

9-1-2013

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Gregory S. Weber

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### Recommended Citation

Gregory S. Weber, *A New Water Accounting*, 40 *ECOLOGY L. Q.* 795 (2013).  
Available at: <http://scholarship.law.berkeley.edu/elq/vol40/iss4/3>

### Link to publisher version (DOI)

<http://dx.doi.org/https://doi.org/10.15779/Z385G2W>

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# A New Water Accounting

Gregory S. Weber\*

*Unlike other natural resources, water is generally priced at cost, rather than at a market rate. Indeed, in California, the state's constitution mandates "at cost" water pricing. Under a 1996 initiative known as Proposition 218, municipally owned water suppliers may not allow water rates to exceed the proportional cost of delivering water to a particular parcel. "At cost" water pricing, however, fails to communicate water's real value to consumers. For example, since it often costs water suppliers the same amount to deliver available water during a drought as during more abundant times, consumers do not receive pricing signals about water's relative scarcity in a given year. Overall, "at cost" pricing leads to waste, unnecessary environmental degradation, and inefficient allocation among competing uses. Water suppliers, however, can send consumers pricing signals, consistent with Proposition 218, by broadening the notion of "costs" beyond the traditional financial costs incurred for water system infrastructure and operations. At a minimum, "at cost" pricing should include a charge to represent the costs of avoiding, mitigating, or restoring environmental impacts. Beyond the minimum, it could include a charge to reflect the opportunity costs of using the public's resources. In effect, "at cost" pricing should include a charge to represent the value of the use of the public's "natural capital." While such an expanded notion of "cost" should apply across the country, it is particularly germane to California. Under California's "public trust" doctrine, water suppliers have an affirmative duty to protect public values in watercourses "wherever feasible." This Article explores the interplay between California's "at cost" pricing restrictions and the public trust doctrine. It concludes that an expanded notion of "at cost" pricing is both compatible with Proposition 218 and mandated by the public trust doctrine.*

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#### INTRODUCTION

Unlike conventional commodities, such as wheat, crude oil, or pork bellies, water is generally not priced at market rates. Instead, across the United

States, its price depends in largest part upon the supplier's cost of providing water service to its customers.<sup>1</sup> Where water is provided by a regulated public utility, the regulatory agency will set rates that allow investors to recover the costs of service as well as obtain a specified rate of return on their investments.<sup>2</sup> Where water is provided by a local public agency, such as a city or special district, common law "reasonableness" restrictions on water rates will generally only allow an agency to recover the cost of providing service.<sup>3</sup>

California has taken the common law "at cost" requirements one step further. In California, publicly owned water suppliers<sup>4</sup> must, under the state constitution, sell water at cost.<sup>5</sup> More specifically, no water customer can be charged more than the proportional cost of supplying water to a particular parcel.<sup>6</sup> In addition, publicly owned water suppliers may not recoup more funds

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1. See, e.g., *Frequently Asked Questions: Pricing Water Services*, EPA, [http://water.epa.gov/infrastructure/sustain/pricing\\_faqs.cfm](http://water.epa.gov/infrastructure/sustain/pricing_faqs.cfm) (last visited July 15, 2012) ("With both public and private ownership, rates charged to public water users are generally based only on the costs of treating and distributing water and not on the resource itself.")

2. See generally C. (KEES) W. CORSSMIT, *WATER RATES, FEES AND THE LEGAL ENVIRONMENT* 8-9 (Am. Water Works Ass'n ed., 2d ed. 2010); CAL. WATER ASS'N, *AN ANALYSIS OF THE DIFFERENCES IN WATER RATES OF INVESTOR-OWNED WATER UTILITIES AND GOVERNMENT-OWNED WATER UTILITIES* (2010).

3. See generally CORSSMIT, *supra* note 2.

4. Four possible applications of "public" require some definition to avoid terminological confusion. First, in this Article, "publicly owned water suppliers" refer to cities and special districts that provide water service; the latter may be organized under one of twenty-one different California laws. See CAL. DEPT. OF WATER RES., *CALIFORNIA'S GROUNDWATER BULLETIN 118: UPDATE 2003*, at 34 tbl.2 (2003), available at [http://www.water.ca.gov/pubs/groundwater/bulletin\\_118/california's\\_groundwater\\_bulletin\\_118\\_-\\_update\\_2003\\_/bulletin118\\_entire.pdf](http://www.water.ca.gov/pubs/groundwater/bulletin_118/california's_groundwater_bulletin_118_-_update_2003_/bulletin118_entire.pdf).

Second, in addition to these entities, investor-owned utilities also provide water to customers in California. Since these utilities are owned by shareholders, they could be considered "publicly owned" in the sense of a publicly held corporation. The constitutional requirement to sell water at cost, however, applies only to publicly owned water suppliers, not to investor-owned utilities. See, e.g., CAL. CONST. art. XIID, §§ 6(b)(1) (restrictions apply to "any agency"), 2(a) (defining "agency" to mean specified "local government"). Cf. CAL. CONST. art. XIIC, § 1(b) (defining "local government" to include "any county, city, city and county, including a charter city or county, any special district, or any other local or regional governmental entity."). Investor-owned utilities are entitled to a reasonable return on investment. In this Article, "publicly owned water suppliers" does not refer to these investor-owned utilities.

This Article also uses "public" in a third way. Extensive discussion below refers to the "general public"; this compound term roughly equates with the people of the state as a whole. Although a water supplier may be "publicly" owned, in the sense that it is a legally constituted subdivision of the state, its customers are specific individuals within a specific geographic area. To that extent, they are only a small subset of the general public. To avoid confusion, costs passed onto California society as a whole will be considered as costs imposed on the "general public."

Finally, "public" is also used below to refer to the "public trust doctrine." This is a specific body of natural resources law. It applies to both state and local governments. It requires consideration and protection of commercial, navigational, ecosystem, recreational, and aesthetic interests in specific waters of the state. See, e.g., *Marks v. Whitney*, 491 P.2d 374, 380 (Cal. 1971). When used in this context below, "public" will be modified by "trust," "trust duties," "trust uses," or "trust-protected uses."

5. See *infra* notes 30–53 and accompanying text.

6. CAL. CONST. art. XIID, §§ 6(b)(1)–(3).

than are needed to provide the water.<sup>7</sup>

Both inside and outside California, the legal restrictions on water pricing at least implicitly acknowledge widely held beliefs that water is “different” from conventional commodities.<sup>8</sup> These perceived differences seem to stem from the combination of water’s relative scarcity and its necessity for life.

On the one hand, gold and diamonds are generally considered much scarcer than drinking water. But the public does not perceive them as essential to life. As such, the state has little to say about the price a jeweler charges for a diamond ring. That price is set entirely by the market.

On the other hand, food and air are certainly as essential to life as water, but are generally not considered as scarce. Breathable air generally remains so abundant that it is truly free for the taking; no market for air is needed.<sup>9</sup> Food prices, however, *are* generally market-set. While food is ultimately as essential for life as water, there are so many different sources of food that there is no widely shared perception that any one grower or food producer could “corner the market” and literally starve an individual or a community to death.<sup>10</sup> In contrast, over 100 years after Los Angeles used “market prices” to buy up water rights and turn Owens Lake—and the local economy that depended upon its tributary waters—into a dust bed,<sup>11</sup> fears of “water grabs” by wealthier or more politically powerful individuals still animate many water policy discussions.<sup>12</sup>

As a result, particularly in the arid West, but, increasingly, across the entire country, private rights to divert and sell water are subject to great restrictions. With the possible exception of Hawaii,<sup>13</sup> nowhere are these restrictions greater than in California. Like most states, California’s restrictions start with a broad array of constitutional and statutory provisions addressing

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7. *Id.*

8. *See, e.g.,* Gary Woodard, *Is Water Weird or Just a Common Commodity?*, 3 SOUTHWEST HYDROLOGY 12 (2004).

9. There are some limited markets in “air.” For example, people who depend upon higher concentrations of oxygen, such as those with emphysema, pay market rates for that gas, even if their life depends upon it. There are also de facto markets for “air quality,” such as with the tradable SO<sub>2</sub> emission limits established under federal “acid rain” legislation in the Clean Air Act. *See, e.g., Acid Rain Program*, EPA, <http://www.epa.gov/airmarket/progsregs/arp/> (last visited Mar. 20, 2013).

10. There are, of course, plenty of laws that regulate food quality and other aspects of food production. But the resulting commodities and products are uniformly sellable at market costs.

11. The Owens Lake tale has been told innumerable times, most famously in the movie *Chinatown*. *See, e.g.,* Jane S. Shaw, *The Owens Valley Water Grab: Seeing Negotiation in a Different Light*, PROP. & ENV’T RES. CENTER, <http://perc.org/articles/owens-valley-water-grab> (last visited Mar. 20, 2013). For a collection of photographs on Owens Lake, see OWENS LAKE PROJECT, <http://www.owenslakeproject.com/> (last visited Mar. 20, 2013).

12. *See, e.g., Snake Valley & Owens Valley*, UTAHNS OPPOSED TO LAS VEGAS WATER GRAB, <http://utvlv-watergrab.blogspot.com/2006/11/snake-valley-owens-valley.html> (last visited Mar. 20, 2013).

13. Hawaii has also recognized the applicability of the public trust doctrine to water rights. *See In re Water Use Permit Applications (Waiāhole Ditch)*, 9 P.3d 409, 443–44 (Haw. 2000). Hawaii’s trust doctrine, however, arises in the unique context of native Hawaiian rights. *See id.* at 447.

water diversions.<sup>14</sup> California, however, goes beyond the typical panoply of public interest regulations in two respects. First, under its version of the public trust doctrine, the state retains inalienable rights to protect certain public uses of water.<sup>15</sup> Among other matters, these public trust rights allow the state to reallocate even longstanding private water uses and rededicate them to public uses, without triggering a “takings” analysis. And second, while limited markets for rights to divert or use water do exist,<sup>16</sup> for the most part, California’s constitution requires water to be sold to its ultimate consumers “at cost.”<sup>17</sup>

“At cost” pricing is politically popular. But this popularity has substantial hidden consequences. In particular, so-called “at cost” pricing systematically underprices water in at least three respects. First, and rather perversely, the “costs” included in the pricing structure are largely market-based costs. That is, water suppliers seek to recover the financial costs they incur to borrow capital, purchase goods and services, and pay employees. Most water systems, however, impose substantial additional costs upon ecosystems and the environments in which they exist.<sup>18</sup> These additional costs are “externalized,” and borne by the general public, rather than internalized and borne by the individual water system customers.<sup>19</sup>

Second, “at cost” pricing assumes that the substance itself—i.e., water—is as free to the suppliers as the air that they and their customers breathe. While water suppliers may pay regulatory costs for obtaining permission to divert water, and they will certainly pay costs for building the system of dams, pipes and pumps for capturing and delivering the water, they do not pay anything for the raw material itself. At least in those states where water is legally declared to be owned by the people,<sup>20</sup> the free provision of rights to use the people’s water amounts to a de facto subsidy of the particular water supplier. In effect, the water supplier and its end users are using the public’s natural capital without

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14. In particular, California’s constitution requires water to be put to “reasonable and beneficial” use, and bars water waste. CAL. CONST. art X, § 2. California’s Water Code and its implementing regulations detail the circumstances under which rights to divert, store, deliver, and transfer water will be authorized. *See generally* CAL. WATER CODE §§ 1201–1707 (West 2013).

15. *See, e.g., Nat’l Audubon Soc’y v. Superior Court*, 658 P.2d 709, 722 (Cal. 1983). For a general discussion of the public trust doctrine, see *infra* notes 59–77 and accompanying text.

16. Water trades annually account for about 5 percent of the water used in California. ELLEN HANAK & ELIZABETH STRYJEWSKI, PUB. POLICY INST. OF CAL., CALIFORNIA’S WATER MARKET, BY THE NUMBERS: UPDATE 2012, at 2 (2012), available at [http://www.ppic.org/content/pubs/report/R\\_1112EHR.pdf](http://www.ppic.org/content/pubs/report/R_1112EHR.pdf).

17. CAL. CONST. art. XIII D, § 6(b)(1)–(3). For a general discussion of the constitutional “at cost” pricing provisions, see *infra* notes 30–53 and accompanying text.

18. Christopher L. Len, *Synthesis—A Brand New Water Law*, 8 U. DENV. WATER L. REV. 55, 66–69 (2004).

19. *See, e.g., Bonnie G. Colby et al., Mitigating Environmental Externalities Through Voluntary and Involuntary Water Reallocation: Nevada’s Truckee-Carson River Basin*, 31 NAT. RESOURCES J. 757, 760–63 (1991).

20. Such declarations are typical in the constitutions and water codes of the Western United States. *See, e.g., WYO. CONST. art. VIII, § 1; CAL. WATER CODE § 101* (West 2013).

directly paying for it. True, the general public stands to benefit indirectly, through the hoped-for economic activity that will result from the end uses made of the “at cost” water. But the failure to include some sort of *direct* return on the public’s capital increases the chance that that capital will be “spent” on economically inefficient uses. At the same time, and again, somewhat perversely, the de facto subsidy mutes the price signals that the end user receives about the scarcity of water. If water is, indeed, so scarce and valuable that markets should not be used to allocate it, then it should not be offered for “free.”<sup>21</sup>

Finally, because a large portion of the costs of providing water is relatively fixed, conventionally calculated “costs” do not change very much, even in drought years. Thus, customers continue to demand water at the offered “at cost” price, even as reservoirs run dry. Shortages result because there is no market-clearing price; there is still unmet demand for water at the legally mandated price. If prices could rise to reflect scarcity, then, at some point, the quantity demanded would drop to meet the quantity supplied at the offered price. An adequate price rise would not only eliminate supply shortages, but would also reduce stresses on the environment and the public trust values of the water resources.<sup>22</sup> Moreover, such stresses are particularly acute in the very times that supply shortages occur. Prevented by law from charging more than cost, however, publicly owned water suppliers must manage demand by public education campaigns and regulatory enforcement programs.<sup>23</sup>

Demand management would be far simpler and more effective if people changed their water use behavior in response to price signals that reflected water’s otherwise externalized costs and relative scarcity.<sup>24</sup> But price increases that reflect non-market costs, returns on public capital, and scarcity values, rather than solely conventional monetized costs, risk creating situations where public agencies end up collecting more revenues than needed to meet their

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21. Indeed, such “free” provision of water stands in stark contrast to the royalties and other extraction fees that states generally demand for rights to mine or drill on publicly owned lands. For a report critical of mismanagement of California’s state-owned natural resources, see CAL. STATE AUDITOR, REPORT NO. 2010-125, STATE LANDS COMMISSION: BECAUSE IT HAS NOT MANAGED PUBLIC LANDS EFFECTIVELY, THE STATE HAS LOST MILLIONS IN REVENUE FOR THE GENERAL FUND (2011), available at <http://www.bsa.ca.gov/pdfs/reports/2010-125.pdf>.

22. See David Zetland, *The Water Storage Myth*, FORBES (July 15, 2008), [http://www.forbes.com/2008/07/14/california-supply-demand-oped-cx\\_dz\\_0715water.html](http://www.forbes.com/2008/07/14/california-supply-demand-oped-cx_dz_0715water.html).

23. Anyone who has lived in an area that has suffered repeated drought knows full well these efforts. In California, public education programs are required by the California Urban Water Conservation Council—an association of the state’s largest urban water suppliers. *Resource Center*, CAL. URBAN WATER CONSERVATION COUNCIL, <http://cuwcc.org/mou/bmp2-education-programs.aspx> (last visited July 17, 2013). For an example of a water supplier’s rule prohibiting water waste, see Las Vegas Valley Water District Service Rules § 12 (2012), available at [http://www.lvwwd.com/custserv/service\\_rules.html](http://www.lvwwd.com/custserv/service_rules.html).

24. “Relatively” refers both to year-to-year scarcity, and to costs for other natural resources, commodities, or goods.

costs.<sup>25</sup>

In the absence of a true market for water, and with the existence of “at cost” limitations on supply prices, water providers have only limited abilities to use prices to send signals about water’s value. Nevertheless, this Article argues that publicly owned water suppliers not only *can* broaden the notion of “costs” that can legally be recovered from consumers, but, also that, at least in California, they may have a *duty* to do so, under the public trust doctrine.<sup>26</sup> Legally, the success of any such effort will require sophisticated accounting and documentation. If done properly, however, the use of water rates to recover funds to compensate for public trust values will simultaneously: a) send pricing signals that water’s value extends far beyond plumbing and pumping costs; and b) generate revenue to protect those public trust values.

This Article thus looks to the interplay between the California constitutional provisions governing water pricing and California’s version of the common law public trust doctrine. Part I introduces the relevant constitutional provisions. It sets out the texts that require the provision of water “at proportional cost” and limit the collection of revenues to those “required” to provide the service.<sup>27</sup> Part II then sets out the common law public trust doctrine. In particular, it identifies trust-protected uses and highlights the state’s duty to protect public trust uses “wherever feasible.”<sup>28</sup> Part III sets out three kinds of costs that publicly owned water suppliers might seek to pass onto their customers. It first identifies conventional supply costs, then examines more contemporary demand management costs. Finally, it explores the consideration of the heretofore non-monetized costs identified above as recoverable “costs.” Part IV analyzes the effects of the interplay of the constitutional and common

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25. Furthermore, they encounter strong public opposition from consumers who are accustomed to low water prices reflecting relative abundance and who believe, for a variety of reasons, that water *should* be priced differently from other commodities.

26. In addition to broadening the notion of what constitutes a recoverable “cost,” publicly owned water suppliers can also use their rate structures to *apportion* costs among their customers. Well-designed rate structures can send pricing signals that better match the specific costs placed upon a system with the demands of specific water consumers. *See generally* YOUNG-DOO WANG ET AL., WATER CONSERVATION-ORIENTED RATES: STRATEGIES TO EXTEND SUPPLY, PROMOTE EQUITY, AND MEET MINIMUM FLOW LEVELS (2005). While beyond the scope of this Article, much fruitful work remains to be done to analyze the “proportional cost” requirements of the basic California constitutional framework. In particular, the constitutionality of two alternative pricing approaches remains to be determined. These approaches are: a) marginal cost pricing; and b) so-called “fee-bate” systems. Under the former, water districts set a charge for water at the marginal cost of delivering the “next unit” of service. *See* AM. WATER WORKS ASS’N, PRINCIPLES OF WATER RATES, FEES, AND CHARGES 211 (6th ed. 2012) [hereinafter AWWA MANUAL M-1]. Under the latter, a specific market-clearing surcharge is added to overall system costs, and any surplus revenues are rebated to consumers, leaving net revenues equal to system costs. *See, e.g.*, Robert A. Collinge, *Conservation Feebates*, 88 J. AM. WATER WORKS ASS’N 70 (1996). *See also* Samantha A. Krasner, Note, *America’s Addiction to Oil: A Comprehensive Strategy for Reducing Our Nation’s Dependence*, 40 CONN. L. REV. 209, 241–42, nn.206–21 (2007); DAVID ZETLAND, THE END OF ABUNDANCE: ECONOMIC SOLUTIONS TO WATER SUPPLY (2011) (proposing a “Some for Free, Rest Pay More” fee-bate model).

27. *See infra* notes 32–53 and accompanying text.

28. *See infra* notes 54–77 and accompanying text.

law provisions on the three sets of costs. It argues that, where applicable, the public trust doctrine not only authorizes but *requires* publicly owned water suppliers to recover these non-monetized costs in order to fund feasible projects that allow them to avoid, minimize, or, at least in some situations, restore aquatic environments affected by their pumping or diversions. It concludes that California's constitutional limits on water pricing and cost recovery do not preclude the use of rate structures that will fund such projects through rates charged to customers.

In the end, such projects can benefit the environment both directly and indirectly. First, they will fund the activities that directly improve the aquatic environment. Second, they will indirectly improve the aquatic environment from a reduced customer demand. If water rates rise to pay for the projects, the amount of water demanded should fall.<sup>29</sup> As demand falls, the reduction in diversions or pumping will reduce stresses on the aquatic environment that arise from reduced flows.

The analysis below focuses on the legal framework for water pricing decisions. It makes no assumptions about the political feasibility of raising water prices to more accurately reflect either the costs of providing water, or the value of the water provided. The same constitutional provision that sets out the legal framework governing water rates, however, also sets out the procedure whereby the constituents of a publicly owned water supplier can protest the rates that are set.<sup>30</sup> Publicly owned water suppliers have learned that, without clear justifications for rate increases, even the inclusion of conventional costs can trigger a voter backlash.<sup>31</sup> Ironically, any such supplier that attempts to change behavior by sending rate signals will have to undertake the very kinds of behavior-changing public awareness campaigns that market signals would hope to make less necessary.

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29. Because of our biological dependence on water, at some levels, the human demand for water will be relatively insensitive to price; people dying of thirst will pay any amount they can to get water. But for discretionary uses of water, studies show that people's consumption drops as the price of water rises. Robert Glennon, *The Price of Water*, 24 J. LAND RESOURCES & ENVTL. L. 337, 340 (2004). Economists call such sensitivity "price elasticity." The more sensitive demand is to price, the greater the elasticity. At survival levels, water is relatively price inelastic. But in all other situations, water use demonstrates elasticity. See generally AWWA MANUAL M-1, *supra* note 26, at 215 (discussing price elasticity for water).

30. CAL. CONST. art. XIIIID, § 6(a)(2) (ratepayers can reject a water rate increase by mailing in a sufficient number of protests).

31. Glennon, *supra* note 29, at 337.

I. LAW LIMITING WATER SERVICE REVENUES TO COST RECOVERY:  
PROPOSITION 218

A. Text

As in most states,<sup>32</sup> the price of water service in California is primarily based upon the water supplier's costs. Unlike other states, however, California has constitutionalized its requirement that government-owned water suppliers provide water at cost.<sup>33</sup> In 1996, California voters approved Proposition 218. Known as the "Right to Vote on Taxes Act,"<sup>34</sup> Proposition 218 added Articles XIIC and XIID to the California Constitution. Article XIIC requires voter approval before any government entity<sup>35</sup> can impose any kind of tax.<sup>36</sup> Article XIID addresses a public agency's<sup>37</sup> ability to impose "assessments, fees and charges."<sup>38</sup> In combination, the two provisions address most of the fees that a public entity might impose for water delivery.<sup>39</sup>

Article XIID lays out the principal provisions affecting water delivery rates. Section 4 of that article addresses property assessments. Section 6 addresses a "fee" or "charge,"<sup>40</sup> imposed either "upon a parcel or upon a

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32. See generally *Frequently Asked Questions: Pricing Water Services*, EPA, [http://water.epa.gov/infrastructure/sustain/pricing\\_faqs.cfm](http://water.epa.gov/infrastructure/sustain/pricing_faqs.cfm) (last visited July 15, 2012) ("With both public and private ownership, rates charged to public water users are generally based only on the costs of treating and distributing water and not on the resource itself.").

33. CAL. CONST. art. XIID, § 4(a).

34. See, e.g., *Howard Jarvis Taxpayers Ass'n v. City of San Diego*, 84 Cal. Rptr. 2d 804, 806 (Ct. App. 1999).

35. Article XIIC, section 1(b) of the California Constitution defines "local government" to mean "any county, city, city and county, including a charter city or county, any special district, or any other local or regional governmental entity." Section 1(c) further defines "special district" to mean "an agency of the State, formed pursuant to general law or a special act, for the local performance of governmental or proprietary functions with limited geographic boundaries including, but not limited to, school districts and redevelopment agencies."

36. CAL. CONST. art. XIIC, §§ 2(b) (general taxes), 2(d). It also protects the rights of citizens to repeal or reduce "any local tax, assessment, fee or charge." *Id.* § 3. See also *Bighorn-Desert View Water Agency v. Verjil*, 39 Cal. 4th 205, 212 (2006).

37. Article XIID, section 2(a) defines "agency" to mean a "local government" entity described by article XIIC, section 1(b). See *supra* note 35.

38. CAL. CONST. art. XIID, § 1.

39. Articles XIIC and XIID may treat different fees differently. For example, article XIID does not apply to "capacity" charges. *Richmond v. Shasta Cmty. Servs. Dist.*, 32 Cal. 4th 409, 419 (2004). These charges are imposed not on parcels of property, but on individuals who seek water service. In theory, however, article XIIC might apply to capacity charges. See *Bighorn-Desert View Water Agency*, 39 Cal. 4th at 226 (noting that article XIID appears to have a narrower applicability than article XIIC). See also *Pajaro Valley Water Mgmt. Agency v. Amrhein*, 59 Cal. Rptr. 3d 484, 501–02 (Ct. App. 2007) (speculating on the continuing viability of *Richmond* and the cases upon which it depends).

40. Section 2 defines "fee or charge" as "any levy other than an ad valorem tax, a special tax, or an assessment, imposed by an agency upon a parcel or upon a person as an incident of property ownership, include a user fee or charge for a property related service." CAL. CONST. art. XIID, § 2(e). For convenience, this Article will use "charges" to include "fees and charges," whether new or increased.

person as an incident of property ownership”<sup>41</sup> for a “property-related” service.<sup>42</sup> Provision of water through an existing connection is a “property-related” service.<sup>43</sup> Section 6 thus places both procedural and substantive limitations on an agency’s ability to impose such charges. Procedurally, it allows a majority of property owners to block a proposed charge by submitting written protests.<sup>44</sup> Substantively, it prohibits any such charge unless:

- the revenues do not exceed the agency’s costs of providing the service;
- the revenues are only used for the purpose for which the agency imposed the charges; and
- the amount of the charges do “not exceed the proportional cost of the service attributable to” an individual parcel.<sup>45</sup>

In addition, it precludes imposition of any charges based on “potential or future use of a service.”<sup>46</sup> It treats such “standby” charges as “assessments” governed by Article XIII D, section 4. That section imposes identical procedural and substantive requirements for “assessments.”<sup>47</sup>

### *B. Applicability to Water Services*

Proposition 218’s application to the complex world of water rates has regularly prompted agencies to seek or offer guidance.<sup>48</sup> It has also spawned a wide range of appellate decisions. The cases involving charges for water service have principally addressed whether the act applied at all to a particular charge in a particular context.<sup>49</sup> For example, while Proposition 218 covers the delivery of water to existing connections, it does not cover a charge to a landowner for the property’s initial connection to a water system.<sup>50</sup> For charges that do fall within Proposition 218’s ambit, there have been no cases addressing

41. Section 2 defines “property ownership” to include “tenancies of real property where tenants are directly liable to pay the assessment, fee, or charge in question.” *Id.* § 2(g). It does not otherwise define “ownership” or “incident of property ownership.”

42. Section 2 defines “property-related service” as “a public service having a direct relationship to property ownership.”

43. *Bighorn-Desert View Water Agency*, 39 Cal. 4th at 225–26.

44. CAL. CONST. art. XIII D, § 6(a)(2).

45. *Id.* § 6(b)(1)–(3).

46. *Id.* § 6(b)(4).

47. CAL. CONST. art. XIII D, § 4(a), (c), (d).

48. *See, e.g.*, ASS’N OF CAL. WATER AGENCIES, PROPOSITION 218: LOCAL AGENCY GUIDELINES FOR COMPLIANCE (2007).

49. *See, e.g.*, *Bighorn-Desert View Water Agency v. Verjil*, 39 Cal. 4th 205, 217–19 (2006) (Under article XIII C, voters can, by initiative, reduce or repeal existing charges, but article XIII C may not require voter approval of future rate increases.); *Richmond v. Shasta Cmty. Servs. Dist.*, 32 Cal. 4th 409, 419 (2004) (Article XIII D does not apply to capacity charges); *Pajaro Valley Water Mgmt. Agency v. Amrhein*, 59 Cal. Rptr. 3d 484, 500–02 (Ct. App. 2007) (article XIII D applies to groundwater augmentation fees); *Paland v. Brooktrails Twp. Cmty. Servs. Dist.*, 102 Cal. Rptr. 3d 270, 279 (Ct. App. 2009) (standby charges are “fees,” not “assessments,” under article XIII D).

50. *See supra* note 39.

what a water supplier can include as “costs.” There has only been one case that addresses Proposition 218’s “proportionality” requirement.<sup>51</sup> And there have been no cases that attempt to draw a line between a covered “fee or charge for a property-related service” and a “regulatory charge”; the latter would be beyond Proposition 218’s mandate.<sup>52</sup>

Except as otherwise noted, the remainder of this Article assumes that Proposition 218 applies to the water supply charges discussed. It focuses on the types of costs that could be included in those charges.<sup>53</sup> In particular, it examines the propriety, under Proposition 218, of the inclusion of public trust charges as part of the “required costs” of providing water service. Accordingly, a brief description of the public trust doctrine will set the stage for that analysis.

## II. PUBLIC INTERESTS IN WATER RESOURCES

### A. *Traditional View: Public “Ownership” of Water Resources*

For most natural resources, public ownership comes as a consequence of public ownership of specific parcels of land. For example, the citizens of the United States own great quantities of land across the country. As such, like any other landowner, they own the soil, forests, minerals, and fossil fuel deposits found on those lands. Similarly, the citizens of individual states can be said to own the natural resources found in state parks or forests.

The law, however, treats ownership of water differently from other natural resources. Traditionally, many states, particularly in the West, declared themselves to own the waters found within their borders.<sup>54</sup> For example, the California Water Code specifically states that the people of the state own all its

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51. *City of Palmdale v. Palmdale Water Dist.*, 131 Cal. Rptr. 3d 373 (Ct. App. 2011).

52. *See, e.g., Cal. Farm Bureau Fed’n v. State Water Res. Control Bd.*, 247 P.3d 112 (Cal. 2011) (charges imposed on water diverters were regulatory fees, not taxes). If a regulatory fee were pegged to the value of the matter regulated, rather than the costs of the regulatory system, it would raise serious questions under articles XIII A and XIII C of the California Constitution, which both require supermajorities of legislators or voters before an *ad valorem* tax can be imposed. CAL. CONST. arts. XIII A, XIII C.

53. In 2010, California voters passed Proposition 26, the “Supermajority Vote to Pass New Taxes and Fees Act.” In response to perceptions that governmental entities were masquerading taxes in the guise of “fees,” that initiative further restricted local agencies’ abilities to raise fees. It requires a two-thirds affirmative vote before a local public agency can raise any “levy, charge, or exaction of any kind.” *See* CAL. CONST. art. XIII C, § 1(e). It excepts from this requirement, however, “charges imposed for the reasonable regulatory costs” of specified permit and enforcement activities. *Id.* § 1(a)(3). It also excepts “[a]ssessments and property-related fees imposed in accordance with the provisions of Article XIII D.” *Id.* § (1)(e)(7). It follows that if the charges examined in this Article do, indeed, meet article XIII D’s definition of “property-related fees,” then the supermajority provisions of Proposition 26 do not apply.

54. *See, e.g., Frank J. Trelease, Government Ownership and Trusteeship of Water*, 45 CALIF. L. REV. 638 (1957); B. Abbott Goldberg, *Interposition—Wild West Water Style*, 17 STAN. L. REV. 1, 8–10 (1964).

waters.<sup>55</sup> More recently, courts speak of ownership as a “fiction” that does two things.<sup>56</sup> First, it serves as “legal shorthand” for the state’s power to regulate “an important [natural] resource.”<sup>57</sup> Second,

it may perhaps have been intended as a pre-emptive strike against any private effort to claim “ownership” in a proprietary sense. But the State’s power under the Water Code is the power to control and regulate use; such a power is distinct from the concept of “ownership” as used in the Civil Code and in common usage.<sup>58</sup>

*B. Contemporary Views: “Trust” Interests in Water Resources, Fish & Wildlife*

At virtually the same time as the “ownership” fiction has fallen out of favor, a “trust” analogy has risen to prominence. Nowhere is this trust analogy more apparent than in the California Supreme Court’s famous decision in *National Audubon Society v. Superior Court*.<sup>59</sup> In that case, the court tackled the relationship between California’s water rights system and the common law public trust doctrine.

The public trust doctrine passed from ancient law to the United States via English common law.<sup>60</sup> It applies to waters that are either tidal, navigable, or that affect navigable waterways.<sup>61</sup> In those waters, the state holds title, in trust for the public, over interests in navigation, commerce, fisheries, open space, habitat, recreation, and aesthetics.<sup>62</sup> Under *National Audubon Society*, the state, including local public agencies,<sup>63</sup> has an affirmative duty to consider trust-protected uses when granting rights to divert water. And while diversions that

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55. Under the California Water Code, “All water within the State belongs to the people of the State, but the right to the use of water may be acquired by appropriation in the manner provided by law.” CAL. WATER CODE § 102 (West 2013).

56. See, e.g., *State v. Superior Court*, 93 Cal. Rptr. 2d 276, 285 (Ct. App. 2000).

57. *Id.* (quoting *Sporhase v. Nebraska*, 458 U.S. 941, 951 (1982)). See also *City of Barstow v. Mojave Water Agency*, 5 P.3d 853, 860 n.7 (Cal. 2000) (state does not “own” water in proprietary sense).

58. *State*, 93 Cal. Rptr. 2d at 285.

59. *Nat’l Audubon Soc’y v. Superior Court*, 658 P.2d 709 (Cal. 1983).

60. Over the last forty years scholars have written extensively about the doctrine. A short recent article by a well-known public trust authority provides as concise an introduction as possible. Jan Stevens, *EPIC v. Department of Forestry & Fire Protection: Is the California Supreme Court Putting the Public Trust Genie Back into the Bottle?*, ENVTL. LAW NEWS, Winter 2012–2013, at 12.

61. *Nat’l Audubon Soc’y*, 658 P.2d at 719–20.

62. See, e.g., *Santa Teresa Citizen Action Grp. v. City of San Jose*, 7 Cal. Rptr. 3d 868, 884 (Ct. App. 2003); *Marks v. Whitney*, 491 P.2d 374, 380 (Cal. 1971). As recently as the 1970s, courts construed the trust as an easement enjoyed by the public. *Marks*, 491 P.2d at 380. “Easement” language imports the now-derided “ownership” notions into the doctrine. That language may still be appropriate when speaking of one aspect of the doctrine: the tidelands trust. Under this doctrine, the states actually own the lands under the beds of tidal lands (and navigable fresh water ways). The states can convey this land to private interests in specific circumstances, but it always retains a trust-like easement allowing public access to and over these submerged lands. *Id.* at 378–80.

63. *Ctr. for Biological Diversity, Inc. v. FPLL Grp., Inc.*, 83 Cal. Rptr. 3d 588, 604–05, 605 n.19 (Ct. App. 2008).

cause harm must, to some extent, occur out of human necessity, the state must protect trust uses wherever “feasible.”<sup>64</sup> Moreover, the doctrine empowers the state to reconsider longstanding water allocations.<sup>65</sup>

Closely related to the common law public trust described immediately above is a distinct public trust interest in the state’s fish and wildlife. As with state interests in water itself, originally, the state was said to “own” the fish and wildlife within its boundaries.<sup>66</sup> Contemporary courts have rejected the ownership fiction. Instead, they speak of public trust duties over fish and wildlife.<sup>67</sup>

Although courts continue to recognize the separate lines of public trust duties, and their overlap,<sup>68</sup> most recently, the duties have started to diverge. The common law public trust remains judge-made law. In contrast, since the so-called “*EPIC*” decision,<sup>69</sup> the courts have narrowed the trust as applied to fish and wildlife. For this strand of the doctrine, the courts have enforced only those trust duties specifically detailed by statute.<sup>70</sup>

To a large extent, the “trust” analogy in the public trust doctrine recalls the older “ownership” fiction. The trustee holds “title” in trust for the beneficiary. And the “trust” must have a corpus—property that can only be used or transferred in accordance with the trust terms. While this “property” notion may well still be a fiction, it is a useful fiction—it makes tangible a set of publicly held rights and interests in water uses that have their own physicality. This set of public rights and interests may lack classic elements of property, such as the right of alienability.<sup>71</sup> But it has more substance and specificity than simply the state’s police power to regulate private conduct for the general welfare. Collectively, these rights are valuable resources, belonging to the general public. They are the general public’s “natural capital.”<sup>72</sup> It is time that the otherwise uncompensated, non-monetized use of this natural capital, held by all for the benefit of a few, receive a more formal place in water cost accounting.

Before turning to the mechanics of a new water accounting and its

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64. *Nat’l Audubon Soc’y*, 658 P.2d at 712.

65. *Id.* at 728–29.

66. *See, e.g., People v. Truckee Lumber*, 48 P. 374, 399–400 (Cal. 1897) (state “owns” fish).

67. *Ctr. for Biological Diversity*, 83 Cal. Rptr. 3d at 599.

68. *Env’tl. Prot. & Info. Ctr. v. Cal. Dep’t of Forestry & Fire Prot. (EPIC)*, 187 P.3d 888, 926 (Cal. 2008) (“There is doubtless an overlap between the two public trust doctrines—the protection of water resources is intertwined with the protection of wildlife.”).

69. *Id.* at 888.

70. *Id.* at 926 (“[T]he duty of government agencies to protect wildlife is primarily statutory.”). *See Stevens, supra* note 60, at 14–15 (criticizing *EPIC*).

71. Generally, trust-bound properties may only be alienated to further trust purposes. *See, e.g., State v. Superior Court (Lyon)*, 625 P.2d 239, 248–49 (Cal. 1981). *Compare City of Long Beach v. Mansell*, 476 P.2d 423, 427 (Cal. 1970) (state may free trust lands if “necessary or advisable” to cut off tidelands from water access), *with Colberg v. State*, 432 P.2d 3 (Cal. 1983) (state may prefer one trust use over another).

72. “Natural” capital contrasts with “financial” or “monetary” capital.

compatibility with Proposition 218's "cost of service" limitations, two limits on the public trust doctrine require mention. Although the public trust doctrine encompasses a wide variety of waters used by publicly owned water suppliers, two sources of water supply remain outside its ambit. First, and most importantly, no California court has yet extended the protection to groundwater.<sup>73</sup> Groundwater pumping accounts for between 30 and 60 percent of California's water supplies.<sup>74</sup> Good arguments exist that, at least where groundwater pumping affects hydrologically connected, trust-protected surface watercourses, the trust should extend to the aquifers from which the groundwater is pumped.<sup>75</sup> Second, no court has yet applied the doctrine to activities on non-navigable watercourses that do not affect navigable watercourses.<sup>76</sup> For this second group of waters, to the extent that the separate common law public trust duties over fish and wildlife still exist, that strand of the doctrine should still apply.<sup>77</sup> Despite these limitations, the public trust doctrine has significant potential to improve resource protection by more fully matching water's price to the full cost of providing it.

### III. A NEW WATER ACCOUNTING: RECOVERING THE FULL COSTS OF PROVIDING WATER SERVICE

This Article argues that to truly account for the costs of providing water service, water prices should include both conventional and public trust components. Conventional components should include both traditional costs and demand management costs. Likewise, a full-cost water accounting would include a public goods charge with two components: a) recovery for the injury to public trust values; and b) recovery for the use of natural capital. The use of natural capital can be further subdivided into "consumptive" and "nonconsumptive" uses. Both of these natural capital charges would reflect the

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73. See *Santa Teresa Citizen Action Grp. v. City of San Jose*, 7 Cal. Rptr. 3d 868, 884 (Ct. App. 2003) (finding unripe a public trust challenge to an aquifer recharge project where the actions involved threatened no public interest in a hydrologically connected navigable watercourse).

74. See, e.g., *Los Angeles Water Sources*, CAL. WATER FOUND., <http://www.water-ed.org/watersources/community.asp?rid=9&cid=562> (last visited July 23, 2013) (statewide, groundwater provides 30 percent of an average year's supply, and up to 60 percent in drought years).

75. Jordan Browning, *Unearthing Subterranean Water Rights: The Environmental Law Foundation's Efforts to Extend California's Public Trust Doctrine*, 34 ENVIRONS ENVTL. L. & POL'Y J. 231, 241 (2011).

76. This author has found no estimate of the total volume of diversions from such nonnavigable tributaries. For purposes of the public trust doctrine, a waterway need only be deep enough to allow passage of boats powered by oar. *People ex rel. Baker v. Mack*, 97 Cal. Rptr. 448, 454 (Ct. App. 1971).

77. To the extent that a particular kind of water body does not fall under the public trust doctrine, the "reasonable and beneficial use" and "anti-waste" provisions of California Constitution article X, section 2, might provide an alternative basis. Arguably, water that is not priced appropriately leads to waste. Thus, the anti-waste doctrine could support its own requirement that water be priced "reasonably"—including recoupment of costs imposed for the use of natural capital.

Because the "anti-waste" and "reasonable use" requirements are far more prevalent in water law than California's public trust doctrine, their applicability would extend the general analysis sketched out in this Article to a broader group of states. That analysis will have to await a future article.

otherwise non-monetized opportunity costs of water diversions.

### A. Conventional Components

#### 1. Traditional Components: Capital, Operations and Maintenance, Water Supply, and Payments in Lieu of Taxes

At a minimum, all publicly owned water suppliers need to recover two main kinds of “costs” of providing those supplies: a) capital costs; and b) operations and maintenance (O&M) costs. Capital costs represent the annual costs of financing the supplier’s infrastructure. O&M costs are the annual costs of running the system. As such, they exemplify what economists call “financial costs.”<sup>78</sup>

Some publicly owned water suppliers must recover additional costs. For example, entities that do not have their own rights to divert water must purchase water from an entity that does.<sup>79</sup> And some publicly owned water suppliers may need to make payments to another public entity in lieu of taxes.<sup>80</sup> Like other conventional financial cost components, these costs need to be recovered from the entities’ customers if the supplier is to have sufficient revenue to meet its obligations.<sup>81</sup>

No legal issues readily appear regarding the inclusion of these traditional costs as properly recouped Proposition 218 “charges.”<sup>82</sup> For these, the only likely Proposition 218 issues arise from their “proportional” allocation among the supplier’s customers.<sup>83</sup>

78. See, e.g., CAL. DEP’T OF WATER RES., ECONOMIC ANALYSIS GUIDEBOOK 4, 46–47 (2008).

79. See *id.* at 46.

80. See, e.g., CAL. WATER CODE § 72126 (West 2013) (Municipal Water Districts may collect payments in lieu of taxes from other public agencies located within the district’s boundaries.).

81. See CAL. DEP’T OF WATER RES., *supra* note 78, at 47.

82. Of course, there may be substantial political opposition to the imposition of such charges. Constituents may believe that the charges are not warranted at all, or not warranted in the amounts sought. Provided the costs are sufficiently documented and have an appropriate nexus to the provision of water service, Proposition 218’s substantive provisions themselves will not limit a supplier’s attempts to recover those rates. Its procedural provisions, however, may lead to voter disapproval of the rate structure. See CAL. LEGISLATIVE ANALYST’S OFFICE, UNDERSTANDING PROPOSITION 218 ch. 5 (1996), available at [www.lao.ca.gov/1996/120196\\_prop\\_218/understanding\\_prop218\\_1296.html](http://www.lao.ca.gov/1996/120196_prop_218/understanding_prop218_1296.html) (Voters may reject any local tax, assessment, or fee.).

83. As set forth above, *supra* note 82, Proposition 218 requires that water service charges “not exceed the proportional cost of the service attributable to” an individual parcel. Proposition 218, however, did not define either “proportional cost” or “service attributable.” On the one hand, these phrases might refer to average costs. On the other hand, they might refer to marginal costs. The meaning adopted will impact the types of costs that can be included. Ultimately, judicial construction will be necessary. To date, however, only *City of Palmdale v. Palmdale Water District*, 131 Cal. Rptr. 3d 373 (Ct. App. 2011), has looked at Proposition 218’s proportional pricing requirements. That case, however, involved a pricing system that lacked any evidentiary support whatsoever for its differential prices structure. *Id.* at 380–81. Examination of the proportional cost provisions merits its own analysis. Further treatment of that topic is beyond the scope of this Article.

## 2. *Newer Components: Demand Management*

As water has become relatively scarcer, and the environmental impacts of new water supply augmentation projects have become clearer, water suppliers have increasingly turned to demand management in lieu of sole reliance upon supply augmentation. Three common types of demand management programs are: a) public awareness; b) hardware replacement; and c) regulatory enforcement. Public awareness efforts encourage customers to voluntarily change the timing or amount of their demands for water in response to information about water's relative scarcity. They can run the gamut from short-term announcements of drought-triggered supply reductions to elementary school programs designed to inculcate lifelong appreciation of water's value. Hardware replacement programs offer publically subsidized provision of no-to-low-cost replacements for household plumbing fixtures. Low-flow showerheads and toilets exemplify these fixtures. Regulatory enforcement efforts involve the promulgation and implementation of legally binding ordinances governing water usage. These "command and control" efforts aim to change behavior by penalizing water usage in violation of the applicable ordinances.

To date, there has been no suggestion that any of these three demand management efforts is not properly considered a cost of water service recoverable under Proposition 218. Each of these efforts requires the expenditure of funds paid to employees or suppliers. Moreover, many public water suppliers would likely consider public awareness and regulatory enforcement to be inherent parts of their water service efforts, so that they simply fall within normal system operation and maintenance.<sup>84</sup> As such, these efforts also represent financial costs.

Demand management activities, however, go beyond the three categories listed above. Indeed, if done in a way to promote conservation, the design of water rate structures themselves can function as a demand management tool. As noted above, conservation rate structures attempt to change water consumption behavior by using pricing signals to indicate water's relative value. Unlike the three demand management efforts previously identified, water rate structures do not themselves add line-item "costs" to a public water supplier's budget. Rather, they shift some of the marginal costs of water service from lower to higher volume consumers. Thus, analysis of their compatibility with Proposition 218 is best left to the analysis of that provision's "proportionality" requirement.

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84. Indeed, since all three efforts aim to prevent water waste, arguably these efforts are mandated by another provision of California's constitution. Article X, section 2 prohibits the waste or unreasonable use of water. To the extent that these demand management programs represent the most cost-effective ways of stretching water supplies, arguably they are not only permitted under Proposition 218 but mandated under article X, section 2.

## B. Public Trust Values as Costs of Providing Service

### 1. Examples of Non-Monetized Costs

Beyond the conventional costs outlined above, a full-cost water accounting would include a public goods charge with two components: a) recovery for the injury to public trust values; and b) recovery for the use of natural capital.

As noted above, the California Supreme Court has acknowledged that, as a matter of necessity, the state may grant rights to divert water from trust-protected watercourses even if trust-protected uses are harmed.<sup>85</sup> A water project can harm trust-protected uses in a variety of ways. To start, the harms will differ depending upon whether the water rights holder is diverting for direct application to a beneficial use, or diverting first to storage for later application to other beneficial uses.

The simplest example of the latter is when a diverter impounds water in a reservoir behind a dam. To the extent that water is being stored rather than flowing freely, dams can significantly reduce the timing and amount of downstream flows. Reduced flows, in turn, have multiple impacts on navigation, habitat, biodiversity, recreation, and even aesthetics.

Beyond the impacts on flows, dams also block fish passage and impede navigation.<sup>86</sup> Their reservoirs inundate habitat. For at least small reservoirs, impounded water may more easily heat up, impacting both species within the reservoir and those downstream once the water is released for later diversion. Moreover, the reservoirs convert a free-flowing watercourse into a lake. While both streams and lakes support recreation, they offer possibilities as distinct as whitewater rafting and house-boating. And since fish and other aquatic species often distinctly prefer specific environments, rivers and lakes will selectively favor one set of species over the other.<sup>87</sup>

As for direct diversions to beneficial use, the harms caused by their operations<sup>88</sup> largely stem from reduced flows. As noted above, a wide range of interconnected trust uses may well be harmed as the volume of flows drops. And, of course, if flows are stopped entirely by the diversion of an entire

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85. Nat'l Audubon Soc'y v. Superior Court, 658 P.2d 709, 727–28 (Cal. 1983).

86. To some extent, these blockages can be overcome with fish ladders and navigational locks.

87. Although a full understanding of the habitat value of individual lakes and streams “requires a detailed knowledge of zoogeography and behavior of fish,” the pH balance and salinity of certain lakes creates a distinct environment from most streams. WILLIAM J. MATTHEWS, PATTERNS IN FRESHWATER FISH ECOLOGY 10–11 (1998).

88. Construction of dams and direct diversions can cause a host of other harms. See, e.g., Harrison C. Dunning, *Confronting the Environmental Legacy of Irrigated Agriculture in the West: The Case of the Central Valley Project*, 23 ENVTL. L. 943, 950–54 (1993); Liba Pejchar & Keith Warner, *A River Might Run Through It Again: Criteria for Consideration of Dam Removal and Interim Lessons from California*, 28 ENVTL. MGMT. 561–75 (2001).

watercourse, then virtually all trust-protected uses will be destroyed.<sup>89</sup>

Of course, there are many positive values associated with both direct diversions and diversions to storage. These values, however, are largely economic—the value of supplying water for irrigation, power, municipal, and industrial use.<sup>90</sup> But just because these values may be enormous, easily monetized, and ultimately “necessary,” it does not follow that their impacts on trust-protected uses are cost-free. On the contrary, the value of those trust-protected uses falls in proportion to the degree of harms otherwise imposed.<sup>91</sup> As the harms increase, the “corpus” of the trust is reduced.

As these harms are almost entirely non-monetized, they are better considered economic costs, rather than financial costs.<sup>92</sup> At least conceptually, there are two different groups of these costs. To complicate matters, each can be considered to have two temporal aspects.

2. *Two Sets of Non-Monetized Costs: “Consumptive” and “Nonconsumptive” Uses of “Natural” Capital*

a. *“Externalities”: Consumptive Uses of Natural Capital*

As for the two sets of costs, the first are those costs that are passed onto the general public in the form of negative externalities. Using the examples discussed above, there is no direct market for, say, the amount of habitat that exists on a watercourse. The financial costs of building a water diversion or storage project will not capture the value of the habitat lost. These costs are simply absorbed by the general public. The diversion project, and its habitat impacts, may meet *National Audubon Society’s* “necessity” test,<sup>93</sup> but this means only that the project’s benefits were found to outweigh its costs, not that there were no costs at all. Unless the costs are monetized and paid by the project developer, they are simply absorbed by the general public in the form of reduced public trust uses.

b. *“Opportunity Costs”: Nonconsumptive Uses of Natural Capital*

The second, and conceptually more challenging, cost borne by the public is best conceived of as the opportunity costs associated with a given water diversion project. Imagine a water supply project that, somehow, caused *no* harmful impacts on public trust uses. The general public would still bear the

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89. Some plant and animal species may favor a dry riverbed to a wet one. And some people might find stark beauty in the once-living river’s bed. Save these unusual situations, for all practical purposes, the trust-protected uses in a dry river are dead.

90. See CAL. DEP’T OF WATER RES., *supra* note 78, at 18–19.

91. For a discussion of the effects of diminished flows on fish species, see Mary Christina Wood, *Reclaiming the Natural Rivers: The Endangered Species Act as Applied to Endangered River Ecosystems*, 40 ARIZ. L. REV. 197, 218–21 (1998).

92. See, e.g., CAL. DEP’T OF WATER RES., *supra* note 78, at 4–6.

93. See *Nat’l Audubon Soc’y v. Superior Court*, 658 P.2d 709, 728 (Cal. 1983).

costs of lost opportunities to authorize some other, more valuable use for that water. For even if the state is no longer said to own its water resources, there is no question that, at least for appropriative rights, the law clearly requires state authorization before any water supplier, whether owned publicly or privately, puts water to beneficial use.<sup>94</sup> Again, it may be that there are no immediately competing applications to put a specific amount of water to a different beneficial use. So, to the state regulators who approve diversion permits, the opportunity costs may appear to be low, and vastly outweighed by the apparent benefits. Even so, the opportunity costs are not zero. The authorization of one use means that the state ordinarily cannot take those use rights back and simply give them to a later, more valuable use.<sup>95</sup> To do so, the state would have to exercise its eminent domain powers, and pay just compensation to the original user. Thus, authorization for one use ordinarily precludes authorization for another.<sup>96</sup>

Again, while these opportunity costs may be considered abstractly, no monetary values are placed upon them, or if they are, they will be borne by the general public. As such, these uncharged, publicly absorbed opportunity costs are, in effect, a public subsidy to the water diverters.

Perhaps a simpler way of considering de facto subsidies is to simply look

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94. California recognizes four different kinds of rights to use surface water: pueblo rights, prescriptive rights, riparian rights, and appropriative rights. *See generally* Cal. Farm Bureau Fed'n v. State Water Res. Control Bd., 247 P.3d 112, 117–18 (Cal. 2011). It divides appropriative rights into two groups: those acquired before 1914, and those acquired after 1914. Of all these rights, only the last group—post-1914 appropriative rights—requires a permit or license from the State Water Resources Control Board (“State Board”). Since 2004, the State Board has imposed a fee upon this last group to finance its regulatory activities. *Id.* at 121–22. The California Supreme Court upheld this fee against a facial challenge that it was an illegal “tax.” *Id.* at 124–25. It remanded the case to determine whether the fees charged bore a reasonable relationship to the State Board’s costs in running its regulatory programs. *Id.* at 126–27.

California also recognizes three different kinds of rights to use groundwater: prescriptive rights, overlying rights, and appropriative rights. *See, e.g.,* City of Barstow v. Mojave Water Agency, 5 P.3d 853, 862–63 (Cal. 2000). Although a permit may be required by local entities before a well can be drilled, groundwater users do not need to obtain any permit from the state. *See, e.g.,* GARY BRYNER & ELIZABETH PURCELL, NATURAL RES. LAW CTR., GROUNDWATER LAW SOURCEBOOK OF THE WESTERN UNITED STATES 14–16 (2003).

95. Again, this hypothetical assumes that there are *no* harms to public trust uses. Thus *National Audubon Society*’s permission to allow the state to reconsider water allocations based on changing trust-use needs does not apply.

In theory, the state could find that a given use is no longer “reasonable” or “beneficial” under the circumstances. *See, e.g.,* Joslin v. Marin Mun. Water Dist., 429 P.2d 889, 895–96 (Cal. 1967) (finding long-standing use of river water to flush sand and gravel for mining operations no longer reasonable, at least when the water was needed for new urban uses).

96. In theory, if the second use were sufficiently more valuable, the would-be second user could pay the first user for the rights to divert. These differences are what drive water transfers. There are, however, large transaction costs and potential uncertainties associated with getting permission for a permanent water transfer. And both individual water rights holders and the communities that depend upon the existing uses of those waters often have such a profound, visceral attachment to those rights—the foundation or life blood of their ways of living—that the waters can often be said, without much hyperbole, to be truly priceless. Doug Malchow, *A Review of California Water Transfers*, 16 ENVTL. L. & POL’Y J. 51, 55-6 (1992).

at the price that the general public charges to forego its opportunities: nothing. The largest single process input in agriculture and much of industry is made available to the user at absolutely no cost.<sup>97</sup> Again, there may be a host of good policy reasons for the state to choose not to charge diverters anything for the right to divert. Most prominently, the overall economic output from putting the water to beneficial use benefits the general public in many ways. Also, the state can levy taxes on the value of the goods and services made possible by the authorized water use. However, offering the right to use water for free represents a noncash subsidy to the authorized users.

Negative externalities and the general public's subsidies really represent two sides of the same coin. Fundamentally, both involve the uncompensated use of the general public's "natural capital." Their use, though, differs. The former represent harms passed on to the general public; they are analogous to someone using public lands as a free dumping ground for waste.<sup>98</sup> The latter represent the value of the water itself, which the general public grants for free. The following discussion separates these two types of uses to highlight some potential differences in the applicable legal regimes.

### 3. *Temporal Aspects of Non-Monetized Costs*

For both the public's absorption of public trust harms and the indirect subsidies offered to the diverter, there are two temporal aspects. The first considers the new costs and subsidies that are going to be incurred for the upcoming operational year. Each year, as sure as the winter snows lead to spring flows, new harms to the state's remaining public trust uses occur from that year's diversion. The second considers the possibility of recoupment of unpaid public trust harms and subsidies from past years; in effect, these are like a non-monetized accumulating debt owed to the general public.

The issues regarding the current externalized costs and repayment of accumulating debt may differ. Accordingly, the following analysis divides consideration of the two sets of costs by their temporal aspects. However characterized, all of these costs may be almost entirely left out of the customer charges a publicly owned water supplier imposes for the cost of providing water service.<sup>99</sup> Hence, the water service bill an individual water customer

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97. As noted *supra* note 52, state water authorities charge regulatory fees to administer the water rights program. They do not, however, charge for the water itself.

98. To that extent, the general public's failure to prevent, or seek compensation for, such negative externalities functions as a subsidy. The costs associated with this "subsidy," however, lend themselves to identification and computation of specific costs attributable to specific harms. For example, what is the value of the fish and wildlife harmed? What is the cost of removing contaminants? In contrast, the other aspect of uncompensated uses of the general public's capital would apply even to a water supply project that had no negative externalities. Such a project would still be receiving a subsidy by being able to use the general public's water for free.

99. These costs, as well as those addressed in the prior sections, focus on system-wide costs. There are a host of special charges for which water suppliers may seek reimbursement from individual customers based on individual service requests. For example, an individual customer who wants his or

receives does not reflect the true costs of the water provided.

With water rates systematically undercharging for the true costs of providing water, everything else being equal, customers will tend to use more water than they would otherwise.<sup>100</sup> A rate structure that included revenues to reflect these additional costs would more accurately send price signals to customers, and more efficiently change their water use behavior. Along the way, shortages and environmental stresses could be minimized, and publicly owned resources could be more appropriately allocated.<sup>101</sup>

#### IV. A NEW WATER ACCOUNTING: COMPATIBILITY WITH PROPOSITION 218

The preceding section's itemization of the costs that need to be included in a full water accounting sets the stage for this section's analysis of the constitutionality, under Proposition 218, of their inclusion as water service charges.

##### A. *Relevant Interpretive Principles*

No cases or other legal authorities address the validity of charges imposed under Proposition 218 to capture otherwise non-monetized, economic costs otherwise borne by the general public. The validity of such charges will turn on the meaning of three terms: "cost,"<sup>102</sup> "funds,"<sup>103</sup> and "purpose."<sup>104</sup>

As Proposition 218 does not itself define any of these three terms, courts must define them. In interpreting the terms, the court seeks to "determine and effectuate the intent of those who enacted the constitutional provision at issue."<sup>105</sup> When voters enact a provision, their intent governs.<sup>106</sup> In several

her water meter sized, changed, or relocated will be billed a specific amount for that specific work. *See, e.g.,* AWWA MANUAL M-1, *supra* note 26, at 247. *See generally id.* at 229-49.

100. Zetland, *supra* note 22.

101. To different degrees, both "legacy" water systems and contemporary water systems, i.e., those designed, constructed, or operated after at least some environmental review, raise questions about both sets of costs. First, the *ongoing operations* of both such systems may continue to externalize costs. And they certainly represent an ongoing public subsidy. The only difference between a legacy and contemporary system is a matter of degree; the legacy systems are much more likely to be substantially externalizing their ongoing costs. Second, to the extent that both "legacy" and contemporary systems have in prior years externalized costs and received indirect subsidies, they both can be thought of as incurring a *non-monetized accumulating debt* owed to the general public. Again, the difference between legacy and contemporary systems is largely a matter of degree. Legacy systems are more likely to have externalized substantial costs at the time of construction. They are also more likely to have been externalizing more ongoing costs for a longer time. And the longer a legacy system has been using public resources without payment, the greater the subsidies it has received.

102. CAL. CONST. art XIII D, § 6(b)(3) ("cost of the service attributable to the parcel").

103. *Id.* § 6 (b)(1) ("funds required to provide the property related service").

104. *Id.* § 6 (b)(2) ("used for any purpose other than that for which the fee or charge was imposed").

105. *Richmond v. Shasta Cmty. Servs. Dist.*, 32 Cal. 4th 409, 418 (2004).

106. *Bighorn-Desert View Water Agency v. Verjil*, 138 P.3d 220, 224 (Cal. 2006).

Proposition 218 cases, the California Supreme Court has reiterated the relevant interpretive provisions applicable to constitutional provisions added by voter initiative. For example, in *Silicon Valley Taxpayers Ass'n v. Santa Clara County Open Space Authority*,<sup>107</sup> the court outlined:<sup>108</sup>

- The principles of constitutional interpretation are similar to those governing statutory construction.
- If the language is clear and ambiguous, the plain meaning governs.
- But if the language is ambiguous, we consider extrinsic evidence in determining voter intent, including:
  - the Legislative Analyst's analysis and
  - ballot arguments for and against the initiative.<sup>109</sup>

In determining the validity of a charge under Proposition 218, courts will use their independent judgment.<sup>110</sup> When faced with ambiguous text, the court must liberally construe the relevant provisions of Proposition 218 “to effectuate its purposes of limiting local government revenue and enhancing taxpayer consent.”<sup>111</sup> Courts need no liberal construction, however, if the provision is unambiguous.<sup>112</sup>

As Proposition 218 leaves many key provisions undefined and ambiguous, the California Supreme Court has frequently relied upon both the Proposition's preamble<sup>113</sup> and external evidence to help determine voter intent. From these sources, the Court has concluded that: “[i]n passing Proposition 218, the voters clearly sought to limit local government's ability to exact revenue under the rubric of special assessments.”<sup>114</sup> By extension, the same conclusion applies to “fees” or “charges.” More specifically, it has noted that “[t]he ballot arguments identify what was perhaps the drafter's main concern: tax increases disguised via euphemistic relabeling as ‘fees,’ ‘charges,’ or ‘assessments.’”<sup>115</sup>

## *B. Costs and Subsidies for the Upcoming Operational Year*

### *1. “Negative Externalities”: Consumptive Uses of Natural Capital*

As noted above, Proposition 218 limits the fees a publicly owned water supplier may charge to those representing the “cost of the service.” As

107. 187 P.3d 37 (Cal. 2008).

108. For convenience and clarity, the following list: a) disaggregates the paragraph into separate bullets; b) omits quotations and citations to other cases.

109. *Silicon Valley Taxpayers Ass'n*, 187 P.3d at 46.

110. *Id.* at 50 (“assessment”).

111. *Apartment Ass'n of Los Angeles v. City of Los Angeles*, 14 P.3d 930, 939 (Cal. 2001) (quoting Proposition 218, section 5).

112. *Id.* at 940.

113. *Silicon Valley Taxpayers Ass'n*, 187 P.3d at 48 (While not conclusive, statements in a preamble are entitled to consideration.).

114. *Id.* at 48–49. By extension, the same conclusion applies to “fees” or “charges.”

115. *Apartment Ass'n*, 14 P.3d at 936.

discussed above, negative externalities are costs not captured by the prices charged for water. As such, they are externalized, i.e., passed onto and borne by society in general,<sup>116</sup> and not by the individual customers at the end of the pipeline who most specifically benefit from the impact-causing withdrawals. Can such externalized costs be internalized or, in other words, included within the charges for “the service,” consistent with Proposition 218?

Of course, contemporary regulatory authorities often require design changes to prevent or mitigate environmental harms. To that extent, the costs of such changes to a water project’s design, construction, or operation should already be properly included within a publicly owned water supplier’s capital or O&M costs. But unless these changes account for a project’s entire gamut of negative environmental impacts, at least some costs remain externalized. In addition, many publicly owned water systems were authorized decades before contemporary environmental law applied to their design, construction, or operation. Until some event triggers a new regulatory review, users of these systems continue to cause substantial harm at the general public’s expense.<sup>117</sup>

Little argument appears that negative externalities are not true economic costs. If a dam is blocking fish passage necessary for spawning, the harm to that fish population is real, even if non-monetized and even if the state has concluded that the economic benefits from that dam outweigh the harm to public trust uses.<sup>118</sup> As with many negative externalities, the problem is

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116. In principle, a water project could also externalize costs that are borne by individual property owners. Also in principle, an individual so impacted could bring an action for nuisance or, in an appropriate case, trespass. To the extent that the uncertainty and other costs associated with bringing such an action inhibit property owners from bringing them, these barriers to suit function as the equivalent of costs being imposed on the general public. For convenience, the following discussion focuses solely on costs borne by the general public.

117. Such regulatory review might be triggered in one of three ways. First, the publicly owned water supplier might propose a new project or initiate a water transfer that required regulatory approval. Second, a regulatory agency might initiate such review itself. For example, California Fish and Game Code section 5937 requires the owner of a dam to keep “in good condition” any fish populations that exist below the facility. Many dams have never had specific flow requirements set to meet this requirement. The California Department of Fish and Wildlife can impose such requirements even on long-existing reservoirs. *See* Cal. Trout v. State Water Res. Control Bd. 255 Cal. Rptr. 184, 209 (Ct. App. 1989); Karrigan S. Börk, et al., *The Rebirth of California Fish & Game Code Section 5937: Water for Fish*, 45 U.C. DAVIS L. REV. 809, 816 (2012).

In addition, the common law public trust doctrine gives the State Board the authority to initiate public trust reviews of longstanding diversions. *See, e.g.,* Nat’l Audubon Soc’y v. Superior Court, 658 P.2d 709, 713 (Cal. 1983). Finally, members of the public may initiate regulatory review by filing a complaint under any number of statutes or common law doctrines. In many circumstances, the regulatory review will be conducted at least initially by an administrative agency. In some circumstances, such as under the public trust doctrine, the “regulatory” review may be conducted directly by the courts. *See id.*

118. Under longstanding law, the people of California “own” the fish and wildlife within the state. *See, e.g.,* People v. Truckee Lumber, 48 P. 374, 399–400 (Cal. 1897) (public ownership of fish); *see also* Ctr. for Biological Diversity, Inc. v. FPLL Grp., Inc., 83 Cal. Rptr. 3d 588, 595–96 (Ct. App. 2008) (state’s public trust duties extend to wildlife).

quantifying and monetizing those costs.<sup>119</sup> The difficulty of quantification alone, however, should not preclude their inclusion as proper “costs” of service recoverable under Proposition 218. Indeed, if “feasible,” *National Audubon Society* suggests that these costs *must* be included.<sup>120</sup>

As noted above, Proposition 218 does not define “cost.” The absence of a definition does not itself make a term ambiguous.<sup>121</sup> In the abstract, “cost” denotes multiple meanings, which can include: accounting cost, average cost, economic cost, financial cost, full cost, marginal cost, opportunity cost, replacement cost, and variable cost. The multiplicity of meanings easily suggests that the term is, indeed, ambiguous. As such, after finding an ambiguity, a reviewing court would need to follow the interpretive principles sketched out above.

Ultimately, the court would need to adopt a definition that promotes the policies behind Proposition 218. As summarized by the California Supreme Court, the fundamental concern behind the initiative was public agencies’ circumvention of Proposition 13’s restrictions on taxes through the subterfuge of euphemistically relabeling them “fees” or “charges.” Seen in this light, the conversion of the economic costs of a water supply to financial costs is not a euphemistic effort to bypass Proposition 13. Rather, it is to advance a publicly owned water supplier’s duty to protect public trust uses wherever feasible. Inclusion of externalized costs helps fulfill that duty in three ways. First, it lets its customers know the full cost of the water they purchase. Second, by raising the prices, it will reduce the amount of water demanded.<sup>122</sup> To the extent that reduced demand leads to reduced diversions, it reduces the harmful impacts on trust uses.<sup>123</sup> And finally, the revenues generated will be used to allow the water supplier to avoid, reduce, or mitigate the harms, or, in an appropriate case, to recover from harms imposed.

A court, however, might be attracted to a different conclusion about the meaning of “cost.” Such a court could be tempted to conclude that despite multiple possible meanings, in context, “cost” has a plain or ordinary meaning. As support, it could cite dictionary definitions of “cost.” For example, the most

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119. See CAL. CONST. art. XIIIID, §6 (a)(1) (requiring fee-levying entity to notify each fee-payer of “the basis upon which the amount of the proposed fee or charge was calculated”). Conceivably, these costs could increase as scarcity increases, if the relative impacts on public values accelerated with drought periods.

120. See *Nat’l Audubon Soc’y*, 658 P.2d at 712 (holding that the state must avoid or minimize harms to public trust resources where “feasible”).

121. See, e.g., *Goldstein v. Sec. & Exch. Comm’n*, 451 F.3d 873, 878 (D.C. Cir. 2006).

122. See *supra* note 29.

123. Of course, a senior water user’s curtailment of diversions leaves more water in the system for downstream junior diverters. In an overappropriated system, i.e., one where there are more claims for water than water to divert, someone downstream will divert the water. At a minimum, though, there will be higher flows than there otherwise would be in the stretch before the junior-most diverter intercepts it. In addition, there are provisions in the Water Code to allow diverters to dedicate water to instream flows. CAL. WATER CODE § 1707. If the State Board approves such a dedication, then downstream junior rights holders may not divert that water.

common definition would be some variant of “an amount that has to be paid or spent to buy or obtain something.”<sup>124</sup> This definition’s use of “paid” and “spent” both denotes and connotes conventional out-of-pocket type financial costs. In this light, other competing definitions of “cost” such as “average” or “marginal” cost reinforce the connotations of financial costs; they are simply different ways of considering expenditures.

At least at first blush, non-monetized costs, such as harmful impacts on public trust uses, do not seem to be included in this definition of “cost.” On closer examination, however, the would-be “plain meaning” disappears. Even if cash has not changed hands, someone has still “paid” or “spent” an “amount” so that the water can be diverted. In broadest terms, the general public has “paid” for the diversions by “spending” some of its natural capital. More subtly, a duly constituted publicly owned water supplier, acting under authority of the state, has “spent” an amount of the public’s trust-protected uses. However characterized, wealth, in the form of valuable trust-protected assets, has been transferred from the general public to the customers of a particular water supplier. Again, this transfer may all be in accordance with *National Audubon Society*’s recognition of the “necessity” for trust-harming diversions. Nevertheless, it is still a de facto transfer of wealth. Public capital has been spent.

The wording of Article XIID, section 6(b)(3) permits this broader interpretation of “cost.” It precludes fees that exceed “the proportional cost of providing the service.” Notably, it does not restrict the recoupment of costs to those paid by the publicly owned water supplier. Had such a result been intended, the provision would have been better written to preclude fees that exceeded “the proportional cost, *incurred by the [publicly owned water supplier]*, of providing the service.”

Absent a plain meaning, the court should adopt the interpretation of “cost” that includes non-monetized economic costs. Only that definition allows a publicly owned water supplier to fulfill its public trust duties. Proposition 218’s “cost of service” provision does not forbid the recovery of charges to repay the general public’s natural capital contribution.

## 2. “Opportunity Costs”: Nonconsumptive Uses of Natural Capital

Beyond accounting for the harms caused from negative externalities shifted onto the public, a full-cost accounting for the costs of water service would reflect two other matters. First, there are the opportunity costs that the general public absorbs from one water user’s diversions at the expense of others. Second, a full-cost accounting would attribute some value to the benefits received from the otherwise free use of water. Failure to include these

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124. *Definition of Cost*, OXFORD DICTIONARIES, [http://www.oxforddictionaries.com/us/definition/american\\_english/cost](http://www.oxforddictionaries.com/us/definition/american_english/cost) (last visited Oct. 27, 2013).

two charges amounts to a noncash, indirect subsidy.

If payments were required for the use of such public capital, the quantity demanded would fall.<sup>125</sup> The publicly owned water supplier would divert less. At least in watercourses that were not already over appropriated, the public could devote the water resources to economically more productive uses. Alternatively, resources could be devoted to ecologically more productive uses. In either event, everything else being equal, a public water supply agency's use, without charge, of water encourages more use than if a natural capital charge were included, and precludes the use elsewhere of the excess<sup>126</sup> water diverted. In effect, the free use of water functions as an indirect subsidy. And as things stand now, the greater the volume of water used by an individual water user, the greater the public subsidy that user receives. While there may be historical, political, or policy reasons why such subsidies occur, none of those reasons excuses their consideration as "costs."

A comparison with private capital is instructive. In conventional debt financing, bondholders generally expect two types of payments for the use of their capital. First, they expect a particular annual rate of return *on* their capital, e.g., 5 percent. Second, they generally expect the return *of* their capital itself, over some specified period, e.g., thirty years. By analogy, operators of water projects could be expected to, at a minimum, include some cost that was equivalent to a reasonable rate of return on the investment of the general public's "natural" capital.<sup>127</sup> Such an inclusion would send pricing signals that better reflect the full range of social costs<sup>128</sup> for the provision of water supplies. Moreover, where a water project requires the dedication of public capital to a particular type of use, that project should include a charge that is equivalent to

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125. See Zetland, *supra* note 22. The amount by which the quantity demanded would fall would depend upon how sensitive water consumption is to price changes. Economists refer to such sensitivity as the price elasticity of demand: the ratio of the percentage change in the amount demanded to the percentage change in price. The price elasticity of demand depends upon a variety of factors. Indoor water demand is relatively insensitive to price increases; demand for landscaping water, however, drops with price increases. See, e.g., David Zetland, *Elasticity of Demand*, AGUANOMICS (May 23, 2008), <http://www.aguanomics.com/2008/05/elasticity-of-demand.html>.

126. "Excess" refers to the amount of water that would not have been diverted if an appropriate charge were added to reflect the water's value either in another's hands or left for ecosystem uses. That value should rise in times of greater scarcity, sending further appropriate pricing signals.

127. Article XIII of the California Constitution limits the imposition of *ad valorem* taxes and requires a two-thirds vote before many other taxes may be imposed or raised. See, e.g., CAL. CONST. art. XIII, § 3A. A natural capital charge, however, should not trigger either of these tax restrictions. Rather, it would be the monetization of a *cost* otherwise being borne by the general public.

128. In calculating this return, the benefits produced by the project should be included, as this is already a return to the general public. For example, while damming a river costs the public the values associated with a free-flowing stream, it gives the public the values associated with flat-water uses. So while kayakers are not going to be running a whitewater river, they can still paddle on the reservoir itself. And other recreational boaters can use boats on flat water that aren't possible on white water. Similarly, water projects can produce positive externalities. For example, land values around a reservoir often rise as people build homes that take advantage of views over and access to the reservoir. Thus, in calculating costs, it should be the net public cost that needs to be recouped.

the return *of* public capital.<sup>129</sup>

Beyond the opportunity costs and the free provision of water, other indirect subsidies exist. For example, water systems frequently depend upon the maintenance of conditions conducive to adequate drainage in the watershed where the supply originates. To the extent that a publicly owned water supplier must spend money to protect those sources, such as through the purchase or condemnation of privately owned real property or the acquisition of conservation easements, these costs are already treated as long-term, capital investments.<sup>130</sup> The headwaters of many of the watercourses that supply Californians, however, are in publicly owned national forests. Indeed, water supply protection is one of the two primary purposes of the national forest system.<sup>131</sup> To the extent that downstream water users are dependent upon the maintenance of upstream forests, the downstream users are, at a minimum, receiving a subsidy from the forest owners.<sup>132</sup> Again, a charge that recouped this subsidy would better reflect the true cost of water.

A water supplier that included such costs in its charges would be able to send clear pricing signals to its customers about the full range of costs incurred in providing the service. Conceivably, these costs could increase as scarcity increases, if the relative impacts on public values accelerated with drought periods.

Compatibility of such charges with Proposition 218's "cost of service" provision raises many of the same issues analyzed above. Assuming the water supplier could adequately justify the amounts charged,<sup>133</sup> the legal question

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129. In response, a growing number of voices have called for the imposition of a public goods "charge" upon water users. *See, e.g.*, ELLEN HANAK ET AL., *MANAGING CALIFORNIA'S WATER: FROM CONFLICT TO RECONCILIATION* 344–46 (2011), *available at* [http://www.ppic.org/content/pubs/report/r\\_211ehr.pdf](http://www.ppic.org/content/pubs/report/r_211ehr.pdf). Such a charge could attempt to capture funds to defray the costs of demand management and ecosystem restoration. Hanak et al., however, conclude that such charge would amount to a tax and thus would require a two-thirds vote. *See id.* at 345 n.18.

130. In one well-known case in California, the Westlands Water District purchased a substantial amount of property in the McCloud River watershed, above Shasta Dam. These lands would be inundated were Shasta Dam to be raised in an effort to increase the dam's water storage abilities. *See Shasta Dam Expansion: Flood of Concerns*, REDDING REC. SEARCHLIGHT, <http://www.redding.com/news/2007/feb/19/flood-concerns/> (last visited Mar. 20, 2013). While this is not watershed protection per se, it exemplifies the kind of headwaters actions that districts choose to take to protect or expand their supplies.

131. *See, e.g.*, *United States v. New Mexico*, 438 U.S. 696, 706–07 (1978).

132. Indeed, use of national forests as watershed protection means that the opportunity costs are being born by the nation as a whole, not just California's general public. Hidden water supply costs are thus shifted to national taxpayers, not an individual water supplier's customers. Again, there are a whole host of policy reasons why devoting nationally owned land to water supply protection might be a good idea. Again, however, the costs of those policy decisions are borne by the nation as a whole, not individual water customers at the end of the pipeline. The prices paid for water by those customers do not reflect the full cost of all the inputs necessary for obtaining that supply.

133. In some ways, it may be easier for the supplier to justify these charges than to attempt to put values on the externalized costs addressed in the preceding section. A reasonable rate of return could be determined by consideration of returns in conventional capital markets, e.g., long-term municipal bonds. As for quantification of opportunity costs, to the extent there are other economic uses of the resource,

turns on whether such heretofore non-monetized costs are properly chargeable to customers as part of the “cost of service.” For the same reasons that the preceding section’s non-monetized economic costs are compatible with Proposition 218, a charge to reflect the otherwise free use of the general public’s natural capital should also be permissible.

### 3. *Accumulated Costs and Subsidies*

Inclusion of charges to reflect the general public’s costs of providing water in the current year is the minimum a publicly owned water supplier can do to ensure that its water prices reflect the full costs of providing water service. A further step would be inclusion of charges that reflect previously unrecouped costs imposed upon the general public. To the extent that public water suppliers have benefitted from prior years’ negative externalities and public subsidies, they have, in effect, been accumulating a debt to the general public. Charges to reflect payment of this debt could also be considered “costs” of providing water service.

Legal justification for a publicly owned water supplier’s imposition of a charge to recover for past harms to, or free uses of, the general public’s natural capital presents a more difficult task. Citing pre-environmental movement social values, some customers will argue that that no such debt has ever existed; water diverters and dam builders were given virtual *carte blanche* to use the public’s natural capital even if it meant destroying public trust uses. If no debt to the general public occurred at the time a, say, pre-1950s project was constructed, it follows that no debt has accumulated over the intervening years. If no debt has occurred, then a publicly owned water supplier cannot impose a charge meant to pay down those debts. Any such charge would violate Proposition 218 since it does not reflect a cost incurred in providing water service.

*National Audubon Society* itself demonstrates that, as of 1940, the state water rights permitting authority believed that it *had* to approve any application for domestic water uses. It believed that, at least for such uses, it had *no* authority to consider the impact on fish and wildlife.

But *carte blanche* for all diverters goes too far, even under nineteenth-century values. At least for those diverters who constructed a dam as part of their storage or diversion works, longstanding law has required them to maintain “in good condition” any fish that may exist below the dam.<sup>134</sup> Currently codified as Fish and Game Code section 5937, a version of the prohibition can be traced to Penal Code provisions adopted in the nineteenth

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the difference in the value of the outputs from the two sets of uses (i.e., the permitted use and the foregone use), would provide a good foundation.

134. CAL. FISH & GAME CODE § 5937 (West 2013).

century.<sup>135</sup>

To counter those who are unpersuaded that publicly owned water suppliers were given carte blanche to impose costs on the general public, a different set of arguments will likely be raised. Like the costs and subsidies for the current year's operations, these charges would be difficult to calculate. They also raise unique legal issues.

Lawyers could raise such principles as the statute of limitations, laches, and equitable estoppel to preclude any accounting for past harms to, or free uses of, such capital. In effect, they could argue that it is simply too late to demand recovery for decisions made and actions taken many, many years ago.

At least superficially, such denials and defenses have some appeal. How far back should such liability go? How fair is it to require current and future generations of customers to pay for past customers' free ride? Why should today's customers have to pay for the "sins" of their ancestors? Yet many of those same customers continue to benefit from their ancestors' actions, at least for those water systems whose supplies and infrastructure stem from longstanding diversions.

In effect, at issue here is ultimately the existence of a general duty to restore, where feasible, public trust values degraded by actions taken 50, 100, or even more years ago. If such a duty exists, then the costs of such restoration activities can properly be considered as Proposition 218 "costs" required to provide a public water supply. If no such general duty exists, then, without more, voluntarily undertaken restoration activities might not be attributable to the "costs" of providing water.<sup>136</sup>

It is not clear that the public trust imposes any duties retroactively. A broad reading of *National Audubon Society* could suggest some sort of duty to restore, provided that the restoration efforts are "feasible."<sup>137</sup> In addition, the opinion specifically authorizes reconsideration of past water allocation decisions.<sup>138</sup> Still, it seems one thing to tell a diverter to reduce its diversions *today*. To the extent that increased flows will undo harms to public trust uses, restoration comes about as a result of changes in current behavior. But restoration of flows alone will not necessarily restore all of the prior public trust uses.

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135. Current section 5937 comes from former Fish and Game Code section 525, as amended 1937 Cal. Stat. 1400. Section 525, in turn, traces its roots to Penal Code provisions. See CAL. PENAL CODE § 637 (1872) (enacted) (amended 1891, 1903, 1915, and 1917).

136. The "something more" might be the publicly owned water supplier's need for a permit. For example, an agency with a longstanding diversion might find that it has to undertake habitat or other restoration actions in order to get an incidental take permit under the federal Endangered Species Act. If the restoration actions were mandated under that act, they would be necessary costs of operating the system.

Of course, a publicly owned water supplier could undertake restoration activities that were paid for by a grant. The costs of those activities would not need to be passed on to its customers.

137. *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d 709, 712 (Cal. 1983).

138. *Id.* at 728.

Therefore, perhaps the ability to reconsider and require feasible protection of trust uses could allow the state to condition the *future* exercise of an existing right to divert upon the remedy of past impacts. But nothing in the opinion requires a diverter to go back and undo the effects of its previously permitted diversion.

Absent the compulsion of the public trust doctrine, other positive laws may require some ecosystem restoration. The federal and state Endangered Species Acts are most relevant. If a diverter's ongoing operations are harming ("taking") a listed species, the diverter will need to halt those operations unless it obtains an "incidental take" permit.<sup>139</sup> The issuing agencies may well condition the grant of such a permit upon the permittee's ability to help the species recover. In such a case, the costs of the recovery activities will certainly be includable as "costs of service" consistent with Proposition 218. Absent a very broad reading of the public trust doctrine, or some other positive law, imposition of charges to, in effect, recoup an accumulated debt raise too many issues to pursue further here.

### C. Calculation of Costs

The calculation of all of the non-monetized, economic water costs, discussed in the preceding sections, undoubtedly presents greater challenges than the identification of system costs. Conventional cost components, such as bond repayment and O&M costs, and demand management efforts pose no conceptual hurdles because water suppliers are accustomed to addressing these financial costs.<sup>140</sup> But the calculation of some of the other components identified above pose substantial challenges. For example, no markets exist to determine the values of a project's negative externalities. Economists struggle to set values for these nonmarket goods.<sup>141</sup> Shadow values, or minimum values, are often all that can be determined.<sup>142</sup>

Inclusion of such costs in rates subject to Proposition 218 will certainly trigger particularly close scrutiny. In an action challenging a water rate under Proposition 218, the burden of proof lies with the publicly owned water supplier.<sup>143</sup> Any supplier who wants its charges to more accurately reflect the true cost of water will need to justify the calculation of these costs with expert economic opinion. Assuming any such costs can be included at all, the safest approach for a publicly owned water supplier would be to use values that represent floors rather than ceilings.

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139. 50 C.F.R. § 17.3 (2013); *Babbitt v. Sweet Home Chapter of Cmty. for a Great Or.*, 515 U.S. 687, 696–700 (1995).

140. See, e.g., CAL. DEP'T OF WATER RES., *supra* note 78, at 22, 27–33 & app. C-2.

141. *Id.*

142. For a discussion of shadow values, see David Starrett, *Shadow Pricing in Economics*, 3 ECOSYSTEMS 16 (2000).

143. CAL. CONST. art XIII, § 6(b)(5).

#### D. “Funds” and “Purposes” Restrictions

Even if a publicly owned water supplier were able to identify, quantify, and include any of the non-monetized costs described in Part IV as a Proposition 218 “cost of service,” Proposition 218 places two other hurdles in the attempt to recoup those “costs” from water users. First, article XIII D, section 6(b)(1) does not allow revenues to “exceed the funds required to provide” water service. Second, section 6(b)(2) does not allow revenues to “be used for any other purpose other than that for which the fee or charge was imposed.” Consideration of both of these provisions requires application of the interpretive provisions set out above.

##### 1. “Funds Required”

At least two issues arise under section 6(b)(1). First, what can constitute “funds”? Second, who or what can “require” the recoupment of those funds?

If a third-party regulator, such as the State Water Resources Control Board or the Department of Fish and Wildlife, were to validly require a publicly owned water supplier to pay money to support, say, an ecosystem restoration program, those payments would meet both elements of section 6(b)(1). The money paid would easily qualify as “funds” that could be recouped through customer charges. Ordinarily, “funds” connotes cash or cash equivalents.<sup>144</sup> And the obligation to make such payments would be “required” by the relevant regulator. These are simply the costs of doing business that can properly be passed onto customers.

Problems would arise, however, if publicly owned water suppliers were to attempt to recoup negative externalities or the use of natural capital, on their own initiative. Unless something “requires” the publicly owned water supplier to devote “funds” to such purposes, they potentially run afoul of section 6(b)(1)’s “funds required” limitation.<sup>145</sup>

As with “costs,” “funds” is susceptible to multiple meanings. A court willing to take a broad definition of “funds” could allow the district to recover a broader range of non-monetized “costs.” While “funds” most commonly connotes “money,” Webster’s defines “fund” as “a sum of money *or other resources* whose principal or interest is set aside for a specific objective.”<sup>146</sup> In this broader sense, publicly owned water suppliers that are using the general public’s natural resources are using “other resources” to provide water services. As long as the publicly owned water supplier’s overall charges do not exceed the value of the cash *or other (noncash)* resources “required” to provide the water, the supplier can meet the “funds” limitation. Such an interpretation

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144. Webster’s second definition of “funds” is “an available quantity of material or intangible resources.” *Definition of Fund*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/fund> (last visited Oct. 19, 2013).

145. CAL. CONST. art. XIID, § 6(b)(1)–(3).

146. *Definition of Fund*, *supra* note 144 (emphasis added).

allows a publicly owned water supplier to fulfill public-trust-related duties.

Assuming that a charge to reflect noncash commitments of “other resources” meets section 6(b)(1)’s “funds” limitation, a publicly owned water supplier must still show that the costs are “required.” Again, fees that are lawfully imposed by third-party regulators easily meet this provision.<sup>147</sup> However, a publicly owned water supplier that acts on its own initiative to pass on, to its specific customers, the costs of the use of resources owned by the general public must still demonstrate that these costs are “required.”

This “required” requirement should pose fewer difficulties to overcome than the “funds” limitation. Fundamentally, if a water supply project cannot operate without either passing on costs to the general public or using the general public’s property for free, then the project “requires” what is, in effect, a general public subsidy. Effectively, these subsidies are integrated into a project’s very design; they are operating assumptions that are necessary and essential to the project’s operation.<sup>148</sup> To that extent, the project “requires” the free use of resources owned by the general public. A charge meant to recoup those costs provides cash equivalents for the funds, broadly conceived, required for the project.

A broad interpretation of the “funds required” provision is consistent with both section 6(b)(1)’s text and purpose. Proposition 218 was meant to keep public entities from raising more revenues than required to provide a given service. The concern was that public entities were using “fees and charges” to circumvent Proposition 13’s limitation on taxes.<sup>149</sup> Where revenues exceeded costs, surpluses generated could then be diverted to general funds, effectively skirting Proposition 13’s requirement of a two-thirds vote before taxes could be raised. Proposition 218 does not purport to restrict the ability of publicly owned water suppliers from recouping the well-documented, legitimate costs of providing water service. It says nothing about what can constitute either “funds” or “requirements.” It just says that revenues may not exceed required funds.

## 2. “Purpose”

In addition to meeting Section 6(b)(1)’s “funds requirement” provision, a publicly owned water supplier must meet Section 6(b)(2)’s requirement that revenues may “not be used for any purpose other than that for which the fee or charge was imposed.” Where a publicly owned water supplier’s charges reflect nonmonetary costs otherwise absorbed by the general public, its revenues may

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147. Webster’s first definition of “require” is “to claim or ask by right and authority.” *Definition of Require*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/require> (last visited Oct. 19, 2013).

148. Indeed, Webster’s second and third definitions of “require” easily encompass this kind of obligation. The secondary second definition states: “to demand as necessary or essential: have a compelling need for.” The primary second is even broader: “to call for as suitable or appropriate.” *Id.*

149. See *supra* notes 113–15 and accompanying text.

lead to surplus cash. Such a cash surplus would run afoul of Proposition 218's intended limits, unless used to otherwise support the provision of water service. Under section 6(b)(2), questions arise as to what the publicly owned water supplier may do with cash derived from recoupage of the general public's costs.

The ease of answering these questions depends upon the specific purposes to which the publicly owned water supplier devotes the funds. Again, the simplest situation is where a third-party regulator properly requires the publicly owned water supplier to mitigate the specific impacts of its project, either through a cash payment to some entity, or by undertaking specific activities that, in turn, require payments to employees, contractors, or suppliers. No issue should arise as to whether these required expenditures of funds are for the provision of water service; they are required by the regulator as a condition of allowing water project operations.

Again, a publicly owned water supplier's self-initiated efforts to collect charges to defray the general public's costs raise more difficult questions. In this respect, the simplest solutions to defend are cases where the publicly owned water supplier makes efforts to avoid, mitigate, or restore harms caused by its specific project(s). For example, if a dam blocks fish passage, a publicly owned water supplier that spent funds to avoid or mitigate the harms, or to restore the ecosystem from prior harms, should have no trouble meeting section 6(b)(2)'s "purpose" requirement. These efforts are meant to address specific costs imposed by the specific project involved. They are not funds being taken from water customers and being devoted to, say, police, fire, library, transportation, schooling, or public health purposes. They are not piling up, unused, in bank accounts. No circumvention of Proposition 218's prohibition against cross-subsidizations of one service by another occurs.

Two situations, however, raise greater interpretive difficulties. First, publicly owned water suppliers might want to use the cash "surpluses" to help defray costs imposed on the general public *by others*. For example, it may be more cost-effective for publicly owned water suppliers to help restore a wetland impacted by another party's project. Second, a supplier might want to use the cash surpluses to help improve the reliability of its system or its supply. For example, it might want to reinvest these cash surpluses in replacing pipes, pumps, or other hardware.

Conceptually, the first situation should pose no problem under section 6(b)(2). If a publicly owned water supplier imposes a charge to defray environmental costs otherwise imposed on the general public, it should not matter which aspect of the general public's environmental costs the supplier chooses to address. As long as there is correspondence between the amount of the costs imposed on the general public and the amount of the charges imposed on specific customers to defray these costs, the publicly owned water supplier ought to be able to spend the funds on any project that otherwise helps avoid such costs, mitigate for them, or recover from them. This is consistent with

longstanding mitigation “practice.” For example, a project developer who has to fill in a certain amount of wetlands is often required to purchase or create a comparable—or greater—amount of wetlands on another site.<sup>150</sup>

The transfer of funds from the publicly owned water supplier to the State would present a more difficult question. At least initially, such a transfer would appear to be an end-run around Propositions 13, 26 and 218: money would be going from local customers to the state without meeting the two-thirds voting requirements.

On closer inspection, however, no end-run occurs. The initiators of Proposition 218 were concerned with the use of *over*-charges to fund programs other than those for which the charges were collected. The surplus revenue came from public entities charging more than their *costs*. The revenues generated functioned as a tax even if they masqueraded as a fee. If reasonably computed, however, a charge that attempted to internalize costs otherwise imposed upon the general public is, indeed, a charge to defray actual—if nonmonetary—costs. These are the equivalent of rents paid to the state for use of publicly owned assets, or costs imposed by a district contractor.

The same conclusion should be drawn whether the money transferred to the state is deposited into a special fund or a general fund. If the general public charges are earmarked for a state-funded program to avoid, mitigate, or otherwise recover from environmental harms, there should be no problem with Proposition 218. The fees would be charged for harms to the general public’s interest in healthy ecosystems. The funds would be used by the state to promote the general public’s interest in healthy ecosystems. There is a nexus between the costs recouped and the specific revenues expended.

Even if the publicly owned water supplier transfers these revenues to the state’s general fund, without having them earmarked to avoid, mitigate, or recover from environmental harms, no Proposition 218 violation should occur. Again, the charges are being collected to recoup costs passed onto the general public, whether from negative externalities or free use of publicly owned resources. They are not an attempt to collect a “tax” imposed without any direct nexus to any costs specifically incurred by the state. The general public, through the state, is analogous to an owner of property who receives rent for that property’s use, or damages for that property’s misuse. Property law does not require landlords to take rents collected and reinvest them in the rented property. Similarly, tort law does not require a damaged property owner to take the damages received from an action to recover for those injuries to real property and devote them to restoring the damaged property itself. In either

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150. See, e.g., Compensatory Mitigation Requirements for Losses of Aquatic Resources, 73 Fed. Reg. 19,594 (April 10, 2008) (codified at 33 C.F.R. pts. 325, 332 & 40 C.F.R. pt. 230); RICHARD F. AMBROSE ET AL., AN EVALUATION OF COMPENSATORY MITIGATION PROJECTS PERMITTED UNDER CLEAN WATER ACT SECTION 401 BY THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD 1991-2002, at ii (2007), available at [http://www.waterboards.ca.gov/water\\_issues/programs/cwa401/docs/mitigation\\_finalreport\\_full081307.pdf](http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/mitigation_finalreport_full081307.pdf).

case, the property owner can use the rents or damages collected for whatever lawful purpose he or she wishes. At least for purposes of Proposition 218, the state, acting on the general public's behalf, should be in no worse a position.

Although there may be no violation of Proposition 218, the state's use of environmental mitigation fees for non-environmental purposes might well run afoul of common law public trust duties. As articulated by the California Supreme Court, in supervising the use of the state's waters, the state has an affirmative duty to take the public trust into account whenever feasible.<sup>151</sup> If a publicly owned water supplier is collecting funds to address costs imposed on the state's public trust resources, then, unless infeasible, the state should use those funds to help avoid, mitigate, or otherwise recover from harms to public trust resources.

Finally, a publicly owned water supplier's use of cash "surpluses" to fund improvements in the reliability of its water system or supply also raises difficult issues under section 6(b)(2). On their face, such expenditures seem to comport with the constitutional requirement. The charges are collected to defray the costs of providing water service. The revenues are being spent to improve water service. Again, at least initially, from a legal perspective, the expenditures seem to meet Proposition 218's literal requirements.

From a policy perspective, it seems inappropriate to allow a freeloading entity to use revenues generated to compensate *for* the freeloading to freeload even more. And, on closer inspection, not only would such a use be poor policy, it would also run afoul of the common law public trust duties. Local public agencies are subject to the public trust doctrine.<sup>152</sup> If a publicly owned water supplier is collecting funds to address costs imposed on the state's public trust resources, then, unless infeasible, that entity should use those funds to help avoid, mitigate, or otherwise recover from harms to public trust resources.

## CONCLUSION

In many ways, Proposition 218 seems to have accomplished much of its intended effect. Customers do not welcome an increase in their water bills. Publicly owned water suppliers now know that every rate increase will be closely scrutinized. They must document their costs carefully. They must explain to the public the rationale for a price increase. They know that proposed rate hikes can be set aside if sufficient protests are filed. Indeed, if greater than 50% of the mail-back ballots returned from its customers oppose the rate hike, the proposed rate structure will fail.<sup>153</sup>

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151. Nat'l Audubon Soc'y v. Superior Court, 658 P.2d 709, 728 (Cal. 1983); State Water Res. Control Bd. Cases, 39 Cal. Rptr. 3d 189, 272 (Ct. App. 2006).

152. Ctr. for Biological Diversity, Inc. v. FPLL Group, Inc., 83 Cal. Rptr. 3d 588, 602-04 (Ct. App. 2008).

153. For an example of a recent rate election in the city of Davis, California, see Darrell Smith, *Davis Water Project Seems Headed to Victory*, SACRAMENTO BEE (Mar. 6, 2013, 12:00 AM), <http://www.sacbee.com/2013/03/06/5239798/davis-water-measure-appears-headed.html>.

Even if a majority of the mailed in rate hike ballots support the proposal, the publicly owned water supplier still faces legal challenge for violation of the substantive provisions of Article XVIII (b). The suppliers bear the burden of proof in any such challenge. They must convince the court that their rate structure collects no more revenue than required to meet the costs of providing the water service.

For too long, however, water in California has been taken for granted. This author believes that too many people in the state have no idea where their water comes from before it reaches their tap.<sup>154</sup> Except in years where lawns go brown from water restrictions, a perception of water abundance exists in far more residences than it should.

A lingering reason for the perception of abundance comes from the way water is priced. Water costs often do not capture the costs passed on to the general public, or the de facto subsidies indirectly provided to individual customers by the general public. Furthermore, water prices frequently do not reflect the relative scarcity of water in a given year. When laws like Proposition 218 require water to be priced at the cost of delivery, and when that cost of delivery changes little in a drought year, price signals do not communicate the relative scarcity of water. Unlike all other goods in the marketplace, water's price changes little during times of scarcity. This pricing structure causes people to demand more water than is available at the given cost; a shortage results when people's consumptive behavior does not change in response to pricing signals.

With a pricing structure that includes a charge for impacts on, or de facto subsidies from, the general public, a publicly owned water supplier can simultaneously accomplish four things. First, it can communicate to its customers the true costs of the water they use. Second, in most situations, an increase in price will lead to a decrease in quantity demanded. Such a decrease can help to eliminate shortages. Third, a price-induced decrease in the quantity demanded will, in turn, reduce the diversion-related impacts on public trust uses. And finally, funds generated by the charges can, and should, go toward avoiding, minimizing, mitigating, or recovering from the harms—even the “necessary” ones—imposed on the general public for the uncompensated use of public trust resources.<sup>155</sup>

Public-resources charges raise substantial political challenges in addition to practical and legal complexities. As for the practical challenges, the identification, quantification, and monetization of heretofore non-monetized natural-resources costs is a difficult undertaking. Even if, conceptually, most can agree that there are such costs in conjunction with water diversion and use,

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154. Cf. *Where Does My Water Come From?*, AM. RIVERS, <http://www.americanrivers.org/rivers/about/where-does-my-water-come-from.html> (last visited July 23, 2013) (“Where does my drinking water come from? For many, the answer is the kitchen faucet.”).

155. See *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d 709, 712 (Cal. 1983) (discussing necessity for diversions).

assigning a non-arbitrary value for such costs will surely lead to dispute. The Legislature could help make this part of the task easier by developing a schedule of presumed harms, akin to the worker's compensation system.<sup>156</sup>

As for the substantive legal challenges, Proposition 218 raises five principal issues. First, and most fundamentally, a court must determine that "costs of service," as used in the relevant provision, is ambiguous. Second, the court must conclude that a plausible construction of "costs of service" would include the full range of a service's costs, both monetized and non-monetized.<sup>157</sup> Third, the court must conclude that such a construction is consistent with underlying purpose behind the initiative: to eliminate the linguistic subterfuges that circumvented supermajority provisions by masquerading taxes as "fees." Fourth, the court must conclude that non-monetized resources can be considered "funds required" for the provision of service. Finally, the court must determine the permissible "purposes" for which the supplier may use the revenues.

The publicly owned water supplier that dares run this political, practical, and legal gamut will have the common law public trust on its side. Indeed, if courts take seriously *National Audubon Society's* command that the state protect public trust uses where "feasible," then arguably these suppliers have not just the right, but also the duty, to undertake the kinds of trust-protecting activities suggested here. Courts should adopt an interpretation of Proposition 218 that permits publicly owned water suppliers to fulfill their trust-protecting duties. The public must accept that, just as there is no such thing as a free lunch, so, too, there is no free glass of water.

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156. CAL. CODE REGS. tit. 8, §§ 10150–10169 (2013).

157. The inclusion of "proportional" to modify "costs of service," with the latter phrase followed by "attributable to the parcel," suggests a strong desire, on the part of the drafters of the initiative, to avoid the subsidization of one user, or group of users, by other users. In effect, each user should bear its share, and no more than its share, of the overall system costs. This "no subsidization" principle provides further support to the inclusion of heretofore non-monetized costs within the "costs of service." As argued throughout this Article, failure to include those costs amounts to de facto subsidization of one group of people—the supplier's customers—by another—the general public.

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