Case No. B309151

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA
SECOND APPELLATE DISTRICT, DIVISION ONE

STATE WATER RESOURCES CONTROL BOARD,

Appellant and Cross-Respondent,

v.

LOS ANGELES WATERKEEPER,

Respondent and Cross-Appellant,

Appeal from Los Angeles County Superior Court
The Honorable James C. Chalfant, Judge
Case Nos. BS171009, BS171010, BS171011, and BS171012
Consolidated with B309148, B309153, and B309155

PROPOSED BRIEF OF *AMICI CURIAE* KARRIGAN BÖRK, Ph.D., NAOMI GOLDENSON, Ph.D., JOHN LESHY, CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, CALIFORNIA WATER IMPACT NETWORK, AND ENVIRONMENTAL LAW FOUNDATION IN SUPPORT OF RESPONDENT AND CROSS-APPELLANT

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CERTIFICATE OF INTERESTED ENTITIES OR PERSONS

Pursuant to Rule 8.208 of the California Rules of Court, there are no interested parties or entities to list in the certificate. (Cal. Rules of Court, rule 8.208 (d)(3).)

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AMICI CURIAE BRIEF[1]

I. INTRODUCTION

Of all California's natural resources, her most precious and vital is water.

--Gordon R. Miller, *Shaping California Water Law*[2]

For Californians, "lack of water is the central fact of existence, and a whole culture and set of values have grown up around it." (Reisner, Cadillac Desert: the American West and its Disappearing Water (1987) p. 12 (hereafter Cadillac Desert).) As one overview of California's approach to water management concludes, "California has always faced water management challenges and always will. The state's arid and semiarid climate, its ambitious and evolving economy, and its continually growing population have combined to make shortages and conflicting demands the norm." (Pub. Policy Inst., *Floods, Droughts, and Lawsuits: A Brief History of California Water Policy*, in Managing California's Water: From Conflict to Reconciliation (2011) p. 1 (hereafter *Floods, Droughts, and Lawsuits*).)

These physical scarcities have given rise to powerful legal doctrine. Early in the state's history, the California Supreme Court had determined "that water shall not be 'allowed to run waste' nor remain unused, regardless of prior claims and rights,

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[1] UCLA Law students Jake Gold and Rachel Sweetnam contributed significantly to this brief through their work in the Frank G. Wells Environmental Law Clinic.

[2] Miller, *Shaping California Water Law, 1781 to 1928* (1973) So. Cal. Quarterly 9, 9 (hereafter *Shaping California Water Law*).

if such water can be beneficially applied by others." (*Hufford v. Dye* (1912) 162 Cal. 147, 159; *Burr v. Maclay Rancho Water Co.* (1908) 154 Cal. 428, 436; *Shaping California Water Law*, *supra*, at p. 10.) And nearly a century ago, in response to a controversial court decision that allowed riparian owners to use water unreasonably, California voters adopted the constitutional amendment at issue here, which states that "the general welfare requires that . . . the waste or unreasonable use or unreasonable method of use of water be prevented." (Cal. Const., art. X, § 2 (enacted in response to *Herminghaus v. South. Cal. Edison Co.* (1926) 200 Cal. 81).)[3]

The body of law that has arisen from these decisions and enactments, which has become known as the "reasonable use" doctrine, "applies to all branches of government, to all levels of governmental administration of the state's water resources, and to public and private uses of the state's waters"—and has been called "the most powerful of all of the laws that govern California's water resources." (Gray, *The Reasonable Use Doctrine in California Water Law and Policy* in Sustainable Water: Challenges and Solutions from California (Lassiter edits., 2015) p. 84.)

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[3] Along with this constitutional provision, sections 100 and 275 of the California Water Code collectively form the state's reasonable use doctrine. Section 100 reflects the language of Article X, section 2: "that the waste or unreasonable use or unreasonable method of use of water be prevented." (Cal. Water Code § 100.) Section 275 of the Water Code charges the Board with the responsibility of preventing the waste and unreasonable use of state water resources. (Cal. Water Code § 275.)

As organizations and researchers with expertise on California's water supply and water management, we write to emphasize two important elements of the historical and factual background of the lower court's decision in this case. **First**, we share information on Southern California's highly constrained water supply, and on the ways that climate change is already hindering—and will further constrain—this supply. Southern California is one of the most water scarce regions in the state, importing much of its water over long distances and from regions that are becoming less reliable sources. As climactic conditions change, shifts in the hydrologic landscape are presenting extreme challenges for water security and water resource management, and these challenges will grow. Southern California's water is becoming increasingly precious.

These conditions of water scarcity place into stark context the volumes of water at issue in this case, which are staggering. At issue is the daily discharge of almost 300 million gallons ("MGD") of advanced treatment wastewater into the Los Angeles River and Santa Monica Bay, amounting to 100 billion gallons per year. (*Los Angeles Waterkeeper v. State Water Resources Control Board, et al.*, Los Angeles Superior Court Case No. BS171009 (2020) pp. 37-38.) The four wastewater plants involved have the capacity to treat a volume of water equal to **ten percent** of the state's annual water demand, or to the entire water demand of the City of Los Angeles. (See *id.* at 28; Mount & Hanak, Water Use in California, Public Policy Institute of California (2019) pp. 1-2.) Whether this volume of water is being

handled in a manner consistent with the reasonable use doctrine—and how to ensure that consistency—are questions of extraordinary importance.

Second, we link the conditions of water scarcity in Southern California to the application of the reasonable use doctrine here. We share the history of that doctrine in order to emphasize that it has always been applied on a case-by-case basis and in a manner that takes into account, *inter alia,* changing conditions over time. (*Lux v. Haggin* (1886) 69 Cal. 255, 408; *Envtl. Def. Fund, Inc. v. E. Bay Mun. Util. Dist*. (1980) 26 Cal.3d 183, 194; *Joslin v. Marin Mun. Water Dist.* (1967) 67 Cal.2d 132, 140; *Peabody v. City of Vallejo* (1935) 2 Cal.2d 351, 368.) We see the lower court's decision as consistent with the long development of the reasonable use doctrine, the lodestar of which has been an increasing prioritization of water conservation and the elimination of wasteful practices so as to maximize the beneficial uses of water in California.

The State Water Resources Control Board ("State Board" or "the Board") and Regional Water Quality Control Boards ("Regional Boards") were established by the state to ensure the efficient use of water resources. (Cal. Water Code § 174.) The State Board has "the charge of comprehensive planning and allocation of waters" and is required to consider public interests when making water management decisions. (*Nat'l Audubon Soc'y v. Superior Ct.* (1983) 33 Cal. 3d 419, 444.) Indeed, "*[a]ll uses* of water, including public trust uses, must now conform to the standard of reasonable use." (*Id*. at 443 (emphasis added).) The

lower court decision is consistent with these principles, and the State Board and Regional Boards have a critical role to play in ensuring that Southern California's water supply remains secure in the face of changing conditions.

II. SOUTHERN CALIFORNIA HAS FACED WATER SECURITY CHALLENGES FOR A CENTURY, AND CLIMATE CHANGE WILL EXACERBATE THOSE CHALLENGES AND CAUSE EXISTING WATER USES TO BE INCREASINGLY UNREASONABLE

A. Southern California has struggled with water security for decades, importing much of its water across hundreds of miles and over mountain ranges.

Southern California is one of the most water scarce regions in the state.[4] Currently, few cities in Southern California possess the resources and management capacity to independently meet local water demand. (See, e.g., Water Education Foundation, California Water Issues Overview (2021) p. 1.) This is due, in part, to the misalignment of water resources and water demand. (*Id.*) Nearly seventy five percent of state water resources are in the upper third of California. (*Id.*) Conversely, eighty percent of statewide water demand is in the bottom third of California. (*Id.*)

[4] See UCSD Water Economics, *San Diego's Water Crisis: California Water Issues* (2017) <https://watereconomics.ucsd.edu/cali_SD.html>; Katie Mika et al., LA Sustainable Water Project: Los Angeles City-Wide Overview, UCLA (2018) p. 112 (hereafter LA Sustainable Water Project).

As a result, since the 1930s, Southern Californians have imported billions of gallons of water from distant regions in and out of state to meet growing water demands.[5] As observed by Marc Reisner, "California's very existence is premised on epic liberties taken with water—mostly water that fell as rain on the north and was diverted to the south[.]" (Reisner, Cadillac Desert, *supra*, at p. 9.)

Every day, Los Angeles pumps hundreds of millions of gallons of water from Owens Valley, the San Francisco Bay Delta, and the Colorado River.[6] The City of Los Angeles imports roughly eighty five percent of its water resources.[7] The Metropolitan Water District is responsible for importing the majority of the City's water along both the Colorado River Aqueduct, from 242 miles away, and from the State Water Project, 444 miles away.[8] The rest of Los Angeles's imported

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[5] California Department of Water Resources, *The California Water System* <https://water.ca.gov/water-basics/the-california-water-system>; USC Viterbi School of Engineering, *Los Angeles Water Issue: Why It's Not Just the Drought* <https://viterbi.usc.edu/water/>.

[6] Pincetl, Porse, & Cheng, *Fragmented Flows: Water Supply in Los Angeles County*, Envtl. Mgmt. (2016) 208, 208-09 (hereafter *Fragmented Flows*); USC Viterbi School of Engineering, *Los Angeles Water Issue: Why It's Not Just the Drought* <https://viterbi.usc.edu/water/>.

[7] Sierra Club Los Angeles Chapter, *Los Angeles Depends on Imported Water* <https://angeles.sierraclub.org/los_angeles_depends_on_imported_water>; UCLA et al., Our County: Water Briefing, Los Angeles County (2018) p. 9.

[8] LA Sustainable Water Project, *supra*, at pp. 22, 206; Sierra Club Los Angeles Chapter, *supra*. See USC Viterbi School of Engineering, *supra*.

water comes from the Owens Valley, traveling down from the eastern Sierras and over the mountains north of Los Angeles along the Los Angeles Aqueduct. (See LA Sustainable Water Project, *supra*, at p. 17.)

The transport and treatment of California's water resources is an energy- and resource-intensive process. (See LA Sustainable Water Project, *supra*, at p. 141-42.) Once water reaches its destination, more energy is required to treat and pump water for residential, industrial, and agricultural uses. (Water Education Foundation, California Water 101: The Water and Energy Connection (2022).) Water distribution systems use energy for pumping and pressurization, while consumers and businesses use energy to treat water with softeners or filters. (*Id.*) "Energy is needed to heat and cool water, as well as to circulate it with pumps. In addition, treatment plants use energy to pump and treat wastewater and process solids." (*Id.*) These processes together consume 20 percent of the state's total electricity, 30 percent of the state's natural gas, and 88 million gallons of diesel fuel. (*Id.*)

Indeed, Los Angeles spends billions of dollars on water projects, and much of this funding is funneled into the pumping and advanced treatment of imported water. (See LA Sustainable Water Project, *supra*, at p. 122.) The treating of Los Angeles wastewater is complex and involves multiple steps. (See U.S. Department of Energy, Energy Data Management Manual for the Wastewater Treatment Sector (2017) p. 8.) Municipal wastewater treatment usually comprises preliminary treatment, primary

treatment, and secondary treatment. (Environmental Protection Agency, Chapter 3: Municipal Wastewater and Sludge Treatment, p. 47.) Excluding Hyperion, the other three treatment plants at issue here implement a higher degree of treatment called "advanced" or "tertiary" treatment, which exceeds water quality standards for recycled water for irrigation and industrial processes. (See *id.*; Environment LA Sanitation: City of Los Angeles, Water Reclamation Plants (2021).)

Importing large volumes of water has been necessary because local water resources in Los Angeles—such as groundwater, stormwater, and reclaimed wastewater—have failed to meet local demand. (See LA Sustainable Water Project, *supra*, at p. 26.) Historically, as surface water and water imports become less available during droughts, California's average urban reliance on groundwater increases from forty percent to sixty percent. (Stokstad, *Deep Deficit* (Apr. 2020) 368 Science 230, 231.) But during the height of the most recent drought, the City of Los Angeles could only meet a small portion of its demand with local groundwater resources. (See LA Sustainable Water Project, *supra*, at p. 26.)

These dynamics place in stark context the volumes of water being discharged by the plants at issue here. Billions of gallons of treated water in Los Angeles are being discharged into local rivers or the ocean instead of being reused. (See Heal the Ocean, Inventory of Municipal Wastewater Discharges to California Coastal Waters (Sept. 2018) p. 6.) The plants at Burbank, Los Angeles-Glendale, Tillman, and Hyperion discharge into the Los

Angeles River and Santa Monica Bay approximately 55%, 70%, 80%, and 81% of their treated wastewater loads, respectively. (See Los Angeles Department of Water and Power, Urban Water Management Plan 2020, Exhibit 7C, p. 7-9; City of Burbank Water and Power, 2020 Urban Water Management Plan: Draft (May 2021) p. 29.) In other words, these facilities expend significant money and energy cleaning huge volumes of water to then discharge it, largely into the ocean.

There are other options. Notably, Los Angeles's water supply difficulties are, in part, due to a failure to do more to build local water supplies. Instead of discharging treated water into the ocean after just one use, Los Angeles could use it to recharge its groundwater basins. But for the most part, Los Angeles is not yet taking advantage of sustainable recharge strategies, despite laudable goals in this area. (See LA Sustainable Water Project, *supra*, at p. 26.) Stormwater and water reclamation[9] are the two important sources of local groundwater recharge. (Katja Luxem, American Geosicences Institute, Managed Aquifer Recharge (Sept. 2017) p. 2.) As of 2013, however, the LA Sustainable Water Project documented no discernable contributions from reclaimed groundwater recharge or stormwater infiltration to total water demand. (See LA Sustainable Water Project, *supra*, at p. 26.)

[9] The California Legislature passed the Water Reclamation Law in 1970 to encourage wastewater reclamation as a means of supplementing existing water supplies. (*Envtl. Def. Fund, Inc. v. East Bay Mun. Utility Dist.* (1977) 20 Cal.3d 327, 342.) The Legislature intended that California "undertake all possible steps to encourage the development of water recycling facilities …" (Cal. Water Code § 13512.)

Southern California's reliance on importing the vast majority of its water makes its water supply vulnerable to droughts, earthquakes (which can disrupt aqueducts), and other risks; and it comes at a high environmental price.[10] The state's misallocation of surface waters and aging water infrastructure have degraded ecosystems and led to the threatened, endangered, and extinct status of native species. (See Börk & Rypel, *Improving Infrastructure for Wildlife* (2020) 34 Nat. Resources & Env't 1, 1-3; Börk et al., *Small Populations in Jeopardy: A Delta Smelt Case Study* (2020) 50 Envtl. L. Rep. 10714, 10716.)

B. Climate change is jeopardizing California's water resources and threatening Southern California's water security.

In an era of climate change, Southern California's water supply is increasingly perilous. Climate change poses significant threats to both local and imported sources of water for Los Angeles. These climate change threats have been extensively documented in California's Fourth Climate Change Assessment, a periodic survey of climate change effects published by the Governor's Office of Planning and Research in association with the California Natural Resource Agency and State Energy Commission. (See California's Fourth Climate Change Assessment (2018).) The Fourth Climate Change Assessment

[10] Erica Yee, Cal Matters, *Danger in Droughtsville: California's Urban Water at Risk* (Dec. 2021); California's Fourth Climate Change Assessment (2018), p. 57.

details the damages and costs expected to occur this century and is the first of California's Climate Change Assessments to consider regional impacts. (*Id.* at 8.) Out of the dozens of climate-related impacts identified in the report, the majority will directly impact statewide water resources. (See *generally id.*)

In the next few decades, the Fourth Climate Change Assessment projects tens of billions of dollars in damages caused by droughts, wildfires and coastal destruction, all of which present water security issues. (*Id.* at 8-9.) Wildfires will become more frequent and impact regional water quality. (*Id.* at 62, 98.) Droughts will be longer, more frequent, and more intense. (*Id.* at 57.) Sea levels will rise and increase the risk of coastal flooding, contaminating surface and subsurface reservoirs. (Carmen Milanes et al., Office of Environmental Health Hazard Assessment, Indicators of Climate Change in California (2018) p. 147 (hereafter OEHHA).) These issues will be worsened by century-old water management practices originally implemented when California's climate was substantially different. (See *id.* at 73.) Most profoundly, climate change will reduce the Sierra snowpack that much of California relies on for seasonal water supply as a natural reservoir. (California's Fourth Climate Change Assessment, *supra*, at p. 26; Sun et al., *Understanding End-of-Century Snowpack Changes Over California's Sierra Nevada* (Nov. 2018) 46 Geophysical Res. Letters 933, 933-43.) Decreases in snowmelt runoff are already underway, and will worsen with additional warming. (See OEHHA, *supra*, at p. S-6.)

The period from 2012 through 2016 remains one of the worst drought periods on record. (*Id.* at 53.) Scientists are finding that precipitation, though not necessarily projected to decrease, will become more variable. (See California's Fourth Climate Change Assessment, *supra*, at pp. 24-25.) Northern California is projected to become wetter and Southern California drier. (*Id.* at 25.) Due to temperature changes alone, Northern California is already becoming a less reliable source of year-round water supply: Annual precipitation is steadily shifting to be higher percentage rainfall in proportion to snowfall, resulting in reduced snowpack and water storage. (*Id.* at 26.) The Sierra Nevada snowpack, which provides 55% of Southern California's water resources, has reduced nearly 10% since the 1950s, and is projected to decrease another 60-85% by 2100, depending on emissions scenario. (*Id.* at 26-27; Berg & Hall, *Anthropogenic Warming Impacts on California Snowpack During Drought* (2017) 44 Geophysical Res. Letters 2511, 2511-18.) The dramatic shift in the hydrologic landscape of the state presents extreme challenges for water resource management. (California's Fourth Climate Change Assessment, *supra*, at pp. 11, 47, 57.) Cities and districts will need to enhance conservation and efficiency, as well as seek out new or underutilized sustainable sources of water, to guarantee reliable, sufficient water supplies.

Surface water and groundwater sources will also be increasingly harmed by California's wildfires. Increased ambient temperatures coupled with California's drought periods spur extreme wildfire events. (*Id.* at 29-30.) According to the Fourth

Assessment, wildfire events will increase more than 50% by 2100, if greenhouse gas emissions are not mitigated. (*Id*. at 9, 30.) In addition to the significant challenges they pose to California's ecosystems, cities, and energy infrastructure, wildfires also create new water quality and supply challenges. (See U.S. Geological Survey CA, *Water Quality After a Wildfire* (2018); Pierce et al., *Wildfire & Water Supply in California: Advancing a Research & Policy Agenda*, UCLA Luskin Center for Innovation (Dec. 2021).) Runoff from wildfire remnants contaminates surface and groundwater resources, resulting in higher treatment costs and reduced storage space. (U.S. Geological Survey CA, *Water Quality After a Wildfire* (2018).) These runoff events are expected to worsen as precipitation patterns become more variable, resulting in unpredictable and extreme contamination loads in aquatic ecosystems and drinking water treatment facilities. (*Id*.)

Groundwater sources are also threatened by sea level rise. Thermal expansion of ocean waters and melting glaciers are contributing to the rise in sea levels. (OEHHA, *supra*, at p. 107.) California sea level may rise as much as 6.6 feet by the end of the century. (California's Fourth Climate Change Assessment, *supra*, at p. 33.) Elevated sea level rise coupled with more extreme weather patterns will increase the rate and frequency of coastal flooding. (*Id.* at 54.) These events will also cause saltwater intrusion into coastal-adjacent groundwater resources, which will contaminate local water supplies and reduce already-limited

drought storage capacity.[11] (*See* OEHHA, *supra*, at p. 147; U.S. Geological Survey, *Saltwater Intrusion* (Mar. 2019).) Once affected, saline-contaminated waters cannot be reclaimed without extensive desalination. (Water Science School, *Desalination*, U.S. Geological Survey (Sept. 2019).)

Climate change poses challenges to Southern California's water supply infrastructure, too. "The ability of California's water infrastructure to withstand and rebound from climate change is compromised by its advanced age, deferred maintenance, funding constraints, and ongoing technological changes." (California's Fourth Climate Change Assessment, *supra*, at p. 57.) A 2017 study by the Pacific Forest Trust found that half of source water infrastructure is degraded and poses a significant risk to water reliability, which will only worsen as climate change creates new stressors. (See Pacific Forest Trust, A Risk Assessment of California Key Source Watershed Infrastructure (2017) p. 1.) In the Sacramento-San Joaquin Delta—the hub of California's water operations—over 1,000 miles of levees are vulnerable to collapse from earthquakes, rising sea levels, and potentially increasingly severe storms. (California's Fourth Climate Change Assessment, *supra*, at p. 57.) Two Fourth Assessment reports project that

[11] Another source of saltwater intrusion is groundwater overdraft—when groundwater use exceeds the amount of recharge into an aquifer, leading to a decline in fresh groundwater level and an intrusion of saltwater. Tara Moran et al., *The Hidden Costs of Groundwater Overdraft* (2014) Stanford U. Water in the West.) Groundwater overdraft is occurring in an increasing number of groundwater basins throughout California, causing seawater to be drawn into aquifers. (*Id.*)

"across the state, a decline in performance of storage and conveyance systems is expected, including a decline in reservoir carryover storage (amount of water available in the reservoirs before the start of the wet season in October), reduced Delta water exports, and diminished drought resilience and operational control to meet future downstream river fow temperature requirements." (*Id.*)

C. Southern California will need to significantly reduce its reliance on imported water as climate change further undermines the region's water security.

As described above, climate change is affecting and will continue to affect Southern California in ways that imperil its water supply, including via sea level rise, increased flooding, reduced snowpack and precipitation, increased wildfires, and prolonged droughts. Many of these impacts will worsen existing water scarcity issues in Southern California, as well as create new challenges. Observers have noted that Southern California's existing "water infrastructure and institutions are not adequately prepared to meet the many challenges that can be expected with continued climate change." (See Nylen et al., Addressing Institutional Vulnerabilities in California's Drought Water Allocation Part 1: Water Rights Administration and Oversight During Major Statewide Droughts, 1976–2016 (2018) p. 10 (hereafter Institutional Vulnerabilities).)

One way to reduce these vulnerabilities is to make Los Angeles's local water supplies more robust. Decreasing imported

water would help alleviate problems due to the misallocation of water and outdated infrastructure required to import water at such large scales. While the City of Los Angeles has set a goal to reduce Los Angeles Department of Water Power (LADWP) purchases of imported water by 50% by 2025, and to source 70% of the City's water locally by 2035, the City has much further to go to meet these goals. (L.A.'s Green New Deal: Sustainable City pLAn (2019) p. 46; LA Sustainable Water Project, *supra*, at pp. 19, 25-26.)[12] Transitioning to a more localized water economy will reduce GHG emissions associated with water imports, as well as reduce both maintenance costs and stressors associated with climate-change-altered water loads. (See Julia Szinai et al., The Pacific Institute, The Future of California's Water-Energy-Climate Nexus (Sept. 2021) p. 64; Porse et al., *The Economic Value of Local Water Supplies in Los Angeles* (2018) 1 Nature Sustainability 289, 289–97.) Improving groundwater, stormwater, and water reclamation resource management will enhance water resiliency and provide a buffer against worsening water scarcity conditions. (See Hanak et al., *Priorities for California's Water: Responding to the Changing Climate*, PPIC Water Policy Center (Nov. 2021) pp. 3-7.)

[12] The City of Los Angeles uses the following baseline reported by LADWP in its Green New Deal: 15% of LA's water sourced locally between July 2013 and June 2014.

D. California's fragmented regulatory framework inhibits effective water resource management.

California's water management structures are not inherently well suited to respond to conditions of increasing scarcity. Most of California's water resource management is decentralized. (Ellen Hanak et al., Public Policy Institute of California, Managing California's Water: From Conflict to Reconciliation: Executive Summary (2011) p. 4.) "This decentralization across scales and functions of government has created many responsive but narrowly focused stakeholders who drive most water policy today." (Ellen Hanak et al., Public Policy Institute of California, Managing California's Water: From Conflict to Reconciliation (2011) p. 7.) There is a lack of coordination between state and regional agencies, which has resulted in substantial knowledge gaps concerning state water needs. (See *id*. at 107-10, 114.)

Moreover, there is a siloed division of labor between regional and state water entities, which has further contributed to the state's disjointed management of water resources. Due to the complexity of California water issues, the State and Regional Water Boards were created to provide for the efficient use of state water resources. (Cal. Water Code § 174.) Their regulatory authority and duty extend to water supply and water quality issues. (*Id*.) Though the State Board is the "ultimate authority" in allocating water rights and regulating both water supply and quality standards (Institutional Vulnerabilities, *supra*, at p. 12),

historically, the State Board (rather than the Regional Boards) has regulated water supply issues, principally through the allocation of water rights. (See Gray, *The Reasonable Use Doctrine*, *supra*, at p. 88.) The nine Regional Water Quality Control Boards, on the other hand, have principally regulated water quality standards through permitting and regional water quality planning. (Institutional Vulnerabilities, *supra*, at p. B-16.) During previous drought periods, such as the three-year 2007-2009 drought, the State Board took a "hands off approach[,]" largely addressing water allocation issues only after harmed parties submitted petitions. (Institutional Vulnerabilities, *supra*, at p. 30.)

The state constitution, statutory law, and common law do establish rules for "allocating water resources during times of shortage." (Institutional Vulnerabilities, *supra*, at p. 10.) While agencies and courts attempt to balance private water rights against the public interest, they rely on the overriding constitutional consideration to allocate water reasonably and beneficially. (Cal. Const., art. X, § 2.) However, the application of these rules by the Board and other governing agencies to date has best been described as reactive, not proactive. (See Institutional Vulnerabilities, *supra*, at p. 34.) "Allocating limited water supplies among different water users has been challenging during past droughts, and continued climate change will only amplify conflicts over water, raising the stakes for effective drought response." (*Id.* at 39.)

III. OVER ITS HISTORY, CALIFORNIA HAS CONSISTENTLY BROADENED PROTECTIONS AGAINST THE WASTE AND UNREASONABLE USE OF WATER TO MAXIMIZE BENEFICIAL USE

Expanding protections against the waste and unreasonable use of water has been a lodestar of California's developing water law doctrine. In this section, we provide an overview of the history and development of the reasonable use doctrine in California and give context for understanding some of the potential consequences of the holding on appeal.

A. The origins of the reasonable use doctrine run deep.

California's water scarcity has necessitated careful and reasonable water use. (Hutchins, The California Law of Water Rights (1956) at p. 11.) Water scarcity has shaped "a whole culture and set of values" in the West. (Reisner, Cadillac Desert, *supra*, at p. 12.) Since its early days of statehood, California has concerned itself with preventing the waste and unreasonable use of water—with varying degrees of fidelity and success.

We started poorly. In 1850, the California Legislature imported from English common law the riparian doctrine, under which ownership of land next to a watercourse gives the owner water rights. (Gray, *In Search of Bigfoot: The Common Law Origins of Article X, Section 2 of the California Constitution* (1989) 17 Hastings Const. L.Q. 225, 238 (hereafter *Origins of Article X Section 2*).) The riparian doctrine "grew out of common law in England, where rivers never went dry and, in fact,

routinely flooded." (Arax, The Dreamt Land: Chasing Water and Dust Across California (2019) p. 163.) This doctrine weakly fit California's interests where "the limited rainfall showed up in months when the crops needed it least." (*Id.* at 191.) Nevertheless, "California's legislature and courts adopted riparian rights as a legal concept even though it made little sense in a place where aridity ruled." (*Id.* at 163.)

The miners who "siphoned Sierra river flows into ditches and flumes . . . to realize the greatest windfall of the gold rush" created the custom of appropriating water. (*Id.* at p. 191.) To deal with "the relatively fewer rivers and smaller amount of precipitation[,]" miners diverted water "from as far away as was necessary and practical through wooden sluices, iron pipes, ditches, and whatever else worked." (Hundley, The Great Thirst: Californians and Water: A History (2001) pp. 69-70 (hereafter The Great Thirst).) Therefore, the conditions of water scarcity and customs of miners shaped the state's water policy and what constituted reasonable use of water. In 1851, the Legislature adopted "'customs, usages or regulations established and in force at the bar, or diggings' as the formal basis for dispute-resolution in mining areas." (Attwater & Markle, *Overview of California Water Rights and Water Quality Law* (1988) 19 Pacific L.J. 957, 962.) At first, the California Supreme Court considered prior appropriation "impracticable in its application." (*Eddy v. Simpson* (1853) 3 Cal. 249, 253.) In an early mention of reasonableness, this decision articulated that water rights are

usufructuary and that the user only has "the right to its reasonable use during its passage." (*Id.* at 252.)

In 1855, in the seminal case of *Irwin v. Phillips*, the Supreme Court recognized the doctrine of prior appropriation to accommodate the needs of miners and the economic interest in the mining industry. (Gray, *Origins of Article X Section 2*, *supra*, 17 Hastings Const. L.Q. at p. 240.) That case involved a dispute between Captain Irwin, who had constructed a dam to supply water to gold miners, and miners who arrived subsequently and wanted use of the water. (*Id.* at 239.) The underlying property of both users belonged to the government, not the parties, so riparian rights did not apply. (*Id.*) The Supreme Court recognized the superior right of Captain Irwin who had first appropriated the water; superiority of prior appropriative rights was among the regional customs that "[had] come to be looked upon as having the force and effect of *res judicata*." (*Irwin v. Phillips* (1855) 5 Cal. 140, 146.) Thus, the Court emphasized the importance of protecting the prior appropriative right when the prior appropriator has constructed "costly artificial works" in order "to supply the necessities of gold diggers." (*Id.*) Without the prior appropriator's work to divert water to miners, "the most important interests of the mineral region would remain without development." (*Id.*)

The language in the *Irwin* opinion foreshadowed the development of the reasonable use doctrine. In coming to its holding, the Court stated that a party cannot interfere with another's water right "if [the waters] have been already diverted,

and for as high, and legitimate a purpose as the one he seeks to accomplish." (*Id.* at 147.) The Court's consideration of varying degrees of legitimacy of purpose suggests that water rights in 1855 were already limited by notions of reasonableness. (*See* Gray, *Origins of Article X Section 2*, *supra*, 17 Hastings Const. L.Q. at p. 241.)

In 1884, the Court further developed ideas related to reasonable use in ruling against a hydraulic mining company to disallow "deposition onto farmland, flooding of towns, and obstruction of navigable waterways" from the practice of hydraulic mining. (Carle, Drowning the Dream: California's Water Choices at the Millenium (2000) pp. 35-36.) Given the downstream effects of hydraulic mining, the Court stated that even a legitimate and customary business, like mining, can become unreasonable when it "threaten[s] the safety of the people, and destruction to public and private rights[.]" (*People v. Gold Run Ditch & Mining Co.* (1884) 66 Cal. 138, 151.) In this decision, the Court considered the public trust doctrine. (*Id.* at 146, 151-52.) The dumping from hydraulic mining caused harm to the Sacramento River, "a great public highway, in which the people of the State have paramount and controlling rights." (*Id.* at 146.) While "it may seem ironic that the [C]ourt that sanctioned hydraulic mining with its adoption of the law of prior appropriation in *Irwin v. Phillips* would declare this activity unreasonable a mere twenty-nine years later," the decision reflects the Court's consideration of the changed circumstances. (Gray, *Origins of Article X Section 2*, *supra*, 17 Hastings Const.

L.Q. at p. 245.) This case was "a signpost which marked the transition from a mining economy to one predominantly commercial and agricultural." (*Nat'l Audubon Soc'y v. Superior Ct.* (1983) 33 Cal. 3d 419, 436.)

Reasonable use language continued to appear in opinions predating the adoption of Article X, section 2 of the California Constitution. (Hutchins, *supra*, at p. 11.) In 1886, the court "established reasonable use as another cornerstone of California water law." (Gray, *Origins of Article X Section 2*, *supra*, 17 Hastings Const. L.Q. at p. 250) (referencing *Lux v. Haggin* (1886) 69 Cal. 255).) It also already recognized the concept of reasonableness as dynamic and dependent on changing circumstances, stating "the reasonable usefulness of a quantity of water for irrigation is always relative." (*Lux v. Haggin* (1886) 69 Cal. 255, 408.). In these ways, the foundations of the reasonable use doctrine had been set even before the adoption of the California constitutional amendment that would firmly enshrine and expand the doctrine.

B. California enacted Article X, section 2 to ensure that all the state's water resources are used both beneficially and reasonably.

Article X, section 2 of the California Constitution was adopted in 1928 and provides the foundation of California water law today. This constitutional provision governing the reasonable and beneficial use of water resources "applies to all branches of government, to all levels of governmental administration of the

state's water resources, and to public and private uses of the state's waters." (Gray, *The Reasonable Use Doctrine*, *supra*, at p. 84.) With "[i]ts overarching directives, comprehensive reach, and infusion into the water rights system," Article X, section 2 can be considered "the most powerful of all of the laws that govern California's water resources." (*Id.*)

The provision states, in pertinent part, as follows:

> It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. . . . This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained.

(Cal. Const., art. X, § 2.)

The adoption of this provision was precipitated by a contentious judicial decision two years earlier holding that a riparian owner "is not limited by any measure of reasonableness." (*Herminghaus v. South. Cal. Edison Co.* (1926) 200 Cal. 81, 101.) The *Herminghaus* case pitted a power company that wanted to harness hydroelectric energy from a river against the Herminghaus family, riparian rightsholders who believed "they

were entitled to the uninterrupted natural flow of the river" to irrigate their land through flooding. (Miller, *Water Rights and the Bankruptcy of Judicial Action: The Case of Herminghaus v. Southern California Edison* (1989) 58 Pac. Hist. Rev. 83, 86.) The company argued that the Herminghaus family's use of water was unreasonable because "[r]eliance on the river at flood stage to irrigate a relatively small parcel of unimproved land was wasteful." (*Id.* at 87.)

The Supreme Court held for the riparian rightsholders, concluding that the doctrine of reasonable use did not apply to constrain the Herminghaus family's use in this case because it restrained riparian owners only in relation to other riparian owners. (*Herminghaus*, *supra*, 200 Cal. at p. 100.) In relation to an appropriator, the Supreme Court stated that "the riparian owner is entitled to restrain any diversion which will deprive him of the customary flow of water which is or may be beneficial to his land." (*Id.* at 100-01.) Compared to an appropriator, a riparian owner "could make extravagant demands on the river and use its water with stubborn inefficiency and waste." (Worster, Rivers of Empire: Water, Aridity, and the Growth of the American West (1985) p. 108.) After this decision, "[t]he lesson was clear: the Legislature could not define reasonable water use to limit the common law riparian right recognized in the state constitution." (Börk et al., *The Rebirth of California Fish & Game Code Section 5937: Water for Fish* (2012) 45 U.C. Davis L.Rev. 809, 830.)

The *Herminghaus* decision "shocked the public into howls of protest which culminated in 1928 with [the] popularly voted

initiative amending the state constitution and prohibiting any 'waste or unreasonable use.'" (Hundley, The Great Thirst, *supra*, at p. 245.) The president of the California State Irrigation Association characterized the *Herminghaus* outcome as "'legalized robbery of the people of California.'" (Stroshane, Drought, Water Law, and the Origins of California's Central Valley Project (2016) p. 121.) He warned that the decision "[was] a serious menace to the future life and development of the State of California" and that it "would forever make impossible the co-ordinated conservation of the waters of the State." (*Id.*) Other "[r]esentful critics charged that the *Herminghaus* court legitimized waste just so the Herminghauses could irrigate their Madera County lands with flood flows." (*Id.* at 135.) This "immediate and pronounced" reaction by the public spurred the Legislature "to take steps to make possible the marshalling of the state's waters to meet the ever increasing needs of the people." (*Shaping Water Law*, *supra*, at p. 30.) Reasonable use, which had been expressed in previous decisions by the California Supreme Court, provided "a solution to the impasse between the conflicting doctrines of water rights." (*Id.*)

The amendment that eventually became Article X, section 2 was written following "a long series of legislative hearings and other conferences and discussions extending over many parts of the State." (Hutchins, *supra*, at p. 13.) Numerous remedies, including dispossession of riparian rights, were considered by a Joint Committee of the California Legislature. (*United States v. Gerlach Live Stock Co.*, (1950) 339 U.S. 725, 751.) Committee

members and members of the general conference recognized the "imperative need that the limits of the right of an owner of riparian land should be set and that prevention of a wasteful use of water is a matter of paramount importance to the general welfare of the State." (Journal of the Assembly During the 47th Session of the Legislature of the State of California (1927) p. 510.) They revised the constitutional amendment to demonstrate its clear intentions. For example, originally, the word "natural" originally appeared to modify the phrase "the conditions appearing in this State," but it was stricken because the committee felt "that conditions generally, artificial as well as natural, require that the water resources of the State be conserved." (*Id.*) In another instance, a sentence was added to clarify that reasonable use applies to riparian rights and "to define beyond the peradventure of a doubt the limits of a riparian right in a stream or watercourse." (*Id.*)

The proposed amendment "came out declaring 'reasonable use' to be the universal test for natural water resources, controlling not alone riparians but everyone." (Wiel, *Fifty Years of Water Law* (1936) 50 Harv. L.Rev. 252, 275.). In response to "the extremes to which the riparian doctrine had been extended....the [L]egislature espoused the doctrine of reasonable use and embodied it in a clear and concise proposed constitutional amendment." (*Shaping California Water Law*, *supra*, at p. 32.)

The 1928 general election ballot stated that the purpose of the constitutional amendment creating Article X, section 2 was "to prevent the waste of the waters of the state resulting from an

interpretation of our law which permits them to flow unused, unrestrained and undiminished to the sea." (Ballot Pamp., Gen. Elec. (Nov. 6, 1928) p. 14 [argument in favor of Prop. 7].) The amendment "allow[ed] water which now so runs to waste to be conserved and used for the benefit of all of the people in the state." (*Id*.) The ballot stated that the amendment "[was] a common sense rule of the utmost importance to, and should be adopted for, the future growth of our state and cities." (*Id*.) California voters overwhelmingly adopted the constitutional provision by a vote of 77.2% "Yes" to 22.8% "No." (Stroshane, *supra*, at p. 209.)

Along with the constitutional provision, sections 100 and 275 of the California Water Code form the reasonable use doctrine. Section 100 reiterates the language of Article X, section 2. (Cal. Water Code § 100.) The Legislature's intent with this enabling legislation was "to devise a plan which was commensurate in scope with the constitutional amendment." (*Modesto Properties v. State Water Rights Bd.* (1960) 179 Cal.App.2d 856, 860.) Section 275 tasks the Board with preventing the waste and unreasonable use of state water resources, stating that the Board "shall take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste…[and] unreasonable use." (Cal. Water Code § 275.) Overall, the legislative intent conveyed in the Water Code is "to adopt a general and complete scheme and plan for conserving water, and regulating the production, control, distribution, and use of water by such water districts as those

involved herein." (*Baldwin Park Cty. Water Dist. v. Los Angeles Cty.* (1962) 208 Cal.App.2d 87, 97.)

C. Courts have applied the reasonable use doctrine expansively and contextually in order to give effect to its core purpose of preventing the waste and unreasonable use of water.

The enactment of Article X, section 2 had a profound impact, making reasonable use foundational to all of California water law. (*Floods, Droughts, and Lawsuits*, *supra*, at p. 40.) The Legislature intended for Article X, section 2 to be enforced widely and to be used to combat decades of poor water resource management caused by prior water right allocations. (See Gray, *The Reasonable Use Doctrine*, *supra*, at p. 84.) Courts, in turn, have taken up the invitation to interpret and apply the doctrine broadly to ensure that all water uses in California are reasonable. (See *id.* at 85-89.)

One early, landmark interpretation of Article X, section 2 showed its expansive reach and also established its dynamism, emphasizing the "flexible and dynamic evaluation of the competing interests" that must accompany determinations of reasonableness. (Gray, *Origins of Article X, Section 2*, *supra*, 17 Hastings Const. L.Q. at p. 266 (discussing *Peabody v. City of Vallejo* (1935) 2 Cal.2d 351).) In *Peabody*, the Court considered the reasonableness of plaintiff's asserted water rights, where the water in question was used "to overflow his lands for the purpose of depositing silt thereon." (*Peabody v. City of Vallejo* (1935) 2 Cal.2d 351, 369.) The Court found that the plaintiff's "asserted

right [involved] an unreasonable use or an unreasonable method of use or an unreasonable method of diversion of water as contemplated by the Constitution." (*Id.*) In so holding, the Court made clear that "[t]he limitations and prohibitions of the constitutional amendment now apply to every water right and every method of diversion." (*Id.* at 367.) According to the Court, no water right extends to the waste of water, and the California Constitution's "mandates are plain, they are positive, and admit of no exception. They apply to the use of all water, under whatever right the use may be enjoyed." (*Id.*)

In *Peabody*, the Court also affirmed that questions of the reasonanableness of a given use of water are contextual and depend on changing circumstances. It stated that "[a]s to what is waste water depends on the circumstances of each case and the time when waste is required to be prevented." (*Id.* at 368.) This dynamic conception of reasonableness is now well established, as is the idea that reasonableness analyses must consider interests even outside of those of the parties before the court. In its 1967 *Joslin v. Marin Municipal Water District* decision, the Supreme Court underscored the importance of "the ever increasing need for the conservation of water in this state, an inescapable reality of life quite apart from its express recognition in the 1928 amendment." ((1967) 67 Cal.2d 132, 140.) There, the Court found unreasonable the petitioners' use of unobstructed stream flow for sediment mining, given the adjacent utility's need to meet increasing water demand. (*Id.* at 140-41.) According to the Court, "[a reasonable use] inquiry cannot be resolved *in vacuo* from

statewide considerations of transcendent importance." (*Id.* at 140.) The Court concluded that reasonable use determinations cannot be made in reference to only the parties at issue, stating the Board must consider the totality of the circumstances when determining reasonableness. (*Id.* 139-40.)

Elsewhere, the Court has emphasized that changing environmental, economic, political, and hydraulic conditions may make prior reasonable water uses unreasonable. (*Envtl. Def. Fund, Inc.*, *supra*, 26 Cal.3d at pp. 194-95.) "What may be a reasonable beneficial use, where water is present in excess of all needs, would not be a reasonable beneficial use in an area of great scarcity and great need. What is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time."(*Tulare Dist. v. Lindsay-Strathmore Dist.* (1935) 3 Cal.2d 489, 567 [45 P.2d 972].) Thus, all water use in California must be reasonable, a determination which must be made in light of both local and statewide conditions of water scarcity, with due recognition of the changing climatic conditions in the state.

Interpreting Article X, section 2 expansively to protect against the waste of water gives effect to the provision's purpose and accords with longstanding doctrine concerning the interpretation of California constitutional amendments. (See *In re Quinn* (1973) 35 Cal.App.3d 881, 888 (in construing constitutional amendments, California courts "take judicial cognizance of the existence of the evil which the Legislature in framing such amendment, and the people ratifying it, endeavored

to correct"); *Turlock Irrigation Dist. v. White* (1921) 186 Cal. 183, 188 (courts resolve ambiguities in constitutional amendments based on "the object to be accomplished or the mischief to be remedied or guarded against").) Referencing the stated purpose on the ballot "to prevent the waste of waters of the state," the Supreme Court has said this purpose "is beyond question." (*Gin S. Chow v. Santa Barbara* (1933) 217 Cal. 673, 700.) The Court described the amendment as "an endeavor on the part of the people of the state, through its fundamental law, to conserve a great natural resource[.]" (*Id.*) "[W]ithout [this] conservation," the Court wrote, "such waters would be wasted and forever lost." (*Id.*) The Court also has stated: "It was undoubtedly the purpose of the proponents of the amendment of 1928 to make it possible to marshal the water resources of the state and make them available for the constantly increasing needs of all of its people." (*Meridian v. San Francisco* (1939) 13 Cal. 2d 424, 449.)

The Ninth Circuit has articulated the same concern for conservation in the public's interest, describing that the purpose of the constitutional amendment "was to vest with a public interest the use of all the waters of the state, so that no part of the precious supply should flow uselessly into the sea or otherwise go to waste." (*People of State of Cal. v. United States* (1956) 235 F.2d 647, 663.) These articulations of the constitutional provision's purposes should serve as guideposts to its interpretation and application. (See *In re Quinn*, *supra*, 35 Cal.App.3d at p. 888; *Turlock Irrigation Dist.*, *supra*, 186 Cal. at p. 188.)

Even at the time of its passage, commentators understood that the new constitional provision would have profound implications for water use and reuse. In considering the proposed constitutional amendment in the May 1928 issue of California Law Review, Samuel Wiel noted that studies at the time "disclosed that putting the water resources of the State to beneficial use to the fullest extent of which they are capable requires using the same water over again the greatest number of times that can exist comfortably together." (Wiel, *The Pending Water Amendment to the California Constitution, and Possible Legislation* (1928) 16 Cal. L.Rev. 257, 259 (emphasis omitted).) He compared the single use of a large flow of water to "a railroad serving one large unit like San Francisco and no other place on its line to New York" because it "served only a fraction of its possibilities." (*Id.*) Wiel stated: "It is the judicial expression that repeated use of the same water over again in the successive places which it visits must have the same realization in legal right and legal protection that it has in fact and practical employment," adding that the constitutional amendment "will have rededicated the law to this principle of the courts." (*Id. a*t 269 (emphasis omitted).)

Almost forty years ago, the Supreme Court's 1983 *Audubon* decision strengthened and clarified the Board's duty by recognizing the obligation to consider public trust interests in water allocation and planning. (*Nat'l Audubon Soc'y v. Superior Ct.* (1983) 33 Cal. 3d 419, 444 (hereafter *Audubon*).) *Audubon* highlighted "that public trust uses are subject to the doctrine of

reasonable use." (Garner & Littleworth, California Water (1995) p. 130.) For the first time, the *Audubon* court "squarely faced the question of the applicability, if any, of the public trust doctrine to another resource in which the state has a vital interest, that is, water." (Attwater & Markle, *supra*, 19 Pac. L.J. at p. 988.) The Department of Water and Power of the City of Los Angeles had "a permit to appropriate virtually the entire flow of four of the five streams flowing into [Mono Lake]." (*Audubon*, *supra*, 33 Cal. 3d at p. 424.) The plaintiffs filed suit to enjoin the diversions, which decreased the level of the lake and its surface area and "[exposed] the gull rookery there to coyotes and other predators and [caused] the gulls to abandon the former island." (*Id.* at 424-25.)

The Supreme Court held that the State must reevaluate the allocation of the Mono Basin waters, given the impact of the diversions on the public trust uses. (*Id.* at 444-48.) The Court's ruling established that California, as the trustee, "has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." (*Id.* at 446.) The Water Boards, which are responsible for "the charge of comprehensive planning and allocation of waters," are statutorily required to consider public trust interests. (*Id.* at 444.) Importantly, the Court also noted that because Article X, section 2 "establishes state water policy," "*[a]ll uses* of water, including public trust uses, must now conform to the standard of reasonable use." (*Id.* at 443 (emphasis added).)

D. Recognizing the Boards' duty to prevent the waste and unreasonable use of water in this case is consistent with the development of the doctrine, with the Boards' role, and with sound water management in California.

California created the State and Regional Boards to "provide for the orderly and efficient administration of the water resources of the state." (Cal. Water Code § 174.) The Legislature has recognized that the complex nature of California water resource management requires state agencies tasked specifically to address "water rights, water quality, and drinking water functions[.]" (*Id.*) Part of that responsibility includes the protection of the public interest. (See *Audubon*, *supra*, 33 Cal. 3d at p. 444.) Over time, the State Board has become responsible for "the charge of comprehensive planning and allocation of waters" and is "required by statute to take [public trust] interests into account." (*Id.*)

In exercising its authority, the State Board has relied on the reasonable use doctrine and public trust doctrine to place limits on water users. Yet, although the Board relies extensively on its broad *authority* to prevent third parties from unreasonably wasting water resources, the Board has sometimes resisted recognition of its *duty* to prevent water waste, as in the case at bar.

It is eminently reasonable to consider the Board's mandate under the reasonable use doctrine here as a duty, not simply a source of authority. (See Gray, *The Reasonable Use Doctrine*, *supra*, at pp. 101, 103 (the state has an "obligation to enforce the

doctrine of reasonable use for the benefit of California's people and economy.")) "The Board's duties and rights include ensuring compliance with the mandate of article X, section 2 of the Constitution, which requires that all uses of water … must now conform to the standard of reasonable use." (*Imperial Irrigation Dist. v. State Wat. Res. Control Bd.* (1990) 225 Cal.App.3d 548, 560 (citing *Audubon*, *supra*, 33 Cal. 3d at p. 443); see also *Spear v. Reeves* (1906) 148 Cal. 501, 504 (determining that the constitutional duty of publishing a proposed law for voter review was properly attributed to the governor, even when "the constitutional provision referred to is silent as to who shall make the required publication, and there is no general law upon the subject").) Here, the constitutional duty to prevent waste and unreasonable use is properly attributed to the State Board. (See Cal. Water Code § 275 (stating that the Board *shall* take appropriate actions to prevent the waste and unreasonable use of water).)[13]

Although this is the first case recognizing this duty in the context of issuance of a waste discharge permit, the decision on appeal is in line with California courts' increasing recognition that Article X, section 2 prohibits the waste and unreasonable use of water in a variety of hydrological contexts—regardless of the precise regulatory setting—in order to effectuate the

[13] The duty imposed by Article X, section 2 also extends to the Los Angeles Regional Water Quality Control Board, as the provision applies "to all levels of governmental administration of the state's water resources[.]" (See Gray, *The Reasonable Use Doctrine*, *supra*, at p. 84.)

provision's purposes and maximize the beneficial use of water. *See, e.g., California v. United States* (1978) 438 U.S. 645, 653, fn 7 [98 S. Ct. 2985, 2990, 57 L. Ed. 2d 1018] (noting, in the context of issuance of a permit for appropriative use, that "[t]he Board is to issue a permit only if it determines that unappropriated water is available and that the proposed use is both "reasonable" and "beneficial" and best serves "the public interest[]"…In determining whether to issue a permit, the Board is to consider not only the planned use of the water but also alternative uses, including enhancement of water quality, recreation, and the preservation of fish and wildlife"); *Audubon*, *supra*, 33 Cal. 3d at p. 443 (holding that all water uses in California, including public trust uses, are subject to reasonable use doctrine); *Joslin*, *supra*, 67 Cal.2d at p. 141 (applying reasonable use doctrine to limit use of water for sediment mining); *Peabody*, *supra*, 2 Cal.2d at p. 369 (applying reasonable use doctrine to limit plaintiff's asserted existing water right to overflow his lands); *Stanford Vina Ranch Irrigation Co. v. State of California* (2020) 50 Cal.App.5th 976, 985 [264 Cal. Rptr. 3d 509, 515] (upholding reliance on reasonable use doctrine to limit diversions that threatened to reduce flow of water below minimum flow requirements during height of severe drought); *Envtl. Law Found. v. State Water Res. Control Bd.* (2018) 26 Cal. App. 5th 844, 861 [237 Cal. Rptr. 3d 393, 404] (affirming that extractions of groundwater that affect the public trust remain subject to reasonable use, consistent with *Audubon*); *Light v. State Wat. Res. Control Bd.* (2014) 226 Cal.App.4th 1463, 1482,

1487 (extending reasonable use doctrine to rights of riparian users and pre-1914 appropriators, noting that "the Board is charged with acting to prevent unreasonable and wasteful uses of water, *regardless of the claim of right under which the water is diverted*"); *Elmore v. Imperial Irrigation Dist.* (1984) 159 Cal.App.3d 185, 197-98 (applying reasonable use doctrine to context of irrigation and flooded lands).

Recognizing the State and Regional Boards' duty to consider whether these discharges constitute waste or unreasonable use of water would benefit water management in California. As discussed *supra*, California's current water management system is siloed and disjointed, with responsibilities often falling in the cracks between regional agencies and the State Board. Acknowledging a duty here would ensure that the Boards proactively and periodically assess the reasonableness of the discharge of this extraordinary volume of water, a task that might otherwise be overlooked or shortchanged because of regulatory fragmentation. This will help safeguard statewide water resiliency "in the face of contemporary and future water supply challenges." (Gray, *The Reasonable Use Doctrine*, *supra*, at p. 94.) Especially as climate change exacerbates California's water supply challenges in the ways discussed in Section II *supra*, recognizing the existence of this duty—and ensuring that these discharges are reasonable—will support the fundamental goals of Article X, section 2, which are to prevent the waste and unreasonable use of water.

Importantly, recognizing such a duty would not place an unmanageable burden on the Boards. The lower court's ruling is narrow, holding only that:

> [t]he disposal of such a significant volume of water with no evaluation whether the discharge constitutes a waste and unreasonable use of water violates the State Board's mandatory duty under Article X, section 2 and section 100...There is no evidence that any other [Publicly Owned Treatment Work ("POTW")] in the state even remotely comes close to the level of wastewater discharge by the four POTWs. As the court ruled on demurrer, the issue is one of degree, and the difference in degree between this case and any other circumstance is so large as to be different in kind. Dem. Ruling at 21. The four POTWs are unique and there is no evidence that the State Board is at risk of being forced to investigate other POTW discharges." (*Los Angeles Waterkeeper v. State Water Resources Control Board et al.*, Los Angeles Superior Court Case No. BS171009 (2020) p. 38.)

The trial court's analysis of when the Boards must conduct a reasonable use analysis in this case focuses not on the plain issuance of a discharge permit, but that issuance in the context of the scale of water discharged by the four POTWs here. (*Los Angeles Waterkeeper v. State Water Resources Control Board et al.*, Los Angeles Superior Court Case No. BS171009 (2020) p. 38.) The four treatment plants at issue collectively discharge around 300 MGD of advanced treated water into the Los Angeles River and Santa Monica Bay. (*Id.* at 37.) This is about 20% of total coastal municipal discharge in California. (See Heal the Ocean, Inventory of Municipal Wastewater Discharges to California Coastal Waters (2018) p. 6.) Very few other permitted sources

discharge a remotely comparable water volume to that of the four plants at issue. (*Id.*)

IV. CONCLUSION

For these reasons, we respectfully urge affirmance of the decision on appeal as to the existence of a duty in this case under Article X, section 2 of the California Constitution.

Dated: April 11, 2022

By:
/s/ Cara Horowitz
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CERTIFICATE OF COMPLIANCE

Pursuant to California Rules of Court, rule 8.204(c), I hereby certify that this brief contains 9,817 words using 13-point Century Schoolbook font, including footnotes, which is less than the total words permitted by the California Rules of Court. In making this certification, I have relied on the word count of the computer program used to prepare the brief.

PROOF OF SERVICE

I am employed in the County of Los Angeles, State of California. I am over the age of eighteen and am not a party to the within action. My business address is 405 Hilgard Avenue, Los Angeles, California 90095. On April 11, 2022, I served the within documents:

[PROPOSED] ORDER AND APPLICATION OF KARRIGAN BÖRK, Ph.D., NAOMI GOLDENSON, Ph.D., JOHN LESHY, CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, CALIFORNIA WATER IMPACT NETWORK, AND ENVIRONMENTAL LAW FOUNDATION FOR LEAVE TO FILE *AMICI CURIAE* BRIEF IN SUPPORT OF RESPONDENT AND CROSS-APPELLANT

PROPOSED BRIEF OF *AMICI CURIAE* KARRIGAN BÖRK, Ph.D., NAOMI GOLDENSON, Ph.D., JOHN LESHY, CALIFORNIA SPORTFISHING PROTECTION ALLIANCE, CALIFORNIA WATER IMPACT NETWORK, AND ENVIRONMENTAL LAW FOUNDATION IN SUPPORT OF RESPONDENT AND CROSS-APPELLANT

☒ **VIA UNITED STATES MAIL.** I am readily familiar with this business' practice for collection and processing of correspondence for mailing with the United States Postal Service. On the same day that correspondence is placed for collection and mailing, it is deposited in the ordinary course of business with the United States Postal Service in a sealed envelope with postage fully prepaid. I enclosed the above-referenced document(s) in a sealed envelope or package addressed to the person(s) at the address(es) as set forth below, and following ordinary business practices I placed the package for collection and mailing on the date and at the place of business set forth above.

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VIA ELECTRONIC SERVICE THROUGH TRUEFILING. Based on a court order or an agreement of the parties to accept service by electronic transmission through TrueFiling, I caused the above-referenced document(s) to be sent to the person(s) at the electronic address(es) listed below.

I declare that I am employed in the office of a member of the bar of this court whose direction the service was made. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on April 11, 2022, at Los Angeles, California.

_____/s/ Cara Horowitz_____
Cara Horowitz

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