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# Water Rights and the Public Trust Doctrine: Resolution of the Mono Lake Controversy

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#### INTRODUCTION

Mono Lake lies in a lifeless, treeless, hideous desert 8,000 feet above the level of the sea and is guarded by mountains 2,000 feet higher whose summits are always clothed in clouds. This solemn, silent, sail-less lake, this lonely tenant of the loneliest spot on earth is little graced with the picturesque.

— Mark Twain<sup>1</sup>

Given Twain's assessment, it may be hard to fathom the level of excitement Mono Lake has generated over the last two decades. Nonetheless, this isolated water body has been ground zero for the most significant developments in California water law since Mrs. Herminghaus and her cows.<sup>2</sup>

Mono Lake first came to prominence in 1983, when the California Supreme Court held that the public trust doctrine applies to all state water rights, and in particular to the water rights held for over forty years by the City of Los Angeles ("City") and its Department of Water and Power ("LADWP").<sup>3</sup> *National Audubon Society v. Superior Court* established that California's appropriative rights system

1. MARK TWAIN, *ROUGHING IT* 201 (Penguin Group 1980) (1872).

2. *Herminghaus v. Southern California Edison Co.*, 252 P. 607 (Cal. 1926) (refusing to apply legislative definition of "useful and beneficial purposes" to riparian rights of one whose wasteful use satisfied the common law standard for a useful and beneficial purpose). The controversial result in *Herminghaus* is widely credited for provoking the passage of the state constitutional amendment—article X, section 2—establishing that all California water rights holders must put their water to reasonable use. *California Trout, Inc. v. State Water Resources Control Bd.*, 255 Cal. Rptr. 184, 207 (Ct. App. 1989). See discussion *infra* part I.B.1.

3. *National Audubon Soc'y v. Superior Court*, 658 P.2d 709 (Cal. 1983), *cert. denied*, 464 U.S. 977 (1983) [hereinafter *National Audubon*].

and the public trust doctrine are parts of an "integrated system of water law."<sup>4</sup> In doing so, the court reaffirmed that the doctrine places a substantive burden on the state to protect trust resources affected by water rights and to allow harm to these assets only when it is infeasible to do otherwise.<sup>5</sup> However, the court made no attempt to dictate any particular allocation of water for the Mono Basin, leaving to the State Water Resources Control Board ("SWRCB" or "Water Board") the task of reexamining Los Angeles' water rights to ensure conformity with the public trust.<sup>6</sup>

The State Board has now spoken on this issue in a cogent decision with significant implications for future water allocation disputes. State Water Board Decision 1631 ("Order")<sup>7</sup> drastically reduces Los Angeles' allotment of water from the Mono Basin, which had supplied about 17% of LADWP's water since 1970. The Order requires LADWP to allow Mono Lake to rise sixteen feet above its current elevation. The Order further establishes minimum stream flows for the Mono Basin tributary streams and requires LADWP to undertake substantial restoration of Mono Lake and its tributaries.

The Board's decision is faithful to the state supreme court's direction: it protects trust resources, yet scrupulously addresses the costs of changing the City's water rights after more than fifty years. This article concludes that the correct balance was struck and that the decision establishes a framework that can be extremely useful in future decisions addressing the integration of the public trust with appropriative water rights.

In hindsight, the most remarkable feature of the battle over Mono Lake is how utterly avoidable it was. In 1983, the California Supreme Court observed, "there seems to be little doubt that both the scenic beauty and the ecological values of Mono Lake are imperiled."<sup>8</sup> However, the dangers were neither unexpected nor unintended.<sup>9</sup>

4. *Id.* at 732.

5. *Id.* at 727-28, 732.

6. *See id.* at 729 (holding that "some responsible body" should reconsider the allocation, and describing the Water Board as that body).

7. Decision and Order Amending Water Right Licenses to Establish Fishery Protection Flows in Streams Tributary to Mono Lake and To Protect Public Trust Resources at Mono Lake and in the Mono Lake Basin, Decision 1631 (Cal. State Water Resources Control Board, Sept. 28, 1994) [hereinafter *Order*].

8. *National Audubon*, 658 P.2d at 711.

9. *See W. KAHRL, WATER AND POWER: THE CONFLICT OVER LOS ANGELES' WATER SUPPLY IN THE OWENS VALLEY* (1982). According to KAHRL, the state fully expected the adverse ecological impacts of constructing the aqueducts:

The various state reports prepared during the early 1960s on the water supply of Owens and Mono basins predicted that [LADWP's] diversions into the second aqueduct would reduce the flows into Mono Lake by 40 percent. [LADWP] itself estimates that the lake will continue to decline over the next fifty to one hundred years.

When the State Board granted LADWP's permits in 1940, it was fully cognizant that this action would decimate the trust resources of Mono Lake. The Board characterized this inevitable result as "indeed unfortunate," but stated that "there is apparently nothing that this office can do to prevent [the harmful diversions]."<sup>10</sup>

This error and others like it are central to the development of modern western water law. Far more today than in 1940, consumptive and *in situ* uses of water are clashing. These conflicts can result in needless damage, ultimately reaching ecological decimation, unless society establishes meaningful protections for important aquatic resources in the first instance. There is nothing profound in the observation that it is easier and cheaper to prevent damage than to repair it later. Ecological protection on the front end actually benefits water rights holders by increasing water supply reliability.<sup>11</sup> Such an approach can only benefit our "common heritage" in streams, lakes, and rivers.

This article revisits the public trust doctrine and *National Audubon* in light of the California State Water Resources Control Board's Mono Lake decision. The article then demonstrates how the resolution of the Mono Lake controversy provides meaningful guidance for avoiding or resolving similar clashes in the future.

## I

### LEGAL BACKGROUND

#### A. *History and Basis of The Public Trust Doctrine*

The Western concept of paramount public rights in water resources is generally attributed to principles of Roman law summarized in the codes of the Byzantine Emperor Justinian.<sup>12</sup> These precepts

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*Id.* at 430.

10. *National Audubon*, 658 P.2d at 714, citing Division of Water Resources Decs. 7053, 7055, 8042, and 8043 (Apr. 11, 1940).

11. See Joseph L. Sax, *The Limits of Private Rights in Public Waters*, 19 ENVTL. L. 473 (1989) (discussing the use of the public trust doctrine to avoid disappointment of economic expectations); Michael Blumm and Thea Schwartz, *Mono Lake and the Evolving Trust in Western Water*, 37 ARIZ. L. REV. 701 (1995) (discussing the trust doctrine in California and other western states).

12. "By the law of nature these things are common to mankind—the air, running water, the sea and consequently the shores of the sea." *National Audubon*, 658 P.2d at 718 (quoting J. Inst. 2.1.1). See also J. Stevens, *The Public Trust: A Sovereign's Ancient Prerogative Becomes the People's Environmental Right*, 14 U.C. DAVIS L. REV. 195 (1980) (summarizing the origins and development of the public trust doctrine); Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 475-78 (1970) (describing the historical background of the public trust doctrine). For discussions regarding additional sources of the public trust doctrine, see C. Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENVTL L. 425, 429 (1989) (describing principles of public water rights as developed by non-western cultures); Harrison Dunning, *The Public Trust: A Fundamental*

eventually migrated to England, where the notion of sovereign ownership of water was appended.<sup>13</sup> By the time the public trust doctrine arrived in the American colonies, British law had reconciled sovereign ownership with the notion of a public common right in water through a trust model: although the sovereign held formal ownership of the resource, he held it in trust for the people.<sup>14</sup> Hence, the sovereign could not grant ownership of water into private hands.<sup>15</sup>

In the United States, the public trust in water has evolved into a continuing public burden or easement on private rights in such resources.<sup>16</sup> The following section discusses the legal and historic basis of the American public trust doctrine and its application.

### 1. Nature of the Public Trust

Early American federal law established the basis for state public trust law. The U.S. Supreme Court declared that rights in the beds of navigable waters were held in trust by the English Crown. Following the American Revolution, the states succeeded to this trust burden.<sup>17</sup> As the states gained admission to the Union, they succeeded to ownership of the navigable waters within their domain, subject to the same public trust restrictions, under the equal footing doctrine.<sup>18</sup>

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*Doctrine of American Property Law*, 19 ENVTL L. 515, 519 (1989) (describing American states' development of the public trust doctrine); Memorial of Non-Governmental Organizations, Legal and Scientific Issues in the ICJ Case Concerning the Gabčíkovo-Nagymaros Project (Hungary/Slovakia), May/June 1995, at 20-26 (arguing that all of the world's major legal traditions recognize the distinct and enforceable rights of the general public in water resources) (on file with author). *But see* D. TARLOCK, WATER RIGHTS AND WATER RESOURCES, § 8.04 (1994) (stating that while notion of common rights is an ancient one, limitations on alienation of public lands imposed by common law "represents judicial intervention that cannot be fully justified by history").

13. Stevens, *supra* note 12, at 198.

14. *Id.* at 198-200.

15. *Id.* at 200.

16. Harrison P. Dunning, *The Significance of California's Public Trust Easement for California Water Rights Law*, 14 U.C. DAVIS L. REV. 357 (1980).

17. *Arnold v. Mundy*, 6 N.J.L. 1, 78 (1821); *Martin v. Waddell*, 41 U.S. (16 Pet.) 367, 410 (1842) ("When the Revolution took place, the people of each state became themselves sovereign; and in that character hold the absolute right to all their navigable waters and the soils under them for their own common use, subject only to the rights since surrendered by the Constitution to the general government."). Later cases confirmed that the individual states held exclusive control of water, subject only to matters that the federal constitution dedicated to federal control. *See, e.g., Shively v. Bowlby*, 152 U.S. 1, 26-31 (1894) (holding that title to tidal waters and the land under them vested in the states after the American Revolution). Major federal incursions in the control of water resources include the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1387 (1986 & Supp. 1995), and the Rivers and Harbors Act, 33 U.S.C. §§ 401-467n (1986 & Supp. 1995). Both were enacted pursuant to broad federal powers under the Commerce Clause.

18. *Pollard's Lessee v. Hagen*, 44 U.S. (3 How.) 212 (1845) (establishing the equal footing doctrine with regard to ownership of submerged lands); *Shively*, 152 U.S. at 57 (holding that the English Crown's rights in water resources passed to the states "charged with a like trust" after the American Revolution). *See* Wilkinson, *supra* note 12, at 439-48

Thus, the states' ownership interest in their water bodies arises out of the U.S. Constitution and is beyond the rule of Congress.<sup>19</sup>

The public trust is an old and revered tenet of state law as well: "[F]rom the earliest days . . . , [California's] judicial decisions have recognized and enforced the trust obligation."<sup>20</sup> This responsibility extends not only to tidal waters, which were the subject of the English Common Law, but also to the beds of navigable freshwater streams and lakes.<sup>21</sup> For almost 100 years California has provided by statute<sup>22</sup> that all of the water of the state is owned by the people.<sup>23</sup>

The basic premise of the public trust doctrine is that the state holds navigable water bodies and related resources in trust for the benefit of the people of the state. The state is therefore limited in its authority to alienate those resources.<sup>24</sup> The trust responsibility is an attribute of state sovereignty and is therefore beyond legislative modification: "The sovereign power itself . . . cannot, consistently with the laws of nature and the constitution of a well ordered society, make a direct and absolute grant of the waters of the state, divesting all the citizens of their common right."<sup>25</sup>

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(critiquing the legal and historic basis for application of the equal footing doctrine to state property rights).

19. See, e.g., *Oregon ex rel. State Land Bd. v. Corvallis Sand & Gravel Co.*, 429 U.S. 363, 374 (1977).

20. *National Audubon*, 658 P.2d at 718-19; See also *City of Berkeley v. Superior Court*, 606 P.2d 362, 365 (Cal. 1980); *Marks v. Whitney*, 491 P.2d 374, 379 n.5 (Cal. 1971); *People v. California Fish Co.*, 138 P. 79, 82 (Cal. 1913); *Forestier v. Johnson*, 127 P. 156, 158 (Cal. 1912).

21. *National Audubon*, 658 P.2d at 719 ("It is . . . well settled in the United States generally and in California that the public trust is not limited by the reach of the tides, but encompasses all navigable lakes and streams."). See also *State v. Superior Court*, 625 P.2d 239, 245 (Cal. 1981) (holding that owner of land along shoreline of navigable nontidal waters had title to land between low and high water mark); *People v. Gold Run Ditch and Mining Co.*, 4 P. 1152, 1155 (Cal. 1884) (holding that the public owns the land over which navigable water flows); *Hitchings v. Del Rio Woods Recreation & Park Dist.*, 127 Cal. Rptr. 830 (Ct. App. 1976) (recognizing that river beds fall within the ambit of the public trust); *Barney v. Keokuk*, 94 U.S. 324 (1876) (discussing the American Rule, which includes underlying land in the public trust); *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563 (1870) (broadening the definition of navigable waters to which the states took title upon admission to the Union to include waters "navigable in fact," whether or not tidally influenced).

22. CAL. WATER CODE § 102 (West 1971). But see *Dunning*, *supra* note 16, at 380-81 (stating that § 102 is not a codification of the public trust doctrine and may not have bearing on private water rights).

23. *Gold Run Ditch & Mining Co.*, 4 P. at 1159 ("The State holds the absolute right to all navigable waters . . ."). For the federal view that water cannot be privately owned, see *United States v. Chandlar-Dunbar Water Power Co.*, 229 U.S. 53, 69 (1913) (noting that "[o]wnership of a private stream wholly upon the lands of an individual is conceivable, but that the running water in a great navigable stream is capable of private ownership is inconceivable.").

24. See *Sax, The Public Trust Doctrine in Natural Resource Law*, *supra* note 12, at 485-87.

25. *Arnold*, 6 N.J.L. at 78.

At the end of the Nineteenth Century, the U.S. Supreme Court delivered the seminal public trust doctrine opinion in *Illinois Central Railroad v. Illinois*.<sup>26</sup> The Court's decision held that the Illinois legislature lacked the power to transfer the Chicago lakefront to private ownership, and has served as the basis for state public trust law ever since:

The trust devolving upon the State for the public, and which can only be discharged by the management and control of property in which the public has an interest, cannot be relinquished by a transfer of the property. The control of the State for the purposes of the trust can never be lost, except as such parcels are used in promoting the interests of the public therein . . . .<sup>27</sup>

Granting private control of public trust property is permitted only under the rare circumstance when such a grant would actually serve the purposes of the trust.<sup>28</sup> However, such a situation is very different from state abdication of control over navigable waters and their underlying lands.

[A]bdication is not consistent with the exercise of that trust which requires the government of the State to preserve such waters for the use of the public . . . . The State [cannot] abdicate its trust over property in which the whole people are interested, like navigable waters and soils under them, so as to leave them entirely under the use and control of private parties . . . .<sup>29</sup>

Thus, the public trust fundamentally limits private rights obtainable in water and water-related lands and resources.<sup>30</sup>

Early trust cases in California primarily involved attempts to grant water-related lands into private hands, as in *Illinois Central*. California courts narrowly construed these grants, holding that they confer a "naked fee," passing only bare title and remaining subject to the rights of the public in navigation, commerce, and other trust uses.<sup>31</sup> For example, in *People v. California Fish Co.*, the court held that a grant of tidelands property conveyed only limited title to private owners because such lands are by their nature subject to an easement for public trust purposes.<sup>32</sup> *California Fish* is notable for the strong language the court employed in determining that despite its grant of private rights in these lands, the legislature did not effectuate

26. 146 U.S. 387 (1892); see *City of Berkeley*, 606 P.2d at 365 (discussing the continued significance of *Illinois Central Railroad*).

27. *Illinois Central Railroad*, 146 U.S. at 453.

28. *Id.*

29. *Id.*

30. See, e.g., Dunning, *supra* note 16, at 363-64.

31. This circumstance has been described as the "public trust lingering over the land like the smile of a juridical Cheshire cat." Stevens, *supra* note 12, at 215 (extensively discussing the naked fee concept and relevant case law).

32. *People v. California Fish Co.*, 138 P. 79, 84 (Cal. 1913).



an intent to "extinguish" the trust.<sup>33</sup> California case law is replete with examples of the judiciary holding that public trust easements burden water-related resources that have been granted to private parties.<sup>34</sup>

While deriving from the concept of state ownership, the public trust is not simply a public property right. As an attribute of sovereignty, the public trust cannot be shaken off by the state through legislative abolition or even Constitutional prohibition.<sup>35</sup> The California Supreme Court has determined that the public trust embodies the state's duty "to protect the people's common heritage" in natural resources.<sup>36</sup> Professor Dunning argues that the state's authority derives not only from its property interest, but that "the sovereign's prerogative exists because of the *common* property nature of the resources—a nature that dictates the recognition of unusually limited conventional property rights."<sup>37</sup>

Indeed, the state's sovereignty interest is such that actual state ownership of the resource in fee does not appear to be necessary to assert the state's public trust authority.<sup>38</sup> At the same time, courts

33. "It is not to be assumed that the State, which is bound by the public trust to protect and preserve this public easement and use, should have intentionally abdicated the trust . . ." *Id.* at 85. "The only practicable theory is to hold that all tideland is included, but that the public right was not intended to be divested or affected by a sale of tidelands under these general laws . . . [T]he buyer of land under these statutes receives the title to the soil, the *ius privatum*, subject to the public right of navigation, and in subordination to the right of the state to take possession and use and improve it for that purpose as it may deem necessary. In this way, the public right will be preserved, and the private right of the purchaser will be given as full effect as the public interests will permit." *Id.* at 87 (*quoted with approval in Marks*, 491 P.2d at 379).

34. *See, e.g., State v. Superior Court*, 625 P.2d at 248 ("It is well settled that if the state holds [submerged] lands in trust for the benefit of the public, its conveyance of title to private persons does not necessarily free the property from the burden of the public trust."); *Forestier*, 127 P. at 162 (private ownership of submerged lands is subject to the pre-existing right of the public to pass over lands on navigable waters in boats for hunting and fishing); *People v. Russ*, 64 P. 111 (Cal. 1901) (private dam not allowed where it would obstruct waters protected by the public trust); *Bohn v. Albertson*, 238 P.2d 128 (Ct. App. 1951) (private rights in inundated swamplands subject to public rights of access when flooded); *People ex rel. Baker v. Mack*, 97 Cal. Rptr. 448 (Ct. App. 1971) (no right to exclude public from navigable waterways adjacent to private lands); *Colberg, Inc. v. State ex rel. Dept. of Public Works*, 432 P.2d 3 (Cal. 1967) (private property rights do not limit state's trust authority over navigable waterways).

35. Harrison Dunning, *The Mono Lake Decision: Protecting a Common Heritage Resource from the Death of Diversion*, 13 *Envtl. L. Rep.* 10144, 10146 (May 1983).

36. *National Audubon*, 658 P.2d at 724.

37. Dunning, *The Mono Lake Decision*, *supra* note 35, at 10147 (emphasis in original). *See also* Dunning, *The Public Trust*, *supra* note 12, at 522. The notion that the public trust doctrine derives from common property rights in natural resources closely resembles Emperor Justinian's formulation. Stevens, *supra* note 12, at 196-97, 202.

38. Dunning, *The Public Trust*, *supra* note 12, at 520; *City of Los Angeles v. Venice Properties*, 644 P.2d 792, 799 (Cal. 1982), *rev'd on other grounds*, *Summa Corp. v. California*, 466 U.S. 198, 204-05 (1984) (rights incidental to sovereignty cannot be alienated through legislative grants; public trust resources at issue were not held by the state in its

have relied on the state's property interest in water to protect important public rights. Thus, several cases have held that the state's public trust interest supports state standing to sue, as a property owner, for damages to water caused by pollution.<sup>39</sup>

## 2. Application of the Public Trust Doctrine

The public trust doctrine calls for a two-step analysis: (1) Is the water body at issue "navigable"? and (2) Do the uses sought to be protected fall within the public trust canopy? The first question effectively defines the geographic reach of the trust, while the second addresses whether the trust preserves the resources at issue.

While originally a major limitation on the reach of the public trust, the concept of "navigability" has expanded to reflect evolving public interests in water resources.<sup>40</sup> It now appears settled in California that the trust extends to virtually all waters, fresh and tidal, susceptible to navigation by "pleasure craft."<sup>41</sup> *National Audubon*

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proprietary capacity, but in trust for the benefit of the public); *State v. Superior Court*, 625 P.2d at 248 (state may assert trust authority over lands granted into private ownership).

39. *Aerojet-General Corp. v. Superior Court*, 257 Cal. Rptr. 621 (Ct. App. 1989). In this case the court rejected out of hand defendant's contention that public ownership of water is a "19th century fiction" and held that: (1) The state's public trust interest in the navigable water at issue served to establish its standing to sue for damages; and (2) Pollution of ground and river waters is damage to public property, as distinct from the separate grievance of being an injury to public welfare. *Id.* at 629. See also *Selma Pressure Treating Co. v. Osmose Wood Preserving, Inc.*, 271 Cal. Rptr. 596, 605 (Ct. App. 1990) (holding that the state's public trust responsibility establishes, *inter alia*, a legally cognizable property interest in the waters of the state, allowing it to support a nuisance claim; the state may seek damages like any other property owner).

40. See, e.g., *People ex rel. Baker*, 97 Cal. Rptr. at 451 (including recreational use in the definition of navigability). There are three basic governmental interests in "navigable" waterways, governed by three different tests of navigability: (1) the ownership of the beds of lakes and rivers, determined by the federal title test; (2) the jurisdiction of federal regulatory authority, determined by the federal commerce clause test; and (3) public rights in waterways, determined by state tests (in California, the recreational boating test). R. Frank, *Forever Free: Navigability, Inland Waterways, and the Expanding Public Interest*, 16 U.C. DAVIS L. REV. 579, 583-91 (1993). It is now firmly established that the definition of navigability for purposes of determining the extension of federal Commerce Clause authority over waters has no bearing on the question of navigability for determining the reach of the public trust doctrine. *Hutchings*, 127 Cal. Rptr. at 834-35; TARLOCK, *supra* note 12, § 8.05[2]. See also Stevens, *supra* note 12 at 201-10 (discussing various tests for navigability).

41. *National Audubon*, 658 P.2d at 720 n.17 ("A waterway usable for pleasure boating is nevertheless a navigable waterway and protected by the public trust."). In this regard, *National Audubon* linked the recreational easement test with the public trust, although the trust historically was dependent on past or present ownership of the bed of a waterway. Decisions in other jurisdictions support the linkage. See, e.g., *Galt v. State*, 731 P.2d 912 (Mont. 1987) (capability of waters for recreational purposes determines their availability for public use under the trust doctrine); *Montana Coalition for Streambed Access v. Curran*, 682 P.2d 163 (Mont. 1984) (stream navigability is determined by use, not title to stream bed). See also *People ex rel. Younger v. County of El Dorado*, 157 Cal. Rptr. 815 (Ct. App. 1979) (county cannot ban all recreational boating on trust waters).

extended the public trust doctrine even further, to non-navigable tributaries that flow into navigable water bodies.<sup>42</sup>

As the geographic range of the trust has expanded, so too has the range of interests protected. In early formulations, the doctrine protected a limited trio of public interests in water resources: commerce, fishing, and navigation.<sup>43</sup> However, over the last century, the California Supreme Court has found the public trust doctrine "sufficiently flexible to encompass changing public needs."<sup>44</sup> Thus, courts have recognized that the public's rights in water resources extend beyond the classic uses to encompass all manner of public activities, including boating, hunting, bathing, swimming, and even wading.<sup>45</sup> Moreover, the trust is sufficiently robust to extend logically to environmental protection, as the California Supreme Court declared in 1971 in *Marks v. Whitney*.

There is a growing public recognition that one of the most important public uses of [public trust property] is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area.<sup>46</sup>

The Mono Lake case strongly reaffirmed the *Marks* court's unequivocal application of the public trust doctrine to recreational and ecological uses.<sup>47</sup> "[T]he scenic views of [Mono Lake] and its shore, the purity of the air, and the use of the lake for nesting and feeding by birds . . . protection of these values is among the purposes of the public trust."<sup>48</sup> These extensions of the public trust doctrine fulfill its very essence: to protect common interests in water.<sup>49</sup>

42. *National Audubon*, 658 P.2d at 721. The court left open the question of whether the trust could extend to non-navigable streams that do not impact navigable waters. *Id.* at 721 n.19.

43. *Illinois Central R.R.*, 146 U.S. at 452; *Colberg*, 432 P.2d at 9; *California Fish*, 138 P. at 82. California has also expressly recognized a public trust interest in fish as a natural resource wholly apart from fishing as an activity. *People v. Truckee Lumber Co.*, 48 P. 374 (Cal. 1897) (enjoining pollution of a non-navigable stream based on the public's property interest in fish spawning and dwelling in the stream).

44. *Marks*, 491 P.2d at 380.

45. *Bohn*, 238 P.2d at 132-33; *Forestier*, 127 P. at 162-63. Cases outside of California reaching the same conclusion include: *Munninghoff v. Wisconsin Conservation Comm.*, 38 N.W.2d 712 (Wis. 1949); *Jackvony v. Powel*, 21 A.2d 554 (R.I. 1941); *Nelson v. De Long*, 7 N.W.2d 342 (Minn. 1942).

46. *Marks*, 491 P.2d at 380.

47. *National Audubon*, 658 P.2d at 719.

48. *Id.* at 719. In later related litigation, the court found that the public trust also protected the fish and other resources of the Mono tributaries. See *infra* part IV.A.

49. Professor Dunning makes a compelling case that the physical nature of the resources covered by the trust explains why responsibility for protecting water resources, vested in a sovereignty doctrine, is beyond modification by the legislature. Unlike dry land, water is migratory and thus has a "natural suitability for common use." Indeed, the

As the range of uses protected by the public trust broadens, the danger arises that the trust will be diluted and *all* uses of water advancing some public interest will fall under its umbrella.<sup>50</sup> Such an interpretation would undercut the doctrine's ability to protect inherent values in water resources against exploitation of the resource for other public benefits. Because the doctrine allows a state to impair trust uses for purposes that further the trust,<sup>51</sup> common heritage resources would be put at risk to the extent that consumptive uses of water are deemed "trust uses." Thus, expansion of the trust to include out-of-stream consumptive uses as well as in-stream uses could countenance the destruction of trust resources.

The California Supreme Court confronted this issue squarely in *National Audubon* and rejected an all-encompassing view of public trust uses. Addressing the Attorney General's advocacy of maximum state power under the trust,<sup>52</sup> the court observed that this interpretation would "impose no restrictions on the state's ability to allocate trust property."<sup>53</sup> Declining the invitation to so rule, the court stated: "We know of no authority which supports this view of the public trust, except perhaps for the dissenting opinion in [*Illinois Central Railroad*]. Most decisions and commentators assume that 'trust uses' relate to uses and activities *in the vicinity of the lake, stream or tidal reach at issue*."<sup>54</sup>

On this basis, the court went on to hold that the public trust is not simply an affirmation of the power of the state to employ water resources for general public purposes, even the important public pur-

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expansion of the definition of "navigable waters" over the last century is entirely reasonable if this concept is understood to mean "water usable by the public on an *in situ* basis." Dunning, *The Public Trust*, *supra* note 12, at 522-23.

50. This argument has been made by various commentators. See R. Walston, *The Public Trust Doctrine in the Water Rights Context: The Wrong Environmental Remedy*, 22 SANTA CLARA L. REV. 63 (1982).

51. See *Illinois Central R.R.*, 146 U.S. at 452 (trust property may be alienated to further trust purposes); *California Fish*, 138 P. at 88-89 (acquisition of trust property free of the trust is rare, and is possible only if, *inter alia*, the grant furthers the purposes of the trust). See also Stevens, *supra* note 12, at 223-25 (balancing of trust uses against each other).

52. The SWRCB relied upon *Colberg*, 432 P.2d 3, to argue that the state is free to treat all public uses, including consumptive use under the appropriative rights system, as trust uses. The court declined to adopt this reading of *Colberg*, holding that the case stands for the far more limited proposition that the state's authority is limited to choosing between trust uses. *National Audubon*, 658 P.2d at 722 n.21.

53. *National Audubon*, 658 P.2d at 723.

54. *Id.* (emphasis added) (*relying on* City of Los Angeles v. Aitken, 52 P.2d 585 (Cal. Ct. App. 1935)); State of California, *ex rel.* State Lands Comm'n v. County of Orange, 184 Cal. Rptr. 423, 428-29 (Ct. App. 1982); Sax, *The Public Trust Doctrine in Natural Resource Law*, *supra* note 12, at 542. See also Morse v. Oregon Division of State Lands, 581 P.2d 520, 523-25 (Or. Ct. App. 1976) (water-related undertakings are consistent with the trust; upland-related undertakings violate the trust).

pose of domestic consumption.<sup>55</sup> Rather, the public trust is "an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right only in rare cases when the abandonment of that right is consistent with the purposes of the trust."<sup>56</sup>

This conception of the public trust is enormously important in its focus on both the authority and the duty of the state to protect water-related resources as such. The court effectively tied public trust protection to the maintenance of natural resources for their innate value and swept away the argument that off-site consumptive use could enjoy parity as a "trust" interest.<sup>57</sup>

It is difficult to imagine an articulation of the state's responsibility more firmly at odds with its orientation under the appropriative rights system, which has at its historic core the precept that the waters of the state should be put to the fullest possible consumptive use.

### B. California's Water Rights System

The appropriative rights system would seem to resist integration with the public trust, since the two systems are based on conflicting philosophies of the public good and the proper role of the state. The public trust doctrine posits conservation of common resources, while the appropriative rights doctrine advocates private consumptive water development. However, a closer look reveals that the doctrines are less antagonistic than they superficially appear. Public interests in water historically have circumscribed appropriative rights, primarily through the reasonable use requirement.

#### 1. Historic Perspective

The principle assumption underlying the prior appropriation system is the inverse of that underlying the public trust: that there is virtually no common right to water, and that the greatest good will flow from placing water rights in private hands. The prior appropriation system thus encourages diverting from the natural watercourse as much water as can be beneficially employed by private users.<sup>58</sup>

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55. Under the appropriative rights system, domestic use of water is the "highest and best" use of water in the state. CAL. WATER CODE § 106 (West 1971).

56. *National Audubon*, 658 P.2d at 724.

57. A superior court has found this analysis to be "semantic," and has stated that the question of whether particular uses of water are properly under the umbrella of the trust doctrine is irrelevant to the analysis of whether and how much protection to extend to water resources. See *Hodge Opin.*, *infra* note 172, at 25.

58. Toward this end, appropriative systems developed as an alternative to eastern riparian systems equating water rights with ownership of appurtenant land. TARLOCK, *supra* note 12, § 5.07.

Compared to the ancient public trust and riparian doctrines, however, prior appropriation is an upstart newcomer, a child of the wild mid-nineteenth century American West.<sup>59</sup> However, some have characterized appropriative rights as venerable prerogatives of almost divine proportion.<sup>60</sup> The system grew out of the largely outlaw mentality and custom of California's gold mining community. Miners were generally trespassers on public lands and could not acquire riparian rights. They simply diverted water as necessary, and they adopted among themselves a "first in time, first in right" rule of rights to water. In the prevailing spirit of entrepreneurial accommodation, the courts adopted the code of the mining camps in settling water disputes.<sup>61</sup>

To establish a right under the new system, a claimant needed only to divert water and apply it to some beneficial use.<sup>62</sup> These elements did not appreciably change when the state formalized permit procedures in 1914.<sup>63</sup> Appropriative rights have remained so strongly associated with possessory control over water that California courts have

59. California is a dual water rights state, recognizing both the appropriative and riparian systems. *Lux v. Haggin*, 10 P. 674, 719-22 (Cal. 1886). See also *People v. Shirokow*, 605 P.2d 859, 863-64 (Cal. 1980); *In re Water of Hallett Creek Stream System*, 749 P.2d 324, 332 (Cal. 1988).

60. For example, western water interests have sponsored the Private Property Rights Act, currently under consideration in Congress. H.R. 925 would require the federal government to compensate water rights holders for a 10% or more diminution in water rights resulting from enforcement of environmental or other laws. In support of this measure, the bill's sponsor stated: "[T]he right to receive compensation for government takings [of water rights as well as other property] is a right as sacred as the rights guaranteed of free speech, free religion, free press, assembly, and all the sacred civil rights contained in our Bill of Rights." 141 CONG. REC. H2459, H2467 (Comments of Rep. Tauzin). See also Testimony of Coors Brewing Company before the House Transportation and Infrastructure Committee on Clean Water Act Reauthorization (Mar. 9, 1995) (amendments to the CWA are needed to "preserve the sanctity of state water rights" from interference by the U.S. EPA); Carol Bradley, *EPA Urges Releases of Additional Water*, GANNETT NEWS SERV., Feb. 24, 1994 (Colorado Senator Hank Brown quoted as describing releases from federal projects for endangered species protection as private property theft); *The Compensation Game; Compensation for Loss of Rights in Public Lands*, WILDERNESS, Fall 1993 (landowners maintain that their ranch came with water rights that predate the existence of the National Forest, and therefore they are entitled to do as they please with their water regardless of whose land it crosses); *A School Prayer-Property Rights Showdown?*, U.S.A. TODAY, Nov. 21, 1994 (proposal to make water worship a holy sacrament thereby protecting water rights under the constitutional guarantee of freedom of religion).

61. See *Irwin v. Phillips*, 5 Cal. 140 (1855); *Shirokow*, 605 P.2d at 864-65; *In re Water of Hallett Creek Stream System*, 749 P.2d at 331; *Joslin v. Marin Mutual Water Dist.*, 429 P.2d 889, 892 (Cal. 1967); *Fullerton v. State Water Resources Control Bd.*, 153 Cal. Rptr. 518, 522 n.6 (Ct. App. 1979); TARLOCK, *supra* note 12, § 5.02.

62. *Shirokow*, 605 P.2d at 865.

63. The California Legislature passed the Water Commission Act in 1913 to establish a formal procedure for obtaining appropriative rights. Water Commission Act of 1913, ch. 586, 1913 Stat. 1012. The Act became effective at the end of 1914, and appropriative rights obtained in advance of this system are generally referred to as "pre-1914" rights. Appropriative rights became the exclusive type of water right in 1925. Ch. 87, 1923 Stat. 162.

refused to grant water rights for instream purposes, even where the state has expressly recognized instream flows as "beneficial uses."<sup>64</sup> In the mid-1970's, a group of sport fishermen applied for an appropriate right on a trout stream, and claimed that the beneficial purpose was fish and wildlife enhancement.<sup>65</sup> The State Water Resources Control Board refused to consider the permit application in the absence of a physical diversion of water:

[A]ppropriation of water in the legal sense involves possession of the water, evidenced by some form of diversion or physical control over it. The courts from the very birth of the legal concept of appropriation of water have uniformly evidenced the basic common element of possession . . . . The statutory pattern makes it plain that possession of some sort must be taken of the water.<sup>66</sup>

If control over water is one pillar of the appropriative system, the reasonable use requirement is the other.<sup>67</sup> Given the scarcity of western water, the common law recognized a water right only to the use of the water reasonably necessary to the beneficial purpose served. Over a century ago, the California Supreme Court explained this policy:

[P]aramount public policy requires a careful economy of [water] supply . . . . While the right of the prior appropriator is carefully protected, he is compelled to exercise it with due regard for the rights of others and the paramount interest of the public . . . . [The appropriator] must use reasonable due diligence and reasonably efficient appliances in making his diversion in order that the surplus may not be rendered unavailable to those who are entitled to it.<sup>68</sup>

The reasonable use limitation governed relations between appropriators and between riparian landowners, but its application between the two types of rights holders was unsettled until the decision in *Herminghaus v. Southern California Edison Co* in 1926. In that case,

64. Although several western states have legislatively created instream water rights, California has not done so. See, e.g., COLO. REV. STAT. § 37-92-102 (1995).

65. Preservation of fisheries has long been recognized as a beneficial use of water in California. See CAL. WATER CODE § 1243 (West 1995) (expressly identifying recreation, fish and wildlife preservation as beneficial uses for purposes of water appropriations).

66. *California Trout, Inc. v. State Water Resources Control Bd.*, 153 Cal. Rptr. 672, 674 (Ct. App. 1979). This holding extends beyond private applicants to the state fishery agency. See also *Fullerton*, 153 Cal. Rptr. 518 (upholding denial of Fish and Game Department application for an instream water right due to long-recognized possessory nature of appropriative water rights).

67. See B. Gray, *In Search of Bigfoot: The Common Law Origins of Article X, Section 2 of the California Constitution*, 17 HASTINGS CONST. L.Q. 225 (1989) (discussing the nature and origins of the reasonable use requirement in art. X, § 2).

68. *Natoma Water and Mining v. Hancock*, 35 P. 334, 337 (Cal. 1894). See also *Barrows v. Fox*, 32 P. 811 (Cal. 1893) (limiting prior appropriator to amount of water necessary assuming ditches and flumes are in good repair so as to prevent waste); *Half Moon Bay Land Co. v. Cowell*, 160 P. 675, 678 (Cal. 1916) (holding that "[e]ach owner has the right to use the whole or any part of the water on his own riparian land at any time when such use does not interfere with the actual use by the other owners of their due shares.").

the high court determined that riparian owners are "not limited by any measure of reasonableness," and thus Mrs. Herminghaus was entitled to the entire flow of a disputed creek, thereby depriving the upstream utility of the ability to impound water for power generation.<sup>69</sup> Public response to *Herminghaus* was fast and furious. Water diversions had become the key to growth in coastal urban areas far from the state's headwaters, and a rule so broadly limiting appropriative rights could not stand. Within a year, California amended its constitution to establish an overarching "reasonable use" requirement.<sup>70</sup>

Adoption of article X, section 2 of the California Constitution elevated the doctrine of reasonable use to a principle applicable to all water rights and all methods of diversion, establishing a "constitutional policy of water conservation."<sup>71</sup> The amendment brought into sharp focus both the state's authority to adjudicate the question of reasonable water use and its duty to prevent waste.<sup>72</sup> The state high court has characterized the reasonable use rule as "the overriding feature of California water law."<sup>73</sup>

## 2. *Limits of Water Rights as Private Property*

Water is a capricious resource, both variable and migratory. Rights to water therefore fall well short of real property ownership and carry only a right of use.<sup>74</sup> While usufructs are a type of property right to the extent that they have transferable economic value, they are inherently indefinite. Judge Racanelli drew this distinction in the Bay-Delta case: "Unlike real property rights, usufructuary water

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69. *Herminghaus*, 252 P. 615.

70. [B]ecause of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof . . . .

CAL. CONST. art X, § 2 (added Nov. 6, 1928 as art. XIV, § 3).

71. *Erickson v. Queen Valley Ranch Co.*, 99 Cal. Rptr. 446, 451 (Ct. App. 1971).

72. The amendment "superimposed on all water rights the requirement that all water must be put to a reasonable and beneficial use and none may be wasted." *Rank v. United States*, 142 F. Supp. 1, 108 (S.D. Cal. 1956), *aff'd in part & rev'd in part*, 372 U.S. 609 (1963). See also *Peabody v. City of Vallejo*, 40 P.2d 486, 491-92 (Cal. 1935) (applying former article XIV, § 3 to riparian owners).

73. *National Audubon*, 658 P.2d at 725; *Fullerton*, 153 Cal. Rptr. at 522; *State Water Resources Control Bd. v. Forni*, 126 Cal. Rptr. 851, 855-56 (Ct. App. 1976).

74. *Eddy v. Simpson*, 3 Cal. 249, 252 (1853) (the right of property in water is "usufructuary," and consists of the advantage of its use, not the fluid itself). See also *National Audubon*, 658 P.2d at 724 (relying on *Eddy*); *Shirokow*, 605 P.2d at 864 (both riparian and appropriative rights are usufructs and confer no right of ownership in the watercourse); *Rancho Santa Margarita v. Vail*, 81 P.2d 533, 560 (Cal. 1938) (usufructuary nature of riparian water rights); *Scott v. Fruit Growers' Supply Co.*, 258 P. 1095, 1098 (Cal. 1927) (appropriative rights are limited to use).



rights are limited and uncertain. The available water supply is largely determined by natural forces."<sup>75</sup>

From their earliest inception, appropriative water rights imparted less security than real estate or other property rights. They are defined not by physical boundaries, but by the abstractions of beneficial and reasonable use.<sup>76</sup> California courts have repeatedly held that reasonableness of water use is a relative concept that changes over time.<sup>77</sup> A property right delimited by "reasonableness" can be no more secure or unchanging than the underlying concept of reasonableness itself. Thus, appropriative rights are inherently fluid:

What may be a reasonable beneficial use, where water is present in excess of all needs, would not be a reasonable beneficial use in an area of great scarcity and great need. What is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time.<sup>78</sup>

Reasonableness of use is not only contingent on the user's own circumstances; it also depends on the relative needs of other water users and issues of statewide importance.<sup>79</sup>

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75. *United States v. State Water Resources Control Bd.*, 227 Cal. Rptr. 161, 170 (Ct. App. 1986). "Conceptually, what is meant by a water right is the right to use the water—to divert it from its natural course." *Id.* at 167. (emphasis in original). See also CAL. WATER CODE §§ 102, 1052 (West 1995) (statutory scheme is the exclusive means of appropriating the use of water).

76. See, e.g., *Joslin*, 429 P.2d at 896 (holding that the right to use water is limited to the amount of water reasonably required for the beneficial use).

77. See *Gin Chow v. City of Santa Barbara*, 22 P.2d 5, 18 (Cal. 1933) ("[W]hat is a useful and beneficial purpose and what is an unreasonable use is a judicial question depending upon the facts of each case."); *Peabody v. City of Vallejo*, 40 P.2d 486, 491 (Cal. 1935); *Joslin*, 429 P.2d at 894. 2d at 139 (1967) ("What is a reasonable method of use of water is a question of fact to be determined according to the circumstances in each particular case."); *Forni*, 126 Cal. Rptr. at 855 ("[A]s repeated on innumerable occasions, what is reasonable use or [a] reasonable method of use of water is a question of fact to be determined according to the circumstances in each particular case."); *In re Waters of Long Valley Creek System*, 599 P.2d 656, 665 (Cal. 1979); *United States v. State Water Resources Control Bd.*, 227 Cal. Rptr. at 187 ("What constitutes reasonable water use is dependent upon not only the entire circumstances presented but varies as the current situation changes.") (quoting *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 26 Cal. 3d 183, 194 (1980)).

78. *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972, 1007 (Cal. 1935). This principle applies to riparian rights as well. "The reasonable usefulness of a quantity of water for irrigation is always relative. It does not depend on the convenience or profitable results to the particular proprietor, but upon the reasonable use, reference being had to the needs of all other proprietors on the stream." *Lux*, 10 P. at 763.

79. *Joslin*, 429 P.2d at 894 (holding that the reasonableness inquiry cannot be resolved without considering statewide issues of transcendent importance); *In re Waters of Long Valley Creek System*, 599 P.2d at 665 (holding that reasonableness of water use cannot be determined without considering the effect of such use on all the needs of those in the stream system, or isolated from statewide issues of "transcendent importance"); *Gin Chow*, 22 P.2d at 16 (holding that conservation of the waters of the state is of transcendent importance).

Shifting notions of reasonable use have led the courts to modify long-standing water rights. For example, in 1967 a court found unreasonable the use of water to convey sand and gravel even though riparian rights holders had relied on this use for over a decade.<sup>80</sup> In 1971, large "transmission losses" were found unreasonable even though the subject method of water diversion had been employed for decades.<sup>81</sup> The diversion of water for frost protection has been declared unreasonable where the same purpose could be accomplished by constructing winter storage facilities or reservoirs.<sup>82</sup> In 1990, a court upheld a determination that failure to implement water conservation measures constituted an unreasonable use despite long-standing practice, and it confirmed the state's ability to require and oversee conservation planning efforts.<sup>83</sup> The court rejected contentions that this ruling deprived appellants of "vested" property rights, holding that such rights are subject to the constitutional requirement of reasonable use.<sup>84</sup>

Water rights may also be modified to prevent adverse water quality effects. In connection with Bay-Delta water quality proceedings, the Board revised the water rights of the state and federal water projects.<sup>85</sup> The court sustained this action as appropriate under the reasonable use doctrine, finding that new information about the adverse impacts of the projects necessitated more protective water quality standards.<sup>86</sup> Accordingly, it found that "the Board had the authority to modify the projects' permits to curtail their use of water on the ground that the projects' use and diversion of the water had become unreasonable."<sup>87</sup> The reasonable use doctrine empowered

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80. *Joslin*, 429 P.2d 889.

81. *Erickson*, 99 Cal. Rptr. 446.

82. *Forni*, 126 Cal. Rptr. at 855-56.

83. *Imperial Irrigation Dist. v. State Water Resources Control Bd.*, 275 Cal. Rptr. 250, 257-59 (Ct. App. 1990) (finding that Board has a broad legislative grant of authority to control and condition water use, and it must enforce article X, § 2). *See also* *Brydon v. East Bay Mun. Util. Dist.*, 29 Cal. Rptr. 2d 128, 142 (Ct. App. 1994) (upholding utility's conservation-forcing rate structure, and finding the program "not merely reasonable, but [perhaps] compelled by the mandates of" article X, § 2).

84. *Imperial Irrigation Dist.*, 275 Cal. Rptr. at 259-61 (holding that the district has vested rights only to the reasonable use of water and no right to the waste or misuse of water, and that the Board's interference with the district's misuse does not constitute a transgression on a vested right).

85. *United States v. State Water Resources Control Bd.*, 227 Cal. Rptr. 161 (Ct. App. 1986).

86. *Id.* at 187.

87. *Id.* at 188 ("We perceive no legal obstacle to the Board's determination that particular methods of use have become unreasonable by their deleterious effects upon water quality.").

the state to modify these water rights independent of any other legal authority.<sup>88</sup>

Water rights are inherently limited not only by the constitutional requirement of reasonable use, but by a statutory permitting scheme. Since 1914, the sole method for obtaining water rights has been to obtain a permit from the state. The state has full statutory authority to determine what constitutes reasonable use and waste.<sup>89</sup> Appropriative rights are a vulnerable form of property because they are obtained by permit. The state is entitled to condition, modify, or terminate permits it issues. Thus, the statutory appropriation regime empowers the Board to reserve jurisdiction and continuing authority over water rights permits.<sup>90</sup>

Further evidence that a water right is something less than a fee interest is a line of cases refusing to apply the takings doctrine when water rights are modified or lost. The United States Constitution prohibits the states from "taking" private property without providing just compensation to the property owner.<sup>91</sup> However, courts have held that there is no property right in an unreasonable use of water, even if that same use was previously considered reasonable.<sup>92</sup> "A vested right cannot be asserted against [article X, section 2 of the California Constitution] because of conditions once obtaining."<sup>93</sup>

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88. *Id.* The reasonable use doctrine is an "independent basis of authority" which "vests jurisdiction in the [State] to compel compliance with the water quality standards insofar as the projects' diversions and exports adversely affect water quality." *Id.* at 196.

89. See *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 572 P.2d 1128, 1135-36 (Cal. 1977) (the Board has full authority to exercise regulatory functions regarding water resources, including prevention of waste and unreasonable use); *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 605 P.2d at 7 (describing statutory regime for enforcing article X, § 2 and the permit scheme); *Imperial Irrigation Dist. v. State Water Resources Control Bd.*, 231 Cal. Rptr. 283 (Ct. App. 1986) (holding that Board has power to find that a party has made unreasonable use of water and to order that such waste be remedied).

90. *United States v. State Water Resources Control Bd.*, 227 Cal. Rptr. at 187-88. "Thus, no water rights are inviolable; all water rights are subject to governmental regulation." *Id.* at 171. See also *Forni*, 126 Cal. Rptr. at 857-58.

91. U.S. CONST. amends. V, XIV. The Fifth Amendment command that private property shall not be taken for public use without just compensation was early absorbed into the Fourteenth Amendment "Due Process" guarantee. See, e.g., *Chicago, Burlington & Quincy R.R. v. Chicago*, 166 U.S. 226, 234 (1897) (stating that "compensation for private property taken for public use is an essential element of due process of law as ordained by the Fourteenth Amendment.").

92. See, e.g., *Gin Chow*, 22 P.2d at 16-17; *Forni*, 126 Cal. Rptr. at 857; *Joslin*, 429 P.2d at 897.

93. *Gin Chow*, 22 P.2d at 17. "[W]henver [a water right] has been deemed a vested right, such right has become defined to be, or limited to, the right of the [holder] to make a reasonable or beneficial use of water." *Id.* at 18. See also *Forni*, 126 Cal. Rptr. at 857; *Joslin*, 429 P.2d at 898 ("[S]ince there was and is no property right in an unreasonable use, there has been no taking or damaging of property by the deprivation of such use."). The U.S. Supreme Court denied certiorari to LADWP on the taking issue. *City of Los Angeles Dep't of Water & Power v. National Audubon Soc'y*, 464 U.S. 977 (1983).

At least one commentator has questioned whether priority of appropriation remains the operative rule in light of the exceptions.<sup>94</sup> That issue has special relevance after the Bay-Delta litigation, in which Judge Racanelli broadly interpreted the power of the state to alter appropriations for the benefit of other important state purposes:

If the Board is authorized to weigh the values of competing beneficial uses, then logically it should also be authorized to alter the historic rule of "first in time, first in right" by imposing permit conditions which give a high priority to a more preferred beneficial use even though later in time.<sup>95</sup>

Today, the appropriative rights system is part of a comprehensive water regime governed by the state for a variety of purposes in addition to consumptive use.<sup>96</sup>

## II

### THE MONO LAKE CONTROVERSY

Mono Lake presents a stark and dramatic example of the inevitable clash between public trust resources and interests in the consumptive use of water. This section briefly reviews the factual context and legal history of the Mono Lake dispute before discussing the State Board's ultimate resolution.

#### A. *Mono Lake and Its Tributaries*

While Mark Twain may have been unmoved, the Mono Basin has long been regarded as a unique and remarkable area. Mono Lake lies on the valley floor below the crest of the Sierra Nevada range, due east of Yosemite Valley. At more than 700,000 years old, Mono Lake is one of the most ancient lakes in North America.<sup>97</sup> Situated in an arid, closed basin without natural outlets, the lake is often described as a "saline sink" because evaporation over the years has rendered it hypersaline and alkaline. The lake supports only a few species typical of saline waters, including the now-famous alkali fly and brine shrimp.<sup>98</sup>

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94. TARLOCK, *supra* note 12, § 5.08 at 5-40. Professor Tarlock questions whether the physical diversion requirement serves any purpose, since the noticing role such a diversion once played is now filled by the filing of an application. *Id.* § 5.15 at 5-74.

95. *United States v. State Water Resources Control Bd.*, 227 Cal. Rptr. at 189.

96. *See Imperial Irrigation Dist.*, 275 Cal. Rptr. at 258-59.

97. MONO BASIN ENVIRONMENTAL IMPACT REPORT [hereinafter MONO BASIN EIR] at 3F-2. Mono Lake is apparently a remnant of a vast inland sea that covered more than 300 square miles over 13,000 years ago. KAHRL, *supra* note 9, at 430. Mono Lake's ecological values have been the subject of substantial debate and account for the bulk of the enormous record in the seventeen-year history of the Mono Lake proceedings. This very brief summary does not presume to present all of the issues pertaining to the Mono Basin's resources.

98. MONO BASIN EIR, *supra* note 97, at 3E-1.

Prior to LADWP's water exports from the region, the Mono Basin supported a variety of ponds, lagoons, and other water habitats fed by creeks and springs.<sup>99</sup> Hundreds of acres of wetlands lined the shore,<sup>100</sup> and the lake's major tributaries supported dense, continuous stands of riparian forests.<sup>101</sup> The basin was home to abundant fauna, including deer, mountain lions, bobcats, and coyotes.<sup>102</sup>

But it was and continues to be the birds that make Mono Lake extraordinary. Nearly 300 different species of birds make use of the waters of Mono Lake, including 98 species of water birds,<sup>103</sup> most notably eared grebes, red-necked phalaropes, Wilson's phalaropes, Caspian terns, and snowy plovers. The Mono Lake colony of California gulls is the second largest in the world, representing 85% of California's breeding population.<sup>104</sup> Gulls and other birds have escaped mainland predators by nesting on Mono Lake's two major islands, Negit and Paoha.<sup>105</sup> Tens of thousands, possibly hundreds of thousands, of ducks once migrated to Mono Lake during the fall.<sup>106</sup> The lake also supported many hundreds of geese.<sup>107</sup>

Finally, the tributaries feeding the Lake constitute important and substantial resources themselves, a matter often overlooked. Four primary streams—Rush, Lee Vining, Walker and Parker Creeks—feed the lake. Rush and Lee Vining Creeks are the largest and most significant of these tributaries. All four creeks were lined with dense riparian growth, and they contained stable channels and high deposits of spawning gravels.<sup>108</sup> These conditions favored the propagation of trout, and the tributaries supported substantial trout fisheries before LADWP's exports began.<sup>109</sup>

### B. Los Angeles' Water Rights

While the phalaropes were browsing with the grebes, the City of Los Angeles was doing one of the things it does best: growing. The City's founders, true California visionaries, cast their eyes toward the

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99. *Id.* at 3F-2.  
 100. *Id.* at 3C-14.  
 101. *Id.* at 3F-2.  
 102. *Id.* at 3F-11.  
 103. *Id.* at 3F-15.  
 104. *Order, supra* note 7, at 100-01. The Great Salt Lake population in Utah is the largest. *Id.* at 100.  
 105. *Id.* at 103-06.  
 106. *Id.* at 112.  
 107. *Id.*  
 108. MONO BASIN EIR, *supra* note 97, at 3D-3.  
 109. Although these fisheries were self-sustaining prior to LADWP's exports, trout were not indigenous to the area and were originally imported by settlers. *Id.* at 3D-7,-8. See also *California Trout Inc.*, 255 Cal. Rptr. at 189. The fishery's pre-diversion condition was one of the hotly contested issues of fact during the Board hearing.

Mono Basin early in the City's history. Los Angeles began acquiring land and water rights in the Mono Basin in 1912 and 1913 with the intent of eventually tapping the Basin's water supply.<sup>110</sup> The City first filed permit applications for the diversion of the entire flow of the Mono tributaries in 1923;<sup>111</sup> it renewed these applications in 1934.<sup>112</sup> Bond acts to finance the extension of Los Angeles' aqueduct to the Mono Basin were brought before city voters throughout the 1930's.<sup>113</sup> The State Board finally issued LADWP's Mono permits in 1940, fifty-five years ago.<sup>114</sup>

Bringing Mono water to Los Angeles was a daunting task, requiring that the City tunnel more than eleven miles through the craters of an extinct volcano, something that had never before been attempted.<sup>115</sup> Work on the project began in 1934, and was not completed until 1940.<sup>116</sup>

When LADWP began exporting water from the Mono Basin in 1941, the utility served a population of about 1.5 million people.<sup>117</sup> Until the mid-1960's, LADWP's average annual export was about 51,000 acre-feet.<sup>118</sup> The 1940 permits provided for much larger exports, but the physical limitations of the transport facility, the Los Angeles Aqueduct, constrained the City's diversion ability, preventing the City from perfecting its right to the full amount of water allocated.<sup>119</sup> LADWP began addressing this problem in 1963 when it began construction of its second aqueduct. Upon the project's

110. KAHRL, *supra* note 9, at 330.

111. *California Trout Inc.*, 255 Cal. Rptr. at 187.

112. *Id.*; MONO BASIN EIR, *supra* note 97, at 3L-2.

113. Mono Basin water is carried to Los Angeles through the Los Angeles Aqueduct, originally built to transport water to Los Angeles from the Owens Valley, which is south of the Mono Basin. For an in-depth discussion of the Owens Valley story, see KAHRL, *supra* note 9.

114. Permits 5555 and 5556. See *California Trout Inc.*, 255 Cal. Rptr. at 188.

115. KAHRL, *supra* note 9, at 342-43. In addition to physical barriers, the City encountered substantial local opposition to its project as well. *Id.* at 343-46. One federal official noted: "The taking over of the water [of the Owens Valley] by the City of Los Angeles has converted a prosperous community into a waste, and the landowners [of Mono] should be given consideration." Jacob N. Wasserman, Chief Counsel to the General Land Office, to Mr. Wolfson, Assistant Commissioner, Nov. 5, 1945, as quoted in KAHRL, *supra* note 9, at 344-45 n.67.

116. The Mono project was marketed to city residents as an interim measure to stave off scarcity until the much more expensive Colorado River system was built. KAHRL, *supra* note 9, at 348-49. However, the Los Angeles Aqueduct supplied so much water that the Metropolitan Water District could find customers for only 2% of its capacity in its early years. *Id.* at 349. The Mono Basin was, and remains, a better water source for the City than the Colorado because it has higher quality water and lower transportation costs. *Id.*

117. MONO BASIN EIR, *supra* note 97, at 3L-2.

118. *California Trout Inc.*, 255 Cal. Rptr. at 189. During that period LADWP's exports ranged from zero to 96,900 acre-feet, with the median export at about 64,400 acre-feet. *Id.* An "acre-foot" is the volume of water necessary to cover an acre to the depth of one foot.

119. *Id.* at 203.

completion in 1970, the City began diverting much larger quantities from the Mono Basin,<sup>120</sup> and in 1974 the State Board issued licenses to LADWP acknowledging that the City had accomplished full application of the allocated water to beneficial uses.<sup>121</sup> Since 1970, LADWP has exported about 83,000 acre-feet annually from the Mono Basin.<sup>122</sup>

Throughout this period, Los Angeles has continued to grow,<sup>123</sup> and its municipal water requirements have become far more acute.<sup>124</sup> LADWP's service population has grown from 1.5 million in 1940 to about 3.5 million today.<sup>125</sup> Annual water consumption has risen accordingly, from about 250,000 acre-feet in 1940 to about 700,000 acre-feet in 1994.<sup>126</sup> Most of LADWP's water is used for single- and multi-family residential consumption (66.1%), with the rest going to commercial (21.1%), industrial (5%), governmental (3%), and miscellaneous (4.7%) uses.<sup>127</sup> Historically, Los Angeles has met the rest of its water needs from (in descending order) the Owens Valley, local groundwater basins, the Metropolitan Water District (MWD),<sup>128</sup> and recycling and reclamation.<sup>129</sup> Without question, Mono Basin water has played an important role for the people of Los Angeles; prior to 1989,<sup>130</sup> the Basin accounted for approximately 17% of the City's water supply.

### C. *The Effects of Los Angeles' Water Exports on the Lake*

In 1941, Mono Lake stood at 6417 feet above sea level.<sup>131</sup> With the advent of LADWP's exports, the lake began to drop by about one foot per year; this rate increased to about 1.6 feet per year with the

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120. From 1970-74, LADWP exported between 94,300 and 123,600 acre-feet annually. *Id.* at 189-90.

121. *Id.* at 190.

122. MONO BASIN EIR, *supra* note 97, at S-1,-2. Historically, LADWP has received four times as much water from the Owens Basin as from the Mono Basin. *Id.* at 3L-9.

123. The population of Los Angeles increased by 10% in the 1940's; 34% in the 1950's; 15% in the 1960's; 5% in the 1970's; and 16% in the 1980's. *Id.* at 3L-3.

124. *Id.* at 3L-3,-4.

125. *Id.* at 3L-2,-3 and Figure 3L-1.

126. *Id.* at Figure 3L-2.

127. *Id.* at Figure 3L-3.

128. MWD obtains water from the Colorado River and from the California State Water Project. *Id.* at 3L-10.

129. *Id.* at 3L-9 to 3L-11 and Figure 3L-6.

130. Since 1989, Los Angeles has not diverted water out of Mono Lake, in order to comply with a superior court order mandating that the lake be restored to a level of at least 6377 feet. *See Order, supra* note 7, at 202.

131. MONO BASIN EIR, *supra* note 97, at 3A-12, 3F-2, and Figure 1-7.

opening of the second aqueduct.<sup>132</sup> Mono Lake reached a historic low of 6372 feet in August, 1982.<sup>133</sup>

Decades of water exports lowered Mono Lake by nearly 45 feet and reduced its surface area by about 30%.<sup>134</sup> By 1989, these reductions had caused the reliction of about 14,560 acres of former lake bed. Nearly 6000 acres of the lake bed is now unvegetated alkali flats with significantly less habitat value than the wetlands they replaced.<sup>135</sup> "Salt efflorescence" now dominates expansive flats along the shorelines and islands in much greater amounts than previously.<sup>136</sup>

These changes have obviously had substantial impacts on the extent and distribution of the basin's wetlands, islands, and riparian and wildlife habitat. Wet meadows, both brackish and freshwater, now occupy only about 50 acres around the existing shoreline.<sup>137</sup> The remaining marshlands are no longer adjacent to the lake, and have thus lost the association critical to waterfowl.<sup>138</sup> In addition, declining lake levels have resulted in periodic dust storms so severe that the air quality in this otherwise pristine environment is often in violation of standards under both state and federal law.<sup>139</sup>

The surface area reductions have doubled Mono Lake's salinity, severely damaging the populations of the alkali fly and brine shrimp that serve as food supply to numerous birds and animals in the Mono Basin.<sup>140</sup> The loss of open water habitats and freshwater sites has also resulted in substantial declines in migratory waterfowl populations at the lake: current habitat conditions support only a small fraction of the historic number of ducks, gulls, and phalaropes.<sup>141</sup> The most noted consequence of the falling lake level has been the emergence of a land bridge between Negit Island and the mainland, allowing predators easy access to bird colonies and thereby destroying the island's historic safety.<sup>142</sup> As would be expected, the land bridge has wreaked havoc on bird populations in the Basin.<sup>143</sup>

Finally, LADWP's diversions have dramatically affected the fish and stream habitat of the four Mono Lake tributaries, altering the

132. KAHL, *supra* note 9, at 430.

133. *Order*, *supra* note 7, at 99.

134. The lake's surface area shrank from 55,000 to 39,000 acres. MONO BASIN EIR, *supra* note 97, at 3F-14; Figure 3A-6.

135. *Order*, *supra* note 7, at 97-98.

136. MONO BASIN EIR, *supra* note 97, at 3C-29.

137. *Order*, *supra* note 7, at 97-98.

138. *Id.* at 96-98.

139. *Id.* at 120-21.

140. MONO BASIN EIR, *supra* note 97, at 3F-14,-15.

141. *Order*, *supra* note 7, at 115, 117-18; MONO BASIN EIR, *supra* note 97, at 3C-39.

142. *Order*, *supra* note 7, at 99.

143. Since 1979, coyotes have crossed the land bridge to the nesting island multiple times, displacing gulls. *Id.* at 103.



geomorphology, hydrology, vegetation, and aquatic habitat of these creeks.<sup>144</sup> Dewatering has caused massive reductions in fish habitat, and the extensive riparian zone has been lost.<sup>145</sup> As the riparian vegetation has disappeared, the creeks have experienced significant streambank erosion and major changes in channel morphology and location.<sup>146</sup>

As discussed earlier, however, none of this damage was unexpected.<sup>147</sup> What was unexpected was the rise of the environmental ethic and the force with which that ethic would be brought to bear. "Saving Mono Lake," the campaign that spawned a thousand bumper stickers, began with a group of students and birders in the Santa Monica Chapter of the Audubon Society in the late 1970's.<sup>148</sup> Their early activism prompted formation of a state task force, which in 1979 issued a plan for the preservation of the natural resources of the Mono Basin.<sup>149</sup> Citing extraordinary costs, the City refused to implement the task force's recommendations.<sup>150</sup>

Environmentalists filed suit in California Superior Court that year seeking to enjoin the Mono Basin diversions based, in part, on the public trust doctrine. The case was removed to federal district court,<sup>151</sup> which retained jurisdiction over the federal issues but abstained from deciding state law claims to permit the state court to rule on the applicability of the public trust doctrine and other questions of state law.<sup>152</sup> The result was the California Supreme Court's 1983 decision in *National Audubon*.

### III

#### THE ACCOMMODATION OF THE PUBLIC TRUST IN WATER RIGHTS LAW

##### A. *The National Audubon Integration*

The Mono Lake controversy provided the state's high court with the opportunity to articulate a formula uniting the prior appropriation

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144. MONO BASIN EIR, *supra* note 97, at 3D-14 to 3D-22.

145. *Order*, *supra* note 7, at 86-89, 90-92, 100.

146. *Id.* at 86-89, 100.

147. *See supra* notes 8-10 and accompanying text.

148. KAHRL, *supra* note 9, at 431-32.

149. California Department of Water Resources, REPORT OF THE INTERAGENCY TASK FORCE (1979), *cited in* KAHRL, *supra* note 9, at 433 n.170. Somewhat prophetically, the Task Force recommended that LADWP reduce its diversions to about 15,000 acre-feet per year, step up water recycling activities, and maintain a strong water conservation program. *Id.*

150. KAHRL, *supra* note 9, at 434-35.

151. Removal followed LADWP's filing of cross-claims naming federal agencies as cross-defendants. *National Audubon Soc'y v. Los Angeles Dept. of Water & Power*, 869 F.2d 1196, 1199 (9th Cir. 1988).

152. *Id.*

system and the public trust doctrine.<sup>153</sup> Deciding wholly in favor of either approach would have had highly detrimental impacts for either public trust resources or longstanding water rights, a Hobson's choice that the court refused to acknowledge. Instead, the court depicted the water rights system and the public trust as complementary. It noted that water rights are already highly circumscribed, since they must conform to the constitutional standard of reasonable use and other statutory requirements regardless of the public trust.<sup>154</sup> Preservation of trust resources is a fundamental duty of the state that serves as a substantive mandate *in addition to* the reasonable use requirement, which the state must consider in determining the nature and extent of water rights.<sup>155</sup>

The *National Audubon* court refused to adopt a sweeping finding that all past allocations harmful to public trust resources were improper,<sup>156</sup> even while strongly confirming the state's power to correct past mistakes regardless of the existence of valid water rights.<sup>157</sup> Key to this holding was the court's rejection of the notion (strongly advanced by water development interests) that "vested" water rights preclude application of either the public trust doctrine or the reasonable use doctrine. The conviction that private parties cannot acquire vested rights to use water in a manner harmful to the trust pervades *National Audubon*; the court reiterated this point no fewer than eight times.<sup>158</sup>

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153. See M. Blumm & J. Schwartz, *supra* note 11, stating that *National Audubon* has made six major contributions to public property law.

154. *National Audubon*, 658 P.2d at 724-26.

155. *Id.* at 721-24.

156. *Id.* at 728 ("Now that the economy and population centers of this state have developed in reliance upon appropriated water, it would be disingenuous to hold that such appropriations are and have always been improper to the extent that they harm public trust uses . . .").

157. *Id.* at 728 ("[T]he state is not confined by allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs.").

158. (1) Parties are barred from "claiming a vested right to divert waters once it becomes clear that such diversions harm the interests protected by the public trust." *Id.* at 712; (2) Since the prosperity of the state derives in part from the ability to divert water from streams for consumptive purposes, the state "must have the power to grant *nonvested usufructuary rights* to appropriate water . . ." *Id.* (emphasis added); (3) "[N]o one can acquire a vested right to the unreasonable use of water." *Id.* at 725 n.23 (emphasis added); (4) "[The public trust] prevents any party from acquiring a vested right to appropriate water in a manner harmful to the interests protected by the public trust." *Id.* at 727 (emphasis added); (5) A consequence of the public trust is that "parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert *no vested right* to use those rights in a manner harmful to the trust." *Id.* at 721 (emphasis added); (6) "[Grantees] can claim *no vested right* to bar recognition of the trust or state action to carry out its purposes." *Id.* at 723 (emphasis added); (7) "*No vested rights bar such reconsideration* [of allocation of Mono Basin waters]." *Id.* at 729 (emphasis added); and (8) The public trust preserves "the continuing sovereign power of the state to protect public trust uses, a power

After *National Audubon*, there is no room to argue that water rights are sacrosanct in California.<sup>159</sup> In subsequent litigation involving water quality standards for the San Francisco Bay-Delta, a state court did not hesitate to hold that the public trust doctrine gives the Water Board continuing jurisdiction to modify vested appropriation permits in order to improve water quality or otherwise revisit a previous allocation decision.<sup>160</sup>

*National Audubon* represents a substantial incursion into an area where certainty is highly valued.<sup>161</sup> The case signals that the court will no longer tolerate environmental degradation of common water resources based solely on outmoded notions of private rights to water.<sup>162</sup> In this vein, the court reaffirmed its holdings that state action pursuant to the public trust easement does not constitute a "taking" of private property under the Fifth Amendment of the United States Constitution. "In [prior cases] we rejected the claim that the establishment of the public trust constituted a taking of property for which compensation was required: We do not divest anyone of property; the consequence of our decision will be only that some landowners . . . [will] hold it subject to the public trust."<sup>163</sup> At the same time, the court recognized that given the region's economic dependence on appropriated water, the Board must exercise care when integrating the public trust with appropriative rights retroactively.<sup>164</sup>

*National Audubon* accomplishes this integration through a weighted balance test. Although the decision does not establish an absolute priority for public trust resources, it does mandate that conflicts between public trust values and competing water uses be weighted in favor of public trust protection.

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which precludes anyone from acquiring a vested right to harm the public trust . . ." *Id.* at 732 (emphasis added).

159. Indeed, such claims were inapposite once article X, § 2 of the California Constitution took effect. *Id.* at 725 n.23. See also *Jostin*, 429 P.2d at 898 (holding that there has never been and is not now a property right in an unreasonable use of water).

160. *United States v. State Water Resources Control Bd.*, 227 Cal. Rptr. at 201-02 ("[*National Audubon*] firmly establishes that the state . . . has continuing jurisdiction over appropriation permits and is free to reexamine a previous allocation decision."). Having taken nine years subsequent to this 1986 decision to develop interim quality standards, the State Board has recently taken up the necessary reallocation of water rights.

161. See, e.g., S. Somach, *The Financial Impacts of Instream Protection*, ROCKY MOUNTAIN. L. INST. 25-1 (1987).

162. *National Audubon*, 658 P.2d at 722-30.

163. *Id.* See also *California Fish*, 138 P. 88-89; *City of Berkeley v. Superior Court*, 606 P.2d at 372; *Colberg*, 432 P.2d at 3; *United States v. State Water Resources Control Bd.*, 227 Cal. Rptr. at 198-200.

164. *National Audubon*, 658 P.2d at 729. The court indicated that the following factors should "enter into" a reexamination of a water right which has harmed the public trust: (1) the need for exported water; (2) reliance on water rights; (3) the financial cost of replacement water; and (4) environmental costs associated with replacement supply. *Id.*

As interpreted by the California Supreme Court, the trust doctrine is not merely a procedural rule; the state must do more than consider the impacts of water diversions on trust resources. The doctrine imposes a *substantive burden* to affirmatively protect trust resources when it issues water rights.<sup>165</sup> The state must actually safeguard public trust resources “whenever feasible,” and must also “attempt, so far as feasible, to avoid or minimize *any* harm to those interests.”<sup>166</sup> The court described the “infeasibility” of protecting trust resources in terms of pressing need for water exports. While appropriative rights may be required for the consumptive use of water in California, the exercise of such rights must not cause harm to the public trust unless circumstances leave no alternative:

As a matter of *practical necessity* the state may have to approve appropriations despite foreseeable harm to public trust uses. In doing so, however, the state must bear in mind its duty as trustee to consider the effect of the taking on the public trust . . . and to preserve, so far as consistent with the public interest, the uses protected by the trust.<sup>167</sup>

While the state may find on occasion that harm to public trust resources is unavoidable, it may not ordinarily do so: state-sanctioned harm to trust resources is an unusual event justifiable only by practical necessity. The court’s view is consistent with the standard historically employed to determine when to allow harm to trust resources: “It is not enough that the invasion be conducted with care and damage kept to a minimum. The encroachment *must be justified by necessity* . . . . The pattern that emerges comes very close to a doctrine that can be described as no significant deterioration of public rights in public resources.”<sup>168</sup>

Note that *necessity* is a far higher standard for an appropriative right than reasonable use. Thus, an appropriation that passes constitutional muster in California is not necessarily sufficient to trump public trust requirements. To establish reasonableness an applicant must demonstrate only that the water sought would accomplish the proposed beneficial use.<sup>169</sup> To overcome the public trust, the appropriator must be able to further demonstrate that the desired diversion is necessary in the sense of serving the state’s economy.<sup>170</sup> A showing that public trust protections would be prohibitively costly or inconve-

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165. *Id.* at 723. See *supra* notes 55-56 and accompanying text.

166. *Id.* at 712, 728 (emphasis added).

167. *Id.* at 728 (emphasis added; citation omitted).

168. W. RODGERS, ENVIRONMENTAL LAW § 2.16, at 182 (1977).

169. See *supra* part I.B.

170. *National Audubon*, 658 P.2d at 727 (“The population and economy of this state depend upon the appropriation of vast quantities of water for uses unrelated to in-stream trust values.”).

nient should not be sufficient to prevail since a proposed diversion may not be a practical necessity, even if it is a reasonable use of water.

In sum, although *National Audubon* does not establish an "absolute priority" for public trust resources, it does mandate that conflicts between public trust values and competing water uses be weighted in favor of public trust protection. A weighted balance approach is consistent with the distinction the court drew between common heritage assets protected by the public trust and other important public interests promoted by the appropriative rights system. It also gives effect to the court's express rejection of the notion that all "public interests" are coterminous with trust interests.<sup>171</sup> The strongly protective language chosen by the court to describe the state's trust responsibility, in concert with its definitive holding that no "vested" water rights supersede the trust, leaves little doubt on this point.

### B. *Application of the National Audubon Approach: The Lower American River Decision*

Before the State Board issued its Mono Lake Order, there were limited opportunities to add detail to *National Audubon's* "weighted balance" approach. Few cases directly addressed the question of when protecting the public trust is infeasible, or, put differently, when a water diversion constitutes a practical necessity justifying foreseeable harm to trust resources.

Prior to the State Board's Mono Lake Order, the most detailed assessment of the "feasibility" issue was an Alameda County Superior Court opinion involving a prospective diversion from the lower American River. In that case, environmentalists challenged the East Bay Municipal Utility District's ("EBMUD") plan to divert water upstream of a segment of the river protected under the wild and scenic river statutes.<sup>172</sup> While of limited precedential value, the superior court's decision presents a valuable application of *National Audubon's* weighted balance approach. Ultimately, the *EBMUD* court found

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171. See *supra* notes 50-54.

172. *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, Sup. Ct. Alameda County No. 425955 (Jan. 2, 1990) [hereinafter *Hodge Opin.*]. This litigation, originally filed in 1972, has a stormy procedural history, including two trips to the California Supreme Court (*Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 572 P.2d 1128 (Cal. 1977); *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 605 P.2d 1 (Cal. 1980)) and one to the United States Supreme Court (*Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 439 U.S. 811 (1978)). Trial on the merits began in 1984, but was immediately suspended pending referral to the State Board on a number of issues, including the feasibility of alternative diversion points and application of the public trust doctrine. The Board issued the Report of Referee in June, 1988, and the parties filed objections to it. Trial on these "exceptions" began in March, 1989. *Hodge Opin.* is the trial court's ruling on the merits of the case.

that the apparent conflict between the diversionary and public trust interests disappeared when a feasible alternative was adopted.

Environmental plaintiffs contended that EBMUD's proposed diversion would cause substantial harm to fisheries, riparian habitat, and recreational resources.<sup>173</sup> They further argued that such damage was unnecessary because diversion points downstream of the important river segment were "feasible."<sup>174</sup> As LADWP did in the Mono Lake proceeding, EBMUD argued that its diversion entailed minimal, if any, harm to public trust resources, and that countervailing public interests favored the proposed diversion point.<sup>175</sup>

The court found, as a preliminary matter, that EBMUD's proposed point of diversion was "reasonable" for purposes of article X, section 2,<sup>176</sup> but would certainly cause significant harm to important trust resources.<sup>177</sup> Reviewing the options for avoiding such harm, the court determined that it was not compelled to reject EBMUD's preferred point of diversion merely because one *particular* alternative, a downstream diversion point, was available and technically feasible.<sup>178</sup> Instead, the court developed a "physical solution" to the dilemma<sup>179</sup> and imposed a stringent set of prerequisites on EBMUD's diversion.<sup>180</sup> The court thereby established a high level of protection for the river's biological and recreational resources as an absolute condition of any future exports.<sup>181</sup>

Although couched as a rejection of plaintiffs' position,<sup>182</sup> Judge Hodge's approach actually gave full effect to their argument: *National*

173. *Hodge Opin.*, *supra* note 172, at 2.

174. *Id.*

175. *Id.* The United States Bureau of Reclamation is the actual water rights holder. Report of Referee, *supra* note 172, at 42. The Bureau operates the Nimbus Dam, a part of the Federal Central Valley Project. EBMUD had entered into a contract with the Bureau for the export of 150,000 acre-feet annually at Nimbus through an extension to the Folsom South Canal. Report of Referee at 2. Among other things, the superior court found that the public trust doctrine applied to EBMUD's potential diversion even though the utility did not hold the water right. See *Hodge Opin.*, *supra* note 172, at 30-34.

176. *Hodge Opin.*, *supra* note 172, at 2. In particular, the court was persuaded that the water quality would be significantly better if the diversion were taken further upstream. *Id.* at 74.

177. *Id.* at 2.

178. *Id.* at 30.

179. The "physical solution" doctrine grows out of the state constitutional requirement of reasonable use, and provides that courts must fulfill the reasonable use mandate to the fullest possible extent when fashioning substantive remedies for conflicts over the appropriation of water. See, e.g., *Rancho Santa Margarita*, 81 P.2d at 563-64 (remanding for determination of whether proposed physical solution to lower riparian owner's alleged unreasonable use would be itself an unreasonable burden); *Peabody*, 40 P.2d at 499 (holding that if a physical solution is ascertainable, the court may make reasonable regulation of respective parties' water use).

180. *Hodge Opin.*, *supra* note 172, at 108-11.

181. *Id.* at 108-11.

182. *Id.* at 28-30.

*Audubon* requires protection of public trust resources except in extraordinary cases of practical necessity. Here the court simply developed a different alternative than the one the plaintiffs proposed and imposed conditions on EBMUD's exports to arrive at an equally effective way to avoid harm to trust resources while accommodating the utility's water quality concerns.<sup>183</sup>

Having eliminated the potential conflict between the river's public trust resources and EBMUD's proposed diversion, the court did not have to reach the question of whether EBMUD's desire for the new export rose to the level of a "practical necessity" or whether causing harm to trust resources was "unavoidable."<sup>184</sup> Indeed, the court found to the contrary; it was not necessary to allow *any* injury to public trust resources.<sup>185</sup>

The "feasibility" determination does not turn solely on considerations of cost or the preferences of rights holders. The court maintained that when the public trust cannot be reconciled with a proposed diversion, imposition of an alternative less accommodating to the diverter's otherwise reasonable need for water would be appropriate.<sup>186</sup> If a proposed diversion would necessarily result in severe harm to the public trust, "substantial expenditures" to avoid such harm would be justified. Indeed, "that would be an easy case."<sup>187</sup>

Thus, Judge Hodge's analysis indicates that the feasibility of an alternative source of water or method of diversion is relative and depends on the damage confronting the public trust *res*. Public policy does not alone require a court to choose one diversion alternative over another if the diversion as proposed would not harm trust resources. Conversely, the more severe the harm, the more "feasible" costly alternatives become. The State Board arrived at a similar analysis in bringing to a close the fight to save Mono Lake.

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183. "In the absence of harm, plaintiff is not entitled simply to achieve a different diversion site as a question of policy or preference." *Id.* at 28. The court was apparently uncomfortable with the specific alternative proposed by the plaintiffs, but not with their argument regarding the nature and extent of the public trust duty to avoid harm to trust resources.

184. "Whether Article X, Section 2 'overrides' public trust considerations . . . really does not require precise adjudication in this case—just as it was not critical to a determination in *Audubon*. Here, . . . the interests can be accommodated to the satisfaction of both Article X, [S]ection 2 and public trust doctrine." *Id.* at 27-28 (citation omitted).

185. *Id.* at 28.

186. "For example, were it proven that the diversion of EBMUD water could be accomplished at [its preferred location] only by exterminating the fall run of salmon, and with minimal health benefits to the consumer, the balance would shift markedly in favor of plaintiffs." *Id.* at 30.

187. *Id.*

## IV

## ANATOMY OF THE MONO LAKE ORDER

A. *The California Trout Decisions*

The Board's Mono Lake Order not only addressed the public trust concerns at issue in *National Audubon*, but also resolved the related statutory issues raised in the California Trout cases.<sup>188</sup> Following *National Audubon*, CalTrout, a non-profit association of recreational fishers, challenged LADWP's Mono Basin water rights under California Fish and Game Code section 5937, which provides that dam owners are obligated to keep fish existing below dams "in good condition."<sup>189</sup>

CalTrout maintained that the State Board's issuance of LADWP's Mono Basin licenses in 1974 violated section 5937. It further alleged that LADWP's diversions had nearly wiped out the trophy trout fisheries of the Mono Lake tributaries—Rush, Lee Vining, Parker, and Walker Creeks.<sup>190</sup> The CalTrout litigation effectively enlarged the challenge to LADWP's water rights to include the tributaries as well as Mono Lake itself.

The decision in *CalTrout I* established the plaintiffs' right to the requested relief and ordered the Board to attach appropriate conditions to LADWP's Mono Basin licenses to restore and protect the tributary fisheries.<sup>191</sup> In *CalTrout II*, the court responded to the Water Board's slow pace of compliance with a strongly worded order building on its earlier decision.<sup>192</sup> Since 1990, a superior court injunction has required LADWP to modify or cease exports to maintain the sur-

188. *California Trout Inc. v. State Water Resources Control Bd.* [hereinafter "*CalTrout I*"], 255 Cal. Rptr. 184 (Ct. App. 1989); *California Trout, Inc. v. State Water Resources Control Bd.* [hereinafter "*CalTrout II*"], 266 Cal. Rptr. 788 (Ct. App. 1990).

189. See CAL. FISH & GAME CODE § 5937 (West 1984) ("The owner of any dam shall allow sufficient water at all times . . . to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam.").

190. The case was particularly compelling because the state legislature had enacted special legislation to protect the Mono Basin streams in particular: "No . . . license to appropriate water in [Mono County] shall be issued . . . unless conditioned upon full compliance with Section 5937." CAL. FISH & GAME CODE § 5946 (West 1984).

191. Echoing *National Audubon*, the court found: "The unfortunate fact that the Water Board did not hear the Legislature's voice in 1974 does not warrant, by the passage of time, its turning a deaf ear now." *CalTrout I*, 255 Cal. Rptr. at 213.

192. The Water Board argued that it needed more time to determine the amount of water necessary to ensure compliance with section 5937, and that its proceedings would be most efficient if merged with its duty under *National Audubon* to determine the public trust requirements of the lake. The court was unsympathetic:

[T]here is no showing that the gain in precision warrants a delay of years before acting to comply with [section 5937]. It is undeniable that a well-balanced diet is preferable to an unbalanced diet. But starvation is hardly justified by a delayed feeding, however nutritious. No water means no compliance with section [5937]; imprecise compliance is immeasurably superior to no compliance.

*CalTrout II*, 266 Cal. Rptr. 799-800.



face level of Mono Lake at 6377 feet above sea level. The injunction also establishes minimum flow requirements for the four tributaries.<sup>193</sup>

Of particular relevance to this article, *CalTrout II* clarified that sections 5937 and 5946 express a legislatively determined priority. Under this scheme, the trust resources of the Mono Basin tributaries take precedence over municipal water supply or other uses.<sup>194</sup> Thus, when determining the streamflow and other measures necessary to comply with section 5937, the Board could not consider LADWP's competing interest in the water.

As a legislative choice in favor of protecting trust resources, section 5937 restricts the Board's discretion more than the public trust doctrine. While cost issues could not be considered in resolving the fisheries remedy for the tributaries, *National Audubon* expressly required the Board to assess the financial and other costs of restoring Mono Lake. Nevertheless, the stream determinations would fundamentally affect the outcome for the lake. Accordingly, the Board consolidated *CalTrout* and *National Audubon* and held a single proceeding to examine LADWP's Mono Basin licenses.

### B. The State Board's Remedy

The years of litigation and bumper sticker campaigns boil down to one primary determination: Mono Lake will be maintained at about 6392 feet above sea level.<sup>195</sup> The Order provides for a twenty-year transition to allow the lake to reach this level.<sup>196</sup> The target elevation is about sixteen feet above Mono Lake's spring 1994 level and presents LADWP with a formidable loss of water. Nonetheless, 6392

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193. *Order, supra* note 7.

194. *CalTrout I*, 247 Cal. Rptr. at 623; *CalTrout II*, 266 Cal. Rptr. at 791, 797, 800-02.

195. *Order, supra* note 7, at 156-59, 203-04. The Board determined that establishing minimum stream flows alone would not raise the lake elevation within a reasonable time, and would not necessarily maintain the lake at the target elevation. *Id.* at 154-55, 159. The Order separates the Board's section 5937 determinations from its public trust findings in order to comply with the *California Trout I and II* directives that protections necessary to satisfy section 5937 may not be weighed against other public interests, because the statute already embodies the legislature's having weighed the public trust issues. However, the tributaries are protected by the trust doctrine as well as the Fish and Game Code. Thus, the Board almost certainly would have made the same findings regarding the biological requirements of the tributaries under a public trust analysis as it did for purposes of section 5937.

196. The plan to reach the target lake level has four phases. *Order, supra* note 7, at 3. First, LADWP cannot divert any water from the Basin until the Lake rises another two feet to a level of 6377. This provision effectively continues the El Dorado County Superior Court injunction which has been in effect for over five years. Second, when the lake attains a level between 6377 and 6380 feet, LADWP may start diverting a minor amount of water, up to 4500 acre-feet annually. Third, when the level reaches 6380 to 6392 feet, the City may export 16,000 acre-feet of water. Once the lake has reached 6391 feet, LADWP can divert all water not needed to maintain the minimum tributary streamflows. *Id.* at 202-03.

is still 26 feet lower than the lake's elevation before LADWP began diverting water in 1941.<sup>197</sup> Thus, while the Board can fairly claim to have "Saved Mono Lake," it has hardly returned the lake to its natural state.<sup>198</sup>

### C. The Board's Decisional Process

#### 1. The Public Trust Requirements

The Board's process for arriving at these remedies was straightforward. First, it identified the public trust resources of the Mono Basin. These included, *inter alia*, the lake's water quality (salinity), riparian habitat, lake shore and wetland habitat, tufa, air quality, scenic beauty, recreation, waterfowl, deer, gulls, terns, phalaropes of varying kinds, and, of course, brine shrimp and alkali flies.<sup>199</sup> The Board then analyzed the biological requirements of these resources, particularly with regard to lake level.

The Board concluded that an average elevation of 6392 feet would satisfy the greatest number of important trust uses. These uses include air and water quality, food productivity for migratory birds, long-term nesting habitat, recreation, and scenic views.<sup>200</sup> The Board reached its conclusions regarding the Basin's public trust needs based solely on the scientific evidence. The only "balancing" conducted in reaching the 6392-foot determination was between competing trust uses, as directed by *National Audubon*. Thus the Board chose as its first task to determine the water requirements necessary to protect trust uses in the Mono Basin.

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197. The Board recognized that the target elevation could serve only as a goal, given the vast fluctuations in hydrology and the inherent uncertainties associated with any effort to model LADWP's operational system over such a lengthy period of time. The Board is apparently prepared to revisit its criteria if future conditions vary substantially from those assumed in its modeling. *Id.* at 103.

198. The Water Board's remedy also includes the following important features:

- Minimum instream flow requirements for all four tributaries based on prevailing hydrologic conditions. *Id.* at 196-201.

- Periodic channel maintenance and flushing flows. *Id.* at 198-201.

- Maintenance of minimum flows in dry years through storage releases under certain conditions. *Id.* at 199-201.

- Ten-year prohibition on livestock grazing on LADWP lands within the riparian corridors. *Id.* at 201-02.

- Preparation of stream and channel and waterfowl habitat restoration plans in cooperation with the Board and interested parties. *Id.* at 204, 206-07.

The Board has authority to establish physical solutions to protect the state's aquatic resources and to require these plans. *Id.* at 10-11. The plans must be completed within one year. *Id.* at 207-09.

199. *Id. passim.*

200. *Id.* at 154-55.

## 2. *The Cost Analysis*

The Board next examined whether it was "feasible" to provide public trust protection to the Mono Basin, or whether LADWP's exports constituted a "practical necessity" justifying ongoing harm to the trust. The Board framed this inquiry as a matter of determining the impact of trust protections on LADWP's water supply, or the "economic costs of this decision."<sup>201</sup> The Board's analysis of these costs broke down into three questions:

- (1) How much water will LADWP be required to give up to accommodate full protection of public trust resources?
- (2) Is replacement supply available?
- (3) How much more will the replacement supply cost?

These straightforward questions are complicated to answer, given the inherent variability in water supply and cost. With regard to the first, LADWP will lose somewhat more than half of its Mono Lake supply over the long term, and an even greater amount in the near term.<sup>202</sup> During the twenty-year transition period, LADWP will be able to export only about 12,000 acre-feet annually.<sup>203</sup> This is roughly 68,000 acre-feet less than LADWP otherwise would have been able to export over the same period.<sup>204</sup> Over the longer term, the Board expects that LADWP will be able to export about 30,800 acre-feet annually once the lake reaches equilibrium at 6391 feet in 2014.<sup>205</sup> This represents an annual decrease of about 44,000 acre-feet of Mono Basin water that would have gone to Los Angeles under its original license.<sup>206</sup> Thus, the City will experience the bulk of the water supply loss in the near term, with greater levels of Mono Basin supply becoming available as the lake refills.<sup>207</sup>

With regard to the second issue, availability of replacement supply, the Board conceived its assignment broadly: to ascertain whether the City would be able to meet its *total* demand for water in light of

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201. *Id.* at 179.

202. *Id.*

203. *Id.* at 164. The 12,000 acre-feet estimate represents an average of the varying levels of export that will be allowed until Mono Lake reaches 6392 feet.

204. *Id.* at 164. Of this 62,000 acre-feet, about 32,300 will be required for public trust protections over and above the instream flow requirements mandated under section 5937. *Id.* Flows required under section 5937 are not subject to *National Audubon's* public trust integration requirements. See *supra* note 195 and accompanying text.

205. *Order, supra* note 7, at 3.

206. At this equilibrium point, the streamflow requirements will remain stable, but the water needed to maintain Mono Lake will drop to about 8500 acre-feet each year. *Id.* at 164.

207. The Board calculated these "water costs" by projecting how much water LADWP would have been able to export absent the license amendment. The model took into account varying hydrological conditions and the operations of LADWP's system to arrive at an average of 74,500 acre-feet per year. *Id.* at 162-63.

the Mono Basin reductions. This led the Board to consider LADWP's water supply system as a whole. The Board found that LADWP can pursue "a number of alternatives to help offset water losses from the reduction of Mono Basin imports."<sup>208</sup> These include increasing its groundwater yield, water conservation, water reclamation, and purchases from the Metropolitan Water District.<sup>209</sup> The Board did not prescribe how the city might replace the specific amount of Mono Lake water it will forego in each year, but instead examined the system as a whole and LADWP's options for meeting total demand. Based on the evidence presented, the Board concluded that "there shall continue to be sufficient water available to meet the municipal needs of Los Angeles when diversions from the Mono Basin are restricted" for public trust purposes.<sup>210</sup>

Finally, the Board determined the cost of replacement water by calculating a "base" replacement cost of \$400 per acre-foot.<sup>211</sup> The Board adjusted this base cost to account for the fluctuations in water prices during wet and dry years and included an additional 20% to reflect price rises during droughts.<sup>212</sup> From these figures, the Board calculated the total cost of the replacement water required in any particular hydrologic year.<sup>213</sup>

The Board found that during the twenty-year transition period, the average cost of replacing the section 5937 stream flow water would be about \$14.5 million,<sup>214</sup> and the additional cost of protecting the public trust resources of Mono Lake about \$13.3 million,<sup>215</sup> for a sum of \$27.8 million. Including replacement power costs, LADWP's cost to replace lost Mono Basin supply in the first twenty years is expected to be \$36.3 million per year.<sup>216</sup> Once the Lake reaches 6392 feet, this cost will likely decrease to \$3.4 million per year.<sup>217</sup> This savings will

208. *Id.* at 165.

209. *Id.*

210. *Id.* at 176.

211. *Id.* at 172. This price was chosen since it was the upper end of the cost range for new water supplies from the Metropolitan Water District, a major water supplier for the City. *Id.*

212. *Id.* at 173.

213. *Id.* at 176-77. As indicated above, the amount of replacement water is the difference between what LADWP will be able to divert under its amended license and what the Board projected LADWP would have been able to divert under its original water rights. *Id.* at 173. To stay on the conservative side, the Board assumed that full replacement would be required even though substantial evidence indicated that LADWP would be able to recover some of this loss by taking more water from other sources along the Los Angeles Aqueduct. *Id.*

214. *Id.* at 175.

215. *Id.*

216. *Id.* at 180.

217. *Id.* at 172.

reduce LADWP's total long-term replacement cost to about \$23.5 million annually.<sup>218</sup>

### 3. *The Feasibility Analysis*

While recognizing the difficulties inherent in forecasting long-term costs,<sup>219</sup> the Board nevertheless found that for purposes of determining the "feasibility" of the public trust requirements, its cost estimates "provide a reasonable approximation of the expense involved in securing replacement water."<sup>220</sup> Based on this information, the Board concluded that the water and power replacement costs "[do not] make it infeasible to protect the public trust resources in the Mono Basin."<sup>221</sup>

The Order leaps from factual determinations about the probable cost of replacement water to the conclusion that such costs are feasible without much of an analytic bridge. The costs speak for themselves, however. The total transition cost, as estimated by the Board, translates to about \$10 per person per year in the LADWP service area;<sup>222</sup> the public trust share of this cost is less than \$4 per person per year. These costs are likely to be even lower in reality in light of the Board's conservative assumptions.<sup>223</sup> Moreover, the record did not indicate that LADWP would have substantial difficulty absorbing these additional costs. LADWP's block rate structure is designed to shift costs to those consuming disproportionate amounts of water. Thus economically disadvantaged households are likely to be shielded from much of the extra cost incurred in saving Mono Lake.<sup>224</sup>

Note that the Board's cost estimates expressly *exclude* the subsidies that LADWP is likely to receive from state and federal governments to develop reclamation facilities.<sup>225</sup> Thus, the feasibility determination did not consider whether the City would be even partially reimbursed for its costs.

218. *Id.* at 180.

219. "Due to uncertainty about future hydrology and future water availability throughout the state, it is difficult to develop an accurate estimate of the cost of securing replacement water supplies for water formerly diverted from the Mono Basin." *Id.* at 176.

220. *Id.*

221. *Id.* at 177. See also *id.* at 178 ("Los Angeles' need for water for municipal use does not make it infeasible to protect public trust resources in the Mono Basin . . .").

222. There are approximately 3.5 million people in the LADWP service area. MONO BASIN EIR, *supra* note 97, at 3L-3.

223. Rebuttal testimony of David Fullerton, *In the Matter of City of Los Angeles Water Right Licenses 10191 and 10192 for Diversion of Water from Streams Tributary to Mono Lake*, California Trout Exhibit [hereinafter CT]-58, at 7-8, 23-26 (on file with author).

224. Testimony of Dr. David Campbell, *In the Matter of City of Los Angeles Water Right Licenses 10191 and 10192 for Diversion of Water from Streams Tributary to Mono Lake*, Exhibit NAS & MLC-1D (on file with author).

225. See *Order*, *supra* note 7, at 176.

## V

## SIGNIFICANCE OF THE MONO LAKE DECISION

The Mono Lake proceeding offered the first major opportunity since *National Audubon* to flesh out the integration of the public trust doctrine with California's appropriative rights system. *Audubon's* central theme—that destruction of trust resources must be justified by practical necessity—was not accompanied by guidance on the ultimate merits.<sup>226</sup> The Board's analysis of certain key issues has potentially important ramifications for future public trust disputes. Several of these issues are reviewed below.

A. *The Board Established a Roadmap for Properly Resolving Future Conflicts*

1. *The Board Embraced Protection of Public Trust Resources as a Legal Imperative*

Despite the strong wording of *National Audubon*, it was not certain that the Water Board would start from the premise that its first duty was to protect the Mono Basin. The Board was invited to reformulate the state's duty, from protecting the public resources of Mono Lake whenever feasible, to protecting public trust values without needlessly depriving LADWP of its historic water source.<sup>227</sup> Indeed, LADWP argued strenuously that the Board should first determine LADWP's optimal water needs, and then craft the public trust protections so as to avoid harm to water diverters.<sup>228</sup> This proposed interpretation would have stood *National Audubon* on its head.

The Water Board prudently declined this invitation. Without expressly addressing the issue, the Board applied the weighted balance approach discussed above in determining whether and how to conserve trust resources. The Board determined the Basin's public trust requirements, and then asked whether LADWP's ratepayers could "feasibly" bear this cost. The Order makes clear that the Board's purpose was to establish protections fulfilling the public trust mandate, not to determine a "minimum" level of protection that would accommodate LADWP's historic diversions. The fundamental question at Mono Lake was, "How much protection is sufficient to safeguard the resource?"

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226. See *National Audubon*, 658 P.2d at 732 (declining to state how the Board should apply the court's holding to Mono Lake).

227. Closing Brief of the City of Los Angeles, *In the Matter of City of Los Angeles Water Right Licenses 10191 and 10192 for Diversion of Water from Streams Tributary to Mono Lake* [hereinafter LADWP Cl. Br.] at 2, Mar. 21, 1994 (on file with author).

228. *Id.* at 48-49 (asserting that the Board should determine the minimum amount of water necessary to protect public trust values while maintaining diversions as close as possible to historic consumptive use).

California's first major application of *National Audubon* firmly established that the state's foremost responsibility is to fully ascertain the needs of the public trust and the extent to which appropriative demands can be made to accommodate those needs. The primary objective of this analytical approach, based on the strong legal foundation provided by *National Audubon*, is environmental protection. The public trust analysis is likely to be of central importance to future water rights reconsiderations, particularly those involving the Bay-Delta estuary.

## 2. *The Board Established a Sound Standard for Determining the "Feasibility" of Public Trust Protection*

Some parties to the Mono Lake proceedings urged the Board to interpret *National Audubon's* standard that trust resources be protected "whenever feasible" as amounting to no more than a "reasonableness" standard.<sup>229</sup> This argument posited that a remedy is not feasible simply because it is possible. Thus, raising the lake level or restoring trout should be deemed "infeasible" if such efforts would entail extraordinary costs or time.<sup>230</sup> Under this theory, measures that substantially disturb existing water uses would be deemed "infeasible" regardless of the availability of alternative sources of supply. This formulation fails to fulfill *National Audubon's* command that the state affirmatively protect trust resources, however, and the Water Board correctly declined to adopt it.<sup>231</sup>

In accord with *National Audubon*, the Board ascertained whether the public trust remedy was feasible given LADWP's reliance on the Mono Basin supply, the cost to ratepayers of obtaining replacement water, and the public trust implications of the alternative supplies.<sup>232</sup> Despite the fact that public trust recovery will require substantial costs, and a period of twenty years or more, the Board determined that recovering these resources is entirely feasible.<sup>233</sup>

The Board appropriately refused to equate the feasibility of protecting trust resources with the state constitution's reasonable use requirement. These concepts serve very different purposes in water law

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229. *Id.* at 5-7.

230. *See, e.g., id.* at 6. ("Given the number of years it would take to raise the lake surface [beyond the 6377 feet advocated by LADWP], the millions of acre-feet required to do so, the tens of thousands of acre-feet required on an annual basis to maintain the lake surface at that elevation, the substantial uncertainty about the extent to which the migratory waterfowl would return in light of the general decline of waterfowl populations over their entire range . . . this alternative is simply not feasible.").

231. As discussed above, the trust doctrine defines the feasibility of conserving trust resources in terms of the countervailing need for a diversion. Mere appetite for water does not alone justify damaging trust resources. *See supra* part III.A.

232. *See National Audubon*, 658 P.2d at 728-29.

233. *See supra* part IV.C.3 and accompanying text.

and must be analyzed separately. Indeed, the state high court expressly rejected the notion that the appropriative water rights system “subsumed” public trust needs.<sup>234</sup> The semantic limitations of subjective terms like “feasible” and “reasonable” should not obscure either the contexts that inform the trust and reasonable use doctrines or the important differences between the two standards.

### 3. *The Board Adopted the Correct Evidentiary Standard in Determining Economic Impacts*

*National Audubon* recognized that economic costs may occasionally render trust protection infeasible. How to determine such costs, however, poses difficulties. The economic value of water is elusive. Parties to the Mono Lake proceeding provided the Board with radically different cost estimates based on different assumptions about supply, demand, and price both in Los Angeles and in the rest of California.<sup>235</sup> Thus, LADWP argued that protection of the Mono Basin would cost southern California water users \$96 million annually by the year 2000 and about \$140 million annually by 2010.<sup>236</sup> CalTrout maintained that the figure would initially be about \$5.0 million per year, declining over time to about \$1.6 million per year.<sup>237</sup>

The disparity between the cost estimates reflects the differences between a worst case and a most-likely case approach and is the logical result of divergent evidentiary standards. For much of the proceeding, LADWP pressed the Board to base its feasibility determination only on data that were virtually certain. For example, LADWP’s experts urged the Board to assume that the Metropolitan Water District, a major water supplier for the City, would obtain only one-half of its historic 1.2 million acre-feet from the Colorado River.<sup>238</sup> They also maintained that the Board should not assume that LADWP would be able to obtain large amounts of water from trans-

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234. *National Audubon*, 658 P.2d at 727. While the *National Audubon* court observed that public trust needs must conform to standards of reasonable use, this statement simply affirms the axiom that *all* water use in California is subject to the reasonable use requirement.

235. Variables significantly affecting the cost estimates included predictions regarding operations of the Los Angeles Aqueduct, the success or failure of conservation efforts, and population growth.

236. Testimony of Dr. William Wade, *In the Matter of City of Los Angeles Water Right Licenses 10191 and 10192 for Diversion of Water from Streams Tributary to Mono Lake*, Exhibit LADWP-60 at 77 (on file with author).

237. Closing Brief for California Trout, Inc., *In the Matter of City of Los Angeles Water Right Licenses 10191 and 10192 for Diversion of Water from Streams Tributary to Mono Lake* [hereinafter CalTrout Cl. Br.] at 79 (citing Exhibit CT-34) (on file with author).

238. CalTrout Cl. Br., *supra* note 237, at 83 (citing Exhibit CT-25); LADWP Cl. Br., *supra* note 227, at 60.



fers,<sup>239</sup> even though current trends in federal and state law encourage transfers. The City's cost estimate also assumed that LADWP would take no action to compensate for reductions in Mono Basin supplies.<sup>240</sup> Thus, the City's experts argued that the Board should consider only those sources of water that were absolutely certain and currently available to LADWP in estimating the cost of replacing Mono Basin supplies in the future.<sup>241</sup>

There is a certain emotional appeal to the basic question that emerges from this argument: "How can the state reduce a city's historic water supply for a bunch of brine shrimp and grebes if it cannot ensure replacement water?" On the other hand, water supply certainty is never guaranteed, and is an unreasonable standard in the American West. *National Audubon* does not provide support for tying protection of the public trust to a worst-case scenario of future water supply options. A certainty standard for the feasibility determination would have drastically undermined the state's ability to provide public trust protection to any trust resource. At the end of the day, the Board rejected a worst case or certainty standard for estimating future water supply availability: "[T]he LADWP analysis assumes that insufficient replacement water will be available thereby causing high water shortage costs to be imposed on water users in Los Angeles. This assumption does not appear to be realistic in light of the evidence . . . ." <sup>242</sup>

Instead, the Board adopted a more flexible and pragmatic evidentiary standard for determining the feasibility issue by using cost estimates that provided "a reasonable approximation of the expense involved in securing replacement water."<sup>243</sup> Presented with a dizzying array of numbers, charts, and graphs,<sup>244</sup> the Board discarded the calculations proffered by all parties and generated its own figures. It acknowledged that estimations of supply cost and quantity would necessarily be imprecise given the uncertainty about hydrology and

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239. *Id.* For a recent discussion of the future of water transfers, see Brian Gray, *The Modern Era in California Water Law*, 45 HASTINGS L.J. 249 (1994).

240. Testimony of William W. Wade, *In the Matter of City of Los Angeles Water Right Licenses 10191 and 10192 for Diversion of Water from Streams Tributary to Mono Lake*, Exhibit CT-25, at 3-4.

241. See Reporter's Transcript, *In the Matter of City of Los Angeles Water Right Licenses 10191 and 10192 for Diversion of Water from Streams Tributary to Mono Lake* [hereinafter RT], Nov. 17, 1993, at 29-39; RT, Dec. 1, 1993, at 105-16 (on file with author).

242. *Order, supra* note 7, at 171.

243. *Id.* at 176.

244. The economic presentations prompted one Board member to plead for simplicity. RT, Nov. 17, 1993, *supra* note 241, at 132-36.

water supply throughout the state.<sup>245</sup> Nevertheless, the Board believed it had sufficient information to make a feasibility determination.

The Board's reasoning was sound. Water supply and cost estimates should be used only to determine the limited question of whether appropriative needs overwhelm trust requirements. The state's goal should be to ascertain the most likely future consumption needs, not to conjure nightmare prospects. The *National Audubon* integration does not allow the state to abandon its trust responsibilities for the sake of unlikely and remote demands for water; such worst case concerns do not constitute "infeasibility" for purposes of defeating public trust protections. Moreover, should worse come to worst, the Board can revisit its decision.<sup>246</sup>

The state's instruction that water supply and cost estimates must be based on "realistic" future scenarios becomes critically important as California enters an era of increasing competition between public trust and consumptive water uses. Major policy decisions, in particular those involving the Sacramento-San Joaquin Delta, will turn largely on water supply forecasts and cost estimates.

#### 4. *The Board Estimated Replacement Costs Conservatively*

Although the Water Board refused to tie its hands with a highly circumscribed evidentiary standard, it nevertheless employed conservative assumptions in estimating the cost to LADWP of replacing Mono Basin water. The Board overlooked factors that would have reduced the predicted cost of replacement supplies and rendered the estimates more accurate. For example, the Order gave scant attention to the benefits LADWP would gain through more efficient groundwater management. The Order also ignored the certainty that water transfers will be available to LADWP within the next twenty years. These issues clearly influence the feasibility of protecting trust resources.

Nevertheless, the Board's cautious approach has the advantage of underscoring the integrity of its feasibility conclusion. The conservative assumptions demonstrate the state's compliance with *National Audubon's* mandate that special care be given to historic consumptive uses in a public trust reallocation. This approach also confirms that

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245. *Order, supra* note 7, at 176. The Board also acknowledged that a complete economic analysis would include the economic benefits of protecting the fisheries and trust resources of Mono Lake. *Id.*

246. *Id.* at 212.

the state has not attempted to use a public trust determination to insert itself into the utility's management prerogatives.<sup>247</sup>

One notable flaw in the Order's approach to the economic assumptions was the Board's failure to scrutinize LADWP's demand for water. The Board simply adopted LADWP's own prediction that it would require in excess of 750,000 acre-feet annually with no investigation into the accuracy of this estimate.<sup>248</sup> This produced two errors. First, it skewed the feasibility analysis by inflating the estimated cost of replacement water. Second, it bypassed the reasonable use requirement.

The record contained substantial evidence that the City's demand for water would be lower than LADWP's projection.<sup>249</sup> State and federal statutes mandating specific conservation measures are highly likely to decrease water consumption, and LADWP has committed itself to binding agreements that will foster additional conservation.<sup>250</sup> A more accurate and realistic appraisal of demand would have lowered the estimated economic impact of the license amendments.<sup>251</sup> While the Board nonetheless found that the cost of replacement water was "feasible," future disputes may turn on the technical assumptions behind such cost estimates.

Of greater significance, a demand estimate is essentially an appropriator's showing of reasonable use.<sup>252</sup> The Board should have determined the City's future water demand as a predicate to determining whether its proposed use of Mono Basin water was reasonable. Since LADWP had operated for more than five years during one of the state's worst droughts without the benefit of any Mono Basin water,<sup>253</sup> the City's reasonable need for Mono Basin supplies would have been a legitimate inquiry in the license amendment proceeding. However, the Board declined to reopen this threshold issue, and instead assumed without discussion that LADWP's proposed use of Mono Basin water continued to meet the constitutional reasonableness standard.

The Board may have sidestepped the demand issue in the Mono proceeding simply because it could. The Board found that the cost of

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247. In a similar vein, the Board did not further condition LADWP's Mono Basin licenses on the pursuit of alternative water supplies, noting that LADWP has a "strong incentive" to do so on its own. *Id.* at 177-78.

248. *Id.* at 165.

249. The demand figure adopted by the Board was based on a 1990 report acknowledged by most parties to be out of date. RT, Dec. 1, 1993, *supra* note 241, at 107-08.

250. CT-58, *supra* note 223; CalTrout Cl. Br., *supra* note 237, at 72-75; LADWP Cl. Br., *supra* note 227, at 65.

251. Testimony of David Fullerton, Exhibit CT-3, at 9-36.

252. *See supra* part I.B.1.

253. *See supra* note 193 and accompanying text.

replacement water was manageable for LADWP even accepting the high demand estimate. In general, the state should give greater scrutiny to appropriative demand estimates in public trust proceedings. Reasonable use is a basic requirement of water diversion throughout the West, and the feasibility equation must not overlook this crucial factor.

*B. The Board Inappropriately Confused Its Public Trust Duties with CEQA*

A troubling aspect of the Mono Lake Order is that the Board entangled the requirements of the California Environmental Quality Act ("CEQA")<sup>254</sup> with those of the public trust doctrine. The Board seems to have equated CEQA's mandate to consider alternatives that can feasibly attain project objectives with *National Audubon's* direction to protect public trust resources whenever feasible. CEQA provides an enormously valuable approach to evaluating state actions that may harm the natural world. However, its substantive mandate is not comparable to the public trust doctrine. CEQA and the public trust serve different purposes and incorporate entirely different decisionmaking standards. Thus, the "feasibility" analyses under these authorities are not analogous. In merging the trust doctrine with CEQA, the Order potentially undermines the protective mandate of the public trust.

Examination of these principles clarifies their differences. CEQA is a largely procedural statute, intended to inform decisionmakers about the environmental consequences of proposed state actions but making no promise that environmental considerations will prevail.<sup>255</sup> The public trust, in contrast, confers a specific substantive mandate upon agencies to safeguard common heritage assets and to structure consumptive water uses around trust protections.<sup>256</sup>

Where the trust doctrine establishes an environmental standard that the state must attempt to maintain, CEQA is designed principally to allow proposed projects to proceed, albeit in an environmentally sound manner. Thus, CEQA calls for an agency to develop alterna-

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254. CAL. PUB. RES. CODE 21000-21178.1 (West 1986 & Supp. 1995).

255. *Id.* § 21000. See *Concerned Citizens of South Central Los Angeles v. Los Angeles Unified School Dist.*, 29 Cal. Rptr. 2d 492, 503-04 (Ct. App. 1994); *Save San Francisco Bay Ass'n v. San Francisco Bay Conservation & Dev. Comm'n*, 13 Cal. Rptr. 2d 117, 124-25 (Ct. App. 1992); *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.*, 764 P.2d 278, 283 (Cal. 1988). But see *Sierra Club v. Gilroy City Council*, 271 Cal. Rptr. 393, 398 (Ct. App. 1990) (holding that CEQA imposes substantive mandates on agencies, including requiring denial of approval for projects with significant adverse effects when feasible alternatives or mitigation measures can substantially lessen such effects).

256. See *supra* part I.A.

tives intended to achieve project objectives,<sup>257</sup> to analyze environmental impacts, to identify mitigation measures ameliorating adverse impacts, and ultimately, to select a project alternative. Although the agency may choose the "environmentally superior" alternative, it has broad discretion to elevate other public policy choices over environmental protection.<sup>258</sup> CEQA does not identify a category of common assets entitled to continuing state supervision and protection, or establish any particular standard for resource preservation. Thus, the state's decisionmaking under CEQA is substantially different from its decisionmaking under the public trust doctrine, which *does* establish an environmental standard.

The Mono Lake Order blended these mandates in a manner that overlooked their critical distinctions and could potentially undermine the trust doctrine. The Board determined that its proposed remedy fulfilled its obligation to protect the trust resources of Mono Lake in a feasible manner.<sup>259</sup> It attempted to fit this determination into the CEQA paradigm by characterizing its decision as the selection of a CEQA project alternative. The Board then observed that the preferred alternative would have "adverse environmental impacts" on LADWP in the form of reduced water supply.<sup>260</sup> The Board resolved this artificial conflict with circular logic, stating that since public trust considerations called for a lake level of 6392 feet, "alternatives which would result in a significantly lower lake level are not a feasible means of reducing adverse impacts on LADWP's water supply."<sup>261</sup>

Although the Board's result was correct, its reasoning is troubling and should not guide future public trust actions. Even though CEQA and *National Audubon* both establish "feasibility" standards, the context and application of these standards are not comparable. Under CEQA, the feasibility inquiry is a limit on environmental protection;

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257. An EIR must "[d]escribe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project . . . ." CAL. CODE REGS. tit. 14, § 15126(d) (1990) (emphasis added).

258. *Id.* § 15093; *Towards Responsibility in Planning v. City Council*, 246 Cal. Rptr. 317, 323-24 (Ct. App. 1988); *Las Virgenes Homeowners Fed'n, Inc. v. County of Los Angeles*, 223 Cal. Rptr. 18, 25 (Ct. App. 1986).

259. *Order, supra* note 7, at 177.

260. *Id.* at 177-78. Aside from confusing the public trust determination, this finding seems to misstate CEQA law. An EIR may address adverse economic effects, but such effects, by themselves, do not constitute environmental impacts requiring mitigation. CAL. CODE REGS. tit. 14, § 15131(a) (1990) ("Economic or social effects of a project shall not be treated as significant effects on the environment."). See also *San Franciscans for Reasonable Growth v. City of San Francisco*, 258 Cal. Rptr. 267, 274 (Ct. App. 1980); *No Slo Transit, Inc. v. City of Long Beach*, 242 Cal. Rptr. 760, 768 (Ct. App. 1987) ("CEQA does not require an analysis of social or economic impacts.").

261. *Order, supra* note 7, at 177. The Order goes on to describe as "mitigations" the very measures which the Board had already considered in determining that protecting trust resources was feasible for public trust purposes. *Id.*

at issue is the feasibility of the project. Under the trust doctrine, the inquiry is reversed and feasibility is a limit on ecological damage; at issue is the feasibility of protecting trust resources, not accomplishing a proposed diversion.<sup>262</sup>

The CEQA feasibility inquiry is focused on making projects happen. Project proponents must develop a range of alternatives that could “feasibly attain the basic objectives of the project,”<sup>263</sup> which are assumed to be beneficial. The standard for whether an environmentally protective alternative is “feasible” is whether the project goals can be achieved at reasonable economic cost.<sup>264</sup> Thus, project alternatives that will generate fewer jobs or less revenue than the project as proposed may be deemed infeasible.<sup>265</sup> Similarly, project alternatives in jurisdictions beyond the scope of lead agencies are infeasible.<sup>266</sup>

A project-driven standard is at odds with *National Audubon* and public trust law generally.<sup>267</sup> Trust resources may not be degraded whenever their protection would render a proposed project infeasible. To the contrary, even long-standing uses of the trust may be altered or halted when the state determines that such uses are harmful to the trust, despite individualized economic impacts.<sup>268</sup> With regard to water rights, *National Audubon* has clearly placed the burden on appropriators to demonstrate that a proposed diversion is a “practical necessity” before the state may allow harm to trust resources. In sum, CEQA and the public trust doctrine have only a semantic, not a substantive similarity with regard to “feasibility.” Accordingly, a CEQA analysis of “feasible alternatives” is inappropriate when the trust doctrine dictates the applicable decisionmaking standard.

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262. See *supra* part III.A.

263. CAL. CODE REGS. tit. 14, § 15126(d) (1990).

264. See *Marin Mun. Water Dist. v. KG Land California Corp.*, 1 Cal. Rptr. 2d 762, 775 (Ct. App. 1991); *Kings County Farm Bureau v. City of Hanford*, 270 Cal. Rptr. 650, 672 (Ct. App. 1990); *Citizens of Goleta Valley v. Board of Supervisors*, 243 Cal. Rptr. 339, 347 (Ct. App. 1988) (“The fact that an alternative may be more expensive or less profitable is not sufficient to show that the alternative is financially infeasible.”).

265. *Foundation for San Francisco’s Architectural Heritage v. City of San Francisco*, 165 Cal. Rptr. 401, 412-13 (Ct. App. 1980). See also *Sierra Club v. Gilroy City Council*, 271 Cal. Rptr. at 400 (declaring that alternatives providing less housing than desired by project proponent were infeasible).

266. *Save Our Residential Env’t v. City of West Hollywood*, 12 Cal. Rptr. 2d 308, 310 (Ct. App. 1992).

267. See *supra* parts I, III.

268. See *supra* part III.A.

## VI

EPILOGUE: TWO FORMULAS FOR THE PUBLIC TRUST/  
WATER RIGHTS INTEGRATION COMPARED

The American River case<sup>269</sup> stands in striking parallel to the Mono Lake proceeding. Addressing similar issues and conflicts, a superior court and the State Water Resources Control Board developed decisionmaking models to give practical effect to *National Audubon's* weighted balance. These two approaches do not conflict but are two sides of the same coin. The first addresses the integration of public trust and appropriative rights doctrines prospectively, before a diversion has taken place or harmed trust resources. The second confronts the analysis retrospectively, after an appropriative right has been granted and reliance on harm-producing diversions has occurred. Together they provide a comprehensive framework for dealing with the nexus of aquatic resources and water rights as these systems move into an era of greater conflict.

Taken as a whole, the superior court's American River decision defined the analysis called for by *National Audubon* in three steps.<sup>270</sup> First, the court examined whether the diversion would harm the public trust resources of the river.<sup>271</sup> It scrutinized evidence regarding the potential impacts of the diversion on trust resources such as wildlife, riparian habitat, recreation, and salmon.<sup>272</sup> Judge Hodge concluded that the existing instream flow requirements would not sufficiently protect these resources from the loss of water caused by the proposed diversions.<sup>273</sup>

Second, the court asked what measures would ensure that public trust resources are not harmed by the diversion. Although the plaintiffs favored an alternative point of diversion, the court found that stringent export conditions would prevent harm to trust resources while also allowing the preferred diversion to occur.<sup>274</sup> Third, the court found that its physical solution was feasible.<sup>275</sup> Without question the court-ordered conditions increased the cost of the proposed diversion. Although the court did not quantify this cost, it clearly con-

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269. *Hodge Opin.*, *supra* note 172, at 4-7.

270. As a preliminary matter, the court conducted a reasonable use assessment, and satisfied itself that the rights holder's proposed diversion point was reasonable under article X, § 2 in light of LADWP's interest in high quality drinking water. *Id.*

271. Having determined that EBMUD's proposed point of diversion was "reasonable" for purposes of article X, § 2, the court framed its next task: "[I]t remains to be determined if any resulting harm to American River public trust values is of sufficient magnitude to preclude the diversion." *Id.* at 74.

272. *See id.* at 74-105.

273. *See id.* at 96.

274. *Id.* at 109.

275. *See id.* at 108.

sidered the physical solution to be attainable nevertheless. Had the court been unable to accommodate the proposed diversion without harming trust resources, it would have reached the final step of determining whether the diversion constituted a practical necessity.<sup>276</sup> The state may avoid this issue in circumstances that allow it to reconcile trust preservation with water appropriations.

The Water Board went through a similar process for Mono Lake, although this analysis involved past harm rather than prospective damage. First, the Board investigated the measures necessary to restore and protect the Mono Basin trust resources.<sup>277</sup> As discussed above, this inquiry occupied most of the Mono Lake proceeding as the Board scrutinized the biological requirements of the full array of trust resources in the Basin.<sup>278</sup> Second, the Board evaluated the feasibility of providing the requisite flow and restoration measures to the Mono Basin. The feasibility question comprised inquiries regarding the availability of replacement water and the cost of replacement supplies.<sup>279</sup> Here the Board accepted without analysis LADWP's assertions regarding the City's projected need for a certain level of water supply, but concluded that viable alternatives to Mono Basin water were available to the City at feasible cost.<sup>280</sup>

Like the *EDF v. EBMUD* court, the Board was not required to reach the last step in the analysis: considering what circumstances would have made it infeasible to protect the trust resources of Mono Lake. The Board found that a surface elevation of 6392 feet above sea level would be optimal for most trust resources, and that higher levels could actually cause harm to others.<sup>281</sup> The Board allowed LADWP to maintain some exports from the Mono Basin not because it found them "necessary," but rather, because it found such diversions unlikely to harm trust resources.

Both decisions establish very high standards for the feasibility of trust protection. The court and the agency have now found that trust

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276. The court framed this conflict as between the reasonable use determination and the public trust protection considerations. *Id.* at 27-28. This interpretation seems implausible under *National Audubon's* analysis, which posits reasonable use as a threshold issue for all water appropriations, not as a countervailing consideration in the public trust context. To trump protection for trust resources, appropriations must be both (1) reasonable, and (2) necessary. Merely passing the constitutional threshold of reasonable use clearly does not in and of itself establish that protecting public trust resources is infeasible. See *National Audubon*, 658 P.2d at 725-28. It was precisely this argument which the high court rejected in *National Audubon*. *Id.* at 727.

277. The Board was able to skip the first question considered in *Environmental Defense Fund v. East Bay Mun. Util. Dist.* since several courts had recognized that harm to the environment had already occurred.

278. See *supra* part IV.C.1.

279. See *supra* part IV.C.2.

280. See *supra* part IV.C.3.

281. *Order, supra* note 7, at 154-55.



remedies expected to cost millions annually, and requiring decades to execute, are "feasible." Thus, arguments that trust resources cannot be protected if protection entails great cost are no longer viable. To the contrary, these cases stand for the principle that extraordinary efforts are entirely appropriate in the defense of our common heritage resources.

The reactive and proactive sides of the trust coin demonstrate that the public trust doctrine can be a highly effective tool not only for natural resource protection, but also for promotion of greater certainty and reliability in water rights.<sup>282</sup> The latter may well be even more important. The best guarantee of a reliable water supply system will be reliable protection for public trust resources. Hindsight reveals that Los Angeles could have slaked its thirst even without diversions from the Mono Basin. Earlier application of the public trust doctrine would have directed the City to a water strategy less damaging to the environment and more likely to avoid controversy and litigation. Such a preemptive effect is precisely what Judge Hodge may have accomplished in *EDF v. EBMUD*.

Together, the Mono Lake and American River disputes consumed over thirty-two years of litigation. Yet these are among the easy cases, where decisionmakers were able to accommodate both public trust resources and appropriative rights. These decisions are critical victories for the often embattled policy of maintaining our natural heritage.

However, such accommodations will not always be possible. California and the rest of the American West face a torrent of conflicts between public trust resources and water rights. These conflicts will not readily submit to solution through easy alternatives or artfully crafted physical solutions, even by the most Solomonic of jurists. At some point, smelt, salmon, grebes, and gulls will line up against export facilities for which there are no alternatives, and against diversions that cannot be replaced at less than stratospheric cost.

At that point, *National Audubon* will direct that the state determine whether the appropriation is a practical necessity. Bowing to historic realities, the *National Audubon* court recognized that it would be "disingenuous" to hold that appropriations harming trust uses have always been improper.<sup>283</sup> Nonetheless, the overwhelming message of the case is that water use concepts are mutable and evolving. What was reasonable in 1940 is not necessarily reasonable in 1994. By the

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282. See M. Blumm & J. Schwartz, *supra* note 11, at 40 (discussing use of the public trust doctrine as a planning tool).

283. *National Audubon*, 658 P.2d at 728.

same token, not every aspiration for water—even when reasonable—justifies new or continuing harm to our shared aquatic resources.

California is poised for the next round in the water wars. The state is undertaking a massive reassessment of water rights in connection with new water quality standards for the Sacramento-San Joaquin Delta Estuary. The Central Valley Project Improvement Act<sup>284</sup> calls for the doubling of anadromous fish stocks and the dedication of 800,000 acre-feet of water to the environment. Proponents of enlarging the State Water Project have begun to raise funds for that purpose. For those who believe that human beings and the natural world can and must coexist, the common sense of *National Audubon* and its progeny is a beacon in these acrimonious times. The state always had the tools, and now it has the precedents, to plan intelligently for efficient water consumption while maintaining our common heritage assets.

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284. Pub. L. No. 102-575, 106 Stat. 4706 (1992) (codified in scattered sections of U.S.C.).

