Cal. State WATER RES. CONTROL BD., WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY (1995); Letter from U.S. Env't Prot. Agency to John Caffrey, Chairman, State Water Res. Control Bd. (Sept. 26, 1995), https://www.epa.gov/sites/default/files/2017-05/documents/wqcp1995usepaapproval_0.pdf (approving the 1995 Bay-Delta Plan).

158. *See* CAL. STATE WATER RES. CONTROL BD., NOTICE OF PREPARATION AND OF SCOPING MEETING FOR ENVIRONMENTAL DOCUMENTATION FOR THE UPDATE AND IMPLEMENTATION OF THE WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA ESTUARY: SOUTHERN DELTA SALINITY AND SAN JOAQUIN RIVER FLOWS (Feb. 13 2009), https://www.waterboards.ca.gov/bay_delta/bay_delta_plan/environmental_review/docs/nop2009feb13.pdf. The Board released its most recent proposed update to water quality standards for the Bay-Delta in December 2025; s*ee* CAL. STATE WATER RES. CONTROL BD., WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN DELTA WATERSHED: DECEMBER 2025 DRAFT (Dec. 2025) [hereinafter DRAFT BAY-DELTA PLAN UPDATE], https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/2025/h/dec2025-rev-draft-sacdeltabdplan.pdf.

159. *See* Title VI Complaint, *supra* note 11.

Unlike its predecessor statutes, the modern statute outright prohibits the "discharge of any pollutant by any person," subject to specified exceptions.[160] One such exception exists where a person holds a permit issued by the EPA or authorized State or Tribe under the National Pollution Discharge Elimination System (NPDES). NPDES permits incorporate "effluent limitations," or technology-based regulations that restrict "quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources" into receiving waters, as well as "any more stringent limitation" needed to meet water quality standards.[161] States are also required to designate water bodies as impaired if technology-based regulations and other water quality controls are insufficient to meet applicable water quality standards.[162] States must then develop Total Maximum Daily Loads (TMDLs) for pollutants that can occur in the waterbody to meet water quality standards, implemented through NPDES permits and nonpoint source controls.[163] Importantly, the Act empowers States and authorized Tribes to enforce their water quality standards directly against the federal government. Under Section 401, applicants for federal licenses or permits for activities that may result in discharges into navigable waters within State jurisdiction or the jurisdiction of a Tribe with Section 401 authority must obtain a certification from the State or Tribe stating that the activity will not result in a violation of applicable water quality standards.[164]

Although the Act recognizes the value of water in sustaining industrial production and economic growth, its legislative history shows Congress's intent to put a thumb on the scale in favor of preserving the nation's waters for non-consumptive uses. On October 17, 1972, then-President Richard Nixon vetoed the Clean Water

160. 33 U.S.C. § 1311(a) (Westlaw 2025).

161. 33 U.S.C. § 1362(11) (Westlaw 2025); 33 U.S.C. § 1311(b)(1)(C) (Westlaw 2025); 33 U.S.C. § 1342(a) (Westlaw 2025); *see also* Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. at 29497 (explaining that if technology-based effluent limitations are insufficient to meet applicable water quality standards or site-specific water quality goals, the Clean Water Act and EPA's NPDES regulation, 40 C.F.R. § 122.44(d), require more stringent water quality-based effluent limitations).

162. 33 U.S.C. § 1313(d) (Westlaw 2025).

163. *Id.*

164. 33 U.S.C. § 1341 (Westlaw 2025) For a description of the Section 401 water quality certification program, *see* Clean Water Act Section 401 Water Quality Certification Improvement Rule, 88 Fed. Reg. 66558, 66560-52 (Sept. 27, 2023) (to be codified at 40 C.F.R. pts. 121, 122, 124). For a discussion of Tribal authority to implement Section 401 and its implications, *see* Maccabee, *supra* note 22.

Act, declaring in his veto message that although "[c]leaning up the Nation's waterways is a matter of urgent concern," the "laudable intent" of the bill was "outweighed by its unconscionable $24 billion price tag."[165] In Nixon's view, investment in water quality control must be done in a way that "does not ignore other very real threats to the quality of life, such as spiraling prices and increasingly onerous taxes."[166] The following day, in overriding Nixon's veto by a Senate vote of 52 to 12 and a House vote of 247 to 23, the Legislature made clear its resounding disagreement with this message.

In advocating for override, Senator Edmund Muskie of Maine, the bill's principal sponsor, explained: "To call the President's decision 'dangerous' falls short of adequately describing the risk it asks us to take with our rivers, lakes, and streams."[167] He went on:

> At the time the Senate approved the conference report on the bill, I asked these questions: "Can we afford clean water? Can we afford rivers and lakes and streams and oceans which continue to make life possible on the planet? Can we afford life itself?" The answers are the same. Those questions were never asked as we destroyed the waters of our Nation, and they deserve no answers as we finally move to restore and renew them. These questions answer themselves.[168]

Senators also read into the record a Report by the White House Council on Environmental Quality which decried Nixon's failure to properly value a healthy environment:

> "The common property resources—air and water—are not included in the market exchange. They are used as free 'dumps' for consumption and production residuals. But such dumping exacts social costs—in degraded air and water, impaired health, loss of fish and wildlife, loss of recreational opportunities and aesthetic values, and added costs of treatment necessary for downstream water users. Environmental problems stem largely from this fundamental failure of the economic system to take into account environmental costs."[169]

In the end, Congress made a clear decision about how water quality control is to be effected where values collide: Impairments to water quality will not be allowed, whatever their economic benefit, if they

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165. Richard Nixon, Veto of the Federal Water Pollution Control Act Amendments of 1972, *in* 1 PUB. PAPERS OF THE PRESIDENTS OF THE UNITED STATES: RICHARD M. NIXON 990-91 (1972).

166. *Id.*

167. 118 CONG. REC. 36873 (1972).

168. *Id.* at 36874.

169. *Id.*

undermine non-consumptive values and uses of water that the State or Tribe deems worthy of protection.

B. *Regulation of Water Quantity as Quality*

As is evident from this discussion, the Legislature took a broad view of the components of water quality and thus the forms of regulation necessary to protect it. The Act conceives of quality as a condition that will satisfy desired uses and values that involve interaction with water. Thus, while certain statutory provisions are directed at regulating discharges of contaminants into waterways—NPDES permits and effluent standards, for instance—the types of criteria that Section 303(c) contemplate are not so limited. Rather, the drafters of the 1965 amendments that added the water quality standard provisions to the law recognized that it will often be necessary to assure adequate quantities of water to assure continuity of protected uses, and they understood that the standards would be used in this vein.

The question whether the Clean Water Act could be used to regulate water quantity as a dimension of water quality was addressed by the Supreme Court in its 1994 decision in *PUD No. 1 of Jefferson County v. Washington Department of Ecology*.[170] In that case, a city and local utility district sought to build a hydroelectric project on the Dosewallips River on federally owned land in the Olympic National Forest in Washington State. The project would divert water from a 1.2-mile reach of the river (the bypass reach), run it through turbines to generate electricity, and then return the water to the river below the bypass reach. The proponents required a license from the Federal Energy Regulatory Commission to build and operate the project, which in turn required them to obtain a Section 401 state water quality certification since the project would result in discharges into the Dosewallips River. Recognizing that the project would divert a substantial portion of river flows from the bypass reach and could thereby harm the Dosewallips salmon and steelhead fisheries, the state water agency calculated the minimum stream flows necessary to protect the fisheries in the bypass reach and issued a Section 401 water quality certification conditioned on the minimum instream flow requirements. The project proponents charged the agency with exceeding its statutory authority in imposing the condition since, in their view, the Clean Water Act "is

170. PUD No. 1 of Jefferson Cnty. v. Wash. Dep't of Ecology, 511 U.S. 700 (1994).

only concerned with water 'quality' and does not allow the regulation of water 'quantity.'"[171]

The Supreme Court roundly rejected this distinction as "artificial."[172] Rather, as the Court explained, it is often the case that "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, be it for drinking water, recreation, navigation, or, as here, as a fishery."[173] The Court also discerned in the statutory text and EPA's implementing regulations clear recognition that "reduced stream flow, *i.e.*, diminishment of water quantity, can constitute water pollution."[174] Among other things, the Court pointed to the Act's definition of pollution as "man-made or man induced alteration of the chemical, physical, biological, and radiological integrity of water" as well as the recognition in Section 304 that "pollution" may result from "changes in the movement, flow, or circulation of any navigable waters."[175] These and other statutory provisions, in the Court's view, manifest Congress's concern with hydrological integrity and flow effects. The Court also discerned no obstacle in statutory provisions that preserve State authority to allocate water quantities between users.[176] Flow requirements, the Court explained, "neither reflect nor establish 'proprietary rights' to water."[177] This reading is consistent with legislative history reflecting Congress's recognition and tolerance of the incidental effects that water quality restrictions may have on the exercise of individual water rights under State allocation schemes.

The Court's reasoning in *PUD No. 1* applies equally to Section 303(c) water quality standards.[178] In 1998, EPA published a report on its priorities for enhancing water quality criteria, which identified flow alterations as a principal driver of water quality degradation and promised to consider developing guidance for flow criteria.[179] In 2016, EPA released a joint report with the U.S. Geological

171. *Id.* at 719.

172. *Id.*

173. *Id.*

174. *Id.*

175. *Id.* at 719-20 (quoting 33 U.S.C. § 1362(19) (Westlaw 2025) and 33 U.S.C. § 1314(f) (Westlaw 2025)).

176. *Id.* at 720.

177. *Id.* at 720-21 (quoting California v. Fed. Energy Regul. Comm'n, 495 U.S. 490, 498 (1990)).

178. *See generally* Youngman, *supra* note 147.

179. U.S. Env't Prot. Agency, Office of Water, *Water Quality Criteria and Standards*

Survey providing guidance to States and Tribes on means to protect natural flows through Clean Water Act programs including water quality criteria.[180] The report approvingly catalogued examples of narrative flow criteria adopted by State and Tribes and articulated a framework for translating narrative flow criteria into quantitative flow targets to protect aquatic life.[181] Along the way, EPA has approved both narrative and numeric state flow criteria and informally urged States to develop more robust criteria to protect natural flows.[182] In 2022, EPA went a step further in disapproving minimum instream flow standards adopted by South Carolina that would have allowed too much water to be withdrawn from the state's rivers, to support designated uses and would have flattened the natural hydrograph in ways that ignore the ecological functions of unimpaired flows.[183]

C. Treatment of Tribes as Sovereigns for Water Quality Regulation in Indian Country

The 1972 statute had delegated authority solely to States to develop and enforce water quality standards in the first instance, subject to EPA oversight. The statute was silent on water quality governance on Tribal lands, or the role of Tribes in establishing and enforcing water quality standards and discharge permits. The consequence, as a number of Tribes pointed out to the House of Representatives in debates leading up to the adoption of the 1987 amendments, was that "[t]he limited Tribal role ha[d] created a

Plan–Priorities for the Future: Interim Final 43, EPA 822-R-98-003 (June 1998); s*ee* U.S. Env't Prot. Agency, Notice of Availability of the Water Quality Criteria and Standards Plan—Priorities for the Future, 63 Fed. Reg. 47014 (Sept. 3, 1998).

180. *See* U.S. ENV'T PROT. AGENCY, FINAL EPA-USGS TECHNICAL REPORT: PROTECTING AQUATIC LIFE FROM EFFECTS OF HYDROLOGIC ALTERATION, Report No. 822-R-16-007 (2016), https://www.epa.gov/sites/default/files/2016-12/documents/final-aquatic-life-hydrologic-alteration-report.pdf.

181. *Id.* at 69-74.

182. *See generally* Youngman, *supra* note 147, at 1638-49; *see also, e.g.*, U.S. Env't Prot. Agency, Comments on the October 25, 2024 Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Watershed 1-2 (Jan. 10, 2025) (urging California State Water Resources Control Board to adopt unimpaired flow criteria for the Bay-Delta to protect aquatic life and Tribal beneficial uses).

183. Letter to South Carolina Attorney General Alan Wilson, U.S. Env't Prot. Agency Region 4, Decision Document of the United States Environmental Protection Agency Review of the South Carolina 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, in Letter to South Carolina Attorney General Alan Wilson (May 20, 2022) (on file with author).

regulatory vacuum on Indian lands since states, except for certain Public Law 280 reservations, have no jurisdiction on Indian reservations."[184] This omission meant that Tribes had not only been left out of the Act's cooperative federalism but that the environment and health of Native people in Indian country lacked the substantive protections the statute was intended to afford.[185] A number of Tribes urged Congress to fill this gap by delegating authority to Tribal Nations to adopt and administer water quality standards and permitting programs in the same manner as States, coupled with expanding eligibility for grant funding to build Tribal capacity to carry out these functions.[186]

The U.S. House of Representatives and ultimately the Senate agreed, adding Section 518 to the Act over President Reagan's veto to delegate regulatory authority to Indian Tribes notwithstanding hesitations about potential conflicts where waterways cross jurisdictional boundaries.[187] Section 518(e) authorizes the EPA administrator to "treat an Indian Tribe as a State" for a variety of State-delegated functions, including establishing Section 303(c) water quality standards for on-reservation waterways and administering NPDES and Section 401 water quality certification programs for federal licenses and projects.[188]

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184. Testimony by Norman Hollow, Chairman, Fort Peck Assiniboine and Sioux Tribes of Montana, Hearings before Subcommittee on Water Resources of the Committee on Public Work and Transportation, U.S. House of Representatives, Ninety-Eighth Congress First Session (Dec. 2, 1983); *see* Statement of Wilfred Scott, Chairman, Council of Energy Resources Tribes and Vice Chairman, Nez Perce Tribe, Subcom. on Water Resources, U.S. House of Reps. (Feb. 23, 1983) (describing "regulatory vacuum on Indian lands").

185. Grijalva, *supra* note 21, at 8 (recounting "EPA's recognition that American Indian potentially faced disproportionate health and welfare risks because of the regulatory gap").

186. *Id.* (As Professor James Grijalva and others have recounted, EPA helped lay the groundwork for these amendments through its 1984 Indian Policy, which laid out the agency's commitment to Tribal self-determination and to work with Tribes on a government-to-government basis, including its specific commitment to recognizing Tribal Governments as the primary authorities for setting environmental standards for reservations).

187. *See, e.g.*, Cong. Rec. 2822 (Feb. 23, 1983) (Rep. Moody, Hearings before Subcommittee on Water Resources of the Committee on Public Work and Transportation, U.S. House of Representatives, Ninety-Eighth Congress First Session) ("I am looking at the statement that says only Tribal governments are able to protect the reservation environments in a manner consistent with the goals and values of the Indian people they represent. When you have an ambient substance such [. . .] as water which flows through jurisdictions, how practical is it really to have one jurisdiction with its own administration of standards or decision-making on standards, yet without it affecting other jurisdictions.").

188. 33 U.S.C. § 1377(e) (Westlaw 2025). The Act also authorizes treatment of Tribes as States for the purpose of enacting nonpoint source control programs and issuing Section 404 dredge and fill permits. Congress adopted similar amendments authorizing treatment

To be eligible for TAS authority, the Tribe must be federally recognized by the Secretary of the Interior and "exercis[e] governmental authority over a Federal Indian reservation."[189] The Tribe must also: (1) have a "governing body carrying out substantial governmental duties or powers," (2) exercise functions pertaining to management and protection of water resources "within the boundaries of an Indian reservation," and (3) be "capable, in the Administrator's judgment, of carrying out the functions to be exercised in a manner consistent" with the Act and its implementing regulations.[190] Attentive to the potential for conflict between Tribal water quality standards and state standards up or downstream of Tribal lands, the amendments direct EPA to promulgate regulations that provide a mechanism for resolution of "any unreasonable consequences" of differing standards for common water bodies.[191] Other portions of Section 518 that direct grant funding and technical resources to Tribes are intended to help Tribal governments develop the bureaucratic architecture and capacity to administer regulatory programs.[192]

Congress designed the TAS provisions to promote Tribal self-governance by assimilating Tribes into the cooperative federalism framework on par with States consistent with the era of self-determination inaugurated by President Nixon.[193] This has spawned a generation of scholarship that has wrestled with the double-edged implications of cooperative federalism for Tribal sovereignty and self-determination.[194]

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of Tribes as States for regulatory programs under the Safe Drinking Water Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), the Clean Air Act, and the National Historic Preservation Act; s*ee* Dean Suagee, *Tribal Self-Determination and Environmental Federalism: Cultural Values as a Force for Sustainability*, 3 WIDENER L. SYMP. J. 229, 233 (1998).

189. 33 U.S.C. § 1377(h) (Westlaw 2025).

190. 33 U.S.C. § 1377(e)(1)-(3) (Westlaw 2025); *see Federal Baseline Water Quality Standards for Indian Reservations*, 88 Fed. Reg. 29497-98 (May 5, 2023).

191. 33 U.S.C. § 1377(e) (Westlaw 2025). EPA implemented this statutory directive by adopting regulations that provide for resolution of such disputes to be resolved, at the State or Tribe's initiation, through a mediation or arbitration process administered by the EPA Regional Administrator. 40 C.F.R. § 131.7; *see* City of Albuquerque v. Browner, 97 F.3d 415, 427-28 (10th Cir. 1996) (describing dispute resolution mechanism).

192. 33 U.S.C. § 1377(e)-(f) (Westlaw 2025).

193. *See, e.g.*, President Richard Nixon's Special Message to the Congress on Indian Affairs, 1 PUB. PAPERS 565 (July 8, 1970) ("The time has come to break decisively with the past and to create the conditions for a new era in which the Indian future is determined by Indian acts and Indian decisions.").

194. *See, e.g.*, Sibyl Diver, Daniel Ahrens, Talia Arbit, & Karen Bakker, *Engaging*

On the one hand, taking on TAS authority requires some level of accession to a colonial regulatory framework.[195] Tribes must do the work to demonstrate to EPA that they are equipped to administer a federal regulatory program and must obtain EPA's approval before they can participate as co-regulators.[196] Once Tribes acquire TAS authority, their water quality standards remain subject to EPA oversight and must meet the basic requirements of the federal statute as interpreted by EPA. These requirements have led scholars to ask whether the assimilationist dimensions of TAS authority might overshadow benefits to Tribal governance—namely that TAS may go too far in inducing Tribes to form or reform internal structures of governance around Western bureaucratic models.[197] In a different vein, Tribes' pursuit of TAS authority has invited sometimes successful attacks on Tribal regulatory jurisdiction by neighboring governments hostile to Tribal sovereignty and regulatory authority.[198]

On the other hand, assumption of TAS authority allows Tribes to shore up protections for Indian country water quality as well as their sovereign authority to regulate waters across the entire reservation.[199] This is particularly important for the many Tribes whose

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Colonial Entanglements: "Treatment as a State" Policy for Indigenous Co-Governance, 19 GLOBAL ENV'T POLITICS 33, 40-42 (2019) (reviewing scholarship); Anna Fleder & Darren J. Ranco, *Tribal Environmental Sovereignty: Culturally Appropriate Protection or Paternalism?*, 19 J. NAT. RES. & ENV'T L. 35, 52 (2004).

195. In a similar vein, Professor Maggie Blackhawk has posited that addressing discrimination within the political branches will "do little to address the artifacts of colonialism" as "[f]orcing colonized people to engage in our democratic process to avoid subordination only furthers the colonial project." Maggie Blackhawk, *Federal Indian Law as Paradigm Within Public Law*, 132 HARV. L. REV. 1787, 1800 (2019).

196. *See* 33 U.S.C. § 1377(e)(1)-(3) (Westlaw 2025).

197. *See* Fleder & Ranco, *supra* note 194, at 52 (observing that "[m]any Tribal governments, include that of Isleta Pueblo, have been forced, and have sometimes chosen, to adopt aspects of the Euro-American culture in order to facilitate interaction with the federal government in hopes of making small advances toward self-government—for example, the right to develop water quality standards"); *see generally* Diver, *supra* note 194, at 36 (observing that conditioning Indigenous governance on compliance with Western regulatory frameworks and funding "often reinforce existing power imbalances and the subordination of Indigenous knowledge traditions").

198. *See* Wyoming v. U.S. Env't Prot. Agency, 875 F.3d 505 (10th Cir. 2017) (holding that Wind River Reservation was diminished by 1905 surplus land act and vacating Clean Air Act TAS authorization as to diminished area); *see generally* Grijalva *supra* note 21, at 37-58 (reviewing similar diminishment challenges); The Supreme Court's decision in *McGirt v. Oklahoma*, holding that land reserved by treaty for the Creek Nation was not diminished by Allotment Era policies, has dampened though not eliminated the threat of diminishment challenges. McGirt v. Oklahoma, 591 U.S. 894 (2020).

199. *See City of Albuquerque*, 97 F.3d at 418 (confirming Congress's intent to eliminate

reservations, as a result of Allotment Era policies, include land owned in fee by non-members.[200] EPA bolstered this dimension of the TAS provisions in 2016, when it issued a rule reinterpreting Section 518 as a Congressional delegation of authority to Tribes to administer Clean Water Act regulatory programs "over their entire reservations, including over nonmember activities on fee land within the reservation of the applicable Tribes."[201] The rule eliminated prior requirements EPA had placed on Tribes seeking TAS authority to demonstrate inherent authority to regulate conduct of nonmembers on reservation fee lands under the test established by the Supreme Court's 1981 decision in *Montana v. United States* and its progeny.[202] A Tribe can instead rely on Section 518's express delegation "as the source of its authority to regulate its entire reservation under the [Clean Water Act] without distinguishing among various categories of on-reservation land."[203]

In practical effect, Section 303(c) has proved sufficiently flexible to allow Tribes to fill the jurisdictional vacuum for reservation water quality control with standards tailored to protection of Tribal cultural uses and attentive to the distinct health risks Tribal members face on account of culturally-specific practices. In one notable instance, the Tenth Circuit in *City of Albuquerque v. Browner* upheld Section 303(c) water quality standards developed by the Pueblo of Isleta, which designated "Primary Contact Ceremonial Use" as a protected use of the Rio Grande River within reservation boundaries, encompassing immersion and intentional or incidental ingestion for religious or traditional purposes.[204] Among its allegations, the City charged EPA with violating the Constitution's

barriers to Tribal self-governance of reservation water quality by "preserv[ing] the rights of Tribes to govern their water resources within the comprehensive statutory framework of the Clean Water Act").

200. *See* Diver, *supra* note 194, at 40-41 (observing that Tribes "may eschew TAS and instead adopt their own non-TAS water quality standards and water codes, although Tribally approved standards primarily apply to Tribal members on Tribal lands").

201. Revised Interpretation of Clean Water Act Tribal Provision, 81 Fed. Reg. 30183 (May 16, 2016) (to be codified at 40 C.F.R. pts. 123, 131, 233 & 501).

202. *Amendments to the Water Quality Standards Regulation that Pertain to Standards on Indian Reservations*, 56 Fed. Reg. 64876 (Dec. 12, 1991) (to be codified at 40 C.F.R. pt. 131); *see* Montana v. United States, 450 U.S. 544, 566 (1981).

203. 81 Fed. Reg. at 30190 (May 16, 2016); *see* Montana v. U.S. Env't Prot. Agency, 137 F.3d 1135, 1141 (9th Cir. 1998) (holding that Confederated Salish and Kootenai Tribes that had acquired TAS status under prior version of EPA regulation properly exercise "inherent Tribal regulatory authority over non-consenting members.")

204. 97 F.3d at 428-29.

Establishment Clause by approving water quality standards directed at protection of ceremonial practices. The Tenth Circuit disagreed, holding that EPA's approval "serves a clear secular purpose: promotion of the goals of the Clean Water Act" even as it functioned to enable practice of Tribal religion.[205]

The Pueblo of Isleta's water quality standards are far from singular in integrating Tribal custom into the federal regulatory structure. In a 2015 survey of Tribal water quality codes adopted by Tribes with TAS status in Arizona, Montana, New York, and Oklahoma, Professor Elizabeth Kronk Warner identified innovations by a host of Tribes that have used TAS authority to reconcile the Clean Water Act's Western regulatory and scientific framework with Tribal values, custom, and knowledge.[206] For instance, the Hopi Tribe's water quality standards—approved by EPA in 2008[207]—expand on traditional federal standards by adding designated uses for "Primary Contact Ceremonial" water uses and "Fish Consumption" and by "allow[ing] for a determination that a body of water is a 'unique' water because of the water's 'exceptional recreational, traditional, or ecological significance.'"[208] Kronk Warner identifies similar protections for cultural, religious, and ceremonial practices in water quality ordinances and codes adopted by most of the other surveyed Tribes.[209] Researchers have also found that Tribes tend to adopt water quality criteria that list more pollutants than neighboring States and that otherwise vary considerably from state standards.[210] This Tribal experimentation and adaptation of water quality programs surfaces ways in which Tribes adapt the machinery of the colonizer to serve their own ends.

Tribes' exercise of TAS authorities can also reach non-Tribal activities beyond reservation boundaries that implicate reservation water quality.[211] In *City of Albuquerque*, the Tenth Circuit concluded

205. *Id.* For a discussion of this and other decisions rejecting Establishment Clause challenges to government protections of Native sacred sites and practices, see Anthony Moffa, *Traditional Ecological Rulemaking*, 35 STAN. ENV'T L.J. 101, 149-54 (2016).

206. Kronk Warner, *supra* note 21; *see also* Suagee, *supra* note 188, at 233-34 ("When Tribal governments become engaged in environmental federalism, they do not act exactly like state governments. Perhaps the most significant distinction between the two is that Tribal policy decisions tend to reflect Tribal cultural values.").

207. *See* U.S. Env't Prot. Agency, Water Quality Standards Regulations: Hopi Tribe, https://www.epa.gov/wqs-tech/water-quality-standards-regulations-hopi-tribe.

208. Kronk Warner, *supra* note 21, at 822.

209. *Id.* at 817-31.

210. Diver, *supra* note 194, at 48.

211. One commentator has argued that "[o]ne of the most important benefits that a

that Section 518 allows Tribes, like States, to establish water quality standards that are more stringent than federal standards and, in cooperation with EPA, to require upstream point-source dischargers to comply with downstream Tribal standards.[212] Several years later, the Seventh Circuit in *Wisconsin v. EPA* affirmed EPA's authority to approve TAS status for the Mole Lake Band of Lake Superior Chippewa Indians so it could adopt water quality standards to, among other things, protect manoomin (wild rice)—an economically, culturally, and spiritually important staple for Tribes in the region.[213] The Seventh Circuit's decision acknowledged that the Tribe's water quality standards could interfere with planned construction of "a huge zinc-copper sulfide mine on the Wolf River," upstream of reservation waters.[214] But the court found no issue with these extraterritorial effects: "Once a [T]ribe is given TAS status, it has the power to require upstream off-reservation dischargers, conducting activities that may be economically valuable to the state (*e.g.*, zinc and copper mining), to make sure that their activities do not result in contamination of the downstream on-reservation waters" even though achieving "such compliance may impose higher compliance costs on the upstream company, or in the extreme case it might have the effect of prohibiting the discharge or the activities altogether."[215]

Despite the considerable benefits for eligible Tribes, Congress' limitation of TAS authority to the metes and bounds of Indian country replicates a history of political and cultural subjugation that has denied many Tribes self-rule in their most important ancestral lands. Most glaringly, the bright-line limits on eligibility for TAS status make it wholly unavailable to the more than 400 Tribes recognized under state law that have not been able to make it onto the federal recognition list and the more than 200 federally recognized Tribes without formal or informal reservations.[216] For Tribes

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Tribe can realize from becoming a partner in environmental federalism is the use of federal law to deal with cross-boundary pollution matters." Dean B. Suagee, *The Indian Country Environmental Justice Clinic: From Vision to Reality*, 23 VT. L. REV. 567, 569 (Spring 1999).

212. 97 F.3d at 423-24. Although in this section of its opinion, the court was addressing enforcement of downstream effluent limitations against upstream dischargers, its reasoning applies equally to Tribal water quality standards adopted under Section 303(c).

213. Wisconsin v. U.S. Env't Prot. Agency, 266 F.3d 741 (7th Cir. 2001), *cert. denied*, 122 S.Ct. 2347 (2002).

214. *Id.* at 745.

215. *Id.* at 748.

216. *See* U.S. GOV'T ACCOUNTABILITY OFF., GAO-12-348, REPORT TO THE HONORABLE DAN BOREN, HOUSE OF REPRESENTATIVES, INDIAN ISSUES: FEDERAL FUNDING

eligible to pursue TAS status, Section 518's jurisdictional limitation to Indian country lands can be nearly as significant a barrier. The geographic and legal distance between reservation and ancestral lands, on top of the time and resources demanded to pursue TAS status, may help to explain why only 85 of 574 federally recognized Tribes have obtained authority to administer a Section 303(c) water quality standard program on Tribal lands, amounting to roughly one quarter of Tribes with formal or informal reservations.[217] Of these 85 Tribes, only 52 have EPA-approved Tribal water quality standards as of December 2024.[218]

The upshot is that the jurisdictional gap that Congress sought to fill when it adopted the TAS provisions in 1987 persists across most of Indian country. EPA recently estimated that "about 76,000 miles of river and streams and 1.9 million acres of lakes, reservoirs, and other open surface waters within Indian reservations currently lack [Clean Water Act]-effective [water quality standards]; these reservations are home to approximately 550,000 people."[219] In May 2023, EPA proposed to fill this gap by adopting federal baseline water quality standards for Indian reservations without approved water quality standards.[220] The rule proposed to designate "cultural and traditional uses of reservation waters" as uses to be protected for all reservation waters, in addition to aquatic life and recreational uses, and proposed narrative criteria together with a framework to translate them into locally-tailored numeric values.[221] EPA

FOR NON-FEDERALLY RECOGNIZED TRIBES (2012) (identifying approximately 400 non-federally recognized Tribes, only 26 of which received funding from federal programs between 2007 and 2010); Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. 29496, 29498 (May 5, 2023) (recording that around 300 of the 574 federally recognized Tribes have informal or formal reservations that make them eligible to exercise TAS authority over reserved land).

217. Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. at 29498. Of those 85 Tribes, all but one are authorized to administer Section 401 certifications. *Tribes Approved for Treatment as a State (TAS)*, U.S. ENV'T PROT. AGENCY, https://www.epa.gov/Tribal/Tribes-approved-treatment-state-tas. EPA has not yet authorized any Tribe to directly administer NPDES programs.

218. Federal Baseline Water Quality Standards for Indian Reservations: Withdrawal of Proposed Rule, 90 Fed. Reg. 1909 (Dec. 20, 2024).

219. Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. at 29499.

220. *Id.* at 29496. EPA's proposed rule would not have applied baseline water quality standards to off-reservation allotments or dependent Indian communities. *Id.* at 29500; *see also* Grijalva, *supra* note 21, at 58-65 (providing a thorough discussion of EPA's history of halting consideration of federal baseline standards).

221. Federal Baseline Water Quality Standards for Indian Reservations, 88 Fed. Reg. at 29522.

withdrew the proposed rule in the final month of the Biden Administration, reaffirming its preference for Tribes to obtain TAS status to develop standards "tailored to the Tribes' individual environmental goals and reservation waters," as well as EPA's commitment to helping Tribes build capacity to perform these functions.[222]

IV. PROTECTION OF OFF-RESERVATION TRIBAL CULTURAL USES THROUGH STATE WATER QUALITY STANDARDS

In contrast with the extensive scholarship on reservation water governance, much less attention has been paid to the possibility of extending Tribal cultural use protections and Tribal water quality governance beyond Indian country. This is a significant oversight. As the Snoqualmie Tribal Council explained in commenting on EPA's proposed federal baseline rule, "the Tribe's resources are not limited to 'Indian country' reservation lands and lands held in trust. Rather, the Tribe's legal interest to protect water quality extends throughout the Tribe's ancestral homelands and to its sacred sites."[223] It also presents a significant challenge, as Congress designed TAS authorization for Tribes to act as co-regulators to be coextensive with Tribes' territorial jurisdiction. Except in those instances where it can be shown that upstream activities implicate downstream Tribal water quality standards, extending protections beyond Indian country will accordingly need to be effected through state or federal water quality standards. Whether and how this might be achieved merits critical examination.

The following discussion examines two non-exclusive pathways toward off-reservation Tribal cultural use protections under the Clean Water Act: (1) requiring state and federal water quality standards to protect off-reservation fishing, gathering, and other water-dependent rights reserved to Tribes by treaties and other federal instruments, and (2) designating cultural uses exercised by Tribes in ancestral waterways as uses to be protected in water quality standards irrespective of their relationship to reserved rights. This analysis locates state and federal duties under both pathways. Such duties exist, at minimum, where cultural uses are exercised under

222. Federal Baseline Water Quality Standards for Indian Reservations: Withdrawal of Proposed Rule, 90 Fed. Reg. at 1909.

223. *Snoqualmie Indian Tribes' Comments on Proposed EPA Baseline Tribal Water Quality Standards*, U.S. ENV'T PROT. AGENCY, (Aug. 1, 2023), https://www.regulations.gov/comment/EPA-HQ-OW-2016-0405-0229.

federally reserved rights and where, regardless of rights, the uses are existing ones that must be protected against water quality degradation.

A. *Harmonizing Water Quality Standards with Tribal Reserved Rights*

The first pathway seeks to harmonize water quality standards with rights reserved to Tribes by treaties and other federal instruments. In exchange for land cessions, numerous Tribes obtained treaty guarantees to continue fishing, hunting, gathering, and exercising other practices essential to Tribal lifeways in off-reservation ancestral lands.[224] In its foundational 1905 decision on off-reservation reserved rights, the Supreme Court in *United States v. Winans* interpreted the treaty between the Yakama Nation and the United States to secure to the Tribe the right to fish at places customarily visited prior to treaty time, as well as an implied easement to traverse private property to access customary fishing grounds.[225] In upholding the Tribe's off-reservation fishing rights, the Court acknowledged that such rights "were not much less necessary to the existence of the Indians that the atmosphere they breathed."[226] Similar reservations of rights in ceded territories, both express and implied, are replete in treaties with Tribal Nations in the Pacific Northwest, the Great Lakes Region, and elsewhere around the country. The federal government continued to reserve off-reservation rights to Tribes by statute and by executive orders grounded in congressionally delegated authority beyond the close of the treaty-making era in 1871.[227]

States must avoid trammeling on Tribal reserved rights, either by directly interfering in their exercise or through action (or inaction) that impairs the right. These obligations stem from Article VI,

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224. *See* Robert T. Anderson, *Water Rights, Water Quality, and Regulatory Jurisdiction in Indian Country*, 34 STAN. ENV'T. L.J. 195, 205 (2015) (recounting history of Tribal reserved rights).

225. United States v. Winans, 198 U.S. 371 (1905).

226. *Id.* at 381.

227. *See* Parravono v. Babbitt, 70 F.3d 539, 545 (9th Cir. 1995) (explaining that when Congress suspended treaty-making in 1871, it delegated power to the President to create Indian reservations, a practice which persisted until Congress put an end to it in 1919 (citing WILLIAM C. CANBY, AMERICAN INDIAN LAW IN A NUTSHELL 17-18 (2d ed. 1988)). A congressional delegation of authority to withdraw land and accompanying water rights from the public domain may be express or implied "from long continued Congressional acquiescence in the executive practice." Sioux Tribe of Indians v. United States, 316 U.S. 317, 326 (1942).

Clause 2 of the U.S. Constitution, which makes treaty and statutory commitments "the supreme Law of the Land," taking precedent over conflicting state law.[228] As the Supreme Court said in *Winans*, rights reserved to Tribes are "intended to be continuing against the United States and its grantees as well as against the state and its grantees."[229] Courts have thus consistently enjoined State actions that directly interfere with reserved rights—for instance, by compelling Tribal members to obtain licenses to exercise off-reservation reserved fishing rights[230] or by imposing a total ban on commercial net fishing for steelhead, thereby interfering with Tribes' treaty-protected share of the fish run.[231]

Tribes have also successfully enforced treaty rights to compel conservation of water resources and habitat essential to the exercise of a reserved right.[232] In *United States v. Adair*, the Ninth Circuit identified implied treaty-reserved water rights for the Klamath Tribe to uphold its "exclusive right to hunt, fish, and gather on its reservation,"[233] which entitle the Tribe to "prevent other appropriators from depleting the stream waters below a protected level in any area where the non-consumptive right applies."[234] These reserved water rights have since been asserted to halt deliveries of

228. U.S. CONST. art. VI, cl. 2. Courts have "long held that when it comes to protecting [T]ribal rights against non-federal interests, it makes no difference whether those rights derive from treaty, statute or executive order, unless Congress has provided otherwise." *Parravono*, 70 F.3d at 545 (citing cases).

229. *Winans*, 198 U.S. at 381-82.

230. Tulee v. Washington, 315 U.S. 681, 685 (1942) ("exaction of fees as a prerequisite to the enjoyment of fishing in the 'usual and accustomed places'" reserved to Yakama Tribe by a 1859 treaty "cannot be reconciled with a fair construction of the treaty").

231. Dep't of Game of Wash. v. Puyallup Tribe, 414 U.S. 44, 45 (1973); *cf.* Minnesota v. Mille Lacs Band of Chippewa Indians, 526 U.S. 172, 204-5 (1999) (reasoning that reservation of rights "curtails the State's ability to regulate hunting, fishing, and gathering by the Chippewa in the ceded lands" but accommodates State authority "to impose reasonable and necessary nondiscriminatory regulations on Indian hunting, fishing, and gathering rights in the interest of conservation"); United States v. Washington, 520 F.2d 676, 686 (9th Cir. 1975) ("Direct regulation of treaty Indian fishing in the interests of conservation is permissible only after the state has proved unable to preserve a run by forbidding the catching of fish by other citizens under its ordinary police power jurisdiction.").

232. *See* Washington v. Wash. State Commercial Passenger Fishing Vessel Ass'n, 443 U.S. 658 (1979) (holding that state fisheries agency may be ordered to promulgate and enforce regulations in compliance with a federal court's decree to ensure Tribes their treaty-protected share of off-reservation fisheries).

233. United States v. Adair, 723 F.2d 1394, 1398, 1408 (9th Cir. 1983). The Klamath Tribes' "hunting, fishing and implied reserved water rights survived passage of the Termination Act," which largely terminated the reservation originally secured to the Klamath Tribes with their 1864 treaty. Baley v. United States, 942 F.3d 1312, 1322 (Fed. Cir. 2019).

234. *Adair*, 723 F.32d at 1411.

water by the U.S. Bureau of Reclamation to farmers that imperiled treaty-protected fish runs.[235] And in a sub-proceeding of the long-running *United States v. Washington* litigation over the Stevens Treaties, twenty-one Indian Tribes joined by the United States succeeded in compelling the State of Washington to repair the hundreds of State-owned barrier culverts hindering the movement of salmon across 1,000 linear miles of streams.[236] By suppressing fish propagation, the State's barrier culvert system interfered with treaty-protected fish harvest and "caused cultural and social harm to the Tribes in addition to the economic harm."[237] In upholding the district court's permanent injunction against the State, the Ninth Circuit reasoned that implicit in the treaty right to access usual and accustomed fishing grounds was the existence of "fish sufficient to sustain them" and that the State had acted in a manner inconsistent with that implied right.[238]

If States can be compelled to adopt regulations to protect treaty-protected fishing or fix a statewide system of barrier culverts to avoid suppressing treaty-protected fish runs, it follows that they can also be required to maintain Section 303(c) water quality standards consistent for exercise of Tribal reserved rights. This is especially so as statutory language confirms that the Clean Water Act should not be construed as "affecting or impairing the provisions of any treaty of the United States."[239] For most of the last decade, EPA has exercised its Section 303(c) oversight authorities to ensure integration of Tribal reserved rights into state water quality standards. In 2015, EPA interpreted the State of Maine's "fishing" designated use to encompass subsistence fishing rights reserved to the Passamaquaoddy Tribe and Penobscott Nation under the Maine Indian Claims Settlement Act.[240] EPA then disapproved Maine's human

235. *Baley*, 942 F.3d at 1337 (holding that "[a]t the bare minimum, the Tribes' rights entitle them to the government's compliance with the [Endangered Species Act] in order to avoid placing the existence of their important [T]ribal resources in jeopardy.").

236. 853 F.3d 946 (9th Cir. 2017); *see also* CHARLES F. WILKINSON, TREATY JUSTICE: THE NORTHWEST TRIBES, THE BOLDT DECISION, AND THE RECOGNITION OF FISHING RIGHTS 228-30 (2024).

237. *Washington*, 853 F.3d at 966.

238. *Id.* at 964. For an excellent account of litigation over implied environmental servitudes in the Stevens Treaties, *see* Gerald Torres, *Decolonization: Treaties, Resources Use, and Environmental Conservation*, 91 U. COLO. L. REV. 709 (2020).

239. 33 U.S.C. § 1371(a)(3) (Westlaw 2025).

240. Letter from H. Curtis Spalding, Regional Administrator, U.S. Env't Prot. Agency Region 1, to Patricia W. Aho, Commissioner, Me. Dep't of Env't Prot. (Feb. 2, 2015), https://www.epa.gov/sites/default/files/2016-04/documents/me_let_020215.pdf

health criteria because they were not based on a fish consumption rate that reflected the reserved subsistence fishing rights.[241] In 2016, EPA likewise interpreted the state of Washington's designated fish and shellfish harvesting use to encompass subsistence fishing rights reserved under the Stevens Treaties.[242] Identifying Tribes "as the target population" for health-based water quality controls related to fish and shellfish consumption, EPA applied a subsistence fish consumption rate of 175 grams per day to derive human health criteria—significantly higher than the agency's recommended national default fish consumption rate of 22 grams per day.[243] EPA took an analogous position on Idaho water quality standards through a series of letters that designated Tribal subsistence fishers as the "target general population" for water quality criteria to vindicate treaty fishing rights.[244] EPA grounded these decisions in its "obligation to ensure that its actions do not conflict with [T]ribal treaty rights."[245]

(citing 30 M.R.S. § 6207(4), (9), miscited in the letter as "38 M.R.S. § 6207(4), (9)").

241. Although EPA in 2020 withdrew its 2015 disapprovals, the State of Maine had by then designated a sustenance fishing use subcategory, which EPA approved, and decided that human health criteria to protect sustenance fishing would be based on a fish consumption rate of 200 g/day rather than the 32.4 g/day used to derive human health criteria in other waters in the state. Letter from Dennis Deziel, Regional Administrator, U.S. Env't Prot. Agency, to Gerald D. Reid, Me. Dep't Env't Prot. (May 27, 2024), https://www.epa.gov/sites/default/files/2020-05/documents/revision-decisions-2015-052720-signed.pdf.

242. Revision of Certain Federal Water Quality Criteria Applicable to Washington, 81 Fed. Reg. 85424 (Nov. 25, 2016). EPA in 2015 "made a [Clean Water Act] Section 303(c)(4)(B) determination that new or revised [water quality standards] for the protection of human health in Washington were necessary to meet the requirements of the CWA." A year later, it disapproved 143 and approved 45 human health criteria adopted by Washington. In its November 2016 rulemaking, EPA adopted standards for state waters directly along with the 45 approved human health criteria from Washington; *Id.* at 85419.

243. *Id.* at 85422, 85426. Until 2000, EPA had applied a default 6.5 gram per day fish consumption rate normed on average American fish consumption habits. *See* O'Neill, *supra* note 55, at 17 (discussing erasure of Tribal subsistence fishing practices in water quality standard-setting). EPA's revised methodology set a default fish consumption rate of 17.5 g/day (later raised to 22 g/day) for the general population and a default subsistence consumption rate of 142.4 g/day for subsistence anglers. ENV'T PROT. AGENCY, EPA-822-B-00-004, METHODOLOGY FOR DERIVING AMBIENT WATER QUALITY CRITERIA FOR THE PROTECTION OF HUMAN HEALTH 4-24 (2000), https://www.epa.gov/sites/default/files/2018-10/documents/methodology-wqc-protection-hh-2000.pdf.

244. Letter from Chris Hladick, Regional Administrator, U.S. Env't Prot. Agency Region 10, to John Tippets, Director, Idaho Dep't Env't Quality 11 (Apr. 4, 2019), https://www.epa.gov/sites/default/files/2019-04/documents/04042019_cover_letter_approval_of_deq_human_health_criteria_signed.pdf.

245. Revision of Certain Federal Water Quality Criteria Applicable to Washington, 81 Fed. Reg. at 85426.

After EPA under the first Trump Administration disavowed these actions, the EPA under Biden adopted a final rule in May 2024 evolving the approach pioneered in Maine, Washington, and Idaho to create a framework that could apply to the diversity of rights reserved to Tribes across federal instruments.[246] The rule first requires that when a Tribe or Tribal member asserts a reserved right in writing to the State or EPA, the State must "[t]ake into consideration the use and value of their waters for protecting the Tribal reserved right[247] in adopting or revising designated uses."[248] Second, the rule requires that States consider "anticipated future exercise" of the reserved right unsuppressed by poor water quality in setting water quality standards.[249] And third, it requires that States establish water quality criteria to protect Tribal reserved rights that are encompassed by designated uses, using exposure inputs representative of Tribal practices.[250]

EPA's final rule pared back a more ambitious proposal that would have required States to affirmatively investigate and protect Tribal reserved rights when they review and revise water quality standards.[251] Although the final rule makes quite modest demands of States—merely to "consider" Tribal reserved rights when asserted in writing—this was not sufficient to ward off a challenge in North Dakota District Court by eleven States and industry *amici* concerned that the rule overstretches EPA's authorities and will ratchet up costly water quality controls.[252] In September 2025, the

246. Water Quality Standards Regulatory Revisions To Protect Tribal Reserved Rights, 86 Fed. Reg. 35717 (May 2, 2024). EPA's final rule disclaimed that it was grounded in EPA's fiduciary duties to safeguard reserved rights for beneficiary Tribes, instead relying on the agency's Section 303(c) oversight authority and its Section 501 authority to promulgate regulations to carry out its Clean Water Act functions, seemingly to avoid tension with the holding in the then recently decided Supreme Court case *Arizona v. Navajo Nation,* 599 U.S. 555 (2023). 86 Fed. Reg. at 35724.

247. The regulations define "Tribal reserved rights" as "any rights to [Clean Water Act]-protected aquatic and/or aquatic-dependent resources reserved by right holders, either expressly or implicitly, through Federal treaties, statutes, or Executive orders." 40 C.F.R. § 131.3(r).

248. 40 C.F.R. § 131.9(a)(1).

249. 40 C.F.R. § 131.9(a)(2).

250. 40 C.F.R. § 131.9(a)(3).

251. *See* Water Quality Standards Regulatory Revisions To Protect Tribal Reserved Rights, 87 Fed. Reg. 74367 (proposed Dec. 5, 2022) (requiring States to affirmatively engage with potential rights holders to "determine if there are reserved rights, the scope of those rights, and whether and how they should be applied in the [water quality standard] context," including by requesting information on reserved rights during triennial reviews).

252. Complaint and Petition for Review at 21-22, Idaho v. Env't Prot. Agency, Case

EPA under the second Trump Administration withdrew its defense of the rule, deeming it agency overreach.[253] This paper posits that the litigating positions of the plaintiff States and the Trump EPA misunderstand both the scope of the challenged rule and preexisting state and federal duties to ensure protection of reserved rights in water quality regulation.[254]

First, the plaintiff States contend that EPA improperly reads protection of "Tribal reserved rights" into the list of uses and values which States are to consider designating under Section 303(c)(2)(A). And they argue that, read in context, any unenumerated purposes can mean only "economic" purposes, which would exclude protection of cultural and subsistence uses.[255] Neither argument holds water. Section 303(c) requires that water quality standards take "into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purpose, and agricultural and other purposes . . . ."[256] Many Tribal reserved rights (for instance, fishing and hunting) will fall within enumerated purposes (for instance, propagation of fish and wildlife). Rather than requiring new use designations, their protection may simply call for heightened criteria—such as the re-normed toxin criteria that EPA required for Washington state to account for exposure rates of uniquely sensitive Tribal communities and avoid suppression effects. For cultural uses that fall outside enumerated purposes, "other purposes" is best read in light of the Act's ameliorative objectives and legislative intent to prioritize protection of non-consumptive water uses over economic considerations. Congress, in other words, left a good deal of "play in the joints in the administrative scheme"[257] to integrate a broadening set of uses and values in service of the Act's restorative purposes; by revealing contrast, it made it exceedingly difficult to remove a use once

No. 1:24-cv-100 (D.N.D. May 28, 2024).

253. Notice of Withdrawal of Prior Filings, Idaho v. Env't Prot. Agency, Case. No. 1:24-cv-100 (D.N.D. Sept. 16, 2025).

254. Order Granting Motion to Hold Case in Abeyance, Idaho v. Env't Prot. Agency, Case No. 1:24-cv-100 (D.N.D. Feb. 10, 2025).

255. Complaint and Petition for Review, *supra* note 252, at 38.

256. 33 U.S.C. § 1313(c) (Westlaw 2025).

257. Charles W. Tyler & Heather K. Gerken, *The Myth of Laboratories of Democracy*, 122 COLUM. L. REV. 2188, 2238 (2022) (considering implications of State discretion in carrying out a federal regulatory scheme for anti-commandeering and Spending Clause challenges).

designated or attained.[258]

Second, the plaintiff States have charged EPA with upsetting a delicate balance in the distribution of power under the Act by unconstitutionally conscripting State administrators into carrying out federal Indian policy.[259] This argument misunderstands the federalism that undergirds the statute. As a textbook example of cooperative federalism,[260] the Clean Water Act is designed to coordinate distribution and exercise of power between levels of government: the EPA in its oversight role, partnering with States and authorized Tribes that carry out the bulk of the statute's administrative functions.[261] The Act preserves the traditional function of States and Tribes to manage water quality within their jurisdictions by affording them substantial discretion to design and tailor water quality standards.[262] But Congress clearly intended to correct the disintegration of water quality resulting from weak and divergent State regulation through minimum nationwide expectations and a supercharged EPA oversight role.[263]

In the water quality standards context, these functions appear in EPA's congressionally delegated duty to approve or disapprove standards based on its assessment of their consistency with the Act,

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258. *See Changing/Removing a Designated Use*, ENV'T PROT. AGENCY, https://19january2017snapshot.epa.gov/wqs-tech/key-concepts-module-2-use_.html [https://perma.cc/6RTN-6XXM] (last visited Nov. 13, 2025).

259. Complaint and Petition for Review, *supra* note 252, at 13-17.

260. *See* Philip J. Weiser, *Towards a Constitutional Architecture for Cooperative Federalism*, 79 N.C. L. REV. 663, 665 (2001) ("[C]ooperative federalism envisions a sharing of regulatory authority between the federal government and the states that allows states to regulate within a framework delineated by federal law."); *see also* Robert W. Adler, *A Unified Theory of Clean Water Act Jurisdiction*, 73 CASE W. RES. L. REV. 235, 236 n.4 (2022) ("Like it has done in many federal environmental statutes, Congress embraced the strategy of cooperative federalism in the CWA, with shared responsibility between the federal government and the states.").

261. *See* Arkansas v. Oklahoma, 503 U.S. 91, 101 (1992) ("The Clean Water Act anticipates a partnership between the States and the Federal Government, animated by a shared objective: 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'" (quoting 33 U.S.C. § 1251(a) (Westlaw 2025)).

262. *See* 33 U.S.C. § 1251(b) (Westlaw 2025). The Act also preserves States' sovereign interests by authorizing adoption of more stringent effluent and other pollution-control standards than federal minima; *see* 33 U.S.C. § 1370 (Westlaw 2025); *see Arkansas*, 503 U.S. at 107.

263. *See* Robin Kundis Craig, *There Is More to the Clean Water Act than Waters of the United States: A Holistic Jurisdictional Approach to the Section 402 and Section 404 Permit Programs*, 73 CASE W. RES. L. REV. 349, 355 (2022) ("One of the core regulatory innovations of the 1972 amendments was to tie previously existing state water quality standards to federal water quality permitting requirements, in part because of growing congressional concerns about the impact of water pollution on public health.").

as well as the discretion afforded to EPA to sua sponte adopt new standards when, in its judgment, existing ones are falling below the statute's minimum requirements. Courts have characterized EPA's oversight over water quality standards as a "limited, non-rulemaking role," restricted to "approval and rejection powers only."[264] These characterizations overlook EPA's broader supervisory functions, including its authority to declare existing standards noncompliant, to promulgate standards directly when a State or authorized Tribe fails to bring its standards into compliance, and to adopt rules as necessary to carry out its oversight functions.[265] The Act also empowers EPA to impose general procedural and substantive constraints on water quality standards by vesting broad rulemaking authority in the agency[266] and providing for state water quality criteria to be measured against EPA's recommended Section 304(a) criteria.[267]

The twelve plaintiff States in *Idaho v. EPA* have looked to test the limits of EPA's supervisorial role by invoking the anti-commandeering doctrine.[268] The anti-commandeering doctrine is grounded in the Tenth Amendment's reservation to the States of powers not delegated to the federal government.[269] Under the Supreme Court's recent articulations, the doctrine prevents the federal government from "commandeer[ing] the legislative process of the States by directly compelling them to enact and enforce a federal regulatory program."[270] The problem for the *Idaho* plaintiffs is that the Supreme Court has consistently read cooperative federalism schemes to be entirely consistent with the Tenth Amendment and untroubled by anticommandeering principles. In *Hodel v. Virginia Surface Mining*, the Court explained in reference to the federal Surface Mining Control and Reclamation Act of 1977 that cooperative federalism statutes do not "commandeer the legislative processes of the States" so long as they leave States with the option of opting out

264. *City of Albuquerque*, 97 F.3d at 425; *see* Natural Res. Defense Council v. U.S. Env't Prot. Agency, 16 F.3d 1395, 1399-1401 (4th Cir. 1993).

265. *See* 33 U.S.C. §§ 1313(c), 1361(a) (Westlaw 2025).

266. *See* 33 U.S.C. § 1361 (Westlaw 2025).

267. *See* 40 C.F.R. pt. 131 (setting forth model water quality standards); *Arkansas*, 503 U.S. at 101; *see also* 40 C.F.R. § 131.4(a) (providing that "States may develop water quality standards more stringent than required by this regulation").

268. Complaint and Petition for Review, *supra* note 252, at 31.

269. U.S. Const. amend. X.

270. Hodel v. Virginia Surface Mining & Reclamation Ass'n, 452 U.S. 264, 288 (1981).

of participating in the federal regulatory program, in which case "the full regulatory burden will be borne by the Federal Government."[271] Just so here.[272] States (and Tribes) that prefer not to incur the burden and expense of considering asserted Tribal reserved rights in setting water quality standards remain free to opt out of the federal scheme entirely and allow EPA to promulgate federal standards in their stead.

More interesting than the doctrinal dimensions of these challenges may be the reasoning behind them. Beyond economic concerns about costs associated with potential ratcheting up of water quality protections, the plaintiff States seem to object fundamentally to a duty to consider Tribal reserved rights in water quality regulation. These objections recall the State of Washington's in what has been termed "Phase II" of the *United States v. Washington* litigation: that treaty rights could be construed to imply a general duty to prevent environmental degradation that suppresses reserved rights dependent on a basic level of watershed health. As Professor Gerald Torres recounts, the State of Washington "was quite explicit about this fear: in its argument before the Supreme Court, it maintained that 'the treaties become a catch-all environmental statute that will regulate every significant activity in the Northwest . . . .'"[273] The challenge for the Tribes in the Phase II culvert sub-proceeding was to connect State action to suppression of fish runs to an extent that compromises the treaty-guaranteed take of fish—a challenge they overcame through extensive factual documentation of specific effects of State-operated culverts on salmon habitat.

In the water quality standard-setting context, these concerns appear misplaced: the causal link is even more immediate. States and EPA must make judgments grounded in "sound scientific rationale" about water quality parameters sufficient to maintain designated uses.[274] If in doing so, they set criteria that suppress the availability of species on which reserved rights depend or make rights unsafe to exercise, they make themselves vulnerable to charges that their actions interfere with reserved rights. A recent

271. *Id.*; *see* Murphy v. Nat'l Collegiate Athletic Ass'n, 584 U.S. 453, 455 (2018).

272. *See* John P. Dwyer, *The Practice of Federalism under the Clean Air Act*, 54 MD. L. REV. 1183, 1193 (1995) (explaining that similar provisions of the Clean Air Act are "directory, not mandatory").

273. Torres, *supra* note 238, at 735 (quoting Transcript of Oral Argument at 13, Washington v. United States, No. 17-269 (U.S. Apr. 18, 2018)).

274. 40 C.F.R. § 131.11(a)(1).

decision by the U.S. District Court for the District of Minnesota made this plain. The Grand Portage and Font Du Lac Bands of Lake Superior Chippewa charged EPA with compromising their treaty-reserved rights related to wild rice harvest, drinking water, medicinal and culturally important plants, and aquatic life in its approval of Minnesota's revisions to its water quality standards. Minnesota had removed numeric pollution limits that incidentally protected wild rice and aquatic life in favor of narrative standards that describe characteristics Minnesota waters must have to protect industrial and agricultural uses. At the time of summary judgment, EPA had not yet finalized its reserved rights rule, but the district court nonetheless read the statute itself to require States and EPA to "consider Tribal treaty rights to aquatic and aquatic-dependent resources... ."[275] Though the court recognized that "[f]ailure to do so may be grounds for overturning the agency's approval of water quality standards," it declined to set aside EPA's approval in that instance because it found EPA had reasonably concluded that the Bands' reserved rights would remain protected by separate and unaffected water quality standards.[276]

EPA's rule can be properly viewed as a procedural rule that organizes when and how Tribal reserved rights are to be considered and protected through water quality standards to meet substantive requirements grounded in the Clean Water Act and the Constitution. EPA's implementing regulations had previously lumped Tribal Nations with members of the general public, who are afforded a right to participate in public hearings during triennial reviews of water quality standards.[277] The new rule properly affords Tribes a dedicated space in the administrative process to dialogue with States about reserved rights in relation to water quality controls and to provide data and information to support these

275. Grand Portage Band of Lake Superior Chippewa v. U.S. Env't Prot. Agency, No. 22-1783, 2024 WL 1345202, at 12 (D. Minn. 2024).

276. *Id.* A similar degree of deference should be afforded to EPA's exercise of its judgment in reviewing state water quality standards under the principles announced by the Supreme Court in *Loper Bright. See* Loper Bright Enters. v. Raimondo, 603 U.S. 369, 395 & n.6 (2024) (reasoning that where a statute delegates discretionary authority to an agency, the Court's role is to ensure that the agency "has engaged in 'reasoned decisionmaking' within those boundaries" and citing the Clean Water Act's delegation of authority to the EPA to establish "effluent limitations" under Section 302(a) as one area where this more deferential review would apply).

277. 40 C.F.R. § 131.20(a) (requiring States to "hold public hearings" at least once every three years to review and, as appropriate, revise water quality standards); *see* 33 U.S.C. § 1313(c)(1) (Westlaw 2025).

connections, and it guarantees government-to-government to inform EPA's approvals.[278] If the rule is withdrawn, the procedures necessary to fulfill State and federal substantive duties to regulate consistent with reserved rights are likely to become more muddled and more contested, but the substantive duty would be unaffected.

B. *Protection of Tribal Beneficial Uses Beyond Reserved Rights*

As the history recounted in Part II illustrates, whether Tribes can claim reserved rights to resources necessary for customary practices has as much to do with the colonial state that assented to or refused the reservation as it does the centrality of the practices to Tribal culture and identity. The California State Water Board explained this aptly in comments to EPA on its Tribal reserved rights rule, insisting that "lack of recognition does not . . . determine whether a Tribe maintains cultural, subsistence, spiritual or other practices that depend on water quality."[279]

California's colonial history aptly illustrates these inequities. California remains home to the largest American Indian population of any state in the country: fully 15 percent of U.S. residents identifying in whole or part as Native American or Alaska Native.[280] California is also home to 110 federally recognized Tribes and around 100 non-federally recognized Tribes. Yet by virtue of California Indian policy, as recounted in Part II.B, no Tribe in the state can claim reservation of lands or other rights by treaty. Indian country today is a fraction of ancestral lands and, for many Tribes, bears little relationship to ancestral waterways.[281]

A consequence of the tragic history of California Indian policy is that water quality protections focused solely on reserved rights

278. 40 C.F.R. § 131.9(a), (c).

279. Cal. State Water Res. Control Bd., Comments to U.S. Env't Prot. Agency Re: Water Quality Standards Regulatory Revisions to Protect Tribal Reserved Rights 3, Docket ID No. EPA-HQ-OW-2021-0791 (Mar. 6, 2023).

280. *Id.* According to the 2020 U.S. Census, over 631,000 people who identify as American Indian or Alaska Native alone live in California. U.S. Census Bureau, *Race and Ethnicity in the United States: 2010 Census and 2020 Census* (2023). This number, though a dramatic increase over California's 2010 American Indian population count, may still represent an undercount. *See* Amanda Ulrich, *California's American Indian Population Jumped in the 2020 Census. Why?*, DESERT SUN (Aug. 17, 2021), https://www.desertsun.com/story/news/2021/08/17/2020-census-count-california-american-indians-more-accurate/8151037002/ [https://perma.cc/TWJ9-WXH8].

281. *See* Part II.B, at 12-17. Three reservations were established under the 1864 Four Reservations Act, albeit forcing Tribal communities with little connection to each other or the land into the same areas. Advisory Council on Cal. Indian Policy, *supra* note 58, at 7.

omit the interests of the vast majority of California Tribes and Tribal members. As a result, as the State Water Board impressed upon EPA, "tying water quality protections of Tribal beneficial uses to Tribal reserved rights . . . results in the least protection for those Tribal people who already face significant hurdles in sustaining cultural, spiritual, traditional, subsistence and other practices."[282]

The unique positionality of California Indians has led Tribes and State regulators to pioneer integrating Tribal water uses into the traditional framework of water quality controls.[283] This approach reads into Section 303(c)(2)(A)'s non-exhaustive list of purposes of the use and value of waters for Tribal cultural and subsistence purposes, irrespective of whether those uses are rooted in a federal reservation of rights.[284]

California's approach dates back to May 2011, when the North Coast regional water board amended its basin plan to add cultural water uses and subsistence fishing to the list of uses to be protected through water quality standards governing the watershed.[285] Two years later, during the 2013 annual California Tribal Water Summit, representatives of Tribes, non-profits, and state regulatory bodies discussed the prospect of extending similar protections for traditional Tribal water uses statewide. The summit culminated in a commitment to seek "formal acknowledgment that traditional Tribal uses represent beneficial uses within the meaning of State law"—with the intent to "place Tribal uses, customs and practices at the same level of importance as agricultural, domestic and other uses."[286] Following the Summit, a coalition of Tribes and non-profits wrote to the State Water Board to formally request statewide adoption of beneficial uses protecting Tribal cultural uses and

282. CAL. STATE WATER RES. CONTROL BD., *supra* note 279, at 4.

283. In California, water quality standards must also meet the requirements of the State's Porter Cologne Water Quality Control Act, Cal. Water Code § 13000 et seq.

284. *See* CAL. STATE WATER RES. CONTROL BD., *supra* note 279, at 14-15 (proposing that EPA amend its implementing regulations "to add 'Tribal uses' to the enumerated uses that state must take consideration and protect.").

285. *See Water Quality Control Plan for the North Coast Region*, N. COAST REG'L WATER QUALITY CONTROL BD. (May 2011), https://www.epa.gov/sites/default/files/2014-12/documents/ca1-northcoast.pdf, [https://perma.cc/49TG-HVLK].

286. *See* Cal. Dep't of Water Res., *California Tribal Water Summit Proceedings* (CAL. NATURAL RES. AGENCY 2013) https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/California-Water-Plan/Docs/Update2013/Tribal/Summit/2013-Tribal-Water-Summit-Proceedings.pdf. California's Water Code uses the term "beneficial uses" to refer to Section 303(c) designated uses. Cal. Water Code § 13050(f).

subsistence fishing practices.[287] For support, the requesters submitted a series of studies documenting increased fish consumption rates and resulting mercury exposure among ethnic minority communities with cultural ties to fishing. Then-Board Chair Felicia Marcus responded affirming the Board's commitment to act on the request and soliciting input on appropriate beneficial use language.[288]

The question how exactly these protections would be accomplished through the State's water quality planning was answered in part when the State Water Board adopted statewide water quality standards for mercury in 2017. Preceding the adoption, the Board sought input from a Tribal Ad Hoc Beneficial Uses Working Group; in addition, eight Tribes submitted proposals to the Board with specific beneficial use language.[289] The final terminology adopted by the Board mirrors these recommendations. The Board's 2017 update to the statewide Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries established three new beneficial use definitions: Tribal Tradition and Culture (CUL) protects "uses of water that support the cultural, spiritual, ceremonial, or traditional rights or lifeways of California Native American Tribes, including, but not limited to: navigation, ceremonies, or fishing, gathering, or consumption of natural aquatic resources, including fish, shellfish, vegetation, and materials."[290] Tribal Subsistence Fishing (T-SUB) protects "uses of water involving the non-commercial catching or gathering of natural aquatic resources, including fish and shellfish, for consumption by individuals, households, or communities of California Native

287. *See* Letter from Andia Ventura, Toxics Program Manager, Clean Water Action, et al. to Felicia Marcus, Bd. Chair, Cal. State Water Res. Control Bd., *Re: Beneficial Uses* (July 29, 2013), https://www.waterboards.ca.gov/Tribal_affairs/docs/bu_initial_reqlttr.pdf [https://perma.cc/MD3G-GVJM].

288. Letter from Felicia Marcus, Chair, Cal. State Water Res. Control Bd., to Tribal Ad Hoc Beneficial Use Group, Cultural and Subsistence Fishing Beneficial Uses (Oct. 1, 2013), https://www.waterboards.ca.gov/Tribal_affairs/docs/Tribal_ad_hoc%20beneficial_group.pdf [https://perma.cc/2GRM-5FG4].

289. *See* CAL. STATE WATER RES. CONTROL BD., DIRECTING STAFF TO DEVELOP PROPOSED BENEFICIAL USES PERTAINING TO TRIBAL TRADITIONAL AND CULTURAL, TRIBAL SUBSISTENCE FISHING, AND SUBSISTENCE FISHING, RES. NO. 2016-011 (Feb. 16, 2016), https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2016/rs2016_0011.pdf [http://perma.cc/9W9Z-LQ8Q].

290. *See* Cal. State Water Res. Control Bd., *Tribal Beneficial Uses Designations*, https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/Tribal_beneficial_uses/, [https://perma.cc/VN3E-N8KU] (last visited Nov. 19, 2025).

American Tribes to meet needs for sustenance."[291] An additional Subsistence Fishing Use (SUB) protects similar subsistence uses for non-Tribal communities.[292]

The State Water Board integrated these uses into water quality criteria by establishing mercury objectives for subsistence fishing beneficial uses that are five times as protective as the criteria established to protect sportfishing uses.[293] Two months later, EPA issued a letter approving the three new beneficial use designations and the new mercury water quality criteria, including the heightened subsistence criteria.[294] The State has since focused on integrating Tribal beneficial use designations into regional basin planning.[295] Responding to pressure by Bay-Delta Tribes, the State Water Board in December 2025 also released a proposal to update its Bay-Delta water quality control plan, which would designate the entire Bay-Delta watershed for cultural and traditional beneficial uses.[296] These designated uses could in turn be translated into heightened salinity, temperature, and flow criteria.[297] Assuming the position in this paper prevails that States and EPA are constitutionally and statutorily obligated to harmonize water quality standards with reserved rights, then Tribal beneficial uses could encompass reserved rights protections while extending protections to cultural

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291. *Id.*

292. *Id.*

293. *See* CAL. STATE WATER RES. CONTROL BD., FINAL PART 2 OF THE WATER QUALITY CONTROL PLAN FOR INLAND SURFACE WATERS, ENCLOSED BAYS, AND ESTUARIES OF CALIFORNIA—TRIBAL AND SUBSISTENCE FISHING BENEFICIAL USES AND MERCURY PROVISIONS A-4–A-5, Appendix A to Res. No. 2017-0027 (May 2, 2017), https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0027.pdf [https://perma.cc/4ER9-9LQH] (setting forth a Tribal Subsistence Fishing Water Quality Objective of 0.04 mg/kg per year of average methylmercury concentration in fish tissue and a Sport Fish Water Quality Objective of 0.2 mg/kg per year).

294. Letter from Tomás Torres, Director, Water Division, U.S. Env't Prot. Agency, Region 9, to Felicia Marcus, Chair, Cal. State Water Res. Control Bd. (July 14, 2017), https://www.epa.gov/sites/default/files/2017-07/documents/ca_hg_approval_letter_with_enclosures_signed_071417.pdf. [https://perma.cc/W6S6-GDEV].

295. *See* Cal. State Water Res. Control Bd., *Regional Water Board Progress Updates on Tribal Beneficial Uses*, https://www.waterboards.ca.gov/tribal_affairs/regional_tbu_updates.html.

296. CAL. STATE WATER RES. CONTROL BD., DRAFT BAY-DELTA PLAN UPDATE, *supra* note 158, at 10-11.

297. *Id.* at 11 (affirming that "[i]n the future, additional flow-based water quality objectives or site-specific water right requirements may be considered if needed to protect other tribal uses and activities encompassed within the" Tribal Tradition and Culture use designation).

uses that fall outside the scope of reserved rights.[298]

Indeed, there is a clear case to be made that the Clean Water Act sometimes obligates States to consider Tribal cultural uses beyond those protected by reserved rights. The case is strongest when a Tribe's water uses fall outside the scope of the Act's protections for "existing" water uses. EPA's regulations define "existing uses" as "those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards."[299] The agency's existing use regulations prohibit removal of designated uses from state water quality standards if they qualify as "existing uses"[300] and require that States adopt and implement an anti-degradation policy that ensures "existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected."[301] EPA has interpreted these regulations to together "define the absolute 'floor' of minimum use and necessary level of water quality achieved that must be maintained and protected in a waterbody."[302] If a Tribe can show that a use has actually been attained in a waterbody or segment at any point since November 1975, EPA's regulations require this "existing use" to be added to the list of designated uses for the water body and protected against degradation.[303] The State may also be required to protect the use if the water quality was *capable* of

298. In comments to EPA on its reserved rights rule, the State Water Board suggested that a focus on "Tribal uses of water" could substitute for consideration of "federally established right[s] to the use." Cal. State Water Res. Control Bd., *supra* note 279, at 10. This position misunderstands state obligation to reserved rights holders, which exist independent of their codification in EPA's implementing regulations. Still, California is surely correct that consideration of Tribal cultural and subsistence uses should not be limited to contexts where those uses fall within the scope of reserved rights.

299. 40 C.F.R. 131.3(e) (2025). EPA has interpreted "existing uses" to mean "a description of the highest degree of uses and water quality necessary to support the uses that have been achieved at any time since November 28, 1975" Env't Prot. Agency, Office of Water, Letter to State of Oklahoma, Att. at 8 (Aug. 11, 2008), https://www.epa.gov/sites/default/files/2014-10/documents/existinguse-smithee-letter.pdf (hereinafter "Smithee Letter"); *see also* Water Quality Standards Regulation, 48 Fed. Reg. 51,400, 51,403 (U.S. Env't Prot. Agency Nov. 8, 1983) (explaining that the intent of anti-degradation regulations is to provide that "the full use" of a water body "must continue to exist even if some change in water quality may be permitted").

300. 40 C.F.R. § 131.10(h) (2025).

301. 40 C.F.R. § 131.12(a)(1) (2025).

302. Smithee Letter, *supra* note 299, at 2.

303. ENV'T PROT. AGENCY, *A Framework Incorporating Community Preferences in Use Attainment and Related Water Quality Decision-Making*, EPA/625/R-08/001F (Apr. 2010) ("Designated uses must be at a minimum the uses actually attained, termed existing uses, at any time since November 28, 1975"); *see also*, e.g., Smithee Letter, *supra* note 299, at 1.

supporting it since November 1975, regardless whether there is evidence of actual practice.[304]

The Act's existing use protections may be particularly relevant as increased water scarcity, land use pressures, and higher temperatures pose new challenges to generational practices. Such challenges include, for instance, nonpoint source pollution from expanding agricultural and livestock production and urban runoff, which contribute dangerous levels of *e-coli* and other biological and chemical compounds incompatible with water contact.[305] They also include proliferation of toxic algal blooms, which have been documented as a growing threat in waterbodies to exercise of ceremonial, subsistence, and other cultural practices that require intimate water contact.[306]

Where a cultural use was not capable of being exercised since 1975 because of poor water quality, there is little question that States have discretion to include those uses in designations that embrace forward-looking protections. EPA went a step further in June 2024 when it disapproved Alaska's human health criteria based in part on the agency's concern that "people eating fish they catch for sustenance are being disproportionally impacted by toxic pollutants that may cause adverse human health effects."[307] This disapproval suggests EPA's view at the time that States may sometimes have an affirmative obligation to take into account suppression of subsistence and other cultural practices in setting water quality criteria to avoid discriminating against Tribal water users.[308] EPA has also encouraged, though not yet required, States to expressly designate Tribal cultural uses as ones to be attained and maintained

304. Smithee Letter, *supra* note 299, at 1.

305. Adler, *supra* note 118, at 210, 218 (discussing growing severity of toxic algal blooms and nonpoint source pollution and strain these problems pose on the Act's traditional regulatory structure).

306. Tayaba Decl., *supra* note 43, at ¶¶ 15-16.

307. Letter from Bruno Pigott, Acting Assistant Administrator, U.S. Env't Prot. Agency Region 10, to Emma Pokon, Commission-Designee, Alaska Dep't of Env't Conservation, 8 (June 5, 2024), available at https://dec.alaska.gov/media/x2hdedjz/alaska-hhc-administrator-determination-june-2024.pdf.

308. The pending complaint by Shingle Springs Band of Mi-Wok Indians et al. advances similar arguments that water quality impairments that suppress Tribal beneficial uses constitute discrimination in violation of Title VI of the Civil Rights Act. *See generally* Title VI Complaint, *supra* note 11 at 36 (alleging that "[c]ollapsing fish populations, loss of riparian resources, and proliferation of [harmful algal blooms] uniquely harm Native tribes by impairing their exercise of cultural, religious, and subsistence activities and thereby compromising cultural survival").

through water standards.[309] Whether or when the law may mandate such designations remains mostly untested.

V. TRIBAL CO-GOVERNANCE AND THE PURSUIT OF POLITICAL AND CULTURAL PLURALISM

A. *Toward Tribal Co-Governance*

The project of integrating Tribal cultural uses into water quality regulation outside Indian country puts into stark relief the risks for Tribes of co-optation into a dominant colonial legal framework.[310] These risks arise in the course of accommodating Tribal communitarian values and demands for cultural self-determination within a liberal legal regime focused on individual rights and freedoms. Canadian political philosopher Will Kymlicka casts such struggles as quintessential examples of the negotiation between two distinct types of communities—a political community and cultural community—that co-exist in culturally plural liberal states.[311] "Within the political community, 'individuals exercise their rights and responsibilities entailed by the framework of liberal justice.' Within the cultural community, 'individuals form and revise their aims and ambitions . . . [and] share a culture, a language and history which defines their cultural membership.'"[312] In culturally plural liberal states, persons are "owed respect as citizens *and* as members of cultural communities."[313] For Kymlicka, "group-differentiated citizenship" mediates between cultural and political communities:

309. *See* U.S. Env't Prot. Agency, *supra* note 182, at 2 (urging California State Water Resources Control Board to incorporate Tribal cultural and subsistence fishing beneficial uses into the Bay-Delta Plan and to designate Tribal culture uses throughout the Bay-Delta watershed); Martha Guzman, Regional Administrator, U.S. Env't Prot. Agency Region 9, Remarks to Cal. State Water Res. Control Bd., Bay-Delta Plan Updates Public Workshop (Dec. 3, 2024), https://www.youtube.com/watch?v=VWNiLNJjJYE (expressing EPA's strong support for the designations to aid in "healing" of the state's colonial past "by reconciling our western rules with those water uses that preexisted the entirety of our current water governance").

310. *See* Fleder & Ranco, *supra* note 194, at 55 (identifying ever-present risk of co-optation for Tribal culture and autonomy as "Native lives continue to be lived in a world of ideas imposed on them by others" (quoting TAIAIAKE ALFRED, PEACE POWER RIGHTEOUSNESS: AN INDIGENOUS MANIFESTO 70 (1999)).

311. WILL KYMLICKA, LIBERALISM, COMMUNITY AND CULTURE 135 (1989).

312. N. Bruce Duthu, *Implicit Divestiture of Tribal Powers: Locating Legitimate Sources of Authority in Indian Country*, 19 AM. INDIAN L. REV. 353, 390 (1994) (quoting KYMLICKA, *supra* note 313, at 135).

313. *Id.* at 391 (quoting KYMLICKA, supra note 311, at 151 (emphasis added)).

Indigenous groups are afforded the "external protection" from decisions of the larger society necessary to exercise self-governance and develop, maintain, and evolve distinct laws and traditions.[314] And individuals are afforded the freedom that comes with being able to exercise membership in and inform a rich cultural community.[315]

Kymlicka's focus on reconciling cultural pluralism with liberalism glosses over the political pluralism that characterizes the American Indian landscape and specifically the political sovereignty enjoyed by American Indian Tribes. Professor Bruce Duthu has thus argued that conceptions of pluralism that accommodate American Indian Tribes must more squarely acknowledge the reality that Tribal Nations in the United States are both political and cultural communities.[316] Doing so leads Duthu to argue that federal policy should be primarily concerned with safeguarding Tribal political autonomy and cultural self-determination. According to Duthu, "Tribal political action that uses law to resolve, mediate, or enforce [T]ribal cultural communitarian interests should be accorded the highest form of respect."[317] This includes decision-making over assignment and use of Tribal lands and resources, which goes directly to Tribal self-determination. As to the federal role:

Federal policy may support [T]ribal efforts to secure cultural communitarian interests but such support should not convert [T]ribal interests into federal interests subject to federal controls. The federal role, properly conceived, should be limited to securing the conditions under which the [T]ribe may pursue its cultural communitarian objectives. External constraints should thus rarely,

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314. WILL KYMLICKA, MULTICULTURAL CITIZENSHIP: A LIBERAL THEORY OF MINORITY RIGHTS 36 (1995); *see id.* at 104 (emphasizing that Indigenous groups understand their own culture as "dynamic" and "demand the right to decide for themselves what aspects of the outside world they will incorporate into their cultures" as well as to "use their traditional resources in the process").

315. *See id.* at 105; *see also* KYMLICKA, *supra* note 311, at 165 (arguing that cultural group structures should be protected "not because they have some moral status of their own, but because it's only through having a rich and secure cultural structure that people can become aware, in a vivid way, of the options available to them, and intelligently examine their value"); TULLY, *supra* note 28, at 207 (theorizing that "[a] constitutional association which recognizes and accommodates cultural diversity . . . provides the social basis for critical reflection on and dissent from one's own cultural institutions and traditions of interpretation").

316. Duthu, *supra* note 312, at 393.

317. *Id.* at 396.

if ever, be applied to check this form of [T]ribal political action.[318]

Setting aside the fact that Duthu's conception of a federal role focused on safeguarding Tribal political autonomy is at odds with the history of federal Indian law and policy,[319] it is nevertheless possible to imagine federal-Tribal relations that would comport with Duthu's paradigm in the context of TAS authorities.[320] Even if impossible to disentangle Tribal resource governance from the "artifacts of colonialism"[321] when Tribes function as co-regulators subject to federal oversight, the Clean Water Act assures Tribes exercising TAS authority a protected regulatory sphere within which to adapt the federal framework to local cultural, economic, and environmental conditions. The malleability of the "uses and values" framework of water quality standard-setting under Section 303(c) creates room for this experimentation and adaptation. EPA's oversight role may not perfectly map onto Duthu's conception of its properly constrained function. But because federal oversight within the Act's cooperative federalist structure is limited to ensuring that the statute's minimum requirements are met, Tribes could successfully push back against imposition of federal authority that seeks to interfere with Tribal regulatory primacy where Tribal regulation is directed at adapting or ratcheting up federal minima.

Still, because Duthu assumes that Tribal sovereignty is contiguous with Indian country,[322] his theory of federal-Tribal power is not particularly instructive for Tribal water governance outside Indian country and certainly outside the scope of federal reserved rights. The Clean Water Act and its implementing regulations have

318. *Id.* Because of his insistence on Tribal Nations as political as well as cultural communities, Duthu may be more tolerant than Kymlicka of "internal restrictions" on the civil and political liberties of group members. This paper does not wade into questions about when as Maggie Blackhawk puts it, such restrictions may be "so egregious as to justify disempowerment" through the "imposition of an external rights-based framework." Blackhawk, *supra* note 195, at 1872.

319. *See* Coffey & Tsosie, *supra* note 18, at 193-96 (discussing the history of federal Indian law that makes Tribal political sovereignty dependent on federal acknowledgment and plenary authority, leaving Tribal Nations "vulnerable to restrictions on their sovereignty, and perhaps even to the total annihilation of their sovereignty").

320. *See* Fleder & Ranco, *supra* note 197, at 57 (applying Duthu's theory to exercise of TAS authority).

321. Blackhawk, *supra* note 195, at 1873.

322. Coffey and Tsosie refer to this tethering of Tribal sovereignty to Indian country as a "territorial notion of sovereignty," which they trace back to the Supreme Court's decision in *Johnson v. M'Intosh* and the other decisions comprising the Marshall Trilogy. Coffey & Tsosie, *supra* note 18, at 192, 199.

historically envisioned no distinct role for Tribes in informing regulations outside Indian country, relegating Tribes to engaging in processes afforded to the general public, such as the public hearings baked into triennial reviews of water quality standards.[323] Increasingly, the federal and many state governments have made commitments to consult with Tribes on a government-to-government basis with respect to environmental decision-making that affects ancestral lands.[324] EPA's reserved rights rule makes this duty explicit for federal approvals of state water quality standards, though only for federally recognized Tribes that assert Tribal reserved rights.[325] In California, the State Water Board has made a general commitment to consult with state-recognized Tribes in the early stages of decision-making processes that may affect Tribal cultural resources, Tribal lands, and Native people.[326] Consultation, however, is not the same as consent and typically does not guarantee Tribes a meaningful role in formulating state and federal policy. Thus, for instance, the California State Water Board and Delta Tribes have staked out competing positions on the degree and formality of government-to-government consultation that California state law requires when the Board establishes and revises water quality standards.[327]

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323. *See* 33 U.S.C. § 1313(c)(1) (Westlaw 2025); 40 C.F.R. § 131.20(a); Part IV.A.

324. *See, e.g.*, Exec. Order No. 13175, *Consultation and Coordination With Indian Tribal Governments*, 65 Fed. Reg. 67,249 (Pres. Nov. 6, 2000) (requiring federal consultation and coordination with governments of federally recognized Tribes); Presidential Memorandum, *Tribal Consultation and Strengthening Nation-to-Nation Relationships*, 86 Fed. Reg. 7,491 (Pres. Jan. 29, 2021); Presidential Memorandum, *Uniform Standards for Tribal Consultation*, 87 Fed. Reg. 74,479 (Pres. Dec. 5, 2022); Cal. Assemb. B. 52 (2014) (requiring that public agencies in California consult with state-recognized Tribes during environmental review process). *But see* Exec. Order No. 14148, *Initial Rescissions of Harmful Executive Orders and Actions*, 90 Fed. Reg. 8,237 (Pres. Jan. 24, 2025) (rescinding Exec. Order No. 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*, 88 Fed. Reg. 25,251 (Pres. Apr. 28, 2023) (instructing agencies to "continue to engage in consultation on Federal activities that have Tribal implications and potentially affect human health or the environment")).

325. 40 C.F.R. § 131.9(c) (2025).

326. *Tribal Consultation Policy*, CAL. STATE WATER RES. CONTROL BD. (2019), https://www.waterboards.ca.gov/Tribal_affairs/docs/california_water_board_Tribal_consultation_policy.pdf; *see also* Cal. Exec. Order B-10-11 (Sept. 19, 2011) (making it state policy for every state department and agency to "encourage communication and consultation with California Indian Tribes").

327. *See* Little Manila Rising et al., Petition for Rulemaking to Review and Revise Bay-Delta Water Quality Standards, *supra* note 56, at 46-47 (petitioning State Water Board to undertake government-to-government consultation on Bay-Delta water quality standard revisions); Cal. State Water Res. Control Bd., Denial of Reconsideration Pursuant to Government Code § 11340.7, subdivision (c) of Rulemaking Decision of the State Water Resources

Without guarantees that consultation will not be treated as a check-the-box exercise, commitments to government-to-government consultation can only go so far in respecting Tribal political authority and cultural self-determination.[328] Even where Tribal input is considered, one-off consultation creates a risk that Tribal perspectives and data will be extracted from Tribal communities and integrated into regulation in ways that cause Tribes to lose control over how their knowledge is depicted and deployed. In addition, state designation of Tribal cultural uses without adequate Tribal input risks codifying biases disrespectful of the vast diversity of Tribal practices and their evolution in response to changing ecological, social, cultural, and economic conditions. Likewise, consultation in the decision-making process does nothing to address Tribal interests in the ways water quality controls that affect ancestral waterways and Tribal cultural practices are implemented and monitored over time.

Ultimately, integrating Tribal cultural uses into water quality controls outside Indian country cannot be accomplished in a manner respectful of Tribal political autonomy and cultural self-determination except through active and sustained partnership between Tribes and state and federal regulators. This has been in many ways the primary lesson of the California experiment with Tribal beneficial use protections, as areas of dissensus have emerged and been worked through between Tribes and State regulators.

One area of dissensus has been over the geographic scope of Tribal cultural and subsistence use designations. EPA's Clean Water Act implementing regulations authorize States to designate uses "for each water body or segment."[329] California regional water boards have generally taken a segment-by-segment approach to Tribal beneficial use designations, requiring Tribes to submit evidence of cultural or subsistence use and attainability of the use for

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Control Board Denying Petition to Review and Revise Bay-Delta Water Quality Standards 3 (Sept. 21, 2022), Exhibit H to Title VI Complaint, *supra* note 11 (inviting consultation under the Board's Tribal consultation policy and Executive Order B-10-11 but denying that specific consultation to inform the agency's environmental analysis and mitigations under Assembly Bill 52, Cal. Pub. Res. Code § 21084.3, is required).

328. Self-determination and political autonomy are conceptually distinct if often used interchangeably. Duthu endorses a view of "self-determination as a value or an interest having high moral significance that may be served by various degrees or forms of political autonomy." Duthu, *supra* note 312, at 394. In this way, Tribal Nations can assert and pursue self-determination even if historical circumstance constrains their exercise of political sovereignty.

329. 40 C.F.R. § 131.3(f) (2025).

individual lakes, creeks, or tributary segments to warrant designations.[330] Site-specific protections may sometimes be appropriate and even necessary to ensure adequate regulation of pollution discharges and other activities affecting water quality at important ceremonial and cultural sites. Unlike other water uses like commercial fishing practices, the place-based nature of many Tribal cultural practices—particularly ceremonial practices involving sacred or culturally significant sites—may demand greater site-specific controls on contamination and other water quality dimensions. However, parsing uses by segment can be inconsistent with traditional understandings of waterbodies as interconnected systems and of practices that vary the site of use with the availability of harvested species. And an approach to designations that constrains cultural use protections to specific tributary segments can freeze cultural practices based on historic data, hindering the ability of Tribes to evolve cultural practices and disrespecting the dynamism of Indigenous cultures. The mismatch between Indigenous conceptions of waterways and the scale of regulatory designations recalls the ontological violence that can accompany efforts to squeeze Indigenous experience into Western legal paradigms.

In another respect, a segmented approach to Tribal beneficial use designations may subject cultural and subsistence uses of water to more rigorous demands than uses practiced by the general population—such as contact and non-contact recreational uses and commercial or sportfishing uses, which are more often designated at waterbody scales. EPA, for instance, has instructed that States may "[d]esignate primary contact recreational uses for *all waters* of the state" without attainability analyses.[331] California's Central Valley regional water board has designated 100 percent of waterbodies within its jurisdiction for commercial fishing uses, but for Tribal beneficial uses designations, the board requires Tribes to provide information about traditional practices "and the nexus to water

330. *See, e.g.*, *Tribal Beneficial Use Designations*, CENT. VALLEY REG'L WATER QUALITY CONTROL BD., https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/Tribal_beneficial_uses/ ("For traditional and cultural sues, information would need to be established about the practice to get an understanding of the risk involved and the nexus to water quality so the appropriate water body or water body segment may be designated"); CAL. STATE WATER RES. CONTROL BD., DRAFT BAY-DELTA PLAN UPDATE, *supra* note 158, at 11 (noting that "individual stream segments" could be designated for subsistence fishing uses by regional boards).

331. *Water Quality Standards Handbook, Ch. 2: Designation of Uses* 3, U.S. ENV'T PROT. AGENCY (2012) (emphasis added), https://www.epa.gov/sites/default/files/2014-10/documents/handbook-chapter2.pdf.

quality" sufficient to support designation of an "appropriate water body or water body segment."[332] Tribal representatives voiced these concerns in calling on the State Water Board to designate the entire Bay-Delta watershed, comprising the estuary and its tributary watersheds, for Tribal cultural and subsistence beneficial uses, consistent with Tribes' experience of the system as one interconnected watershed and the scale of other beneficial use designations.[333] The State Water Board responded in December 2025 with a proposal to formally designate the entire watershed for Tribal traditional and cultural beneficial uses, while reserving "[i]ndividual stream segments" for subsistence use designations by regional boards.[334]

A second and related area of tension has emerged over concerns that regulatory demands for evidence of traditional practices may trammel on Indigenous data sovereignty. Although regional boards have instructed that Tribes need not "specify the exact location of the practice or activity" to support a beneficial use designation,[335] a focus on specific river stretches or reaches nevertheless elicits information about the location of sacred sites and customary fishing and gathering grounds. Even at a larger waterbody or watershed sale, demands for information about specific Tribal customary and religious practices and their nexus to water quality may compel Tribes to divulge traditional knowledge, stories, and closely held data to external regulators. Tribes are understandably cautious that providing sensitive and even sacred data and information to regulators may result in loss of Indigenous control and risk exposure to desecration, extractive commercialization, and other forms of misappropriation, even with confidentiality assurances.

Third, engagement between Tribes and State regulators in California has surfaced divergent understandings of Traditional Ecological Knowledge, also referred to as Indigenous Knowledge, and its role in environmental policymaking. Over the last decade or so, many federal and State agencies have adopted policies that call for

332. *See* CENT. VALLEY REG'L WATER QUALITY CONTROL BD., *supra* note 330.

333. *See, e.g.*, Letter from Shingle Springs Band of Miwok Indians et al., to Cal. State Water Res. Control Bd., Re: Proposed Addition of Tribal Beneficial Uses to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta 8-9 (Aug. 21, 2023) (on file with author).

334. Cal. State Water Res. Control Bd., Draft Bay-Delta Plan Update, *supra* note 158, at 11.

335. *Id.*

integration of TEK into regulatory decision-making.[336] These policies tend to conceptualize TEK as "a substantive body of knowledge that is created and stored by human societies" and essentially "archival in nature."[337] This is a mistake. Understandings of TEK voiced by Indigenous communities more often view TEK as "ongoing activities" exercised by indigenous communities that are "expressive of responsibilities."[338] As Professor Kyle Whyte explains, "body-of-knowledge conceptions of TEK risk implying that TEK can be extracted from its society and fit into policy-relevant science" without the active participation of indigenous peoples.[339] By contrast, "definitions based on the assumption that TEK is a system of responsibilities suggest that for TEK to be genuinely included, the people who participate fully in it must be at the table equally with non-indigenous scientists and policy makers."[340] In other words, TEK "is not a piece broken off of one of these strategies and applied in another. TEK is just the living environmental governance of indigenous peoples stemming directly from their cosmologies in relation to the environmental challenges they have faced over many generations."[341] Whyte and other Indigenous scholars of TEK tend to emphasize the participatory imperative that comes with consideration and application of TEK in policymaking. For Whyte, "TEK must play the role of inviting cross-cultural and cross-situational learning for indigenous and non-indigenous policy

336. *See, e.g.*, Council on Env't Quality, Exec. Off. of the President, Guidance for Federal Departments and Agencies on Indigenous Knowledge (Nov. 30, 2022), https://www.bia.gov/sites/default/files/dup/inline-files/ik_guidance_implementation_memo.pdf; U.S. ENV'T PROT. AGENCY, POLICY ON ENVIRONMENTAL JUSTICE FOR WORKING WITH FEDERALLY RECOGNIZED TRIBES AND INDIGENOUS PEOPLES 3 (July 24, 2014), https://www.epa.gov/sites/default/files/2017-10/documents/ej-indigenous-policy.pdf; Cal. Exec. Order N-82-20, ¶ 3(b) (Oct. 7, 2020) (directing California Natural Resources Agency to collaborate with Tribal partners to incorporate Traditional Ecological Knowledge in understanding biodiversity and its threats); *see generally* Anthony Moffa, *supra* note 205 (exploring opportunities for administrative rulemaking based on TEK that would survive judicial scrutiny).

337. Kyle Powys Whyte, *On the Role of Traditional Ecological Knowledge as a Collaborative Concept: A Philosophical Study*, 2 ECOLOGICAL PROCESSES 7, 4 (2013).

338. *Id.* at 9 (cautioning, however, that "TEK, no matter how it is defined, is not adequate for any indigenous community. The English articulation, TEK, is not an indigenous word or concept, and it is likely not used within very many communities unto themselves.").

339. *Id.* at 5; *see also* McGregor, *supra* note 39, at 498 ("Simply taking or 'extracting' TK from the community and inserting what is deemed relevant into environmental management regimes (the 'knowledge extraction paradigm') is an approach that is failing all parties.").

340. Whyte, *supra* note 337, at 5.

341. *Id.*

makers."[342] Whyte's views are mirrored in the demands that Bay-Delta Tribes have made of the State Water Board to actively engage Tribes in fashioning water quality controls informed by Indigenous Knowledge, values, and experiences.[343]

A fourth and perhaps most challenging struggle has been in translating Tribal cultural and subsistence use designations into functional water quality controls. Outside the mercury context, regulators in California that have proposed Tribal beneficial use designations have not yet proposed functional changes to water quality parameters to satisfy those designations—such as maximum pollution concentrations, instream flow objectives, salinity controls, temperature objectives, dissolved oxygen levels, or other physical, chemical, and biological water quality parameters adjusted to meet the needs of Tribal water users. For instance, the Lahontan regional water quality control board's draft staff report on Tribal beneficial use designations concluded that existing water quality objectives for aquatic life and commercial fishing are adequate to protect cultural and subsistence beneficial uses.[344] While the regional board recognized that diversion of water from Mono Lake and its tributaries jeopardizes availability of kootzabe[345] and riparian vegetation on which cultural and subsistence uses depend, it left the work to address these issues to the State Water Board through water rights proceedings and water export permits.[346] In a similar vein, the State Water Board concluded in its December 2025 draft update to the Bay-Delta water quality control plan that water quality controls for aquatic life and habitat would

342. *Id.* at 10.

343. *See, e.g.*, Little Manila Rising et al., Petition for Rulemaking to Review and Revise Bay-Delta Water Quality Standards, *supra* note 56, at 46-50 (petitioning California State Water Board to engage in formal government-to-government consultation with Tribes traditionally and culturally affiliated with the California Bay-Delta in updating water quality standards); Delta Tribal Environmental Coalition, Comments on October 2024 Draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Watershed 32-33 (Jan. 10, 2025) (on file with author) (urging the State Water Board to center Tribal participation and Traditional Ecological Knowledge in updating water quality control standards and designating Tribal beneficial uses).

344. Lahontan Reg'l Water Quality Control Bd., Draft Staff Report/Substitute Environmental Document for Amendments to the Water Quality Control Plan for the Lahontan Region: Tribal Beneficial Use Designations for the Mono Basin 59 (Mar. 15, 2024), https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/2024/r6tbureport.pdf.

345. Kootzabe are pupae of the alkali fly, *Ephydra hians,* harvested by the Mono Lake Kootzaduka'a Tribe as a traditional food source. *Id.* at 20.

346. *Id.* at 51-53, 63-66.

incidentally protect cultural uses.[347] Though the Board recognized that enhanced instream flow controls may be necessary to protect subsistence uses of Bay-Delta waterways, it left both subsistence use designations and water quality parameters to protect them for another day.[348]

This story of halting progress toward functional controls should not diminish the power of dignifying Tribal beneficial uses through formal designations. By giving formal definition to cultural and subsistence uses in language hammered out by Tribal communities and designating water bodies based on Tribal input, regulators make these uses and values visible in Western law. This aspect of Tribal beneficial use designation recalls what is often referred to as the "expressive function of law"—that is, "the function of law in 'making statements' as opposed to controlling behavior directly."[349] While much of the scholarship on expressive theory is focused on the role of communication through legal text in shaping social behavior, the expressive dimension of law has value in dignifying social meanings separate and apart from their role in inducing social conformity to those meanings.[350] This is apparent in the aspirations of California Indigenous communities who have insisted on elevating Tribal cultural and subsistence uses of water to the same plane as agricultural, commercial, and recreational uses in state regulation. Doing so begins to correct the cultural biases in Western water law that has been silent if not expressly hostile to Indigenous values and water-based practices. However, formal recognition of Tribal water uses can only go so far in advancing self-government if it does not actually make water quality more compatible with the lived exercise of culture.

These and other encounters between Tribal representatives and State regulators have culminated in the State Water Board proposing to create a Tribal advisory body to inform the integration of Tribal beneficial uses into water quality controls for the Bay-

347. CAL. STATE WATER RES. CONTROL BD., DRAFT BAY-DELTA PLAN UPDATE, *supra* note 158, at 11.

348. *Id.*

349. Cass R. Sunstein, *On the Expressive Function of Law*, 144 U. PA. L. REV. 2021, 2024 (1996).

350. Scholars of environmental justice increasingly consider cultural recognition to be a core dimension of justice. *See, e.g.*, Margreet Z. Zwarteveen & Rutgerd Boelens, *Defining, Researching, and Struggling for Water Justice: Some Conceptual Building Blocks for Research and Action*, 39 WATER INT'L 143, 147 (2014).

Delta.[351] The advisory body proposal grew out of Tribes' insistence that cultural uses cannot and should not be identified and woven into water quality standards without the intentional participation, informed consent, and active partnership of Tribal communities.[352] Nor can criteria be set in ways that accommodate Indigenous values except through collaboration with Tribes themselves.

This Tribal advisory body concept recognizes that meaningful integration of Tribal cultural values into water quality controls requires giving Tribal Nations and Native people a real seat at the table in water quality governance. Examples outside the United States of collaborative water governance are instructive even if they do not map neatly onto America's legal and political structures. For instance, in New Zealand, negotiations between Māori and the Crown over Māori claims to environmental resources led to the establishment of the Waikato River Authority, a shared governance body comprised of representatives of both Māori and the Crown who collaborate on policies to restore and protect the wellbeing of the Waikato River.[353] The Whanganui River Claims Settlement Act of 2017 built on this precedent to both codify legal personhood for the Whanganui River (Te Awa Tupua) and establish a shared governance body with political appointees selected by the Crown and by the iwi (Tribe).[354] The State Water Board's Tribal advisory proposal can be understood as an incremental step in this direction. Better still would be a structure like the Waikato River Authority that allows Tribal representatives to share in the exercise of delegated regulatory authority.

B. *Toward Repair*

One area where collaborative governance may be particularly salient is in establishing water quality controls for instream flow. As discussed in Part III.B above, courts have long construed the Clean Water Act to authorize regulation of water quantity as a dimension

351. CAL. STATE WATER RES. CONTROL BD., DRAFT BAY-DELTA PLAN UPDATE, *supra* note 158, at 118.

352. *See* Delta Tribal Environmental Coalition, *supra* note 343, at 35 (commenting in support of proposal to establish a Tribal advisory body to advise on Bay-Delta water governance).

353. *Our Purpose*, WAIKATO RIVER AUTHORITY, https://waikatoriver.org.nz/about/; *see* Bryan, *supra* note 22, at 173; David Takacs, *We Are the River*, 2021 U. ILL. L. REV. 545, 565.

354. Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (N.Z.); *see* Takacs, *supra* note 353, at 569 (describing Te Awa Tupua co-governance model).

of water quality.[355] Regulation of flows will be particularly important to address the conditions that produce toxic algal blooms and loss of native biota as climate change exacerbates stressors on ecosystems.[356] Formulation of flow-based water quality control criteria is also an area where the value of Tribal-State partnerships is particularly apparent.

In recent decades, western scientific consensus has converged with Traditional Ecological Knowledge systems in identifying streamflow as a "master variable" in the health of river ecosystems.[357] Rivers have characteristic flow structures—often referred to as "natural flow regimes"—which orient a river's biological, physical, and chemical characteristics and to which the river's native fish, plants, and wildlife are adapted.[358] The quantity, frequency, duration, timing, and rate of change of streamflows are all critical to the integrity of river ecosystems.[359] Tribal cultural practices inform understandings of natural flows and their relationship to watershed health, which in turn shape availability of Tribal cultural and subsistence practices.

In a presentation to the California State Water Board on Tribal beneficial use designations for the Bay-Delta, a representative for Buena Vista Rancheria Band of Me-Wuk Indians illustrated this connection through the example of the cottonwood tree, a principal tree of western North American floodplains. Cottonwood trees rely on spring river floods to propagate. The trees flower in late May to June, corresponding with annual peak floods, which deposit silt and scour sand and gravel beds. Air and water carry the cottonwood seedlings to the newly exposed floodplain mineral soils, where they germinate and establish root systems, following "water as it recedes down into the soil until it can tap into the water table."[360] Mature cottonwood trees are then used by Tribes for a wide variety of uses,

355. *See generally* Youngman, *supra* note 147, at 1633-38.

356. *See generally id.* at 1616-21 (discussing increasing challenges of growing water scarcity and demand).

357. N. LeRoy Poff, et al., *The Natural Flow Regime: A Paradigm for River Conservation and Restoration*, 47 BIOSCIENCE 769, 769 (1997); *see also* Ted Grantham et al., Public Policy Institute of California, *Making the Most of Water for the Environment: A Functional Flows Approach for California's Rivers* (Aug. 2020), https://www.ppic.org/publication/making-the-most-of-water-for-the-environment/.

358. *See* EPA-USGS TECHNICAL REPORT, *supra* note 180, at 14.

359. *Id.* at 17.

360. Moloney, *supra* note 1, at 1:52:00.

from medicine to building materials to ceremonial implements.[361]

Similar natural flow synchronicities are found across riparian biota. Salmon, for instance, rely on environmental cues from seasonal flows to initiate downstream and upstream migrations.[362] They also rely on the structure that flows create for spawning and other lifestage habitat, as well as the dissolved oxygen, cold water temperatures, balanced pH, and host of other physicochemical conditions influenced by flows.[363] Cultural and ceremonial practices have likewise evolved with the annual flow cycle to steward the reproduction and migration of the fish on which Tribes depend for sustenance.[364]

Sustained collaborative partnerships will allow Indigenous Knowledge holders to work directly with regulators to design functional flow controls that restore ecosystem health and adapt with changing conditions. In doing so, Tribes can inform the setting of these controls to support cultural and subsistence practices—for instance, providing for pulse flows that mimic spring floods to which cottonwood are adapted or the cues that salmon rely on for migration and reproduction. Sustained partnership will also allow Tribes to bring their own data and information about ecological conditions and compatibility with Tribal cultural practices into water quality monitoring and adaptive management and control its use. Such a partnership can help to heal cultural and political divisions over water and realize Whyte's call for meaningful cross-cultural collaboration in water governance.

The opportunities to move toward cultural self-determination in water governance discussed in this paper suggest new ways to conceptualize the pluralism within the Clean Water Act. On one dimension, the Act embodies a cooperative federalism that treats Tribes as political co-sovereigns with primary authority to regulate water quality in Indian country. The empowerment of Tribes as co-regulators within their territorial jurisdictions has given rise to new ways to approach water quality standards. In particular, Tribal

361. *Id.*

362. *See* Scott G. Hinch, et al., *Behavioral Physiology of Fish Migration: Salmon as Model Approach*, in *Fish Physiology: Fish Locomotion* 239 (A.P. Farrell & C.J. Brauner eds., Vol. 24, 2005).

363. *Id.*

364. *See The Original Salmon Stewards: How the Winnemem Wintu Tribe Helped Return Endangered Chinook Salmon to the Homeland They Share*, NOAA Fisheries, https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/original-salmon-stewards; Mulcahy Decl., *supra* note 44, at ¶¶ 5-7.

experimentation with water quality standards under Section 303(c) has broadened understandings of "uses and values" of water to be protected under the Clean Water Act as well as means to integrate cultural water uses into the regulatory scheme consistent with Tribal self-determination and political autonomy.[365] It is hard to imagine these plural meanings and possibilities either arising or disseminating without the push and pull of cooperative federalism.

On a second dimension, the Clean Water Act enables a form of cultural pluralism in water governance as communities negotiate uses and values and work out their codification in regulation. Here, I draw on Wallace Coffey and Professor Rebecca Tsosie's call to reframe Tribal sovereignty as "cultural sovereignty."[366] Cultural sovereignty seeks to affirm and revitalize the norms and values that structure Native belief systems; it is rooted in Tribal community and grounded in respect and continuity between generations. In Coffey and Tsosie's view, "[c]ultural sovereignty is the bedrock of Native peoples' self-determination."[367] It is not derivative of political sovereignty but instead a precondition for the "survival of Indian nations as distinct political and cultural groups."[368] From this perspective, collaborative water governance beyond Indian country can be seen as advancing the cultural sovereignty of participating Tribes. It does this by empowering Tribes to participate in a cross-cultural dialogue with State and federal regulators as these three sovereigns hash out water quality standards informed my multiple forms of knowledge and experience. And it does this by empowering Tribes to participate in crafting water quality standards that assure their cultural continuity and survival in a pluralist social and environmental landscape. In this way, the pursuit of cultural pluralism through collaborative water governance resides within Robert Cover's appeal that "[w]e ought to stop circumscribing the *nomos*; we ought to invite new worlds."[369]

365. California's development of Tribal Beneficial Use designations bears out Professors Charles Tyler and Heather Gerken's thesis that "forcing a state to participate in a federal regulatory scheme has the potential to spark experimentation." Charles W. Tyler & Heather K. Gerken, *The Myth of Laboratories of Democracy*, 122 COLUM. L. REV. 2187, 2237 (2022); *see also* Kronk Warner, *supra* note 21, at 796 (concluding that in adapting federal environmental laws under TAS authorities, Tribes "are creating and innovating in the field of environmental law under their unique powers as separate sovereigns in the United States—truly acting as laboratories of the future.").

366. Coffey & Tsosie, *supra* note 18, at 191.

367. *Id.* at 209.

368. *Id.* at 202.

369. Cover, *supra* note 33, at 29.

VI. CONCLUSION

The colonial history recounted in this paper represents only a very partial accounting of state and federal actions that have suppressed Tribal nomoi and inhibited Tribal systems of law, norms, and governance. This is the history of America and its political institutions, and it needs to be reckoned with.

The Clean Water Act may seem an unlikely locus of repair for the government's role in Tribal cultural suppression. As lawyer and playwright Mary Kathryn Nagle has observed, "when statutory federal environmental law was created, environmental lawyers advocated for the establishment of a legal framework that valued the preservation and protection of land, water, and air, with little to no recognition of the fact that the laws of many Tribal Nations had long valued the protection and preservation of the Earth—and therefore refused to commercially exploit it."[370] But the story of the Clean Water Act need not end there: Indeed, if the arguments in this paper are correct, the statute itself would not allow it.

State and Federal governments have legal as well as moral duties to ensure protection of Tribal ceremonial, subsistence, and other cultural uses of ancestral waterways in their water quality standard-setting. These are duties that cannot be realized without the leadership and sustained partnership of Tribal Nations and their culture bearers. Nor can they wait. As the Anthropocene sweeps in new forms of cultural violence and erasure, many enacted through the medium of ever scarcer freshwater, the continuity of lifeways deserves center stage.

370. Mary Kathryn Nagle, *Environmental Justice and Tribal Sovereignty: Lessons from Standing Rock*, 127 YALE L.J.F. 667, 669 (2018).