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Groundwater: Uniform Control of a Critical and Limited Resource

by

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GROUNDWATER: UNIFORM CONTROL OF A CRITICAL AND LIMITED RESOURCE

I. INTRODUCTION

Now is the time for California's legislature to rethink water policy concerning groundwater. Leaving decisions concerning groundwater use and its allocation to local authorities is not the answer. Local governments with differing and competing views have placed the continuing viability of the state's groundwater supply in jeopardy. The California legislature must adopt uniform regulations as it pertains to groundwater and its many uses.

Water is defined as either surface or groundwater. In an average year, California uses all of its surface water, requiring many San Joaquin Central Valley farmers to pump groundwater from a dwindling supply. Various political, agricultural, commercial, social, and economic interests compete for the many uses of water in California. Thus, the failure to implement uniform regulations continues to endanger the supply of safe groundwater.

This Comment has been divided into five sections. The first section discusses water law and the current regulations involving groundwater management. The second section focuses on the famous court case concerning Mono Lake: *National Audubon Society v. Alpine County* and the California Supreme Court's explanation of the Public Trust Doctrine as it applies to water use and management. The third section highlights varying views concerning water use with a focus on the rise of the bottled water industry and its impact on regional groundwater supplies, as well as the growing tension between communities as bottled water companies open plants on Native American reservations. The fourth section addresses the authority of California's legislative and regulatory bodies to regulate the use of groundwater and how the courts balance the competing interests involved. This Comment concludes with the recommendation that the legislature should implement statewide uniform regulations to manage groundwater throughout the state of California.

II. WATER LAW AND CURRENT REGULATIONS

A. Water Law

California water law is complex. Although groundwater is not uniformly regulated statewide, surface water is.[1] Two very different types of water rights, riparian and appropriative, have been adopted in California.[2] A riparian right applies to land bordering a natural watercourse and gives the owner the right to make reasonable and beneficial use of the water on the property.[3] Riparian water cannot be diverted for storage or used outside of the water basin and is superior to an appropriative water right.[4] Appropriative rights refer to any taking of water from a watercourse and allow exportation outside the water basin.[5] Appropriative rights exist within a hierarchy of priorities, based on the principle that the one first in time is the one who is first in right.[6] Appropriators, between themselves, have the right to a specific quantity of water up to the amount taken in the past and these rights can be lost if not used for a period of five years.[7]

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[1] California Environmental Protection Agency, History of the State Water Resources Control Board at 2, *available at* http://www.waterboards.ca.gov/about/history.html (last visited Nov. 11, 2005).

[2] Water of Hallett Creek Stream System v. United States, 44 Cal.3d 448, 455 (1988); National Audubon Society v. Alpine County, 33 Cal.3d 419, 425 (1983); People v. Shirokow, 26 Cal.3d 301, 307 (1980); Pleasant Valley Canal Company v. Bruce Borror, 61 Cal.App.4th 742, 752 (5th Cir. 1998). *See also* California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1, at 1.

[3] National Audubon, 33 Cal.3d at 441; Shirokow, 26 Cal.3d at 307; Holmes v. Nay, 186 Cal. 231, 235 (1921); Borror, 61 Cal.App.4th at 752; Gonzales v. Arbelbide, 155 Cal.App.2d 721, 723-724 (3rd Cir. 1957). *See also* California Environmental Protection Agency, History of the State Water Resources Control Board, Water Rights, General information relating to Water Rights in California - 1990, at 3-4, *available at* http://www.waterrights.ca.gov/ (last visited Mar. 27, 2005).

[4] National Audubon, 33 Cal.3d at 441; Borror, 61 Cal.App.4th at 752; Shirokow, 26 Cal.3d at 307; Holmes, 186 Cal., at 233. *See also* California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1, at 1-2.

[5] Barstow v. Mojave Water Agency, 23 Cal.4th 1224, 1241 (2000); Shirokow, 26 Cal.3d at 307; Tehachapi-Cummings County Water District v. Frank Armstrong, 49 Cal.App.3d 992 at 1001; Pasadena v. Alhambra, 33 Cal.2d 908, 925 (1949); Burr v. Maclay Rancho Water Company, 154 Cal. 428, 436 (1908); Borror, 61 Cal.App.4th at 752.

[6] Barstow, 23 Cal.4th at 1241; National Audubon, 33 Cal.3d at 441; Borror, 61 Cal.App.4th at 776.

[7] Barstow, 23 Cal.4th at 1241. *See also* California Environmental Protection Agency, State Water Resources Control Board, Water rights, General Information at 3, *available at* http://www.waterrights.ca.gov/ (last visited Mar. 27, 2005).

Over thirty years ago, the California Legislature acknowledged that the state would not have enough clean water for agricultural, municipal, industrial, environmental and other uses unless decisions concerning water quality and quantity were coordinated throughout the state.[8] In order to protect water quality and balance competing demands, the State Water Resources Control Board ("SWRCB") was created to resolve water disputes and the Department of Water Resources ("DWR") was created to operate project facilities.[9] The SWRCB allocates water rights, adjudicates water disputes and develops statewide water protection plans by issuing permits and licenses for surface water,[10] which is obtained from lakes, streams and reservoirs.[11]

In contrast, groundwater, which is obtained from beneath the land surface from basins or aquifers,[12] is exempted from the extensive regulations of surface water because the English system of unregulated groundwater pumping dominates.[13] Groundwater is classified as overlying and prescriptive with the overlying right analogous to that of a riparian owner.[14] Overlying rights allow an owner of the land to take water from beneath the ground for use on his land within the water basin.[15] However, a wrongful taking, such as extracting water from an overdrafted water basin, may ripen into a prescriptive right.[16] Prescriptive rights cannot be acquired by taking surplus water.[17] In California, surplus water may be appropriated for beneficial uses, subject to the rights of those who have a lawful priority.[18] As between overlying owners, the right is correlative and the groundwater belongs to all landowners, with each using only his reasonable proportional share when water demand exceeds supply.[19]

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[8] California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1.

[9] California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1, at 1-2.

[10] *Id.*

[11] Cal. Water Code §1200 (2005).

[12] California Department of Water Resources, California Water Plan (2005) Volume 4, Reference Guide, Glossary, "groundwater" and "groundwater basin," *available at* http://www.waterplan.water.ca.gov/technical/index.cfm.

[13] California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* at 2.

[14] Pasadena, 33 Cal.2d at 925.

[15] *Id.*

[16] Barstow, 23 Cal.4th at 1241; *See* Pasadena, 33 Cal.2d at 925.

[17] *Id.*

[18] Barstow, 23 Cal.4th at 1241; San Bernardino v. Riverside, 196 Cal. 7, 17 (1921); Burr, 154 Cal., at 436.

[19] Barstow, 23 Cal.4th at 1242; Tehachapi-Cummings County Water District, 49 Cal.App.3d at 1002.

When the quantity of water withdrawn exceeds the average annual amount contributed, the water basin will gradually be depleted and eventually exhausted.[20] To prevent such a catastrophe, extraction by all users may be limited.[21] In addition to riparian and appropriative rights, reserved water rights, which constitute water set aside by the federal government,[22] and pueblo rights, a municipal right based on Spanish and Mexican law, also exist in the state.[23]

It is the policy of California to foster a beneficial use of water and discourage waste.[24] As defined in the Constitution, water is the property of all under the Public Trust Doctrine.[25] While surface water in the state is uniformly regulated through the SWRCB, groundwater is not.[26] In most areas, landowners whose property overlies a groundwater resource may pump it without approval from the state or a court.[27] This unregulated pumping of groundwater encourages waste and it is time for the legisla-

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[20] Pasadena, 33 Cal.2d at 929; San Bernardino, 196 Cal., at 9; Burr, 154 Cal., at 437-438. *See also* California Water Plan (2004) Volume 1, Chapter 2, California Water Plan, California Water Today, *available at* http://www.waterplan.water.ca.gov/b160index b160.html.

[21] Pasadena, 33 Cal.2d at 933; San Bernardino, 196 Cal., at 11; Burr, 154 Cal., at 438.

[22] United States v. New Mexico, 438 U.S. 696, 715 (1978); Cappaert v. United States, 426 U.S. 128, 138 (1976); Arizona v. California, 373 U.S. 546, 601 (1963); Winters v. United States, 207 U.S. 564, 577 (1908). *Also see* California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1.

[23] Cal. Const. art. 10, § 2, *available at* http://www.leginfo.ca.gov/const-toc.html (last visited Aug. 18, 2004). ("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."). *See also* San Diego v. Cuyamaca Water, 209 Cal. 105, 122 (1980); San Diego v. Sloane, 272 Cal. App.2d 663, 665 (4th Cir. 1969); California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1.

[24] Cal.Wat.Code § 100 (Derring 2005). *See also* California v. Riverside, 78 Cal.App.4th 1019, 1024 (4th Cir. 2000); Wright v. Goleta Water District and Santa Barbara, 174 Cal.App.3d 74, 87 (2nd Cir. 1985).

[25] Cal. Const. art. 10, § 2, *supra* note 23; Cal. Civ. Code § 670 (Derring 2005). *See also* Riverside, 78 Cal.App.4th at 1026; National Audubon, 33 Cal.3d at 426; Tulare v. Lindsay-Strathmore Irrigation District, 3 Cal.2d 489, 524-525 (1935) (It is now necessary for the trial court to determine whether such owners, considering all the needs of those in the particular water field, are putting the waters to any reasonable beneficial uses, giving consideration to all factors involved, including reasonable methods of use and reasonable methods of diversion.).

[26] Water Code § 1200, *supra* note 11. *See also* California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1.

[27] Water Code § 1200, *supra* note 11. *See also* California Environmental Protection Agency, History of the State Water Resources Control Board, *supra* note 1.

ture to mandate that all water, including groundwater, be systematically regulated by the SWRCB.

B. Groundwater Management in California

There are six theories or methods of groundwater management throughout California: overlying property rights, adjudicated basins, local agencies, special legislation districts, application of Assembly Bill 3030 ("AB 3030"), and city and county ordinances.[28] First, overlying property rights allow anyone in California to build a well and extract their proportional share of groundwater.[29] However, proportional shares are not monitored or regulated and they are unknown unless the basin has been adjudicated.[30] Second, adjudicated basins are those in which a lawsuit has been filed, giving the court authority to determine the quantity of water and allocation of all persons above the basin.[31] Out of 431 groundwater basins in California, comprising 515 distinct groundwater systems,[32] sixteen have been adjudicated, the most recent in 1996.[33] Third, there are twenty-three types of local agencies or entities identified in the California Water Code as having specific authority to manage surface water, with a few also authorized to develop a groundwater management plan.[34] Fourth, there are twelve special legislative districts enacted to form management agencies to regulate groundwater.[35] Out of fifty-eight counties in California,[36] eleven support these types of special water districts.[37] Fifth, AB 3030 allows local agencies to develop a groundwater management plan.[38] However, it does not require a local

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[28] California Department of Water Resources, Laws & Legislation, Groundwater Management in California 3-4 (1999), *available at* http://www.groundwater.water.ca.gov/water_law/index.cfm.

[29] *Id.* at 3.

[30] *Id.*

[31] *Id.* at 4.

[32] California, Department of Water Resources, Individual Basin Descriptions, Background at 1, *available at* http://www.groundwater.water.gov/bulletin118/basin_desc/index.cfm (last visited Apr. 7, 2005).

[33] California Department of Water Resources, Legislation, Groundwater Management in California, *supra* note 28, at 17-18.

[34] *Id.* at 3.

[35] *Id.* at 4.

[36] California State Association of Counties, County Profiles, *available at* http://www.csac.counties.org (last visited Dec.15, 2005).

[37] California Department of Water Resources, Groundwater Information Center, Status of Groundwater Management in California (2004), Special Act Districts, *available at* http://www.groundwater.water.gov.

[38] A.B. 3030, 1992 Reg. Sess. (Cal. 1992).

agency to implement a plan,[39] nor does the California Water Code require local agencies to submit their groundwater plans to the DWR.[40] In an attempt to compile information about local agency plans, the DWR mailed questionnaires to over 1,000 water agencies.[41] Out of 650 responses, 267 indicated that they had some type of groundwater management plan with 149 adopted plans in accordance with AB 3030[42] spread throughout twenty-seven counties.[43] Sixth, cities and counties may adopt ordinances to manage groundwater.[44] The California Supreme Court declined to review a lower court decision in *Baldwin v. Tehama County,*[45] which affirmed city and county rights to adopt water plan ordinances, holding that state law does not occupy the field of groundwater management.[46] The court affirmed the fact that groundwater is not uniformly regulated by the state. Out of fifty-eight counties in California,[47] twelve have adopted ordinances relating to groundwater.[48] However, regardless of the method employed, groundwater management varies.

According to the City of Fresno, their primary source of drinking water is pumped from 250 wells.[49] In addition, the city reported that in 1940, fresh water was available forty feet underground, but with each consecutive year the city has to drill deeper.[50] Today, fresh water is available at a depth of 120 feet.[51] In an effort to protect the groundwater supply, the city monitors the water for contaminants[52] and purchases surface water made available through the Central Valley Project ("CVP"). [53] Although users contract with the CVP to receive water, during the most recent 1987 to 1992 drought, it was reported that the CVP reduced deliv-

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[39] *Id.* at 2.

[40] California Department of Water Resources, Legislation, Groundwater Management in California, *supra* note 28, at 1.

[41] *Id.*

[42] *Id.* at IX.

[43] California Department of Water Resources, Groundwater Information Center, *supra* note 37, at 3-7.

[44] California Department of Water Resources, Legislation, Groundwater Management in California, *supra* note 28, at 4.

[45] Baldwin v. Tehama, 31 Cal.App.4th 166, 184 (1994).

[46] *Id.* at 174.

[47] California State Association of Counties, *supra* note 36.

[48] California Department of Water Resources, Legislation, Groundwater Management in California, *supra* note 28, at 4.

[49] Water Quality (2004) City of Fresno, Tapping into Fresno's greatest resource: Water at 1, *available at* http://www.fresno.gov.

[50] *Id.*

[51] *Id.*

[52] *Id.* at 2.

[53] *Id.* at 1.

eries to agricultural users by seventy-five percent and urban users by twenty-five percent.[54] When surface water is not available, farmers must pump groundwater to save crops, thus overdrafting the water basin by extracting more water than can be replenished.[55]

According to a Madera County memorandum, the overall problem with groundwater management is that water level data is not readily available to study.[56] In addition, even when water levels are measured, they are not systematically recorded.[57] Thus, it is not known with certainty how much groundwater is left in most groundwater basins. There are over 470 cities in California[58] and each can implement its own policy concerning groundwater in accordance with their own specific needs. Groundwater is a precious resource, vital to California farmers, residents, and the environment and as such, requires regulation through one central agency, not over 400 cities with competing needs.

C. A Statewide Issue

Statistical information on many of the groundwater basins in California is lacking.[59] Since information is essential to protect this resource, the California legislation mandated that the Department of Water prepare a statewide inventory of groundwater basins.[60] Only where many studies have been completed over a number of years is the health of a basin fairly well understood.[61] However, even in basins where years of study have already been completed, there are many unknowns and changes may result when more information is collected and evaluated.[62]

The Governor's Advisory Drought Planning Report ("Report") states, "California has experienced a series of unusually wet years since the time of the last statewide critical water shortages – the 1987-1992

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[54] California Department of Water Resources, Drought Preparedness, Governor's Advisory Drought Planning Panel, Critical Water Shortage Contingency Plan 7 (2000), *available at* http://watersupplyconditions.water.ca.gov/.

[55] *Id.* at 16.

[56] Todd Engineers, County of Madera, Engineering and General Services, Draft Technical Memorandum, Groundwater Conditions, Eastern Madera County 15 (2002), *available at* http://www.sierrafoothill.org.

[57] *Id.*

[58] California State Association of Counties, *supra* note 36, at 1-11.

[59] California Department of Water Resources, Bulletin 118, Background, *available at* http://www.groundwater.water.gov/bulletin118/index.cfm (last visited Jan. 5, 2005).

[60] *Id.*

[61] California, Department of Water Resources, Individual Basin Descriptions, Background, *supra* note 32.

[62] *Id.*

drought."[63] These wet conditions will not continue indefinitely,[64] and there is an increased risk of critical water shortages until such time as the water supply reliability measures planned in the California Federal Record of Decision are implemented.[65] These measures took effect on August 28, 2000, and are scheduled for implementation over the next thirty years.[66]

The Report also summarized the impacts of recent droughts.[67] In fact, during the most recent drought between 1987 and 1992, the State Water Project, in 1991, terminated all of its deliveries to agricultural users and completed only ten percent of its urban deliveries.[68] In contrast, the CVP delivered twenty-five percent of its water to agricultural contractors and seventy-five percent to its domestic users.[69] During this drought, twenty-three of the state's fifty-eight counties declared local emergencies.[70] Other drought impacts included private wells and small rural water systems drying up.[71] Hydropower generation dwindled from thirty to twelve percent, adversely affecting California's power supply.[72] Since the drought, new agricultural plantings have increased on the San Joaquin Central Valley's west side, where farmers rely mainly on water exports from the Delta and on groundwater pumping.[73] California is an arid state, averaging a monthly high temperature of 92 degrees,[74] thus droughts are not uncommon.

D. A Shrinking Supply

Groundwater use has enabled the San Joaquin Central Valley ("SJCV") to produce twenty-five percent of the nation's food on one

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[63] California Department of Water Resources, Drought Preparedness, ch. 1, *supra* note 54, at 1.

[64] *Id.*

[65] *Id.*

[66] California Department of Water Resources, Drought Preparedness, ch. 2, *supra* note 54, at 17.

[67] California Department of Water Resources, Drought Preparedness, ch. 1, *supra* note 54, at 7.

[68] *Id. See also* California Water Plan (2004), *supra* note 20, at 6.

[69] *Id.*

[70] *Id.*

[71] *Id.* at 8.

[72] *Id.*

[73] *Id.* at 16.

[74] California Geography at 4, *available at* http://www.netstate.com/states/geography/ca_georgraphy.htm (last visited Dec. 15, 2005).

percent of the farmland in the United States.[75] Although it appears as if California has an abundance of water, the state regularly uses one hundred percent of its surface water supply and must resort to pumping groundwater to fulfill demand.[76] Pumping decreases the water table and causes water basins to consolidate, resulting in a permanent loss in capacity and subsidence of land above the aquifer.[77] Excessive pumping contributed to one of the single largest surface land subsidence attributed to humankind.[78] In 1970, a subsidence of more than one foot occurred in 5,200 square miles, half of the SJCV, with a maximum recorded in Mendota, at more than twenty-eight feet.[79] Throughout California, state extraction exceeds recharge by 1.3 million-acre-feet ("MAF") annually.[80] The most recent drought caused rapidly declining water levels and underscored the fragile balance between the availability of water and land subsidence, which occurs in most years.[81] As this overdraft condition worsens, less water is available to meet the state's future needs. In addition, subsidence can produce groundwater gradient that may accelerate movement of contaminants, further degrading water quality.[82] In the SJCV there is a west-to-east water gradient from Merced to Kern County.[83]

Groundwater for most of the Central Valley is stored in two groundwater basins, the San Joaquin River Hydrologic Region and the Tulare Lake Hydrologic Region.[84] The San Joaquin Region includes sixteen of the eighteen counties comprising the SJCV and supplies parts of

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[75] Devin Galloway, David R. Jones, and S.E. Ingebritsen, USGS, *Land Subsidence in the United States*, U.S., Geological Survey Circular 1181, San Joaquin Valley, California, Largest human alteration of the Earth's surface, *available at* http://water.usgs.gov/pubs//circ/circ1182 (last visited Mar. 28, 2005).

[76] California, California Water Plan (2004), *supra* note 20.

[77] Landfills and Water Quality Management, Impact of the Current California Drought on Source Domestic Water Supply Water Quality, at 7, *available at* http://www.gfredlee.com/frought.html (last visited Jul. 30, 2004).

[78] Devin Galloway, David R. Jones, and S.E. Ingebritsen, USGS, Land Subsidence, *supra* note 75.

[79] *Id.*

[80] Bulletin 160-93, The California Water Plan, *supra* note 20, at 2.

[81] Devin Galloway, David R. Jones, and S.E. Ingebritsen, USGS, Land Subsidence, *supra* note 75, at 31.

[82] Bulletin 160-93, The California Water Plan, *supra* note 20, at 3.

[83] *Id.*

[84] California Department of Water Resources, California Department of Water Resources, California's Groundwater – Bulletin 118 Update, Hydrologic Regions of California, San Joaquin River Hydrologic Region and Tulare Lake at 169 and 177, *available at* http://www.groundwater.water.ca.gov/bulletin118/update2003/index.cfm.

Fresno.[85] The Tulare Lake Region includes all of Kings and Tulare counties and supplies most of Fresno and Kern counties.[86] Fresno is the second largest city totally reliant on groundwater in the United States.[87] Much of Tulare Lake groundwater under the western valley floor is not suitable for use because of its high salinity,[88] and the San Joaquin groundwater basin contains high levels of TDS (total dissolved solids), and pesticides, as well as some herbicides and industrial organic contaminants.[89]

E. Water Use

Water is a natural resource with the average inches of rainfall each year varying throughout the United States.[90] On the east coast in Miami, Florida, the average rainfall is almost fifty-six inches;[91] further north in Baltimore, Maryland,[92] and in New York, over forty inches.[93] On the west coast, California rainfall varies from thirty-seven inches in the northern part of the state in Eureka,[94] to twelve inches in the southern part of the state in Los Angeles.[95] In California's San Joaquin Central Valley, Fresno, the average rainfall is just over ten inches.[96]

The limited water supply of California supports over 35.5 million people, the largest population in the United States.[97] It is estimated that by 2030 the state population will reach 48 million, with the central valley's San Joaquin County tripling in size.[98] In addition to domestic water users, the state supports an estimated 6,000 flora species, over one-third of which are not found anywhere else on Earth.[99] Diverse landforms are home to giant redwoods as well as "hundreds of species of birds, mam-

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[85] *Id.* at 169 and 177.

[86] *Id.* at 177.

[87] *Id.* (Discussing water availability, with Visalia more dependent on groundwater than Fresno).

[88] California Water Plan, *supra* note 20, at 12.

[89] *Id.*

[90] Climates of the world, United States 2 (2003) Climate Overview, *available at* http://climate-zone.com.

[91] *Id.* at 1 (Florida).

[92] *Id.* at 1 (Maryland).

[93] *Id.* at 2 (New York).

[94] *Id.* at 2 (Eureka).

[95] *Id.* at 2 (Los Angeles).

[96] *Id.* at 2 (Fresno).

[97] U.S. Census Bureau, *U.S. Population Passes 290 Million; Mountain and Coastal States Fastest-Growing*, 2 (2003) *available at* http://www.cenus.gov.

[98] California Water Plan Volume 1, Chapter 2, *supra* note 20, at 2.

[99] *Id.*

mals, and reptiles."[100] California is also the nation's top agricultural producer with a gross product of more than thirteen percent of the U.S. total,[101] comprising over half the nation's fruits, nuts and vegetables.[102] All of these activities require great quantities of water and droughts are not uncommon in California. By the end of 2003, moderate to extreme drought conditions covered nearly seventy-percent of eleven western states.[103]

Since the 1800s, the lack of water in California has adversely affected aquatic habitats, impaired ecosystem functions, eliminated native species, impacted commercial fisheries, and degraded water quality.[104] "Pumping, treating, and distributing water and wastewater" throughout California consumes ten-percent of the state's total electricity.[105] San Diego has recently pioneered a plan to mix repurified water with the city's drinking water, and in less than four years may be supplying half of San Diego with tap water that once ran through its toilets.[106] Despite the seemingly high costs and risks, repurification seems to be the best option.[107] Today, the primary challenge in California revolves around how to balance its limited and variable water supplies with its many uses.[108]

Decisions made concerning the regulation and distribution of groundwater is too important to be left to local governments with differing and competing views. Leaving these problems up to local authorities is not the answer. Now is the time for the state legislature to rethink water policy concerning groundwater.

III. TWO COUNTIES' TWENTY-YEAR BATTLE OVER WATER

A. Mono Lake: National Audubon Society v. Alpine County

In 1983, the California Supreme Court discussed both the Public Trust Doctrine and California water law in *National Audubon Society v. Alpine*

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[100] *Id.*

[101] *Id.*

[102] *Id.* at 3.

[103] Climates of the world, Overview, *supra* note 90, at 1.

[104] California Water Plan Volume 1, Chapter 2, *supra* note 20, at 3.

[105] *Id.*

[106] GE Infrastructure Water and Process Technology, *Advanced Water Treatment Technologies May Bring Purified Water to San Diego, available at* http://www.gewater.com (last visited Jul. 23, 2005).

[107] *Id.*

[108] California Water Plan Volume 1, Chapter 2, *supra* note 20.

County.[109] The dispute originated with an application by the city of Los Angeles in 1940 for permits to appropriate water in four of five tributaries feeding into Mono Lake.[110] The Division of Water Resources, predecessor to the SWRCB, approved the permits and allowed the city to divert the entire flow of four tributaries.[111] By 1979, the surface area of the lake had shrunk from eighty-five square miles to about sixty square miles.[112] Mono Lake is saline and contains no fish but is home to brine shrimp,[113] which feed vast numbers of migratory birds including ninety-five percent of California's gull population.[114] In addition, twenty-five percent of the total bird species populations use the two islands in Mono Lake to nest and feed.[115]

By 1981, Mono Lake had shrunk to a point where one of the islands became a peninsula, allowing coyotes access to bird nests; as a result, ninety-five percent of the chicks did not survive.[116] Moreover, since fresh water was diverted, salinity increased, causing a ninety-five percent reduction in the shrimp population.[117] The court stated the City of Los Angeles had continued to exercise its water rights "in apparent disregard for the resulting damage to the scenery, ecology, and human uses of Mono Lake."[118]

The court contrasted the state's interest in Mono Lake as a scenic and ecological treasure against the apparent need for water by Los Angeles residents.[119] The city relied on water permits granted by the SWRCB and argued that it faced a substantial increase in costs if water diversions were curtailed.[120] The court held that before lower courts or state agencies approve water diversions, they must consider and attempt to minimize the harmful effects to public trust interests.[121] Furthermore, the court recognized the state's power as administrator of the public trust.[122] The court determined that California water rights are part of an inte-

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[109] National Audubon, 33 Cal.3d at 426.
[110] *Id.* at 427.
[111] *Id.* at 424.
[112] *Id.* at 429.
[113] *Id.* at 424.
[114] *Id.* at 430.
[115] *Id.*
[116] *Id.*
[117] *Id.*
[118] *Id.* at 447.
[119] *Id.* at 425.
[120] *Id.*
[121] *Id.* at 426.
[122] *Id.* at 440. *See* Riverside, 78 Cal.App.4th at 1034 (the state owns the water in a supervisory sense).

grated system and that the Public Trust Doctrine, which precludes anyone from acquiring a vested right to harm a public trust,[123] serves the function of preserving the power of the state to protect public trust uses. In fact, the Public Trust Doctrine imposes a continuing duty on the state to consider public uses when allocating water resources.[124]

The court concluded that state courts and the SWRCB have concurrent jurisdiction, thereby permitting a plaintiff to file a lawsuit seeking reconsideration of a water allocation without first exhausting administrative remedies.[125] The prior judgment allowing Los Angeles to divert the water was vacated and the lower court was ordered to enter a judgment consistent with the California Supreme Court's views.[126] The SWRCB Decision 1631 subsequently amended Los Angeles' licenses and prohibited the exportation of water until Mono Lake reached 6,377 feet above sea level.[127] As of January 1, 2005, Mono Lake was at 6,380.8 feet.[128]

By the 1970s, environmental awareness had grown to such an extent that it was factored into water use decisions.[129] In the 1980s, the *National Audubon Society* court established the use of the Public Trust Doctrine to protect environmental interests promoting the general welfare of California citizens. By the 1990s, environmental awareness mandated that impacts on fish, wildlife, recreation, and aesthetics were to be considered in water use planning.[130] Although the state water board issued permits to the county of Los Angeles in the 1940s, this case demonstrates the evolution of surface water law in California.

National Audubon Society also illustrates the varying and often extreme views that two different counties can have concerning water policy. Since the state and the SWRCB have concurrent jurisdiction to regulate surface water, one county was not allowed to deprive another of a natural resource belonging to the state as a whole.[131] It took Mono Lake over twenty years to recover sufficient capacity and stabilize its

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[123] National Audubon, 33 Cal.3d at 430.

[124] *Id.*

[125] *Id.*

[126] *Id.* at 453.

[127] Mono Lake – Water Resources Control Board Decision 1631, State of California State Water Resources Control Board, *available at* http://www.appliedhydrogeology.com (last visited Aug. 19, 2004).

[128] Current Mono Lake Level, *Tracking the Progress of a Rising Lake*, *available at* http://www.mono.org/live/level.htm (last visited Jan. 5, 2005).

[129] Department of Water Resources, Historical Perspective of Water Development in California, *supra* note 20.

[130] Id.

[131] Cal. Const. art. 10, § 2, *supra* note 23. *See also* National Audubon, 33 Cal.3d at 426; Tulare v. Lindsay-Strathmore Irrigation District, 3 cal.2d at 524-525.

ecosystem, whereas with groundwater pumping, a water basin may never recover its original capacity.[132]

IV. VARYING VIEWS ON WATER

A. The Bottled Water Bonanza

Recent statistics show United States bottled water sales and consumption continuing to rise.[133] This increase is reflected in an almost nine percent increase from 2003, resulting in the consumption of nearly 6.8 billion gallons of bottled water in 2004.[134] California residents consume over 2.24 billion gallons of water annually, accounting for thirty-five percent of the United States bottled water market.[135] A family of four uses 325,851 gallons of water per year, the equivalent of one acre-foot.[136] Based on these figures, Americans drink over 208 thousand-acre-feet ("TAF") of bottled water per year[137] with Californians consuming over seventy-three TAF of bottled water annually.[138] In an average year, 1,135 TAF of groundwater is pumped from the SJCV; thus, Californians currently drink the equivalent of fifteen percent of the groundwater pumped from the SJCV water basin.[139] If something is not done to raise the quality and quantity of groundwater in California, these statistics will only increase.

Globally, 30.8 billion gallons of bottled water are consumed, which is forecasted to increase to 50 billion by 2008. The latest market for selling water is "enhanced water,"[140] which contains additives that either im-

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[132] Pasadena, 33 Cal.2d at 929; San Bernardino, 196 Cal., at 9. *See also* California Water Plan (1994) Bulletin 160-93, *supra* note 20.

[133] IBWA International Bottled Water Association, News Release (2005) *Bottled Water: More than just a story about sales growth*, (2005) *available at* http://www.bottledwater.org.

[134] *Id.*

[135] J.L. Darby, Energy Citations Database, *Quality control of bottled and vended water in California: A review and comparison to tap water*, (1994) *available at* http://www.osti.gove/energycitations/product.

[136] Water Resources: User-Friendly tools and Links for the West, Acre-Foot Calculator, *available at* http://www.western-water.com/Acre-Foot_formula.htm (last visited Jul. 23, 2005).

[137] *Id.* at 1 (Total number of gallons 6.8 billion).

[138] Water Resources, *supra* note 136. (to convert to acre-feet, divide 6.8 billion gallons consumed annually by Americans by 325,851 and arrive at a usage of over 208 TAF per year).

[139] Bulletin 160-93, The California Water Plan Update, *supra* note 20.

[140] Allen Gibson, Bottled Water Web, *Gulp! Bottled water is number two, and enhancements are coming* (2004), *available at* http://www.bottledwaterweb.com/news/nw_042804.html.

prove taste or benefit human health.[141] Consumer awareness of obesity and its associated health problems is accelerating the trend.[142] Michael Salaman of Skinny Water says, "Our patent-pending formula has been clinically shown to reduce carb-uptake, decrease appetite, and increase fat burn without stimulating the nervous system. And it has no sugar or calories!"[143] Enhanced water is the fastest-growing market segment in the bottled water industry, grossing $245 million.[144] With such marketing and growth, many large companies are entering the market. In fact, Coke and Pepsi both have top selling brands of water and are currently expanding.[145]

Bottled water can come from a variety of sources such as artesian wells, spring or pumped well water, or previously processed local tap ground water.[146] According to the National Resources Defense Council ("NRDC") 1999 report on bottled water, about twenty-five to forty percent of all U.S. bottled water is from tap water.[147] The NRDC estimates that up to seventy percent of bottled water brands sold in the United States are single state operations.[148] The NRDC exposed a brand of Massachusetts "spring water" when they found their water source bubbled up to the surface in the company's parking lot.[149] In another case, bottled water labeled as Alaska Premium Glacier Drinking Water was actually drawn from Public Water System number 111241 in Juneau, Alaska.[150] Simply put, purified water can be drawn from any source as long as it is treated.[151] In fact, the top two selling brands of water, Aquafina, a Pepsi product, and Dasani, a Coca-Cola product, are both classified as purified water.[152] Aquafina is municipal water mined from places such as Kansas while Dasani, with minerals added, is tap water extracted from places

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[141] *Id.*

[142] *Id.*

[143] *Id.* at 2.

[144] *Id.* at 2.

[145] *Id.* at 3.

[146] I.H. (Mel) Suffet, Ph.D., Environmental Science and Engineering Program and Department of Environmental Health Science, Bottled Water at 4, *available at* http://www.ioe.uclas.edu/publications/report01/Bottled Water.htm (last visited Jul. 24, 2005).

[147] *Id.*

[148] Brian Howard, Organic Consumers Association, *Is America's $8 Billion Bottled Water Industry a Fraud* 3 (2003), *available at* http://www.organicconsumers.org/footsafety/water121003.cfm.

[149] *Id.* at 5.

[150] *Id.*

[151] *Id.*

[152] *Id.*

such as Queens, New York, and Jacksonville, Florida.[153] On the west coast, the Yosemite brand of water is drawn from Los Angeles.[154]

Bottling companies pump up to 500 gallons of water per minute, with many running twenty-four hours a day, 365 days per year.[155] Tom Ballestero, a civil engineer and hydrologist at the University of New Hampshire, cautions that surrounding wells and the environment can be negatively impacted before an aquifer is severely depleted.[156] "The groundwater they are pumping and exporting was going somewhere where it had an environmental benefit."[157] Due to the amount of time an aquifer takes to replenish, "most scientists consider groundwater a nonrenewable resource."[158] In Florida, Nestlé angered many residents when it took over Crystal Spring near Tampa and fenced out the public.[159] Five years later, the spring that feeds the source of Tampa's public water dropped.[160] In Texas, a well across the street from a Nestlé plant dried up five days after bottling operations began.[161]

In 2000, Big Sur Bottled Water, Inc. announced that the company's business was sold to a subsidiary of The Perrier Group of America, owned by Nestlé.[162] Non-sparkling water represents ninety percent of Perrier and in late 2000, they acquired Black Mountain Spring Water, a Northern California bottled spring water company.[163] Perrier, under parent Nestlé, is the worldwide leader in the bottled water market, selling more than seventy brands in 140 countries.[164] With such an explosive market, water has become big business and everyone seems to want to enter the market.

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[153] *Id.* at 6.
[154] *Id.* at 6.
[155] *Id.* at 9.
[156] *Id.*
[157] *Id.*
[158] *Id.*
[159] *Id.* at 10.
[160] *Id.*
[161] *Id.*
[162] Bottled Water Web, *Big Sur Water of Salinas, California Sold to a subsidiary of the Perrier Group of America* (2000), *available at* http://www.bottled waterweb.com.news/nw_101100.html.
[163] *Id.*
[164] Bottled Water Web, *The Perrier Group Acquires Northern Californian Bottled Water Company, supra* note 162, at 1 (last visited Jul. 19, 2005).

B. The City of McCloud

After the sawmills closed in McCloud, California, the town began to search for a way to create jobs.[165] In fall 2003, Nestlé agreed to buy a half-billion gallons of water each year from the town's water supply for the next fifty years, with an option to extend the agreement for another fifty years.[166] In return, Nestlé agreed to pay the town $450,000 each year.[167] Critics of the deal claimed the town was unconcerned about potentially depleting springs and aquifers, disrupting the flow of water and causing permanent damage to the environment.[168] The town was criticized for surrendering their future to an international conglomerate.[169] The McCloud Watershed Council remained unconvinced that the water bottling plant would be good for the community.[170] In March 2005, a Superior Court judge sided with opponents, agreeing the deal violated state law.[171] Due to the potential environmental impact to the area's water supply, under the California Environment Quality Act, environmental impact studies were required but not completed before the agreement was signed.[172] Thus, the contract was set aside until environmental studies could be completed.[173] A draft of the environmental study is scheduled for release later this year.[174]

Seventy-seven percent of consumers believe that local water utilities should provide tap water that looks and tastes as good as bottled water.[175] "Safe, inexpensive drinking water is considered a right by most U.S. citizens."[176] Inexpensive drinking water depends upon controlling and maintaining our natural water resources, such as water basins and minimizing contamination from harmful farm, industry and urban pollutants.[177]

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[165] Bobby Caina Calvan, *Bottled-water deal leaves town awash in controversy* (2005), *available at* http://www.boston.com/new/articles.

[166] *Id.*

[167] *Id.*

[168] *Id.*

[169] *Id.*

[170] The McCloud Watershed Council, *available at* http://www.mcloudwatercommons.org (last visited Nov. 17, 2005).

[171] Calvan, *supra* note 165.

[172] *Id.*

[173] *Id.*

[174] *Id.*

[175] Suffet, *supra* note 146, at 2.

[176] *Id.* at 11.

[177] *Id.*

C. Idyllwild

The impact of the exploding bottled water industry on California's already strained water resources was revealed in a Los Angeles Times special article.[178] The article discussed the spring water wars by revealing that bottled water consumption in the U.S. has more than doubled.[179] Citizens, fearing that excessive pumping would disrupt the delicate ecosystems in their area, have forced bottled water companies into legal battles.[180] Victories are often temporary; after losing its request to continue to extract 300,000 gallons a day from a New Hampshire spring, an independent bottler received conditional approval and was allowed to continue its extractions of water.[181] In Florida, Nestlé was denied a request to increase its 301,000 gallon allocation by six-fold but did gain approval for a partial increase.[182]

The article also focused on a Palm Springs resident who frequented an area containing two natural springs.[183] In August 1998, the resident noticed that one creek had run dry[184] and discovered his neighbor was running a bottled water business.[185] The neighbor, when subjected to public scrutiny, promised his operation would remain modest and cited watershed studies showing he was taking less than one percent of the available flow.[186] As his operation grew, concerned citizens began to complain.[187] With the water district defending the neighbor's permits, the fight seemed hopeless.[188] By 2002, Foster Lake, the area's water reservoir, resembled a wading pool.[189] In response, local officials declared a water emergency.[190] The neighbor insisted his water came from a percolating source, which could be pumped without a permit, despite his well's placement in a creek bed.[191] Without a comprehensive survey, the science was not strong enough to convince state regulators that the bottled

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[178] Kenneth Miller, *An Idyll Interrupted*, Special to The LA Times (2004), *available at* http://www.latimes.com/features.
[179] *Id.* at 2.
[180] *Id.* at 3.
[181] *Id.*
[182] *Id.*
[183] *Id.* at 1.
[184] *Id.* at 2.
[185] *Id.* at 4.
[186] *Id.*
[187] *Id.* at 5.
[188] *Id.* at 6.
[189] *Id.*
[190] *Id.*
[191] *Id.* at 7.

water plant was harming the area's water supply.[192] By the summer of 2002, locals demanded the pumping of water be halted,[193] and the county sought an injunction.[194]

In July 2003, the neighbor was issued a cease-and-desist order for operating his business in a residential area.[195] In September of the same year, the neighbor's application for a zoning change was denied.[196] Since August of 2003, residents are faced with a new concern.[197] Just north, on land owned by the Morongo Band of Mission Indians, Nestlé has built a bottling plant, starting a new war over the depletion of the aquifer.[198] In addition, the Pine Cove Water District began attempts to buy the neighbor's property in order to tap into the water.[199]

D. Native American Reservations

The Morongo Band of Mission Indians opened its casino in 1997 and later diversified into bottled water production.[200] Now, local governments in the Palm Springs area worry that the tribe's new water bottling plant, built by Swiss conglomerate Nestlé, "will impinge upon local water supplies."[201] Attorneys for Nestlé and the tribe maintain that the Morongo band of Mission Indians minimize the "impact on the aquifer, and note that the tribe has a right to draw water from its land permit or no permit."[202] The largest Arrowhead water bottling plant in the United States now accompanies the Morongo's casino.[203]

The Morongo's neighbors, the San Manuel Band of Mission Indians, operate their own casino, and other diversified real estate holdings alongside their own water bottling plant under the brand name Big Bear

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[192] *Id.*
[193] *Id.*
[194] *Id.*
[195] *Id.*
[196] *Id.*
[197] *Id.* at 8.
[198] *Id.*
[199] *Id.*
[200] Gillian Flaccus, *Seeing Need to Diversify, Tribes Looking Beyond Casinos*, Associated Press (2003), *available at* http://www.rgj.com/news/stories/html/2003/03/30/38215.php.
[201] Whose Water? *Perennial Water Drama Playing out with Morongo Tribe*, (2004) *available at* http://www.sbsun.com/Stories/0,01413,208~2282082,00.html.
[202] *Id.*
[203] NAIIP News Path, *Morongo Tribe To Diversify Its Economy* (2002), *available at* http://www.yvwiiusdinvnohii.net/News2002/0201/MBMI020110Economy.htm.

Mountain Premium Spring Water.[204] Not only is the water sold throughout Oregon, Nevada, and Arizona,[205] but the tribe also plans to increase bottled water production by seventy percent to accommodate a recent expansion into Mexico, where they expect to distribute ten to fifteen percent of their volume within five years.[206]

In addition, the Indian Wells Water Company is putting a new twist on bottled water.[207] Indian Wells Water is attempting to "market bottled water as a purely American Indian enterprise."[208] "That means tapping springs on tribal lands, building bottling plants there, hiring local residents and returning profits to American Indians."[209] The company gained support from The Millie Lacs Band of Minnesota's Ojibwe tribe, who has purchased forty percent of the company for $10 million dollars.[210] Another tribe near Carson City, Nevada has also invested in the Sonoma County startup company.[211] Competition is fierce as the bottled water industry enjoys a sales growth higher than milk or soda, growing an average of eight percent per year overall with the small bottle segment growing around twenty percent.[212]

In response to Idyllwild, Stephen Kay, the International Bottled Water Association's Vice-President[213] stated, that if California residents were serious about protecting their groundwater, any action taken must focus on all users, treat them all equally, and base the action on sound science.[214] Because water use throughout California involves a delicate balance, the intense competition for groundwater demands the implementation of a statewide system to uniformly monitor and regulate all water and all users throughout the state equally. Although Native American Reservations pose a unique issue concerning statewide regulation of water, the courts have already resolved this issue.

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[204] San Manuel Band of Mission Indians: *Casino*,(2004) *available at* http://www.sanmanuel-nsn.gov/economic.php.

[205] Billings Gazette, *Tribe Ups Water Sales*, Knight Ridder News at 2 (2003), *available at* http://www.billingsgazette.com.

[206] *Id.* at 1.

[207] Peter Sinton, San Francisco Chronicle, *Turning Water Into Gold, Sonoma startup marketing Indian Wells as a purely Native American enterprise* (1999), *available at* http://www.sfgate.com.

[208] *Id.*

[209] *Id.*

[210] *Id.* at 2.

[211] *Id.*

[212] *Id.* at 4.

[213] Karen R. Smith, WCP & International, Viewpoint: *Bottled Water Under Assault* (2004), *available at* http://www.wcp.net.

[214] *Id.*

V. THE AUTHORITY OF CALIFORNIA TO REGULATE GROUNDWATER: BALANCING INTERESTS

In *Colville Confederated Tribes v. Walton*,[215] the Ninth Circuit Court found that Congress almost always defers to state water law when it expressly considers water rights unless the water is entirely on a reservation.[216] In *Walton*, the Colville tribes sought to bar Walton, a non-Native-American owner of allotted lands, from using surface and groundwater in the No Name Creek basin.[217] The No Name hydrological system consists of an underground water basin and a creek located entirely within Colville reservation.[218] Although the district court held the tribe was potentially entitled to use water to propagate trout, it refused to award water for that purpose.[219] After the tribe began to pump water from the basin into the creek during spawning season, the court held that the state could regulate water not reserved for Native-American use.[220] On appeal, the Ninth Circuit reversed, holding that state permits are of no force and effect when it unlawfully infringes on the right of reservation Indians to self-government.[221] However, when water extends beyond the boundaries of a reservation, a balancing of interests is required.[222]

In *United States v. Anderson*,[223] the water rights to the Chamokane Water Basin were in dispute.[224] The *Anderson* case raised the question of whether the state of Washington had the authority to regulate water in a basin within a reservation.[225] According to the Ninth Circuit Court, when water extends beyond the boundaries of a reservation,[226] the court must balance tribal, state, and federal interests.[227] These interests included: the welfare of citizens, the stability and independence of communities,[228] the state's interest in overseeing a statewide water system and the state's obligation to regulate and conserve water for the benefit of all.[229] Central to the court's decision was the fact that the state's interest would not

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[215] Colville Confederated Tribes v. Walton, 647 F.2d 42 (9th Cir. 1981).
[216] *Id.* at 53.
[217] *Id.* at 44.
[218] *Id.* at 45.
[219] *Id.* at 46.
[220] *Id.*
[221] *Id.* at 53.
[222] United States v. Anderson, 36 F.2d 1358, 1366 (1984).
[223] *Id.* at 1358.
[224] *Id.* at 1361.
[225] *Id.*
[226] *Id.* at 1366.
[227] *Id.* at 1365-1366.
[228] *Id.* at 1364.
[229] *Id.* at 1366.

infringe on tribal rights of self-government nor impact their economic welfare.[230] Tribal rights were addressed by the appointment of a Federal Water Marshal to administer the available waters in accordance with the court's decision.[231] In addition, the court considered the distribution of water movement and geography of the basin.[232] Here, a comprehensive water program for the allocation of water weighed heavily in favor of the state.[233] After weighing the competing interests, the court concluded that the state could exercise its regulatory jurisdiction over the use of surplus, non-reserved waters within the reservation.[234]

Groundwater basins in California cover almost forty percent of the state.[235] The Morongo reservation is located twenty-two miles northwest of Palm Springs, adjacent to the city of Banning.[236] The land covers over 32,000 acres primarily within the foothills of the San Bernardino Mountain Range.[237] The Coachella Valley Groundwater Basin is underneath this area[238] and covers over 525 square miles.[239] Considering the size of the Coachella Valley Basin and the size of the Morongo Indian reservation, it would be logical to assume that the water extends beyond the boundaries of the reservation, thereby allowing the regulation of water use. Although water is reserved to fulfill the purpose for which a reservation was created, "where water is only valuable for a secondary use," the water is acquired based on state law.[240] California has a compelling state interest to protect natural resources since water is in short supply.[241] By appointing a Federal Water Marshal to assess the needs of the reservation and the health of the water basin, appropriate uses and proportional shares could be determined and all interests protected.

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[230] *Id.*
[231] *Id.*
[232] *Id.*
[233] *Id.*
[234] *Id.* at 1364.
[235] The California Water Plan, *supra* note 20, at 1.
[236] UC Berkeley, College of Natural Resources, Department of Environmental Science, Policy and Management, ESPM-50 – (Fall 2002), ESPM 50AC: *Introduction to Culture and Natural Resources, Morongo Reservation 274, available at* http://espm.berkeley.edu.
[237] *Id.*
[238] California Department of Water Resources, Hydrologic Regions of California, Colorado River Hydrologic Region, *supra* note 84. *See also* Road and Recreation Map of California Q21.
[239] California, Individual Basin Descriptions, *supra* note 32.
[240] New Mexico, 438 U.S. at 702.
[241] See *supra* notes 27 & 122 and accompanying text.

VI. CONCLUSION AND RECOMMENDATIONS

Uniform management must extend to all of the groundwater in California and include Native American land when the water extends beyond the reservation. To ensure all water needs in California are considered, local piecemeal regulations must be eliminated and statewide supervision implemented. By placing groundwater management under the authority of the SWRCB, a neutral party will access and monitor the health of these shrinking water resources. With the bottled water industry sales-growth higher than milk or soda, the state needs to take immediate action to protect this limited resource. Supplying water has created one of the world's greatest business opportunities.[242] Centralized regulation is essential to prevent further degradation of the quality of water and is needed to ensure an adequate water supply for everyone.

The state is obligated to preserve all of the water systems in California and preclude anyone from acquiring a right that would harm public interests through unreasonable use.[243] With California utilizing all of its surface water in an average year, the failure to implement uniform regulations continues to endanger the supply of safe groundwater. Thus, the lack of statewide regulation of groundwater is in opposition with the State Constitution, which acknowledges that the general welfare of the public requires water resources to be put to beneficial use. By definition, this must include statewide regulations and monitoring of these systems to ensure their continuing health. In addition, the heart of the Public Trust Doctrine mandates protection against unreasonable use. The state, as the supervisor of all water within its borders, has a duty to protect this resource.

Water is too important to the state to allow fifty-eight counties and over 470 cities to regulate its consumption. The use of water in the state has historically involved legal battles between competing interests. As farmers, cities, bottled water companies and environmental interests all compete for water rights, water will be to the 21st century what oil was to the 20th century.[244]

Now is the time for California's legislature to rethink water policy concerning groundwater. Leaving these decisions to local authorities is

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[242] Shawn Tully, Fortune, *Water, Water Everywhere*, at 2, *available at* http://www.fortune.com/fortune/investing/articles/0,15114,368262,00.html (last visited Jan. 8, 2005).

[243] Cal. Const. art. 10, § 2, *supra* note 23. *See also* Barstow, 23 Cal.4th at 1252; Tulare v. Lindsay-Strathmore Irrigation District, *supra* note 25; National Audubon, 33 Cal.3d at 452; Burr, 154 Cal., at 438; Wright, 174 Cal.App.3rd at 87.

[244] Tully, *supra* note 242, at 1.

not the answer. Local governments with differing and competing views have placed the continuing viability of the state's groundwater supply in jeopardy. The California legislature must adopt statewide regulations of groundwater to protect this dwindling resource and ensure uniform regulations apply to all, now and in the future.

GAYLE ROUSEY