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Citizen Participation
in The Great California Drought

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Abstract

Because of its size, population, social and geographical diversity, and cultural significance on the world stage, California can be seen as the harbinger of the world's water future. What is that future, and is it worthy of emulation or rejection - or a combination of both? How can citizen participation shape that future? This presentation seeks to illuminate these questions.

The 2014 water year (ending on October 1, 2014) capped a three-year drought unprecedented in California history. Not only was the recently-concluded water year one of the driest of record; it was preceded by two almost-equally dry years. The current water year does not look any more promising; in 2015, January, normally the wettest month of the year, yielded no precipitation for the first time in recorded history. The two major storms experienced so far, in December and February, were unseasonably warm, producing rain instead of snow in the High Sierra Nevada Mountains, meaning an immediate runoff rather than storage as snowpack for the warmer spring and summer.

Of equal significance to the loss of natural supply, California's expanded water use in recent years, and realignment of that use into new hardened demands of permanent (almond and orchard) crops, have created man-made tragedy as great as that brought on by nature.

Successful citizen action between the 1970s and 2000s moderated the impact that the drought otherwise could have produced. But that progress was offset by the frustration of other citizen initiatives, which unnecessarily exacerbated drought impacts now being experienced. Nonetheless, California ended 2014 with two promising developments, which can be attributed in part to public response to drought: a multi-billion dollar investment by California voters in water infrastructure and practices, and enactment of the first statewide groundwater regulation in California's 165-year history.

1 California stands as the world's laboratory of an ecological and political jurisdiction that confronts the boundaries of sustainability, and that reveals the promise and limitations of citizen participation to produce public decisions that conform to natural limitations. In using the term "citizen participation," we must recognize that this role relates to efforts by outsiders, often disadvantaged, to the water-resource decision-making establishment. In California participants can range from individuals to non-governmental organizations to local governments (cities and counties or local districts) whose welfare is challenged by larger and stronger federal, state, or regional authorities. Such "citizen participation" is enhanced by two strong California doctrines: the ability of virtually any advocate to claim "standing" to raise legal challenges of an environmental nature,¹ and to secure reimbursement of its costs and fees if its legal challenge produces a broad public benefit (the so-called "private attorney general" doctrine).²

California is blessed with a Mediterranean climate -- warm and dry summers to facilitate agricultural production, combined with wet and cool winters that bring snow to the mountains that can gradually melt and run off to be used in the warmer, dryer growing season. California's complex system of water gathering and storage is complicated, however, by the instream needs of the fish -- particularly salmon -- whose survivability as an economic and food resource requires that rivers and the Sacramento Delta enjoy year round quantities of flowing water -- even if that means water flowing to the sea and not stored for later release.

2 California's situation is further complicated by the disparity of water supply and demand. Our great annual rainfall and snowfall -- second respectively in

¹ *Common Cause v. Board of Supervisors*, 49 Cal.3d 432, 439-440 (1989).

² Cal. Code Civ. Proc., § 1021.5; *Woodland Hills Residents Ass'n v. City Council*, 23 Cal.3d 917 (1979).

the world only to Kauai and the Japan Alps -- land mainly in the northern and mountain areas, whereas our urban demand lies along the central and southern coast, and agricultural demand largely in the flat San Joaquin Central Valley. **3** So far, our population continues to grow, anticipated to increase by 40 percent in the next generation. Water consumption has also increased -- as we will momentarily present, modestly in the urban sector (as a result of citizen action) but dramatically and inflexibly in the agricultural sector (as a result of failed citizen action). **4** All of these challenges are compounded by climate change -- it's no accident that the California Department of Water Resources has become one of the world's leading authorities on that phenomenon, because California water is most threatened by it.

California experienced its first great modern drought in water years 1976-1977. The latter year showed the lowest precipitation and snow runoff in then-recorded state history. The shortage was preceded by a moderately dry 1976. But while the drought did cause several months of severe urban conservation -- household uses being reduced from 30 to 70 percent of normal in Bay Area communities -- this drought was relieved by strong storms at the beginning of 1978. Southern California was, with one exception we will shortly describe, largely relieved of shortages. **5** In the California State Water Project that serves both urban Southern California and San Joaquin Valley agriculture, both cities and farms received about half their contractual water, but farmers received none of the cheap surplus water to which they had become accustomed in wet years. Both classes of users benefited from other favorable conditions: the urban users could lawfully take more than their normal share from large surpluses in the Colorado River, and the farmers could increase pumping extraction from relatively intact groundwater basins. While the system was programmed to require farmers to assume the full brunt of drought for a short period to maintain urban reliability -- because the farmers were promised in exchange to receive the excess water in years of plenty -- in the end both classes emerged relatively intact because urban Southern California was using only half the water to which it could claim legal preference.

6 The current California drought finds our state much more vulnerable. Water year 2014 was preceded by two severely dry years in 2012 and 2013. **7-8** The current condition -- reflected in two reports issued just this week -- has now brought unprecedented shortage. While water conservation in the intervening years since 1977 has reduced per capita urban demand, population growth has caused overall demand to remain at best constant. The past decade has also seen the elimination of surplus water from the Colorado River; other states are now using their full share, and drought throughout the American West has severely reduced the supplies stored in Lake Mead and Lake Powell. **9** Because of reduced California surface water supplies in the past three years, farmers have turned to groundwater pumping, producing severe overdrafts in these basins. **10-11** Today the San Joaquin Valley's groundwater is the most endangered in the United States, **12** producing land subsidence and unprecedented lowering of groundwater tables, which in turn force all but the most powerful pumpers to lose local groundwater on which farmers have long depended. **13** And whereas in 1977 farmers could give up their field crops for one year by fallowing the land, in the past decade farmers have converted annual row crops (and even previously un-irrigated pasture land) **14** to more lucrative fruit and nut trees -- particularly almonds **15-16** -- which cannot be fallowed for one year but instead need water that is not and simply will not be there in time of shortage.

But while the 1976-1977 drought did produce a threat to California's environment and economy, the response to that threat represents one of the great successes of "citizen participation" in California water history. The City of Los Angeles in 1963 had anticipated a greater need for water in coming years, and proposed to meet that need by increasing its groundwater pumping in the Owens Valley, and exercising its rights to divert the streams feeding Mono Lake. When the drought came, Los Angeles acted to take as much water from these Eastern Sierra

Nevada sources as its aqueduct capacity would allow. **17** In the Owens Valley extreme groundwater pumping would deliberately destroy the vegetation at the ground surface that prevents the valley from turning into a desert. Citizens of the Owens Valley, acting through their Inyo County government, protested that before Los Angeles could produce harm in their valley, Los Angeles should adopt mandatory water conservation.³ Recall that while Northern California communities conserved because their supplies were inherently limited, Los Angeles recognized no obligation to conserve so long as the city controlled its Owens Valley and Mono Lake supply. In response to Inyo County's claim, the Court of Appeal in Sacramento ruled that Los Angeles could not take additional water from the Owens Valley until it met the state constitution's conservation mandate.⁴ Never before had a court invoked the California Constitution to require mandatory conservation for the purpose of protecting some other region's environment. But in response to the court's ruling, Los Angeles' water customers exceeded the court's expectations, in a few weeks' time producing nearly 20 percent conservation savings.

18 The Owens Valley experience thus displayed two forms of citizen participation: that of Owens Valley residents, through their local government, to preserve groundwater in their valley, and force Los Angeles to conserve water; but also in Los Angeles, citizen-consumers responding by improving their own water use to protect the Owens Valley environment. The legacy of this citizen action

³ *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185 (1977); 61 Cal.App.3d 61 (1976); 32 Cal.App.3d 795 (1973); see generally *Forging the New Water Law: Public Regulation of "Proprietary" Groundwater Rights*, 33 HASTINGS LAW JOURNAL 903 (1982).

⁴*County of Inyo v. City of Los Angeles*, 3 Civil 13866, Preliminary Memorandum (Cal. App. Mar. 24, 1977): "In relation to the states' current water crisis, the effort at voluntary conservation is inadequate to justify the requested relief.... When the state's water resources dwindle, the constitutional demands grow more stringent and compelling, to the end that scarcity and personal sacrifice be shared as widely as possible among the state's inhabitants."

continues to benefit California, and prepared the state to better endure the current great drought. Today Los Angeles has 30 percent more population than in 1977 when the court ordered conservation; yet the city uses the same amount of water that it used before the injunction took effect.⁵

19 In the Mono Lake Basin to the north, Los Angeles' diversion of the streams feeding the lake from the Sierra Nevada Mountains caused the lake to shrink in size, producing greater salinity that threatened wildlife, and exposing the shoreline and its fine particles of toxic dust. Here the citizen response was even more direct than in Inyo County; because Mono County would not challenge Los Angeles, two private non-governmental organizations stood up: the Mono Lake Committee, composed of volunteers and students living near or studying the lake, and the National Audubon Society, a national organization dedicated to protection of bird species.

20 This citizen initiative produced the landmark "Mono Lake Decision," which for the first time applied the public trust doctrine to water resources directly, and ruled that California's prior permits to Los Angeles needed to be reconsidered in light of new knowledge about their harm to environmental values.⁶ The California Supreme Court decreed that these values must be protected whenever feasible. As a consequence the California Water Resources Control Board ultimately ordered Los Angeles to reduce its diversions so that the lake could rise to a sustainable level for both wildlife and air quality.⁷ This success was made possible by two features of California law previously mentioned: the ability of the citizen

⁵ *Water Conservation Efforts Paying Off in S. California*, Los Angeles Times, A1 (June 14, 1999).

⁶ *National Audubon Society v. Superior Court (Dept. of Water and Power)*, 33 Cal.3d 419 (1983).

⁷ CAL. STATE WATER RESOURCES CONTROL BD., DECISION 1361 (1994).

groups to bring the case into court ("standing"), and the ultimate award of attorneys' fees to the law firms and lawyers ("private attorneys general") who had prosecuted the case.⁸

21 A final -- but until last year unfulfilled -- legacy of the 1977 drought emerged in Governor Jerry Brown's appointment in 1978 of a Governor's Commission to Review California Water Rights Law. This commission came to represent another form of citizen participation: volunteer service on a panel of interested experts to advise the state government. The commission was chaired by the retired Chief Justice of California, and included leading water practitioners and experts; its executive director was my UC Davis School of Law colleague, Professor (now Emeritus) Hap Dunning. The commission recommended state legislation to establish a series of regional watershed commissions throughout the state to regulate groundwater under state supervision. This recommendation flowed from two realities: that California was one of only two western states with no state supervision of groundwater extraction, and that such a lack of regulation could create disaster if California faced another extreme drought to rival the one from which the state emerged in 1978.⁹

The commission's proposal did not advance through the California Legislature. Urban water suppliers combined with San Joaquin farmers to defeat any effort to govern that which had previously been unregulated. In response to that legislative failure, another form of citizen initiative, literally, emerged. Exercising their right under the California Constitution to propose measures directly

⁸ See footnotes 1, 2, *supra*.

⁹ GOVERNOR'S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, FINAL REPORT (1978). The commission's history and subsequent outcome of its recommendations are summarized in *County Groundwater Regulation: Half a Governor's Commission Legacy Is Better Than None*, 36 MCGEORGE LAW REVIEW 457 (2004).

to the voters in a general election, citizen activists combined with the former Chief Justice and Professor Dunning to qualify a statewide vote to establish state groundwater regulation. But the proponent reformers were vastly outspent in the campaign, leaders of the majority political party misrepresented their members' position as being opposed to the measure, and it went down to a 65-35 percent defeat. As a consequence, when confronted with the present lack of surface supplies, groundwater pumpers in the San Joaquin Valley rushed to the "tragedy of the commons," competing with ever-deeper and ever-stronger wells to produce a new dimension of land subsidence, groundwater drawdown, and groundwater quality degradation.

Not all the Governor's Commission's recommendations were disregarded. One of the most promising did lead to new legislation: a revision of the common law of water to provide that if farmers conserved water they would not lose rights to the water they saved, but could instead sell the conserved amount to more needy uses in other parts of the state, principally new urban development.¹⁰ In theory such "water transfers" would produce a "win-win" solution for both the farmers and the urban consumers. A leading environmental advocate, the late Thomas Graff of the Environmental Defense Fund, proposed what became **22** the largest water transfer to date in the United States: that from the Imperial Valley in southeastern California to urban water districts in Los Angeles and San Diego.¹¹ This well-intentioned citizen initiative has produced mixed results, redistributing California's allocation from the Colorado River, but leading to California's failure to prevent imminent ecological disaster **23-24** at the vital Salton Sea wildlife preserve -- the result of distrustful practices by the state's most powerful water interests, combined with the California courts' retreat from earlier citizen-inspired action.

¹⁰ Cal. Water Code, §§ 1011, 1735-1737.

¹¹ R. STAVINS & Z. WILLEY, TRADING CONSERVATION INVESTMENTS FOR WATER (1983).

The importance – and limitations – of effective citizen participation is revealed in the California Department of Water Resources' 1995 decision to secretly change the operation of the State Water Project. **25** As seen from the 1977 drought experience, during that time of shortage urban water reliability was substantially protected by elimination of "surplus" water to farmers, which meant that fields devoted to annual crops of beans or cotton were fallowed in that water-short year. Fifteen years later a more modest drought produced the same cutback to agriculture, but this time to zero, because increased urban population required more water to be sustained. The farmers, however, were frustrated by being forced to keep their bargain a second time, because the provision of "surplus" water in wet years led to an expectation that such water would remain permanently available. Attempting to avoid such losses in the future, without having to admit that the largely-incomplete State Water Project was incapable of satisfying the ambitions that attended its creation, the state and its urban and agricultural contractors reached a secret agreement that declared all water in the system of equal reliability. (Notably, this agreement did not create any new supply of water.)

Citizen initiative -- this time by a rural county of water origin and two environmental organizations -- succeeded through litigation in forcing the state to reassess the contract amendments, recognizing that the project would never be fully built out, and that in light of that reality, the state could reduce contractual commitments to conform to actual water-supply projections.¹² The resulting judicial opinion produced an immediate benefit: statewide recognition of the project's reduced reliability, and the need to recognize that reality in rendering new land-use approvals dependent on new water deliveries. Long-stalled state

¹² *Planning & Conservation League v. Department of Water Resources*, 83 Cal.App.4th 892 (2000).

legislation was enacted that forced cities and developers to prove water availability as a condition to new project approvals.¹³

But with respect to the project amendment that declared all water of equal reliability -- removing the obligation of agriculture to take the first reduction in time of future shortage -- the Court of Appeal refused to enjoin that change.¹⁴ The resulting consequences have been disastrous. By forcing the project to deliver water of equal priority to both cities and farms, the system's overall reliability decreased. Some farm water was transferred to supply new residential subdivisions -- water that was previously able to be cut back completely for one year now faced a constant, basic demand for domestic use. **26** More seriously, farmers who previously planted annual crops to avoid the risk of short-term water reductions, now expecting a consistent supply converted from field crops to more lucrative pistachios and almonds. **27** In the past decade this "almond rush" has caused almonds to become California's largest crop in dollar value.) Thus as the 2012 and 2013 drought extended into 2014 (and now 2015), when the projects could not deliver water either to cities or to farms, farmers protected their long-term investments by drilling deeper and stronger groundwater wells: the "tragedy of the commons" played out. **28** The less fortunate ripped out their trees. And all joined in calls to relax environmental standards in the Sacramento Delta to create emergency one-time supplies -- but the salmon and other fish dependent on natural flows could not tolerate a one-year deprivation any more than almonds could, but unlike almonds faced extinction.

This experience proves that while citizen initiatives can effect some reform in water resource management, only in extraordinary circumstances can challengers

¹³ Ch. 643, Cal. Stats (2001) (S.B. 601); Ch. 642, Cal. Stats. (2001) (S.B. 221).

¹⁴ 83 Cal.App.4th at 926 n. 16.

displace the authority of the “water establishment,” however misguided it may be. This circumstance results from reluctance of external actors – judges, chief executives, or legislators – to interfere with water managers who to date have largely served their customers without interruption or other disasters. Judges may believe, as did American financial regulators following the financial crisis of 2007-2009, that however erroneous or even fraudulent, water institutions like banks must be treated as “too big to fail.” As initial reform successes produced a new wave of citizen challenges to the authority of water managers, judicial impatience with them and the time they consume became evident. In one notable recent case, the California Supreme Court ruled that the state government did not need to evaluate the benefits of a reduction in water exports from the Sacramento Delta, even as such a “reduced export alternative” was being implemented by federal fishery agencies.¹⁵ In two other cases, intermediate appellate courts have marginalized the public trust doctrine to signal that protection of the public commons in water and air need be no stronger than the essentially unreviewable preference of regulators.¹⁶ The Imperial Valley to San Diego water transfer, a program founded on fallacious assumptions and plain dishonesty about ambitions for growth and environmental impact on the Salton Sea, has now completely escaped appellate judicial review.¹⁷

The increasing inability of citizen reformers to effectuate meaningful protection of public values has produced a corrosive distrust among the constituencies attempting to influence California water governance. This distrust threatened stalemate just when natural shortage most demanded corrective action. The lack of trust produced by the secret or uninformed decisions since the 1990s

¹⁵ *In re Bay Delta Programmatic Environmental Impact Report Proceedings*, 43 Cal.4th 1143 (2008).

¹⁶ *Citizens for East Bay Parks v. State Lands Comm.*, 202 Cal.App.4th 549; *State Water Resources Control Board Cases*, 136 Cal.App.4th 674 (2006).

¹⁷ *Quantification Settlement Agreement Cases*, Cal. App. C074592, Notice of Conditional Settlement (Feb. 19, 2015).

renders California far more vulnerable than in 1977 to the harms of extreme drought.

Nonetheless, two encouraging developments in late 2014 offer promise that renewed citizen participation can enable California to weather the current challenge. Against heavy odds, the Legislature reached compromise on a \$7 billion measure that could fund many constructive and noncontroversial water supply improvements. Most of that fund will go toward increasing water reliability, with competition for that funding between groundwater storage and two marginally-beneficial dams to be resolved by a state water commission. In a display of undeserved trust, California voters – in the ultimate exercise of citizen participation -- last November overwhelmingly agreed to approve the \$7 billion bond measure, trusting that needed improvements would be made, the environment improved, and money not wasted. If the commission makes choices with broad popular support and avoids the false appeal of expensive dams that create little new supply but revive expectations of unlimited growth, the small reservoir of trust reflected in the vote might expand in future years to enable even greater investment to increase water reliability from a diminishing resource.

29 Year 2014's other bright moment came with the enactment – 36 years after the 1978 Governor's Commission recommendation – of state-supervised mandatory groundwater regulation. The California Groundwater Sustainability Act anticipates that individual counties and local water districts will establish plans and restrictions to end unsustainable groundwater extractions and restore unhealthy basins; those failing to do so will cause the state itself to regulate directly.¹⁸ This legislation resulted from forceful leadership by Governor Brown, now in his fourth term of office, and experienced legislators. But without citizen participation in the

¹⁸ Ch. 346, Cal. Stats. (2014); Ch. 347, Cal. Stats. (2014); Ch. 348, Cal. Stats. (2014).

form of support from water law reformers, the water districts, and the threatened farmers themselves, it would not have become law. As an indication of the near-revolutionary acceptance of groundwater regulation by San Joaquin Valley farmers, within the past several months, even in advance of the state legislative mandate, **30** counties in the valley's agricultural heartland have voluntarily adopted ordinances that stabilize groundwater extractions and essentially prohibit pumping to supply conversions from field to tree crops. In Merced County, **31** whose ordinance was adopted just last week, the law's principal supporter is the Merced County Farm Bureau.¹⁹

Transition to the state-required standards will prove challenging. Unless the law is modified, all data collected by local governments or districts will remain insulated from public disclosure and review. The law requires that for overdrafted groundwater basins the local governments and water districts must collectively or individually ensure that all pumpers come under regulation. Conflict will emerge as to which of these (often overlapping) jurisdictions will participate or attempt to assert unilateral control. And once comprehensive regulation is in place, the true test of acceptance will come when established farmers, whose lives and operations have been built for a century and a half on the expectation of unlimited groundwater pumping, are told "no." Under these circumstances, building a broad base of farmer and community trust may be difficult to achieve.

32 In summing up, then, California's most pressing need in water resource administration is not water, not data, or even dollars, but between water institutions and their constituencies TRUST. Often in short supply or subject to abuse in the recent past, trust within California's water community may yet emerge out of necessity in addressing unprecedented shortage coupled with an uncertain

¹⁹ Merced County Code, ch. 9.27 (Mar. 5, 2015).

and even more serious climate-changed future. In school we were taught the "3 Rs" of reading, 'riting, and 'rithmetic. California's 21st century water curriculum will trustfully be guided by another set of 3 Rs: restraint, resolve, and results.