

ESSAYS

A BLAST FROM THE PAST: THE PUBLIC TRUST DOCTRINE AND ITS GROWING THREAT TO WATER RIGHTS

BY

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Unprecedented water shortages in the Western United States have led to similarly unprecedented attempts to restrict water usage, some of questionable legality. In this article, Ninth Circuit Court of Appeals Judge Milan D. Smith, Jr. surveys the state of water shortages, government responses thereto, and the history of water rights in the United States. He then considers whether the public trust doctrine, which the United States inherited from the English common law, might be employed to change the way water is used and distributed. Judge Smith examines how such a use of the doctrine compares to earlier applications, and how other procedural and substantive laws may affect attempts to litigate water cases employing the public trust doctrine. The article closes with questions about the role of the judiciary, federalism, and the Constitution in the application of the public trust doctrine.

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I. INTRODUCTION

Water shortages are a reality on the West Coast. California is facing the worst water crisis in its modern history.¹ The economies of other western states are also adversely affected by this crisis. For example, in Oregon and Washington, statewide snow accumulation in the Olympic Mountains, the source of a significant amount of the water flowing into nearby rivers and streams, is around 16% of its normal level.² In Oregon, the governor has declared a drought in twenty-five out of thirty-six counties.³ In Washington, almost 68% of the state was classified as in extreme drought by the United States Drought Monitor from September 2015 through October 2015.⁴

Mandatory residential watering restrictions are in effect in parts of both Oregon and Washington.⁵ Portland's municipal reservoir was three billion gallons short of its average July supply.⁶ Only six times since 1960 has as

¹ Amir AghaKouchak et al., Comment, *Water and Climate: Recognize Anthropogenic Drought*, 524 NATURE 409, 409 (2015).

² Jim Carlton, *Snow Drought Saps Washington State's Economy*, WALL STREET J., July 2, 2015, <http://on.wsj.com/1CbBq5H> (last visited July 16, 2016); Terry Richard, *Rafting Oregon Rivers to be Hit-and-Miss after Low-snow Winter*, SEATTLE TIMES, April 18, 2015, <http://www.seattletimes.com/life/travel/rafting-oregon-rivers-to-be-hit-and-miss-after-low-snow-winter/> (last visited July 16, 2016).

³ DROUGHT READINESS COUNCIL, OR. WATER RES. DEP'T, DROUGHT DECLARATION STATUS (2016), available at http://tater.wrd.state.or.us/maps/drought/Drought_Rating_by_County_2015.pdf.

⁴ U.S. Drought Monitor, *Tabular Data Archive: Percent Area in U.S. Drought Monitor Categories*, <http://droughtmonitor.unl.edu/MapsAndData/DataTables.aspx?state,WA> (last visited July 16, 2016).

⁵ Kelly House, *Oregon Drought Forces Cities to Impose Water Use Cutbacks*, OREGONIAN, Aug. 1, 2015, http://www.oregonlive.com/environment/index.ssf/2015/08/oregon_drought_forces_cities_t.html (last visited July 16, 2016).

⁶ *Id.*

much acreage been destroyed by fire in Oregon as in 2015.⁷ In July, the Washington Department of Fish and Wildlife restricted fishing on more than sixty rivers and streams to protect wildlife under stress from reduced water flows and increasing water temperatures.⁸

This has already had a significant adverse impact on agricultural and rural interests in those two states.⁹ Farmers, ranchers, miners, foresters, resource developers, and other natural-resource-dependent entities all rely on a supply of water to sustain their industries. Along the Klamath Basin's Sprague River, those with water rights dating from after 1905 have been regulated to save water for senior users.¹⁰

A. California Constitutional Provisions

In this Essay, I will frequently refer to California's plight because it serves as a good case in point, and the public trust doctrine has already been periodically applied by its courts to protect fresh water resources.¹¹ The public trust doctrine is embedded in California's constitution, and requires that the government protect water resources for use by the citizens of the state.¹² In Oregon and Washington, on the other hand, courts have to date only applied the public trust doctrine to protect public access to navigable waters.¹³ Neither Oregon's nor Washington's state constitutions presently recognize the application of the doctrine to conserve water resources themselves,¹⁴ but the common law doctrine has not been repudiated.¹⁵

⁷ Sam Stebbins et al., *Oregon Worst in U.S. for Drought Conditions*, KGW, Sept. 7, 2015, <http://www.kgw.com/story/news/local/2015/09/07/ore-worst-us-drought-conditions-weather-rainfall/71836442/> (last visited July 16, 2016).

⁸ *Id.*

⁹ See Carlton, *supra* note 2; House, *supra* note 5.

¹⁰ House, *supra* note 5.

¹¹ See, e.g., Nat'l Audubon Soc'y v. Superior Court, 658 P.2d 709, 712 (Cal. 1983) (finding, under the public trust doctrine, that California had the authority to exercise continuous supervision and control over the fresh water resource at issue in the case).

¹² CAL. CONST. art. X, § 2.

¹³ In *Hinman v. Warren*, 6 Or. 408 (1877), the Oregon Supreme Court held that the state is the "owner of the tide lands" and retains "the power . . . to sell the same." *Id.* at 411-12. The Court went on to hold that the state retains "no authority to dispose of its tide-lands in such a manner as may interfere with the free and untrammelled navigation of its rivers, bays, inlets, and the like." *Id.* at 412. The Washington Supreme Court similarly has held that "the state of Washington has the power to dispose of, and invest persons with, ownership of tidelands and shorelands subject only to the paramount public right of navigation and the fishery." *Caminiti v. Boyle*, 732 P.2d 989, 993 (Wash. 1987).

¹⁴ For example, the Washington Constitution only provides that the state owns the lands necessary for *access to navigable waters in trust for the public*:

The state of Washington asserts its ownership to the beds and shores of all navigable waters in the state up to and including the line of ordinary high tide, in waters where the tide ebbs and flows, and up to and including the line of ordinary high water within the banks of all navigable rivers and lakes

California Constitution, article X, section 2 provides that:

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.¹⁶

Article X, section 5 states: “The use of all water now appropriated, or that may hereafter be appropriated, for sale, rental, or distribution, is hereby declared to be a public use, and subject to the regulation and control of the State, in the manner to be prescribed by law.”¹⁷

B. Summary of Challenges Facing California

A May 2015 report released by the California Department of Food and Agriculture calculated that the 2015 drought will cost California \$2.7 billion in revenue and erase more than 18,600 jobs from California’s economy.¹⁸ Many of these jobs are in the Central Valley,¹⁹ California’s breadbasket.

As one of the principal suppliers of agricultural goods to the United States, and a leading exporter to other parts of the world, California faces continual pressure to sustain agricultural production.²⁰ Despite drought conditions, some California farmers have continued to realize significant

WASH. CONST. art. XVII, § 1. The Constitution does not provide that the state government owns fresh water itself as a commodity. The Oregon Constitution does not address the public trust issue, but the Act of Congress admitting Oregon into the Union did guarantee that “rivers and waters, and all the navigable waters of said state, shall be common highways and forever free.” Act of Feb. 14, 1859 (Oregon Statehood Act), ch. 33, § 2, 11 Stat. 383, 383 (1859).

¹⁵ See generally Michael Blumm & Erika Doot, *Oregon’s Public Trust Doctrine: Public Rights in Waters, Wildlife and Beaches*, 42 ENVTL. L. 375 (2012) (arguing the public trust doctrine provides broad public recreational rights in all waters in Oregon); Wash. State Dep’t of Ecology, *The Public Trust Doctrine*, http://www.ecy.wa.gov/programs/sea/sma/laws_rules/public_trust.html (last visited July 16, 2016).

¹⁶ CAL. CONST. art. X, § 2.

¹⁷ *Id.* § 5.

¹⁸ RICHARD HOWITT ET AL., PRELIMINARY ANALYSIS: 2015 DROUGHT ECONOMIC IMPACT STUDY 2 (2015), available at https://watershed.ucdavis.edu/files/biblio/2015Drought_PrelimAnalysis.pdf; Geoffrey Mohan, *Drought Saps \$2.7 Billion from California Economy, Report Says*, L.A. TIMES, June 2, 2015, <http://www.latimes.com/business/la-fi-drought-economy-20150602-story.html> (last visited July 16, 2016).

¹⁹ See Mohan, *supra* note 18 (predicting a loss of 6,300 to 6,700 jobs in the San Joaquin Valley).

²⁰ See U.S. Dep’t of Agric., *Farm Income and Wealth Statistics: Farm Finance Indicators, State Ranking, 2014*, <http://www.ers.usda.gov/data-products/farm-income-and-wealth-statistics/farm-finance-indicators-state-ranking.aspx> (last visited July 16, 2016) (presenting farm income and wealth statistics where California makes up 11.9% of nationwide gross receipts of farms, much greater than any other state).

profits.²¹ This is possible because of rising crop prices, and because farmers have increasingly begun to rely on groundwater, the water located beneath the earth's surface.²²

In 2014, farmers replaced about 75% of their surface water deficit by draining groundwater reserves.²³ Groundwater is a limited resource, and some states already overdraw groundwater resources faster than they are being replenished, and sometimes take groundwater from other states.²⁴ At present, two cases are pending before the United States Supreme Court alleging misuse of groundwater by other states, and one similar case was decided last term.²⁵

Prior to California's current water crisis, the state often overdrew its groundwater by millions of acre-feet a year.²⁶ Groundwater supplies also are threatened by saltwater seepage, which can result from low groundwater levels, which reduces the pressure that keeps out the denser saltwater.²⁷

The drought has exacerbated groundwater shortages. A recent article in *The New York Times* concluded that: "Farmers are drilling wells at a feverish pace and pumping billions of gallons of water from the ground, depleting a resource that was critically endangered even before the drought, now in its fourth year, began."²⁸ The rapid depletion of groundwater has also occasionally led to the sinking of land.²⁹ In August of 2015, the Jet Propulsion Laboratory, part of the National Aeronautics and Science Administration

²¹ Dan Charles, *Despite the Drought, California Farms See Record Sales in 2014*, NAT'L PUB. RADIO, Aug. 27, 2015, <http://www.npr.org/sections/thesalt/2015/08/27/434649587/despite-the-drought-california-farms-see-record-sales> (last visited July 16, 2016).

²² Natasha Geiling, *California Farms Raking in Cash Despite Drought*, THINKPROGRESS, Aug. 27, 2015, <http://thinkprogress.org/climate/2015/08/27/3695660/california-agriculture-less-water-more-money/> (last visited July 16, 2016).

²³ RICHARD HOWITT ET AL., ECONOMIC ANALYSIS OF THE 2014 DROUGHT FOR CALIFORNIA AGRICULTURE 15 (2014), available at https://watershed.ucdavis.edu/files/biblio/DroughtReport_23July2014_0.pdf.

²⁴ Brief in Support of Motion for Leave to File a Complaint at 2, *Florida v. Georgia*, No. 220142 (U.S. filed Oct. 1, 2013), available at [http://www.pierceatwood.com/files/67751_2014-11-03%20Complaint%20-%20FL%20v.%20GA%20\(W4610163x7AC2E\).pdf](http://www.pierceatwood.com/files/67751_2014-11-03%20Complaint%20-%20FL%20v.%20GA%20(W4610163x7AC2E).pdf).

²⁵ *Florida v. Georgia*, 135 S. Ct. 701 (2014) (mem.) (opinion appointing a Special Master) (concerning apportionment of Apalachicola-Chattahoochee-Flint River Basin waters); *Mississippi v. Tennessee*, 136 S. Ct. 499 (2015) (mem.) (opinion appointing a Special Master) (concerning a dispute over rights to pump groundwater originating within state borders); *Kansas v. Nebraska*, 135 S. Ct. 1042 (2015) (regarding a dispute over States' rights to Republican River Basin waters).

²⁶ Justin Gillis & Matt Richtel, *Beneath California Crops, Groundwater Crisis Grows*, N.Y. TIMES, Apr. 6, 2015, at A1.

²⁷ Nick Wilson, *Seawater Seeping into Los Osos Water Basin Poses Threat*, TRIBUNE, July 13, 2015, <http://www.sanluisobispo.com/news/local/article39056613.html> (last visited July 16, 2016).

²⁸ Gillis & Richtel, *supra* note 26.

²⁹ TOM G. FARR ET AL., JET PROPULSION LAB., NAT'L AERONAUTICS & SCI. ADMIN., PROGRESS REPORT: SUBSIDENCE IN THE CENTRAL VALLEY, CALIFORNIA 5-10 (2015), available at http://water.ca.gov/groundwater/docs/NASA_REPORT.pdf.

(NASA), released satellite data showing that the San Joaquin Valley is sinking nearly 2 inches per month in some locations.³⁰

On April 1, 2015, Governor Jerry Brown, for the first time in state history, directed the California State Water Resources Control Board to implement mandatory water reductions in cities and towns across California with the objective of reducing water usage by 25%.³¹ The order has had a significant short-term effect. Water use in May of 2015 dropped 28.9% compared with the same month in 2013, deepening the 13.5% drop the previous month.³² In June and July of 2015, California's water use held at 29.5% below the usage in those months in 2013.³³

California also has continued implementing legislation passed in September of 2014 that aims to regulate groundwater use.³⁴ The Sustainable Groundwater Management Act³⁵ represents the first statewide effort to comprehensively measure and manage groundwater.³⁶ The law empowers local agencies to bring groundwater basins into sustainable patterns of pumping and recharge.³⁷ However, the law does not require the state to meet several of its sustainability goals until 2042.³⁸

Importantly, on June 12, 2015, California imposed water controls on senior water rights holders, individuals who hold valuable rights to water based on the principle of "first in time, first in right."³⁹ Under California's prior appropriation doctrine, these water rights holders normally can access water to the exclusion of junior water rights holders.⁴⁰ The new controls in California restricted water use by 114 senior water rights holders in the San

³⁰ *Id.*

³¹ OFFICE OF GOVERNOR EDMUND G. BROWN JR., STATE OF CAL., EXEC. ORDER NO. B-29-15 (Apr. 1, 2015), available at https://www.gov.ca.gov/docs/4.1.15_Executive_Order.pdf.

³² Dale Kasler, *Californians Cut Water Use 29 Percent in May*, SACRAMENTO BEE, July 1, 2015, available at <http://www.sacbee.com/news/state/california/water-and-drought/article25965529.html> (last visited July 16, 2016); Matt Stevens & Tony Barboza, *California Water Use Dropped 13.5% in April, State Board Reports*, L.A. TIMES, June 2, 2015, <http://www.latimes.com/local/lanow/la-me-ln-drought-conservation-20150602-story.html#page=1> (last visited July 16, 2016).

³³ Press Release, State Water Res. Control Bd., Cal. Envtl. Prot. Agency, California Water Use Drops 31.3%, Exceeds 25% Mandate for July (Aug 27, 2015) available at http://www.waterboards.ca.gov/press_room/press_releases/2015/pr082715_july_conservation.pdf.

³⁴ Letter from Edmund G. Brown Jr., Governor of Cal., to the Members of the Cal. Legislature (Sep. 16, 2014), available at https://www.gov.ca.gov/docs/Groundwater_Signing_Message.pdf; 2014 Cal. Legis. Serv. Ch. 346 (West).

³⁵ CAL. WATER CODE §§ 10720–10737 (West 2015).

³⁶ CAL. ENVTL. PROT. AGENCY ET AL., GROUNDWATER LEGISLATION IMPLEMENTATION FACT SHEET 1 (2014), available at <http://groundwater.ucdavis.edu/files/203049.pdf>.

³⁷ *Id.*

³⁸ Pursuant to CAL. WATER CODE § 10727.2(b)(3) (West 2015), the sustainability goals are to be met within 20 years of implementation of a plan, but a five-year extension is available.

³⁹ Alex Dobuzinskis, *California Curtails Some Longstanding Water Rights Over Drought*, REUTERS, June 12, 2015, <http://www.reuters.com/article/us-usa-drought-california-idUSKBN00S2A420150613> (last visited July 16, 2016).

⁴⁰ *Id.*

Joaquin, Delta, and Sacramento watersheds, and affect hundreds of farmers in the Central Valley because farmers are usually the ones with senior water rights.⁴¹ Some curtailments affected senior water rights dating back to 1858, well before the 1914 cutoff that is the usual division in California between senior and junior rights.⁴² And California is policing the 1914 line—it reviewed San Francisco’s water rights and determined that four of San Francisco’s statements of water diversion and use incorrectly claimed a pre-1914 first use.⁴³ While the rights-holders obtained a temporary restraining order against the enforcement of those curtailments,⁴⁴ it is clear that the California Water Board mind-set has shifted, and it will look for ways to challenge long-established users.

More water conservation measures will likely be necessary, even if present consumption levels decrease and there is significant new rainfall and snowfall. One article estimates that “California’s cities consume 178 gallons per person per day, on average. That’s 40 percent more than the per capita water consumption in New York City and more than double that of parched Sydney, in Australia.”⁴⁵ California’s population and agricultural industry are outpacing the state’s ability to supply water to its population.⁴⁶

Government-mandated water conservation efforts also confront political challenges. Farmers and the agricultural industry utilize large quantities of water. They are also important interest groups, both at the state and federal levels. Governor Brown’s April Executive Order, unsurprisingly, exempted the agricultural industry from water use restrictions, although the subsequent controls the State attempted to impose on senior water rights holders included farmers.⁴⁷ This also impacts real estate development—one California community was days away from having no water at all under the

⁴¹ Tamara Audi & Byron Tau, *California Orders Large Water Cuts for Farmers Amid Drought*, WALL STREET J., June 12, 2015, <http://on.wsj.com/1JL0Vgy> (last visited July 16, 2016).

⁴² Press Release, State Water Res. Control Bd., Cal. Env’tl. Prot. Agency, Water Right Curtailment Update (June 26, 2015), *available at* http://www.waterboards.ca.gov/press_room/press_releases/2015/pr062615_wr_curtailment_update.pdf.

⁴³ Letter from Thomas Howard, Exec. Dir., State Water Res. Control Bd., Cal. Env’tl. Prot. Agency, to S.F. Pub. Utils. Comm’n (June 26, 2015) *available at* http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/june26sanfran.pdf.

⁴⁴ *W. Side Irrigation Dist. v. Cal. State Water Res. Control Bd.*, No. 34-2015-80002121, slip op. at 5 (Cal. Super. Ct. Sacramento July 10, 2015) (order granting temporary restraining order).

⁴⁵ Eduardo Porter, *California Innovation, Like Water, Has Limits*, N.Y. TIMES, Apr. 8, 2015, at B1.

⁴⁶ AghaKouchak et al., *supra* note 1, at 409 (explaining that “growth in [California’s] population and agriculture have almost doubled water use” since the 1950’s, placing stress on the State’s water supply).

⁴⁷ Porter, *supra* note 45 (“[T]he decision by Gov. Jerry Brown to exempt farmers from California’s first restrictions ever on water use, even though they consume some 80 percent of the surface water used in the state, underscores the scale of the political challenge.”); Audi & Tau, *supra* note 41 (reporting on California’s later attempts to impose controls on senior water rights holders).

California Water Board's since-enjoined order.⁴⁸ While that crisis was at least delayed, the additional risk to developers is clear.

II. WATER RIGHTS AND THE PUBLIC TRUST DOCTRINE

Given our collective dependence on a reliable supply of water, I turn to the focus of my Essay: What are some of the legal issues likely to arise if courts were to apply the public trust doctrine in states suffering from water shortages to significantly alter the current use of water rights?

A. *History of Water Rights in the United States*

So you will better understand the context in which the public trust doctrine might play a role, I begin by briefly summarizing some important aspects of the history of United States law on property rights and water.

In *United States v. Gerlach Live Stock Co. (Gerlach)*,⁴⁹ the United States Supreme Court considered a water dispute concerning the Friant Dam in the Central Valley of California.⁵⁰ This dam continues to divert significant portions of the San Joaquin River for irrigation purposes.⁵¹ In *Gerlach*, property owners living alongside the dam brought an action under the Fifth Amendment Takings Clause seeking compensation for the loss of their water rights after the dam had been built.⁵² The Court found a Fifth Amendment taking, and granted compensation to the property owners.⁵³ I cite this case primarily because of the Supreme Court's helpful overview of United States water rights history.

The Court began by discussing the "riparian doctrine," the property rights regime holding that landowners adjoining a body of water have rights to make "reasonable use" of water as it flows over their property.⁵⁴ The riparian doctrine tends to be the law in eastern states of the United States where water is more plentiful than it is in the western states.⁵⁵

Riparian rights developed where lands were amply watered by rainfall. The primary natural asset was land, and the run-off in streams or rivers was incidental. Since access to flowing waters was possible only over private lands, access became a right annexed to the shore. The law followed the principle of

⁴⁸ *California Water Cuts Leave City Days Away from Running Out of Water*, CBS SACRAMENTO, June 16, 2015, <http://sacramento.cbslocal.com/2015/06/16/california-water-cuts-leave-city-days-away-from-running-out-of-water/> (last visited July 16, 2016).

⁴⁹ 339 U.S. 725 (1950).

⁵⁰ *Id.* at 727–28.

⁵¹ Bureau of Reclamation, U.S. Dep't of the Interior, *Friant Dam*, http://www.usbr.gov/projects/Facility.jsp?fac_Name=Friant+Dam (last visited July 16, 2016).

⁵² *Gerlach*, 339 U.S. at 729–30.

⁵³ *Id.* at 754–55.

⁵⁴ *Id.* at 751–52.

⁵⁵ Ling-Yee Huang, *Fifth Amendment Takings & Transitions in Water Law: Compensation (Just) for the Environment*, 11 U. DENV. WATER L. REV. 49, 49–50 (2007).

equality which requires that the corpus of flowing water become no one's property and that, aside from rather limited use for domestic and agricultural purposes by those above, each riparian owner has the right to have the water flow down to him in its natural volume and channels unimpaired in quality.⁵⁶

The Court then discussed California's water rights regime.⁵⁷ Historically, California law was not premised on riparian rights but rather on the notion of "first appropriation" or "first use" of water.⁵⁸ This doctrine tends to be the law in states with historically low supplies of water.⁵⁹

[I]n the mountains of California there developed a combination of circumstances unprecedented in the long and litigious history of running water. Its effects on water laws were also unprecedented. Almost at the time when Mexico ceded California, with other territories, to the United States, gold was discovered there and a rush of hardy, aggressive and venturesome pioneers began. If the high lands were to yield their treasure to prospectors, water was essential to separate the precious from the dross. The miner's need was more than a convenience—it was a necessity; and necessity knows no law. But conditions were favorable for necessity to make law, and it did—law unlike any that had been known in any part of the Western world.

The adventurers were in a little-inhabited, unsurveyed, unowned and almost ungoverned country, theretofore thought to have little value. It had become public domain of the United States and miners regarded waters as well as lands subject to preemption. To be first in possession was to be best in title. Priority—of discovery, location and appropriation—was the primary source of rights.⁶⁰

B. Public Trust Doctrine

The public trust doctrine in the United States was derived from the English common law doctrine that the British Crown held title to the bed or soil beneath tidal waters.⁶¹ The Crown was thought to have ownership of waters and the beds below them in order to control the highways of commerce and navigation for the advantage of the public.⁶² The sovereign held this property in trust for the people.⁶³

This public ownership principle has a long history:

⁵⁶ *Gerlach*, 339 U.S. at 745.

⁵⁷ *Id.* at 745–51.

⁵⁸ *Id.* at 745–46.

⁵⁹ Huang, *supra* note 55, at 49–50.

⁶⁰ *Gerlach*, 339 U.S. at 745–46.

⁶¹ Melissa Kwaterski Scanlan, Comment, *The Evolution of the Public Trust Doctrine and the Degradation of Trust Resources: Courts, Trustees and Political Power in Wisconsin*, 27 *ECOLOGY L. Q.* 135, 140–41 (2000).

⁶² *Id.*

⁶³ *Id.*

As long ago as the Institutes of Justinian, running waters, like the air and the sea, were *res communes*—things common to all and property of none. Such was the doctrine spread by civil-law commentators and embodied in the Napoleonic Code and in Spanish law. This conception passed into the common law. From these sources, but largely from civil-law sources, the inquisitive and powerful minds of Chancellor Kent and Mr. Justice Story drew in generating the basic doctrines of American water law.⁶⁴

One way to understand the public trust doctrine is to recall some principles from the law of trusts and estates. A trust is created by a settlor, who transfers some or all of his or her property, known as the corpus of the trust, to a trustee.⁶⁵ The trustee holds and administers the corpus for the trust's beneficiaries.⁶⁶ Under the public trust doctrine, the trustee is the government, the beneficiary is the general public, and the corpus of the trust is the resource to be conserved by the government.

The public trust doctrine has two primary components. First, the doctrine holds that certain resources are highly important to citizens of a state and, therefore, deserve to be protected by the state.⁶⁷ Historically, the value of these resources was tied to what philosophers call "utility."⁶⁸ Certain public trust resources, such as navigable waters, carry significant utility for commerce, the economy, and consumption.⁶⁹ Other resources, a national park for example, embody an intrinsic environmental utility, which encompasses the personal enjoyment one might gain from the resource.⁷⁰ Second, the public trust doctrine holds that, because of the significance of the public trust resource, the government is forbidden from privatizing the resource and must maintain it for public use.⁷¹

The late Joseph Sax, formerly an environmental law professor at the University of California, Berkeley, described the specific restrictions the public trust doctrine places on government conduct:

Three types of restrictions on governmental authority are often thought to be imposed by the public trust: [1] the property subject to the trust must not only

⁶⁴ *Gerlach*, 339 U.S. at 744–45. The Institutes of Justinian were the compilation of Roman law created by the order of the Emperor, Justinian I. H.F. JOLOWICZ & BARRY NICHOLAS, HISTORICAL INTRODUCTION TO THE STUDY OF ROMAN LAW 492 (3d ed. 1972).

⁶⁵ See GEORGE T. BOGERT, TRUSTS 1–2 (6th ed. 1987) (defining "settlor of a trust" as "the person who intentionally causes the trust to come into existence," and explaining that "[t]he trust property is sometimes called . . . the corpus").

⁶⁶ *Id.* at 4.

⁶⁷ Haochen Sun, *Toward a New Social-Political Theory of the Public Trust Doctrine*, 35 VT. L. REV. 563, 590–91 (2011).

⁶⁸ J.B. Ruhl & James Salzman, *Ecosystem Services and the Public Trust Doctrine: Working Change from Within*, 15 SE. ENVTL. L.J. 223, 224–29 (2006).

⁶⁹ See Sun *supra* note 67, at 573 (discussing the application of utilitarianism to the public trust doctrine).

⁷⁰ *Id.* at 573–74.

⁷¹ See Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 477 (1970) (discussing the proliferation of citizens' lawsuits regarding natural resources brought against agencies intended to protect them).

be used for a public purpose, but it must be held available for use by the general public; [2]) the property may not be sold, even for a fair cash equivalent; and [3]) the property must be maintained for particular types of uses.⁷²

The seminal United States Supreme Court case on the public trust doctrine is *Illinois Central Railroad Co. v. Illinois*.⁷³ The Illinois Legislature had granted a portion of the Chicago harbor, the water and lands under Lake Michigan, to the Illinois Central Railroad.⁷⁴ The Legislature subsequently sought to revoke the grant, claiming that the original grant should not have been permitted in the first place because Lake Michigan is owned by the state in public trust.⁷⁵ The Supreme Court, emphasizing the importance of access to navigation on Lake Michigan, agreed:

[P]rior to the Revolution the shore and lands under water of the navigable streams and waters of the province of New Jersey belonged to the King of Great Britain, as part of the *jura regalia* of the crown, and devolved to the State by right of conquest. The information does not state, however, what is equally true, that, after the conquest, the said lands were held by the State, as they were by the king, *in trust* for the public uses of navigation and fishery, *and the erection* thereon of wharves, piers, light-houses, beacons and other facilities of navigation and commerce. Being subject to this trust, they were *publici juris*; in other words, they were held for the use of the people at large.⁷⁶

III. LITIGATING PUBLIC WATER RIGHTS

I turn now to a consideration of some of the legal challenges that might be posed by applying the public trust doctrine to water sources not currently used or considered to be held for the benefit of the public. My intention here is not to advocate for one approach over another, but rather to present some thoughts for your further consideration as scholars or interested parties.

I note as an aside that I do not consider, in this Essay, the very real impact of the Clean Water Act⁷⁷ or the Endangered Species Act,⁷⁸ among other federal and state statutes, that also impact private water rights.⁷⁹ I do observe, however, that some scholars are warning of a “major extinction

⁷² *Id.*

⁷³ 146 U.S. 387 (1892).

⁷⁴ *Id.* at 448–49.

⁷⁵ *Id.* at 452.

⁷⁶ *Id.* at 457.

⁷⁷ Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2012).

⁷⁸ Endangered Species Act of 1973, 16 U.S.C. §§ 1531–1544 (2012).

⁷⁹ Agricultural water providers in the Central Valley recently filed suit in the United States District Court for the Eastern District of California because the Bureau of Reclamation is allegedly diverting water from the Sacramento River Basin to the Klamath Basin to help unlisted salmon survive the drought. The agricultural providers contend that these salmon are not protected by the Endangered Species Act. Complaint at 2, San Luis & Delta-Mendota Water Auth. v. Jewell, No. 1:15-cv-01290-LJO-GSA (E.D. Cal. filed Aug. 21, 2015).

event” in California as a result of the drought.⁸⁰ The drought has had an especially adverse impact on populations of salmon and steelhead trout.⁸¹ Accordingly, the Endangered Species Act and its related federal regulations, do play a role in considering water rights in California and elsewhere within the circuit, and are likely to play an even greater role as the viability of more species are threatened by drought.

A. Legal Doctrine

Let us begin by considering how, as a legal and doctrinal matter, the government can take water sources into trust and allocate this water to the public.

The public trust doctrine has traditionally been used by courts to protect public access to navigable waters, not the public’s use of fresh water itself.⁸² As one article observes, “the traditional [public trust] doctrine evolved to protect common rights to access for commerce purposes (hence the criteria of navigability).”⁸³

In *State v. Cleveland and Pittsburgh Railroad Co.*,⁸⁴ the Ohio Supreme Court considered a case where a railroad, which owned land on Lake Erie, sought to build a wharf on top of submerged lands in the lake.⁸⁵ The Court allowed the railroad to build the wharf, but emphasized that the public trust doctrine required that the railroad could not build a wharf that interfered with *navigation*.⁸⁶ The public trust doctrine:

[S]ecure[d] the rights of the public and prevent[ed] interference with navigation. . . .

. . . . It must be remembered that [the railroad’s] right . . . is one that can be exercised only in aid of navigation and commerce, and for no other purpose. What [the railroad] does is therefore in furtherance of the object of the trust, and is permitted solely on that account.⁸⁷

The California Supreme Court held in *Marks v. Whitney*⁸⁸ that:

⁸⁰ Bettina Boxall, *The Drought’s Hidden Victim: California’s Native Fish*, L.A. TIMES, Aug. 24, 2015, <http://www.latimes.com/local/california/la-me-drought-fish-20150824-story.html> (last visited July 16, 2016).

⁸¹ *Id.*

⁸² See Erin Ryan, Comment, *Public Trust & Distrust: The Theoretical Implications of the Public Trust Doctrine for Natural Resource Management*, 31 ENVTL. L. 477, 481–82 (2001) (discussing history of public trust doctrine in American law).

⁸³ *Id.* at 479.

⁸⁴ 113 N.E. 677 (Ohio 1916).

⁸⁵ *Id.* at 679.

⁸⁶ *Id.* at 682.

⁸⁷ *Id.* at 681–82.

⁸⁸ 491 P.2d 374 (Cal. 1971).

Public trust easements [were] traditionally defined in terms of navigation, commerce and fisheries. They have been held to include the right to fish, hunt, bathe, swim, to use for boating and general recreation purposes the navigable waters of the state, and to use the bottom of the navigable waters for anchoring, standing, or other purposes.⁸⁹

Even though to date the state constitutions and case law of Oregon and Washington have not expressly applied the entirety of the public trust doctrine as to water, they have adopted it in part regarding public access to navigable waters.⁹⁰ Faced with a catastrophic drought, could an Oregon or Washington state court go further and conclude that fresh water, but not solely for use in navigation, commerce, and fisheries is owned by the public, and held in trust by and managed by the state? Under this reasoning, could the state, as trustee of fresh water resources, have the right to allocate previously privately owned or controlled water to public use?

Consider *National Audubon Society v. Superior Court*,⁹¹ a 1983 case where the California Supreme Court held that the public trust doctrine can restrict the amount of water withdrawn from navigable waterways.⁹² Plaintiffs brought a lawsuit against the Los Angeles Department of Water and Power (LADWP) which had appropriated four streams flowing into Mono Lake, a lake located at the entrance to Yosemite National Park.⁹³ LADWP diverted the streams to supply drinking water to residents of Southern California.⁹⁴

The California Supreme Court struck down LADWP's actions.⁹⁵ It held that preserving the human and natural uses of Mono Lake was in the public interest and, therefore, that LADWP was forbidden from removing water from streams leading to the lake, unless a "responsible body" determined that it was appropriate after "due consideration of the effect on the public trust."⁹⁶ The Court emphasized that retaining water in the lake was necessary to sustain "a large population of brine shrimp which feed vast numbers of nesting and migratory birds."⁹⁷ The Court also found that:

Islands in the lake protect a large breeding colony of California gulls, and the lake itself serves as a haven on the migration route for thousands of Northern Phalarope, Wilson's Phalarope, and Eared Grebe. Towers and spires of tufa on the north and south shores are matters of geological interest and a tourist attraction.⁹⁸

⁸⁹ *Id.* at 380.

⁹⁰ See *supra* notes 13–15.

⁹¹ 658 P.2d 709 (Cal. 1983).

⁹² *Id.* at 712.

⁹³ *Id.* at 711–12.

⁹⁴ *Id.* at 713.

⁹⁵ *Id.* at 732–33.

⁹⁶ *Id.* at 721.

⁹⁷ *Id.* at 711.

⁹⁸ *Id.*

The California Supreme Court focused on preserving Mono Lake as an environmental and geological site without reference to federal environmental laws, such as the Endangered Species Act. However, its reasoning went further; the Court held that, under the public trust doctrine, the state of California retains the power to manage the appropriation of water from Mono Lake, a water source held in the public trust.⁹⁹

Once the state has approved an appropriation [of water], the public trust imposes a duty of continuing supervision over the taking and use of the appropriated water. In exercising its sovereign power to allocate water resources in the public interest, the state is not confined by past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs.¹⁰⁰

I was especially struck by the California Supreme Court's use of the phrase "sovereign power to allocate water resources in the public interest," and the fact that "the state is not confined by past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs" to describe the power of the state of California over the water in Mono Lake.¹⁰¹ Armed with this language from *National Audubon Society*, could a California state court recognize the water crisis in the state, deem certain current uses of water as "incorrect in light of current knowledge or inconsistent with current needs," and order that state institutions undertake a different allocation of water to California citizens? The state would then ration water to citizens, to secure the use of water for the public.

B. Standing

What parties would have standing to bring public trust doctrine cases in federal courts? The Case or Controversy Clause in Article III of the Constitution prohibits federal courts from issuing advisory opinions.¹⁰² Litigants must establish standing to sue.¹⁰³ A party bringing suit must show: 1) an injury in fact, 2) a causal connection between the injury and the conduct complained of, and 3) that the injury is capable of being redressed by a favorable decision in court.¹⁰⁴

The argument would likely proceed as follows. First, the injury suffered by the plaintiff could be either the inability to carry out some activity due to the lack of water, or perhaps an environmental injury to an area in which the plaintiff has a sufficiently concrete interest. Second, the "complained of" conduct would be the government's failure to allocate and ration the water,

⁹⁹ *Id.* at 728, 732.

¹⁰⁰ *Id.* at 728.

¹⁰¹ *Id.*

¹⁰² See *Muskrat v. United States*, 219 U.S. 346, 351–53, 356 (1911) (holding that Article III, Section 2 of the Constitution does not extend judicial power beyond cases or controversies).

¹⁰³ *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560 (1992).

¹⁰⁴ *Id.* at 560–61.

which causes the Plaintiff's injuries by not allowing the water to flow where the Plaintiff prefers it. And third, the Plaintiff would have to show that, by declaring the water to be subject to the public trust, the Plaintiff would have access to water resources that they currently do not in a way that would cure the Plaintiff's problem.

The first prong will likely be the easiest to meet, although such claims sometimes founder on issues of organizational standing.¹⁰⁵ The United States Supreme Court has held that an association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests the organization seeks to protect are germane to the organization's purpose, and neither the claim asserted, nor the relief requested, requires the participation of individual members in the lawsuit.¹⁰⁶

In *Sierra Club v. Morton*, for example, the plaintiff, the Sierra Club, sought to prevent the lease of several thousand acres of national forest land near Mineral King Valley in the Sierra Nevada Mountains in California for a proposed ski resort.¹⁰⁷ The Supreme Court recognized that the environmental plaintiffs could assert noneconomic environmental injuries, such as recreational interests and aesthetics.¹⁰⁸ However, the Court rejected the standing of the Sierra Club, holding that an environmental organization lacks cognizable injury based solely on its own longstanding interest in environmental issues.¹⁰⁹ The organization would have to establish a concrete injury to a cognizable corporate interest, or assert representational standing on behalf of specific members who themselves suffered cognizable environmental harms to aesthetic or recreational interests.¹¹⁰ It seems likely that organizations that advocate for the preservation of fresh water sources could satisfy this standard and establish associational standing because some of its individual members would be injured by a lack of water caused by a widespread drought.

The second and third prongs, causation and redressability, might be the more difficult to overcome. The plaintiff would have to draw a nexus between the government's failure to take the water into the public trust and the claimed injury. Conversely, the plaintiff would have to show that taking a fresh water source into the public trust would address the particular water shortage that gave rise to the injury-in-fact. This could be difficult where there are competing claims on the water to be taken into trust. By the very nature of this type of litigation, there will often be such competing claims. It

¹⁰⁵ *Sierra Club v. Morton*, 405 U.S. 727, 739–40 (1972).

¹⁰⁶ *Warth v. Seldin*, 422 U.S. 490, 511 (1975).

¹⁰⁷ *Sierra Club*, 405 U.S. at 730.

¹⁰⁸ *Id.* at 734.

¹⁰⁹ *Id.* at 739.

¹¹⁰ *See* *Hunt v. Wash. State Apple Advert. Comm'n*, 432 U.S. 333, 343 (1977) (establishing the three-part test for representational standing).

might be necessary to be able to show with some certainty how the now-public water would be allocated.¹¹¹

C. Role of the Judiciary

The public trust doctrine, as applied to the allocation of fresh water, concentrates a great deal of power in the hands of the judiciary. When a lawsuit is brought, judges are the state actors charged with establishing the trust.¹¹² Judges also ensure that the trust is being administered for the public's benefit.¹¹³ Where the legislature or an executive agency takes an action with regard to fresh water, the judiciary has the responsibility to examine whether the government institutions have acted within the bounds of their power.

The power of courts to review the legality of actions taken by other branches of government dates back, at least, to the landmark case of *Marbury v. Madison*.¹¹⁴ However, the idea of courts overseeing the other branches' administration of the allocation of water is a somewhat more nuanced application of judicial review. For example, if there is uncertainty about the impact of a state action on fresh water, could courts properly remand a case to the appropriate agency or legislative body to adduce evidence of the benefits to the public interest? Is this legal within the contours of the administrative state? Is it appropriate for courts to engage in such prospective public benefit fact finding, or is that role better left to the political branches?

D. Federalism

What about questions of federalism and the Tenth Amendment to the Constitution? The Tenth Amendment states that the federal government

¹¹¹ In *Washington Environmental Council v. Bellon*, 732 F.3d 1131 (9th Cir. 2013), the plaintiff lacked standing because: 1) the causal nexus between the failure of state and regional environmental agencies to define emissions limits for greenhouse gases for five oil refineries and adverse environmental effects of global climate change was too attenuated, and 2) redressability was not established because there was no evidence that the proposed standards would curb a significant amount of greenhouse gas emissions from the regulated sources. *Id.* at 1142–43, 1146. *Bellon* points out that while the Supreme Court created a relaxed standing requirement for sovereign states, traditional standing requirements still apply to nongovernmental organizations pressing environmental claims. *Id.* at 1144–45 (citing *Massachusetts v. Env'tl. Prot. Agency*, 549 U.S. 497, 505 (2007)).

¹¹² Sax, *supra* note 71, at 561–65 (discussing the role of the courts in resolving lawsuits seeking to invoke the public trust doctrine).

¹¹³ In his famous article, Professor Sax argued that the judiciary didn't involve themselves directly in the administration of the public trust, but instead indirectly "by requiring the intervention of other agencies which will serve to represent under-represented interests or by calling upon the legislature to make an express and open policy decision on the matter in question." *Id.* at 558.

¹¹⁴ 5 U.S. (1 Cranch) 137, 177 (1803).

possesses only those powers delegated to it by the Constitution.¹¹⁵ All remaining powers are reserved for the states or the people.¹¹⁶

Both federal and state courts have recognized the application of the public trust doctrine to natural resources, although historically the public trust doctrine has largely been a state law matter. Indeed, the United States Supreme Court recently reiterated that “the public trust doctrine remains a matter of state law.”¹¹⁷

In a recent unpublished disposition in the United States Court of Appeals for the D.C. Circuit, the court considered a “complaint alleging that [the United States Environmental Protection Agency and its representatives] are trustees of essential natural resources pursuant to various provisions of the Constitution, and that the defendants have abdicated their trust duty to protect the atmosphere from irreparable harm.”¹¹⁸ That lawsuit is similar to the types of actions I describe herein, where water is the natural resource that the government has the responsibility to protect. The D.C. Circuit dismissed the case for lack of jurisdiction, relying on the fact that the public trust doctrine does not give *federal courts* jurisdiction over the management of the environment.¹¹⁹ Of course, federal courts would have jurisdiction of such state law claims in diversity cases.¹²⁰

Are water rights different from other, more localized, public trust doctrine cases? Given the scope of the task of managing and allocating water, wouldn't it be appropriate for federal institutions to be involved? Water sources, of course, exist across state borders. For example, the Mississippi River traverses Minnesota, Wisconsin, Iowa, Illinois, Missouri, Kentucky, Tennessee, Arkansas, Mississippi, and Louisiana. The allocation and management of such water sources as a public trust resource would surely lead to disputes among those states.¹²¹ When those disputes do occur, they become a federal matter.¹²² Our federal courts have federal question jurisdiction over disputes between states, and the United States Supreme Court has original jurisdiction in some such cases.¹²³

¹¹⁵ U.S. CONST. amend. X.

¹¹⁶ *Id.*

¹¹⁷ PPL Mont., LLC v. Montana, 132 S. Ct. 1215, 1234–35 (2012).

¹¹⁸ Alec L., *ex rel.* Looz v. McCarthy, 561 F. App'x 7, 7–8 (D.C. Cir. 2014) (mem. per curiam), *cert. denied*, 135 S. Ct. 774 (2014).

¹¹⁹ *Id.* at 8 (noting that claims based upon violations of the public trust doctrine do not arise under the Constitution or laws of the United States).

¹²⁰ See 28 U.S.C. § 1332 (2012) (providing for diversity jurisdiction).

¹²¹ See, e.g., cases cited *supra* note 25 (highlighting some interstate water disputes currently, and recently, before the Supreme Court).

¹²² Hinderlider v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92, 110 (1938) (“Jurisdiction over controversies concerning rights in interstate streams is not different from those concerning boundaries. These have been recognized as presenting federal questions.”).

¹²³ U.S. CONST. art. III, § 2.

E. Takings Clause

The Takings Clause of the Fifth Amendment to the Constitution raises another set of legal issues. Assume for a moment that a court orders a state to take a fresh water source into the public trust, to be administered and allocated to the citizens of a state. Also assume that the water source is currently privately-owned. Would this action be considered a taking under the Fifth Amendment?

The Takings Clause provides that “private property [shall not] be taken for public use, without just compensation.”¹²⁴ This language is incorporated, as against the states, through the Due Process Clause of the Fourteenth Amendment.¹²⁵

The Supreme Court has held that “[t]he paradigmatic taking requiring just compensation is a direct government appropriation or physical invasion of private property.”¹²⁶ Potential governmental appropriation of a privately owned fresh water source under the public trust doctrine appears in some ways to be a paradigmatic taking. But there are important differences given that water typically flows from somewhere else to the privately owned fresh water source. If courts were to deem that action a taking it would impose significant financial burdens on the state. Such jurisprudence might make it impracticable to apply the public trust doctrine to fresh water sources; however, there are some significant limitations.

1. Investment-Backed Expectations

When it comes to regulatory takings, situations where the government enacts laws or regulations that deprive an individual of value in property, the United States Supreme Court has held that a taking occurs where the government interferes with a private property owner’s “distinct investment-backed expectations.”¹²⁷ For example, where a state regulation prevents private property owners from using their property in a certain way that was expected when the property was acquired, the Supreme Court has held that a taking has occurred.¹²⁸ Where a restriction is expected, on the other hand, the Fifth Amendment may not come into play.

Could a water owner’s future expectations impact the public trust doctrine? Would keeping unrestricted water rights during an unprecedented drought go beyond the scope of what a court determines to be a reasonable expectation?

¹²⁴ *Id.* amend. V.

¹²⁵ *Chi., Burlington & Quincy R.R. Co. v. Chicago*, 166 U.S. 226, 241 (1897) (holding that a state taking private property without compensation is in violation of the Due Process Clause).

¹²⁶ *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 537 (2005).

¹²⁷ *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124 (1978).

¹²⁸ *See Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1027 (1992) (“Where the State seeks to sustain regulation that deprives land of all economically beneficial use, we think it may resist compensation only if the logically antecedent inquiry into the nature of the owner’s estate shows that the proscribed use interests were not part of his title to begin with.”).

Moreover, in *Lucas v. South Carolina Coastal Council*, the Supreme Court held that reasonable expectations can evolve over time.¹²⁹ In *Lucas*, South Carolina law prevented a beachfront landowner from building on his land to prevent the loss of sand dunes from beach erosion.¹³⁰ Much like sea erosion, drought and water scarcity happen over a long time frame, with fresh water sources facing overuse and eventually drying out. That time frame could impact the extent to which an owner could be found to have reasonably expected a drought.

2. Public Utilities

In a long line of cases dating to the end of the 19th century, the Supreme Court has held that states may regulate private property, “when such regulation becomes necessary for the public good.”¹³¹ This regulation encompasses the government’s setting of prices for public utilities, such as electricity and railroads. For example, the Court has repeatedly upheld the constitutionality of statutes creating state commissions to regulate the prices of railroad tickets.¹³² “The Natural Gas Act declares that ‘the business of transporting and selling natural gas for ultimate distribution to the public is affected with a public interest,’ and that federal regulation of interstate commerce in natural gas ‘is necessary in the public interest.’”¹³³ In cases where prices are set by a public entity, the Court has not found a taking, and has not required compensation, unless the price set for the utility is unreasonably low.¹³⁴

When the government restricts water use by a private entity, it could be analogous to setting the price that the entity can charge for water. Just as setting the price limits the profit that the manager of a utility can earn, setting a ceiling on water use can limit the profits that can be earned by a farmer or rancher. Could the Supreme Court’s public utility jurisprudence have an impact on how water is regulated, and the amount of compensation that could reasonably be expected in a taking? Could the public utility cases be used to challenge the extent to which the government controls water use?

3. Compensation and the Police Power

Assuming that government appropriation of fresh water is a taking under the Fifth Amendment, how much compensation would be owed to the

¹²⁹ *Id.* at 1030–31 (“The fact that a particular use has long been engaged in by similarly situated owners ordinarily imports a lack of any common-law prohibition [though changed circumstances or new knowledge may make what was previously permissible no longer so.]”).

¹³⁰ *Id.* at 1007, 1021 n.10.

¹³¹ *Munn v. Illinois*, 94 U.S. 113, 125 (1876).

¹³² *Stone v. Farmers’ Loan & Tr. Co. (Railroad Commission Cases)*, 116 U.S. 307, 335–36 (1886).

¹³³ *Fed. Power Comm’n v. Nat. Gas Pipeline Co. of Am.*, 315 U.S. 575, 581 (1942) (quoting the Natural Gas Act, ch. 556, § 1(a), 52 Stat. 821, 821 (1938) (codified at 15 U.S.C. § 717(a) (2012)).

¹³⁴ *Id.* at 585–86.

previous owner of the fresh water? Usually, courts look to the fair market value of a resource.¹³⁵ Some courts, however, also weigh purported takings against the state's police power.¹³⁶ The police power relates to the capacity of state governments to regulate behavior and enforce order for the betterment of the health, safety, morals, and general welfare of a state's inhabitants.¹³⁷ A state might argue that taking fresh water into the public trust falls under the ambit of the police power. Securing water resources for a state's citizens is directly related to the health and general welfare of those citizens.

As a historical matter, courts have long characterized certain restrictions of the use of property as an exercise of the police power rather than a taking.¹³⁸ However, California courts have noted that where the government action amounts to taking an easement, compensation would be due.¹³⁹ In case of a drought, where the taking of a fresh water source is extremely urgent, characterizing taking the water into public trust might more persuasively be characterized as an exercise of the police power. However, such government action nonetheless would still have many more attributes of a taking than of typical negative restrictions under the police power. There is a dearth of scholarship in this important area of the law.

IV. CONCLUSION

California and the western coast of the United States are facing a water crisis of epic modern proportions.¹⁴⁰ The future is uncertain. Courts may begin to play a greater role in addressing this water crisis through the application of the public trust doctrine. Such actions could severely impact the lives and fortunes of many. The public trust doctrine, as applied to the allocation of water, raises a host of challenging policy and legal questions, which I hope that legal scholars will consider in preparation for challenges that loom.

¹³⁵ See, e.g., *United States v. 50 Acres of Land*, 469 U.S. 24, 29 (1984) (noting the Court's consistent finding that just compensation is usually determined by the market value of the property).

¹³⁶ See, e.g., *Lucas*, 505 U.S. 1003, 1031 (1992) (stating that the state must identify principles of public nuisance that prohibit the plaintiff's intended use in order to prevail against the plaintiff's takings claim on remand).

¹³⁷ William A. Garton, *Ecology and the Police Power*, 16 S.D. L. REV. 261, 263 (1971).

¹³⁸ *Commonwealth v. Alger*, 61 Mass. (7 Cush.) 53, 85 (1851).

¹³⁹ *Turner v. County of Del Norte*, 101 Cal. Rptr. 93, 96 (Cal. Ct. App. 1972).

¹⁴⁰ See, e.g., Dennis Dimick, *If You Think the Water Crisis Can't Get Worse, Wait Until the Aquifers Are Drained*, NAT'L GEOGRAPHIC, Aug. 21, 2014, <http://news.nationalgeographic.com/news/2014/08/140819-groundwater-california-drought-aquifers-hidden-crisis/> (last visited July 16, 2016) (describing the unsustainable use of aquifers and disappearing groundwater in the western United States); Lydia O'Connor, *Striking Photos Show Struggle of Farmers in California Drought*, HUFFINGTON POST, Jan. 15, 2015, http://www.huffingtonpost.com/2015/01/15/california-drought-farm-photos_n_6482762.html (last visited July 16, 2016) (stating that California is undergoing its worst drought in over a millennium).