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THE COSTS OF THE PUBLIC TRUST DOCTRINE IN ENVIRONMENTAL PROTECTION AND NATURAL RESOURCE CONSERVATION

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**The Costs of the Public Trust Doctrine in Environmental Protection and Natural
Resource Conservation**

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Abstract

We examine the costs of the public trust doctrine in environmental and natural resource protection and conservation. We provide a model of litigation and settlement among disputing parties where the doctrine is applied. The model suggests that use of the public trust doctrine is likely to introduce more costs and be more time consuming than would alternative approaches, such as the purchase of private rights through market transactions or application of eminent domain powers. Because the doctrine allows for uncompensated redistribution it is resisted by current resource owners. Further, by providing open standing to members of the “public” to challenge existing uses, public trust disputes encourage excessive demands and are more likely to go to trial than to be settled. This outcome is exacerbated if the plaintiffs are “zealots” and provide litigation services at below market cost, leading to greater investment in litigation. We present a case study of Mono Lake, part of the well-known 1983 litigation, *National Audubon v. Superior Court* to illustrate our arguments. We suggest that the costs of the public trust doctrine have limited its application.

Introduction.

In 1970, at the time of the rise of the modern environmental movement, Professor Joseph Sax argued that the public trust doctrine could be employed as a powerful tool for “effective judicial intervention” on behalf of environmental protection and natural resource conservation.¹ The article energized legal scholars to outline new applications of the doctrine and environmental advocates to petition for judicial intervention in the name of the public trust.²

¹ Sax, *The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970).

² Examples of the enthusiastic application of the doctrine include Slade, et al, *Putting the Public Trust Doctrine to Work: The Application of the Public Trust Doctrine to the Management of Lands, Waters and Living Resources of the Coastal States* (1990); Meyers, "Variation on a Theme: Expanding the Public Trust Doctrine to Include Protection of Wildlife" *Issues in Legal Scholarship*, Joseph Sax and the Public Trust (2003): Article 7. <http://www.bepress.com/ils/iss4/art7>; Robert Fischman, *The National Wildlife Refuge System and the Hallmarks of Modern Organic Legislation*, 29 Ecology L. Q. 457, 581-82 (2002); Kristen Carpenter, *A Property Rights Approach to Sacred Sites Cases: Asserting a Place for Indians as Nonowners*, 52 UCLA L. Rev. 1061, 1120 (2005); Alison Rieser, *Ecological Preservation as a Public Property Right: An Emerging Doctrine in Search of a Theory*, 15 Harv. Envtl. L. Rev. 393 (1991); Michael Blumm, *Public Property and the Democratization of Western Water Law: A Modern View of the Public Trust Doctrine*, 19

As a legal principle, the public trust doctrine historically had applied narrowly to the right of the public to access navigable waterways without being impeded by private riparian owners. Although there had been controversial, limited extension of the doctrine in the 19th century to public ownership of some tidelands and subsurface lakebeds, the notion that the public had superior rights to non-navigable waters, wildlife and other natural resources that were held in trust by the state, as suggested by Professor Sax and others in the late 20th century, represented a profound expansion.³

The most celebrated incorporation of the public trust doctrine came in 1983 when the California Supreme Court in *National Audubon Society v. Superior Court* 685 P.2d 709 stated that the “core of the public trust doctrine is the state’s authority as sovereign to exercise a continuous supervision and control over” the waters of the state to protect ecological and recreational values.⁴ This ruling had the potential to greatly enlarge the coverage of the doctrine and the role of the police power of the state in regulating allocation and use of water and potentially, other natural resources. As a result of the ruling, the public trust doctrine was seen as a new mechanism that could be applied by the judicial system to force water users and the state (legislature and administrative agencies) to directly consider the values of alternative, often neglected water demands in allocating access and use.

Envtl. L. 573 (1989); Charles Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 Env'tl. Law 425 (1989).

³ See James L. Huffman, *A History of the Public Trust Doctrine: A Tilting at Modern Myths*, Lewis and Clark School of Law, 2006 for summaries of modern public trust arguments and criticisms of their legal precedents .

⁴ *National Audubon Society v. Superior Court*, 685 P.2d. 712. See also Blumm and Schwartz (1995) and Sax (1990, 270) for discussion of subsequent cases in California that expanded the public trust doctrine. See also Gray (1994, 262-69). For public trust application to wildlife, see Meyers (1989).

Because of its recent prominence, the public trust doctrine has received considerable attention from legal scholars, both advocates and critics.⁵ Economists, however, have largely been absent in this debate, despite the implications of the public trust implications for property rights, markets, regulation, and the allocation and use of water and other natural resources.

In this paper we analyze one aspect of the public trust doctrine--its costs in addressing disputes over competing resource (water) values. We argue that it is likely to be a costly and contentious vehicle for achieving public environmental benefits and resource conservation. To demonstrate, we present a model to show why litigation under the public trust doctrine is more apt to go to trial than to be settled privately. The data are not available to directly test the hypotheses regarding settlement versus trial. But more broadly, the model shows how emphasizing the “public” nature of certain natural resources increases the costs of resolving resource conflicts. Broad entry is invited for multiple constituents to assert trust claims and for administrative agencies to extend regulatory mandates. These plaintiffs (some with below market wages) invest in efforts to redirect the resource toward uses they value. At the same time, the property rights of incumbent owners as defendants are subordinated and subject to reallocation without compensation. Hence, rights holders strongly resist such efforts.

We illustrate these points by examining the conflict over Los Angeles’ water rights to the Mono Basin, empirical case underlying the *Audubon* ruling. The dispute took nearly 20 years to resolve with multiple court cases and involvement by various

⁵ For instance, see Epstein, **Error! Main Document Only.***The Public Trust Doctrine*, 7 CATO JOURNAL 411 (1987). Blumm and Schwartz(1995), Fischman (2002), Kearney & Merrill, *The Origins of the American Public Trust Doctrine: What Really Happened in Illinois Central*, 71 U. CHICAGO L. REV. 799 (2004) Carpenter (2005), and Huffman (2006).

constituent groups and government units. In the end, Los Angeles lost its ability to divert Mono Basin water, which provided about 15 percent of the city's total water supply, without compensation.⁶ We conclude with brief discussion of other public trust cases, noting that the doctrine has been applied less than advocates had anticipated after *Audubon*. The costs associated with the doctrine are a likely reason. We explore alternative mechanisms for the reallocation and management of key natural resources.

II. An Overview of the Public Trust Doctrine.

The public trust doctrine asserts that the “public” has the legal right to utilize certain resources, such as tidewaters or navigable rivers without restriction by private owners.⁷ These resources are so inherently common in their nature that their permanent assignment to exclusive, private ownership is inappropriate.⁸ To insure group values are respected, the rights of the public are vested in the state as trustee of the resource. As such, the state through its administrative agencies has a duty to administer, protect, manage, and conserve the resource. Existing private users have only usufruct rights that can be withdrawn whenever the state deems that they are inconsistent with the public trust.⁹ Since there were no private property rights, there is no basis for taking challenges

⁶ Citation

⁷ David H. Getches, *Water Law in a Nut Shell*, St. Paul, West Publishing Co. 217, 224-8, 1997. See also, James L. Huffman, *A History of the Public Trust Doctrine: Tilting at Modern Myths*, Lewis and Clark College, School of Law, 2006.

⁸ Common means common property as described by Ostrom (1990).

⁹ Richard A. Simms, *A Sketch of the Aimless Jurisprudence of Western Water Law*, in Kathleen Marion Carr and James D. Crammond, eds., *Water Law: Trends, Policies, and Practice*, Chicago: American Bar Association, 321, 1995.

in such reallocations. Further, the legislature cannot alienate trust resources, which must remain with the state.¹⁰

As such, the public trust doctrine provides for a powerful regulatory and supervisory role for the state with regard to the resources that are covered. Accordingly, extension beyond navigable waterways to include other natural and environmental resources as envisioned by Professor Sax represents a potentially broad extension of the police powers of the state.¹¹

Within this context, the *Audubon* ruling in 1983 set several precedents as noted in Blumm and Schwartz (2003).¹² First, it enlarged the geographic scope of the trust by ruling that the doctrine applied to water diversions of tributaries adjacent to navigable waterways. Second, the court ruled public trust values are transient and that as values changed, the state was obligated to reallocate the resource to be consistent with those changes. Third, use rights to trust resources, such as water, were non-vested, subject to reallocation without compensation if they were applied in a manner inconsistent with trust values. Fourth, the court identified a major administrative obligation for the judiciary and state agencies in overseeing water and other trust resources. Finally, the court affirmed a previous decision that granted open standing to parties in public trust

¹⁰ Sax (1990, 264, 269), Michael C. Blumm and Thea Schwartz, *Mono Lake and the Evolving Public Trust in Western Water*, 37 *Arizona Law Review*, 709-11, 1905.

¹¹ Huffman (2006, 73). He disputes the asserted linkage between this view of the public trust doctrine and Roman law or English common law. See also, Kearney & Merrill, *The Origins of the American Public Trust Doctrine: What Really Happened in Illinois Central*, 71 *U. CHICAGO L. REV.* 799 (2004) for arguments that proponents have the misread the American legal history.

¹² Blumm, Michael and Thea Schwartz. "Mono Lake and the Evolving Public Trust in Western Water." *Issues in Legal Scholarship. Joseph Sax and the Public Trust*. Article 3. 2003.

cases. In *Marks v. Whitney* the court “expressly held that any member of the general public has standing to raise a claim of harm to the public trust.”¹³

Although, the *Audubon* ruling emphasized the relevance of the public trust doctrine as an environmental and natural resource management tool, the case has been controversial because of its potential to undermine the existing property rights structure.¹⁴ Its costs in impeding dispute resolution over public and private values in natural and environmental resources, however, not been addressed directly. To illustrate them, we now turn to a model of litigation and settlement under the public trust doctrine.

III. A Model of Litigation and Settlement under the Public Trust Doctrine.

In this section we develop a more formal model of the incentives to settle or go to trial in public trust litigation.

Trial

As discussed in the preceding section, the “publicness” of certain resources as proclaimed under the public trust doctrine provides for broad legal standing by multiple constituencies. That is, any member or agency of the public potentially can enter as plaintiff in challenging current natural and environmental resource use. Let the number of potential plaintiffs be indexed by i where $i = 1, \dots, n$ and let T_{pi} be the subjective expected benefit to plaintiff i of bringing suit against a defendant. This benefit will be a function of two factors: First, it will be increasing as the probability of winning the lawsuit rises, where p denotes the plaintiff’s probability of success. Second, it will be

¹³ *Marks v. Whitney*, supra, 6 Cal. 3d 251, p. 261-62.

¹⁴ See Huffman **Error! Main Document Only.**, *A Fish out of Water: The Public Trust Doctrine in a Constitutional Democracy*, 19 ENVTL. LAW 527 (1989).

increasing as the expected size of the damages rises, where D represents the expected size of the damages. Therefore, $T_{pi} = p_i D_i$.

Among potential plaintiffs, the one with the maximum subjective expected benefit of bringing suit will challenge the defendant, where the relevant plaintiff's subjective expected benefit is $T_p = \max_i T_{pi}$, where $i = 1, \dots, n$. There are three determinants of T_p : First, T_p increases in the number of potential litigants, n . Second, T_p increases in effort invested by the plaintiff, where e_p is the effort expended by the plaintiff. Hiring more qualified lawyers, soliciting expert witnesses, or engaging in more concentrated research, makes it more likely that the judge will side with the plaintiff and increase the expected size of the damages awarded. Third, T_p declines with the effort expended by the defendant, where e_d denotes the effort expended by the defendant. Accordingly, it follows that:

$$T_p(e_p, e_d, n) = \max_i p_i(e_{pi}, e_d) D_i(e_{pi}, e_d), \quad (1)$$

where $i = 1, \dots, n$.

Similarly, the subjective expected *loss* of going to trial for the defendant, T_d .

$$T_d(e_p, e_d) = p(e_p, e_d) D(e_p, e_d).^{15} \quad (2)$$

The plaintiff can use two types of effort: w_p , those who work for market wages and z , those who work for below market wages. The latter are zealots or "true believers," who derive utility from participating in the case. The defendant, with less emotional or

¹⁵ With symmetric information about the trial outcomes, the expected benefit to the plaintiff of going to trial would equal the expected loss to the defendant of going to trial. It is more flexible and realistic to relax the assumption of symmetric information and allow the expected benefits and losses to be subjective. Consequently, in general, T_p will not equal T_d .

popular appeal, however, can use only w_p . As a result, $e_p(w_p, z)$ and $e_d(w_d)$, and the plaintiff's and defendant's labor costs are $c_{ip}(w_p, z)$ and $c_{id}(w_d)$.

The value to the plaintiff of trial, V_{ip} , is the benefit less the costs incurred or

$$V_{ip} = T_p(e_p(w_p, z), e_d(w_d), n) - c_{ip}(w_p, z) \quad (3)$$

The defendant's total expected loss, L_{id} , of going to trial will be the *sum* of the subjective expected loss and the costs of trial or¹⁶

$$L_{id} = T_d(e_p(w_p, z), e_d(w_d)) + c_{id}(w_d) \quad (4)$$

The net value of trial, V_t , which is the plaintiff's expected value and the defendant's total expected loss or

$$\begin{aligned} V_t &= V_{ip} - L_{id} \\ &= T_p - c_{ip} - T_d - c_{id} \\ &= T_p - T_d - (c_{ip} + c_{id}). \end{aligned} \quad (5)$$

Settlement

Let S_p and S_d denote the plaintiff's subjective expected benefit and the defendant's subjective expected loss from settlement.¹⁷ Let c_{sp} and c_{sd} be the costs incurred by the plaintiff and defendant, respectively of reaching a private solution.

¹⁶ It is the sum because L_{id} is the defendant's total expected *loss* of trial.

¹⁷ Ex ante, uncertainty exists as to what the final settled amount will be. Thus in general, it is reasonable to assume that S_p and S_d are not equal. With settlement, S_p and S_d are not a function of effort as in litigation because neither party is attempting to persuade an outside entity to empathize with their respective causes. In settlement, the expectation is taken with respect to uncertainty over the bargaining outcome. In litigation, the expectation is taken with respect to uncertainty over the third-party's decision process.

In the special case of the public trust doctrine, there are multiple potential litigants, so that any settlement reached by the defendant with one plaintiff may be thwarted by the entry of another plaintiff. Therefore, we can write $c_{sd}(n)$.

The net expected value of settlement to the plaintiff, V_{sp} , will be the subjective expected benefit of settlement minus settlement costs, or

$$V_{sp} = S_p - c_{sp}. \quad (6)$$

The net expected loss of settlement to the defendant, V_{sd} , will be the subjective expected loss of settlement plus settlement costs, or

$$V_{sd} = S_d + c_{sd}(n). \quad (7)$$

The net value of settlement, V_s , the difference between the net expected value of settlement to the plaintiff and the net expected loss of settlement to the defendant is

$$\begin{aligned} V_s &= V_{sp} - V_{sd} \\ &= S_p - c_{sp} - S_d - c_{sd} \\ &= S_p - S_d - (c_{sp} + c_{sd}).^{18} \end{aligned} \quad (8)$$

Trial and Settlement Together

Because trial is more costly than settlement, in natural and environmental resource disputes we are concerned when trial will be observed. This will occur whenever the net value of trial, V_t , is greater than the net value of settlement, V_s , or comparing (5) and (8), when

$$T_p - T_d - (c_{ip} + c_{id}) > S_p - S_d - (c_{sp} + c_{sd})$$

¹⁸ If we assume that there is perfect information in settlement – perhaps an assumption that both parties know the degree of damage caused – then S_p will equal S_d . If this is the case, then equation (8) simplifies and $V_s = -(c_{sp} + c_{sd}(n))$.

$$T_p - T_d - (S_p - S_d) > c_{ip} + c_{id} - (c_{sp} + c_{sd}).^{19} \quad (9)$$

Implications

Several implications emerge from this discussion regarding the settlement of disputes under the public trust doctrine. First, because the doctrine requires no compensation to the defendant, the plaintiff will benefit more from going to trial. A higher T_p raises V_{ip} and V_t . In contrast, private negotiated settlements are not affected. Equation (9) shows that increasing T_p while holding S_p constant, raises the relative value of trial to the plaintiff, the net value of trial, and ultimately the likelihood of trial.

Second, trial is more likely to occur than settlement because the public trust doctrine allows open standing for numerous plaintiffs. Equation (5) shows that

$$V_t = T_p - T_d - (c_{ip} + c_{id})$$

$$V_t = T_p(e_p(w_p, z), e_d(w_d), n) - T_d(e_p(w_p, z), e_d(w_d)) - (c_{ip}(w_p, z) + c_{id}(w_d)).$$

As the number of potential litigants, n , increases, so does the relevant plaintiff's subjected expected benefit of trial, T_p , and hence the value of trial, V_t .²⁰ Further from equation (8),

$$V_s = S_p - S_d - (c_{sp} + c_{sd}(n)).$$

¹⁹ If we assume perfect information in settlement, then S_p will equal S_d and equation (9) will become $T_p - T_d > c_{ip} + c_{id} - (c_{sp} + c_{sd})$. Furthermore, if we assume perfect information in both trial and settlement, then equation (9) simplifies to $c_{sp} + c_{sd} > c_{ip} + c_{id}$. This implies that trial will occur if the total costs to trial are less than the total costs to settlement. In most general models of litigation, it is assumed the costs of trial are greater than the cost of settlement. Therefore, if perfect information exists, parties will always opt for settling the dispute instead of going to trial.

²⁰ Recall that $T_p(e_p, e_d, n) = \max_i p_i(e_{pi}, e_d) D_i(e_{pi}, e_d)$ where $i = 1, \dots, n$. If we array litigants from lowest expected benefit to highest expected benefit, adding additional potential litigants to the current pool of litigants will increase the right hand side of the equation above. This implies as n increases, so does the subjective expected benefit of the relevant plaintiff.

Increasing n raises the costs of settlement for the defendant, implying that the value of settlement, V_s , is decreasing in the number of potential litigants.

Third, trial is more likely when the plaintiff can invest in effort with lower-cost labor than can the defendant, as is often the case in resource and environmental disputes.

Returning to equations (5) and (9), recall that (9) shows that when V_t increases relative to V_s , trial is more likely, and recall from (5) that

$$V_t = T_p - T_d - (c_{tp} + c_{td})$$

$$V_t = T_p(e_p(w_p, z), e_d(w_d), n) - T_d(e_p(w_p, z), e_d(w_d)) - (c_{tp}(w_p, z) + c_{td}(w_d)).$$

Differentiating V_t with respect to both z and w_p will show their relative impacts on V_t .

The

$$\frac{\partial V_t}{\partial z} = \frac{\partial T_p}{\partial e_p} \frac{\partial e_p}{\partial z} - \frac{\partial T_d}{\partial e_p} \frac{\partial e_p}{\partial z} - \frac{\partial c_{tp}}{\partial z}. \quad (10)$$

The

$$\frac{\partial V_t}{\partial w_p} = \frac{\partial T_p}{\partial e_p} \frac{\partial e_p}{\partial w_p} - \frac{\partial T_d}{\partial e_p} \frac{\partial e_p}{\partial w_p} - \frac{\partial c_{tp}}{\partial w_p}. \quad (11)$$

The key comparison is to see how equation (10) relates to equation (11). If the marginal product of labor is the same for zealots and standard labor and is the same for the plaintiff and the defendant, the first two terms on the right hand side of equation (10) will be equal

to the first two terms on the right hand side of equation (11). Second, $\frac{\partial c_{tp}}{\partial z} < \frac{\partial c_{tp}}{\partial w_p}$

because zealots work for below market wages. The above two points together imply that

$\frac{\partial V_t}{\partial z} > \frac{\partial V_t}{\partial w_p}$ or that the value of trial rises when zealots are used for labor rather than

standard labor.

Fourth, when more below market labor is available and when there are more potential litigants, trial outcomes will be skewed more heavily in favor of the plaintiff, increasing the likelihood of trial. Recall equation (1), which states that

$$T_p(e_p, e_d, n) = \max_i p_i(e_{pi}, e_d) D_i(e_{pi}, e_d).$$

Expanding this equation yields,

$$T_p(e_p(w_p, z), e_d(w_d), n) = \max_i p_i(e_{pi}(w_{pi}, z_i), e_d(w_d)) D_i(e_{pi}(w_{pi}, z_i), e_d(w_d)). \quad (12)$$

Equation (1) shows that the subjective expected benefit to the relevant plaintiff of trial is the product of the probability the judge will side with the plaintiff and the expected size of the damages awarded. Taking the derivative of the left hand side of equation (12) with respect to z yields,

$$\frac{\partial T_p}{\partial z} = \frac{\partial T_p}{\partial e_p} \frac{\partial e_p}{\partial z}. \quad (13)$$

The first partial derivative on the right hand side of equation (13) is strictly positive and the second derivative is strictly positive when the marginal product of labor is positive. This indicates that the subjective expected benefit of trial to the plaintiff is strictly increasing in the number of low-wage workers or zealots. Further, by examining the right hand side of equation (12) the plaintiff is able to increase both the probability of winning and the expected size of the award with more low-cost effort, which is not available to the defendant. Further, as indicated in (12) when that the number of potential litigants, n , increases, both the probability of winning the case and the expected damages rise for the plaintiff.

As outlined by the model, the public trust doctrine raises the costs of private settlement relative to trial in natural and environmental resource disputes. We cannot

directly test the model's implications back of a lack of data on settlement versus trial, but we can illustrate how the costs of dispute resolution are affected by examining the conflict over water for Mono Lake.

IV. Property Rights to Mono Basin Water Prior to the Public Trust Ruling in *Audubon*.

Because the public trust doctrine subordinates private property rights as part of asserting state regulatory mandates, it is important to understand the rights that existed as part of the 1983 *Audubon* case. At issue were both water levels in Mono Lake and the water flow in four tributary streams, Rush, Lee Vining, Walker, and Parker Creeks. Due to the lack of outlet, Mono Lake is alkaline and hypersaline, but the brine shrimp, algae and alkali flies that live in or near the lake support bird life, particularly the California gulls. The tributaries provided habitat for trout.²¹

Los Angeles acquired the water rights in the Mono Basin between 1930 and 1940 to augment urban supplies.²² At the time, water for urban consumption was viewed as the highest and best use of the water.²³ Owens Valley and the Mono Basin, just to the north, were very important urban water sources. By the 1970s these two areas supplied 80

²¹ Mark Twain famously visited the lake in the latter decades of the 1800's and wrote about his time there. He sarcastically described the lake as "a solemn, silent, sailless sea – [a] lonely tenant of the loneliest spot on earth – ...little graced with the picturesque." Mark Twain, *Roughing It*, New York. Penguin Putnam, Inc. 266, 1872.

²² For discussion, see Libecap (2007, Chapter 7.....).

²³ "The use of water for domestic purposes is the highest use of water." Stats. 1921, ch. 329, § 1, p. 443 now codified as Water Code § 1255.

percent or more of Los Angeles' water through the Los Angeles Aqueduct. As noted above, the Mono Basin alone accounted for about 15 percent of the city's water.²⁴

In the early 20th century, semi-arid Los Angeles had few options for water to sustain its population growth. One was the Colorado River, whose water arrived in 1941 after completion of Hoover Dam and the California Aqueduct. Another was the Owens Valley and Mono Basins, on the east side of the Sierra Nevada Mountains, 250-300 miles northeast of the city. There were several attractions to Owens Valley and Mono water. One was high quality. The water was so pure that it did not have to be further refined, as was the case with highly-mineralized Colorado River water. Further, the water could be secured by gravity flow so that no pumping was necessary, as was the case for Colorado River water. Indeed, Owens Valley and Mono Basin water *generated* electricity. Early figures indicated that Mono water alone generated some 268,000,000 kilowatt hours per year as it poured through the Owens River Gorge whereas, by contrast pumping Colorado River water to Southern California required at least 186,000,000 kilowatt hours.²⁵ The Los Angeles Department of Water and Power (LADWP) became one of the largest electric utilities in the country based on Owens and Mono water flows.

The LADWP completed the Los Angeles Aqueduct in 1913 to transport Owens Valley water. Between 1905 and 1935 the agency acquired 95 percent of the land and water rights in Owens Valley to support the aqueduct.²⁶ But this was insufficient as urban

²⁴ Jones and Stokes (1993, S-1); Dunning (1990, 20); Hart (1996, 56-8). Currently, due to various environmental requirements, including those cited in the Mono Lake ruling, the Aqueduct supplies only around 34 percent. Page 3-3 2005 Urban Water Management Plan, City of Los Angeles, DWP, <http://www.ladwp.com/ladwp/cms/ladwp007157.pdf>. For discussion of Owens Valley, see Libecap (2005).

²⁵ Libecap (2007, chapter 7, **).

²⁶ Ostrom (1953, 121-27).

demand increased. Accordingly, beginning in 1930, the LADWP acquired the water rights in the adjacent Mono Basin to the north in order to export more water. Adding Mono Basin water required extending the aqueduct by 105 miles, construction of a tunnel to connect the two drainages, building of diversion dams and storage reservoirs, and addition of more hydro-electric generation capacity. This fixed investment was non deployable, and its value depended upon secure property rights to water.²⁷

The construction of dams and storage reservoirs raised property rights issues that were to return 40 years later in the public trust case. In 1935 the California Fish and Game Department approved a license for the LADWP to construct storage dams without fish ladders or water releases and to dry up some 16 miles of the Owens River where the water was diverted from its normal river bed. In 1936, however, this decision was reversed as the agency called for protection of fish habitat under California Fish and Game Code, Section 5937 that required owners of dams to discharge sufficient water to maintain fish stocks. The LADWP reached agreement with the Fish and Game Department in 1940 (the Hot Creek Agreement) to provide a fish hatchery to offset fish losses downstream.²⁸

With this agreement and completion of the capital infrastructure, the LADWP applied for rights to appropriate water flows from the four tributary streams to Mono Lake and to divert them through the tunnel and down the Owens River to the aqueduct to Los Angeles. The rights were granted in 1940 by the California Division of Water Resources (later the State Water Rights Board and the State Water Resources Control

²⁷ Libecap (2007, chapter 7)

²⁸ Tape EJ00087, Miscellaneous File, "Chronological Statement of Land, Construction and Organization Matters in the Owens Valley District" from 1896 to 1945 by E. A. Porter, LADWP Archives.

Board, SWRCB).²⁹ Concerns were raised about impact of water diversions on Mono Lake, but were rejected by the agency.³⁰ The first regular flow of water from the Mono Basin to the Owens River drainage and to Los Angeles began in 1941.³¹ Not all of the authorized water was taken by the city at that time, however. The limited downstream capacity of the aqueduct prevented full appropriation of the water until the second aqueduct was completed in 1970.

Additional concerns about fish habitat in the upper Owens River rose in 1952 as water was being directed to new hydroelectric plants. More parts of the river became dry, and fishing groups lobbied for legislation to require delivery of enough water to sustain the fishery. In response, the California legislature enacted Fish and Game Code Section 5946 in 1953, which stated that preliminary permits or final licenses for water diversion in Inyo and Mono Counties (Owens Valley and the Mono Basin) were conditional on water release according to Section 5937 for protection of fish environments.

The Fish and Game Department applied the new code to Los Angeles' diversion request for the hydroelectric sites, but the California Attorney General ruled that the city's request would be governed instead by the earlier 1940 Hot Creek Agreement. Accordingly, in 1955 when the city applied for diversion licenses for Mono Basin water,

²⁹ Hart (1996, 38-40).

³⁰ Division of Water Resources Decision 7053, 7055, 8042, & 8043, April 11, 1940, p. 26.

³¹ Tape EJ00087, Bibliography File, February 1, 1945, "Chronological Statement of Some Facts Pertaining to Land, Construction, Water Supply and Organization Matters of the Department of Water and Power in the Owens Valley District from December 10, 1928 to February 1, 1945 including a General Statement of Facts from 1895 to December 9, 1928," LADWP Archives.

the Attorney General granted them the same immunity as the 1940 permits. This ruling was unchallenged for 30 years, but then it would be overturned.³²

By the early 1960s it was becoming time to draw upon more of the city's water in the Mono Basin. The Los Angeles Aqueduct was at full capacity and urban demand continued to grow as Los Angeles' population reached 2,479,000 people in 1960. There also was increased anxiety over the status of the city's claim to the water it had not used under its 1940 diversion permit.³³ In 1956, the State Department of Water Resources (DWR) reported that Los Angeles was exporting only 320,000 acre feet of the 590,000 acre feet annually available in the Owens Valley and Mono Basin. In 1959, the State Water Rights Board warned that Los Angeles could lose its rights to the water it was not appropriating (under the beneficial use doctrine), noting growing interest in the apparent surplus water.³⁴ Further, the legislative representatives of Inyo and Mono Counties sought studies of how the excess water might be used in the Owens Valley and Mono Basin.

In July 1963 construction began on the second aqueduct, and it was completed in 1970.³⁵ To gain authorization for the export of more water from the Mono Basin, the LADWP applied to the State Water Resources Control Board for additional diversion licenses. In 1974 diversion licenses 10191 and 10192 were granted, allowing the city to divert up to 167,000 acre feet annually. While between 1940 and 1970 an average of

³² Hart (1996, 118). See also, Hundley (2001, 336-46) for discussion of the politics of the Mono Lake battle.

³³ Hart (1996, 56).

³⁴ Kahrl (1982, 405-6), Hart (1996, 56).

³⁵ <http://wsoweb.ladwp.com/Aqueduct/historyoflaa/aqueductfacts.htm>

57,067 acre feet had been exported, with the new aqueduct capacity, water exports jumped from about 21,000 acre feet in 1969 to close to 100,000 acre feet or more through 1975. The peak was nearly 135,000 acre feet in 1974.³⁶

With larger interception of tributary flows, Rush, LeeVining, Parker, and Walker Creeks dried up below the diversion points and the level of Mono Lake began to decline about 1.6 feet a year.³⁷ Between 1941 and 1981 the lake's level had fallen about 46 feet, with one-third of that decline occurring after 1970. The surface area of Mono Lake receded from 90 to 60 square miles, and its salinity increased from 50 grams per liter to 90 grams per liter.³⁸ Figure 1 reports Mono Lake elevations from 1935-2006.³⁹ The pre-diversion average elevation of the lake between 1850 and 1940 was 6,415 feet above sea level. The lowest level was reached in 1981 at 6,372 feet.

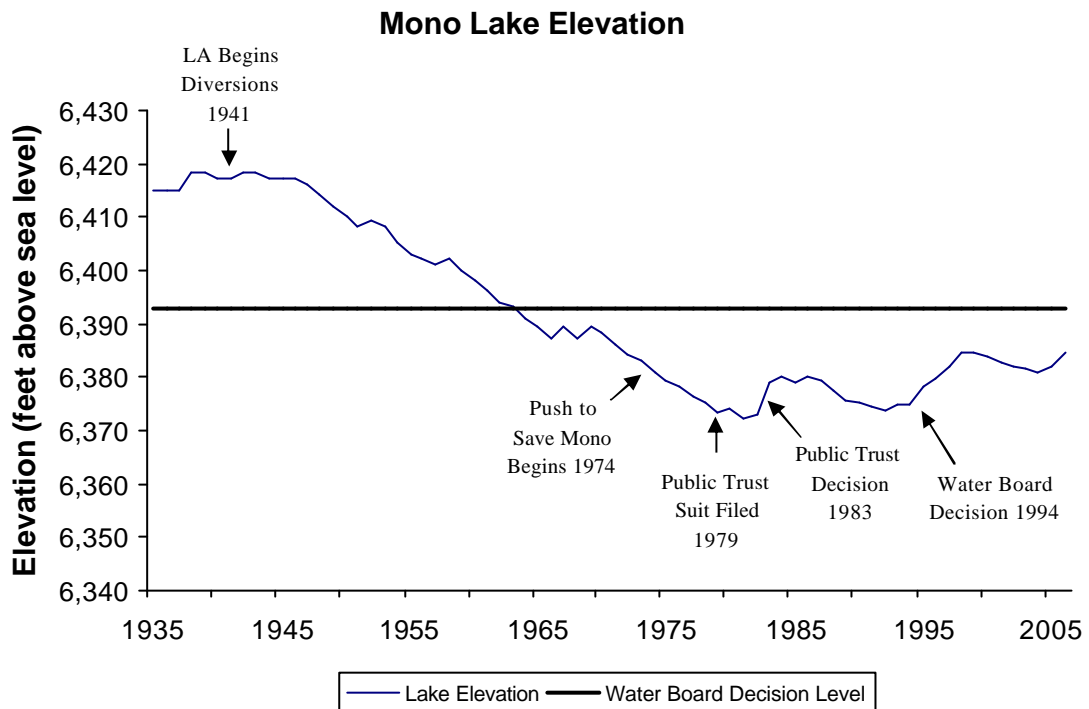
³⁶ *National Audubon v. Superior Court* 33 Cal. 3d 429. See also Libecap, 2007, ***

³⁷ Kahrl (1982, 429-30).

³⁸ Botkin, et. al (1988, ix).

³⁹ Data on the Mono Lake elevations are from the Mono Lake Committee. Each yearly observation is recorded on October 1 of that year.

Figure 1



The resulting effects, first on the lake and then on stream fish habitats, brought growing opposition to the water diversions in the 1970s. This was the beginning of the controversy over Los Angeles' water rights in the Mono Basin and their eventual re-allocation under the public trust doctrine.

V. Conflict over Mono Basin Water, the Public Trust Doctrine, and Implications of the Model.

A Chronology of Disputes over Water Rights in the Mono Basin

Table 1 summarizes the progression of conflicts over Los Angeles' water rights in the Mono Basin.

Table 1

Court Case, Agency	Year	Action
State Water Rights Board	1940	LADWP granted permits to appropriate Mono water for the aqueduct.
State Fish and Game Commission	1940	Hot Creek Agreement to satisfy Fish and Game Code Section 5937.
State Fish and Game Commission	1953	Fish and Game Code Section 5946 holds preliminary permits or final licenses for water diversion in Inyo and Mono Counties conditional on a water release under Section 5937.
	1970	Los Angeles completes the second aqueduct.
California Legislature	1970	California Environmental Quality Act (CEQA).
State Water Resources Control Board (SWRCB)	1974	LADWP receives permanent licenses 10191 and 10192 to divert up to 167,000 a.f. annually from Mono.
<i>National Audubon Society v. Superior Court</i> 33 Cal 3d 419	1983	Appropriative water rights restricted by the public trust doctrine.
<i>Dahlgren v. Los Angeles</i> (Mono County Superior Court No. 8092)	1985	Public trust requires release of 19 cfs down Rush Creek to provide fish habitat.
<i>Mono Lake Committee v. Los Angeles</i> (Mono County Superior Court No. 8608)	1987	Public trust requires release of 4-5 cfs down Lee Vining Creek.
<i>California Trout v. State Water Resources Control Board</i> (207 Cal.App.3d 585, Cal Trout I)	1989	Los Angeles' diversion licenses revoked and reissued to comply with Fish and Game Code Sections 5946 and 5937.
<i>The Matter of Mono Lake Water Rights Cases</i> (El Dorado County Superior Court Coordinated Proceedings Nos. 2284, 2288)	1989	Injunction halting export of all Mono water through March 30, 1990; water releases of 85 to 100 cfs for Rush Creek and 60 cfs down Lee Vining Creek to stabilize the lake's level.
<i>California Trout v. Superior Court</i> 218 Cal. App 3d 187, Cal Trout II	1990	SWRCB directed to amend LADWP's diversion licenses to restore streams to their 1940 status.
State Water Resources Control Board	1991	Order 91-04 amends diversion licenses in Owens Valley and Mono to comply with Fish and Game Code Sections 5946 and 5937.
Environmental Protection Agency	1993	Mono Basin in Moderate Non Attainment of Federal PM-10 Standards.
State Water Resources Control Board	1994	Decision D-1631 amends diversion rights to set permanent stream flows to public trust values in Mono Lake at a level of 6,392 feet.

As Mono Lake levels declined, the National Audubon Society, Friends of the Earth, the Sierra Club, and a new coalition of environmental activists, the Mono Lake Committee that had formed in 1978, brought suit in 1979 to curtail Los Angeles' export of water under the public trust doctrine. Referring to *Marks v. Whitney* 6 Cal. 3d 251

(1971) which held that the public trust doctrine applied not only to navigable waterways but to streams used for recreation, wildlife habitat, and ecological study, the plaintiffs charged that Mono Lake was being harmed and that the diversion was not a reasonable and beneficial use as required by the state's appropriative water rights system. This public trust argument posed clear challenges to private water rights.⁴⁰

After two years, this initial public trust challenge was rejected in November 1981 by the Alpine County Superior Court. The court ruled that administrative remedies to the dispute had not been exhausted and that the public trust doctrine was subsumed in existing California water rights law which governed Los Angeles water rights.⁴¹ The plaintiffs successfully appealed to the California Supreme Court. On February 17, 1983 in *National Audubon Society v. Superior Court* 33 Cal 3d 419 the court held that exercise of appropriative water rights is subject to limitation by the state in order to protect public trust values, including those of wildlife habitat: "Thus, the public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands..."(33 Cal 3d 441).

According to the court, public trust regulatory responsibilities applied *ex post* to existing water rights, and these rights were use rights only that could be reconsidered in light of changing perceptions of the trust. Water belonged to the people. The court charged the State Water Resources Control Board with monitoring water use and re-

⁴⁰Duane Georgeson, Chief Engineer of the Los Angeles Aqueduct, said "If you can overturn that kind of right (granted by the state) in order to protect environmental values, this could be used in varying forms against all water rights in California." Steve Hinderer, DWP director of public affairs, said "We see the Mono Lake suit as a threat not only to 20% of Los Angeles' water supply but also to all water rights in California May 22, 1979 LA Times –

⁴¹ Hart (1996, 98).

allocating it in a manner consistent with the public trust: “Thus, the function of the Water Board has steadily evolved from the narrow role of deciding priorities between competing appropriators to the charge of comprehensive planning and allocation of waters.” (33 Cal 3d 444).

Because the ruling not only signaled the mostly uncompensated loss of valuable water rights, but also the value of Los Angeles’ past fixed investments in the aqueducts, dams, reservoirs, and hydroelectric facilities, the LADWP filed a petition for certiorari with the United States Supreme Court on the basis that the California court misinterpreted the public trust doctrine and that the decision deprived Los Angeles of vested property rights without due process of law (a takings). The Department of Interior's Regional Solicitor for California supported the appeal, but it was denied, November 7, 1983.⁴²

In July 1983, the U.S. District Circuit Court in Sacramento ordered the LADWP to reduce its water diversions from the Mono Basin through August 1984 in order to release enough water to stabilize the lake’s level.⁴³ In August 1984 the city’s diversions again resumed from most tributaries to Mono Lake. But the Department of Fish and Game along with another advocacy group, California Trout, argued that the city should maintain flows in Rush Creek, the Mono Basin’s largest stream. California Trout, joined with the National Audubon Society, the Mono Lake Committee, and others sued under the public trust doctrine.⁴⁴ On March 7, 1985 in *Dahlgren v. Los Angeles* (Mono County

⁴²Conway (1984, footnote 108). *City of Los Angeles Department of Water and Power v. National Audubon Society et al.* No 83-300, 464 U.S. 977, November 7, 1983.

⁴³ Hart (1996, 103).

⁴⁴ Hart (1996, 109-14).

Superior Court No. 8092), the so-called Rush Creek Case, the court issued a restraining order requiring a flow of 19 cfs to provide fish habitat as part of the public trust. Later in August 1985, the court extended the order while studies were conducted to determine the amount of water necessary to maintain fish habitat. These studies took six years to complete.⁴⁵ A similar court ruling in 1987 in *Mono Lake Committee v. Los Angeles* (Mono County Superior Court No. 8608), the so-called Lee Vining Creek Case, required the resumption of water flows of 4 to 5 cfs down Lee Vining Creek to protect public trust values.⁴⁶ Also in August 1987 the National Academy of Sciences report, *The Mono Basin Ecosystem: Effects of Changing Lake Level* was released suggesting that a lake level of 6,380 be maintained to protect the lake's ecosystem. Another state-funded study called for a similar minimum level.⁴⁷

More permanent revision of Los Angeles' Mono water rights occurred in *California Trout v. State Water Resources Control Board* (207 Cal.App.3d 585) on January 26, 1989 (Cal Trout I) where the appeals court concluded that Los Angeles' 1974 diversion licenses should be revoked by the State Water Resources Control Board and reissued because they did not comply with Fish and Game Code, Section 5946 that required protection of fish habitat. The court overturned an earlier opinion by the Sacramento County Superior Court issued on July 30, 1984 that the city's appropriative rights were immune from such a challenge due to the 1940 Hot Creek Agreement. The

⁴⁵ Hart (1996, 115-17).

⁴⁶ See linkage of these cases to the public trust in *Los Angeles Times*, October 26, 1986, "As Mono Lake Rises, Its Political Climate is Slowly Changing," Robert Crabbe, pg. 1.

⁴⁷ *The Future of Mono Lake*, CORI, Community and Organization Research Institute (UCSB) as described by Hart (1996, 124-5).

appeals court held that since Los Angeles' 1940 diversion permits had not been placed fully into beneficial use until 1974, they were subject to the requirements of Section 5946.⁴⁸

In August 22, 1989, In *The Matter of Mono Lake Water Rights Cases* (El Dorado County Superior Court Coordinated Proceedings Nos. 2284, 2288) the court issued an injunction halting export of all water from the Mono Basin through March 30, 1990 and releases of 85 to 100 cfs down Rush Creek and 60 cfs down Lee Vining Creek to stabilize the lake's level at 6,377 feet above sea level.

To provide some financial reimbursement to Los Angeles for the lost Mono water, the California Legislature passed AB444, the Environmental Water Act of 1989, on September 22, 1989 to allocate \$60 million for alternative water sources. Funds would be granted, however, only upon joint application by the LADWP and the Mono Lake Committee, a requirement that gave equal footing to one of Los Angeles' key competitors for its water.⁴⁹ A draft environmental impact report to examine the effects of water export from the basin and to outline management options also was to be prepared by the State Water Resources Control Board.⁵⁰

On February 23, 1990 in *California Trout v. Superior Court* 218 Cal. App 3d 187 (Cal Trout II), the Third District Court of Appeal further directed that the SWRCB amend the LADWP's 1974 diversion licenses to include the requirement that: "The licensee

⁴⁸ *Los Angeles Times*, June 23, 1988, April 27, 1989, "DWP Told to Cut Back Diversion of Mono Lake Water," pg. 34; April 29, 1989, "Court's Decision, Inyo County Objections Put LA Water in Jeopardy," Kevin Roderick, pg. 1"

⁴⁹ Hart (1996, 132).

⁵⁰ *Los Angeles Times* July 16, 1989, "Bill to Halt LA's Use of Mono-Area Water Shelved," Virginia Ellis, pg. 3; August 11, 1989, "LA Backs Legislative Plan to Cut Use of Mono Water," Virginia Ellis, pg. 1; August 17, 1989, "MWD May Back Bill on Mono Lake Water Dispute," Virginia Ellis, pg. 1;" September 1, 1989, "Agreement Near on Bill to Cut Mono Diversions," Virginia Ellis, pg. 32.

shall release sufficient water into the streams from its dams to reestablish and maintain the fisheries which existed in them prior to its diversion of water.” This ruling mandated that Rush, Lee Vining, Parker and Walker Creeks be restored to their 1940 status. Some 60,000 acre feet per year were to be released to the streams and Mono Lake.⁵¹ A Restoration Technical Committee with one seat each for the LADWP, the Mono Lake Committee, the National Audubon Society, California Trout, and the Department of Fish and Game was to manage the restoration of aquatic and riparian habitats. The LADWP was to pay for the restoration.⁵²

Disputes among these groups over the appropriate lake level target, the amount of water diversions to be allowed, and the extent of habitat restoration, however, brought another round of litigation. On April 17, 1991, the El Dorado County Superior Court ordered that the lake level be held at 6,377 and required that the LADWP pay court costs.

There still was no agreement between the LADWP and the Mono Lake Committee on the allocation of the funds set aside by the state under AB444. In September 1992 the U.S. Congress passed HR 429, the Reclamation Projects Authorization and Adjustment Act, authorizing the Bureau of Reclamation to pay one-fourth of the cost of some water recycling projects, conservation, and effluent recycling in Southern California as partial offset for lost Mono water.⁵³

Further pressure was added to the LADWP to give up more Mono water when the Environmental Protection Agency ruled on July 7, 1993 that the Mono Basin was in

⁵¹Jones and Stokes (1993, 3D-113) Hart (1996, 139-40).

⁵² Mono Basin Clearinghouse, www.monobasinresearch.org/timelines/polchr.htm.

⁵³ Hart (1996, 148).

moderate non-attainment of Federal Clean Air Act standards due to blowing dust from the dry Mono Lake bed.⁵⁴

The draft EIR presented a lake level benchmark of 6,390 feet that would end dust pollution and maintain its tufa formations. The Great Basin Unified Air Pollution Control District, the State Department of Parks and Recreation, the State Lands Commission, and other agencies supported this benchmark or higher targets. Even so, the lake level necessary for sustaining wildlife habitats and for protecting fish stocks in the streams still was not fully known.

On September 16, 1994, the SWRCB published the final Environmental Impact Report, which called for a target lake level of 6,390 feet. To achieve it, there could be no water diversions by the LADWP from the Mono Basin until the lake reached 6,377 feet; then 4,500 acre feet a year could be withdrawn until the lake was at 6,390 feet; after that 16,000 acre feet could be exported until the lake was at 6,391; and at higher levels all water in excess of flows necessary to protect fish habitat could be diverted, for an average of 30,800 acre feet per year. This process would take about 20 years. These final exports would be about one-third the amount diverted by the city in the early 1970s.⁵⁵

Finally, on September 28, 1994, the State Water Resources Control Board formally amended the LADWP's Mono water rights through Decision D-1631. As ordered in 1983 in the Audubon case and in 1989 and 1990 in the Cal Trout I and Cal Trout II cases, the diversion licenses issued twenty years earlier were reduced to comply

⁵⁴ Jones and Stokes (1993, 3H-6, 8, 30).

⁵⁵ Pages 3-5 to 3-7, 2005 Urban Water Management Plan, City of Los Angeles, DWP, <http://www.ladwp.com/ladwp/cms/ladwp007157.pdf>.

with Fish and Game Code Sections 5937 and 5946 and to protect public trust values in Mono Lake. Only small diversions would be allowed until the lake level reached 6,392 feet above sea level.

The Costs of Dispute Settlement under the Public Trust Doctrine.

Because so much was at stake in the reallocation of the water without compensation, both the LADWP and the various plaintiffs invested in efforts to advance their particular positions. In 1993, the agency predicted that the long-term costs of replacing Mono water could be \$1 billion.⁵⁶ This figure did not include the costs of stranded, non-deployable capital in water export and hydro-electric generation.⁵⁷

The plaintiffs in the Mono disputes with Los Angeles often relied on the expertise of federal and state agencies. They also were assisted by sympathetic volunteers. Many were members of the Mono Lake Committee. William Kahrl described them as “a small group of birdwatchers and graduate students... activated by nothing more complex than their deep affection for a place few Californians will ever see.”⁵⁸ In both 1981 and 1991, supporters of the Mono Lake Committee took bike treks from LADWP headquarters to Mono Lake. They filled water bottles with water from LADWP’s reflecting pool and dumped them into Mono Lake.⁵⁹ Further, a major law firm, Morrison and Foerster, took the Mono case pro bono. Massive amounts of information were assembled by both the

⁵⁶ Hart (1996, 162).

⁵⁷ In 1991, LADWP estimated that it had spent approximately \$12 million for outside lawyers and consultants since 1979. John Hart, *Storm Over Mono: The Mono Lake Battle and the California Water Future*, University of California Press, 1996, p. 176.

⁵⁸ William Kahrl, *Water and Power: The Conflict over Los Angeles’ Water Supply in the Owens Valley*, University of California Press, 1982.

⁵⁹ Los Angeles Times, September 2, 1981, September 1, 1991.

plaintiffs and the LADWP. The transcripts of the state Water Board hearing alone were over 30,000 pages.⁶⁰ Yet, one round of agreements among conflicting parties did not provide protection against new plaintiff or regulatory claims and more extreme demands on the defendant.

Table 2 summarizes the Mono Lake level demands of the various parties over time. Each higher level involved shifting water from urban consumption to the lake. In general, there is a progressive rise in water level demands. The original objective of the initial plaintiffs, the Mono Lake Committee, in 1977 was 6,378 feet. This was 27 feet lower than the highest level sought by the most aggressive claim (California Department of Fish and Game) and 14.6 feet lower than what was finally set by the State Water Resources Control Board in 1994 after being empowered by the public trust ruling of 1983.

Table 2

Year	Organization	Preferred Lake Level (feet above sea level)
1977	Mono Lake Committee	6,378
1979	Inter-Agency Task Force	6,388
1979	Mono Lake Committee	6,388
1988	Community and Organization Institute	6,382
1988	US Forest Service	6,377 – 6,390
1993	US Fish and Wildlife Service	6,390
1993	State Lands Commission	6,390
1993	Department of Parks and Recreation	6,390
1993	US Forest Service	6,390
1993	Great Basin Unified Air Pollution Control District	6,392
1993	CA Department of Fish and Game	6,405
1993	Mono Lake Committee	6,390 – 6,405
1994	State Water Resources Control Board Final Decision	6,392.6

⁶⁰ John Hart, *Storm Over Mono: The Mono Lake Battle and the California Water Future*, University of California Press, 1996, p. 171.

In March 1983, just after the initial public trust ruling, Sanford Wohlgemuth, Conservation Chairman of the Los Angeles Audubon Society wrote to the Los Angeles Times,

“The DWP is saying that, in order to fill Mono Lake to 10% above its present level, all water from the area will have to be cut off for 15 years. No one is asking for that. We all realize the necessity of maintaining this water source for the city. We are simply asking for a fair share of the water to save the lake and eventually restore its former health. By reducing diversions by, say, 20%, Los Angeles will have its water and Mono Lake will begin to resume its original size and beauty.”⁶¹

Even as late as November 1984, David Gaines, head of the Mono Lake Committee state that “We’re not advocating a cutoff of Mono Basin water to Los Angeles. And we’re not interested in returning Mono Lake to its pristine state. We just want more water for the lake in wet years, when water for LA is available elsewhere.”⁶² But these demands would soon be expanded by other parties and additional issues, especially the application of the public trust doctrine to the tributary trout streams in Cal Trout I and Cal Trout II. In these cases, new plaintiffs, California fishing groups were joined by Mono Lake Commission in seeking additional constraints on Los Angeles.⁶³

The two rulings ultimately required that all diversions by Los Angeles be halted in order to protect fish stocks.⁶⁴ There were more options in negotiating levels of Mono Lake than there were in setting minimum flows in the streams because of the small amounts of water in each one and the vulnerability of the trout changes in levels and

⁶¹ Los Angeles Times, March 8, 1983.

⁶² Los Angeles Times, November 30, 1984.

⁶³ Los Angeles Times, August 15, 1986 “Mono Lake Group Wins Round, Slows Diversion of Creek,” Ronald B. Taylor, pg. 3.

⁶⁴ Los Angeles Times, November 21, December 11, 1984.

water temperatures. Minimum flows were set by the courts in these cases.⁶⁵ Indeed, once successful in forcing a rewatering of Rush Creek, the plaintiffs turned to the other streams until the export of water was no longer possible. In 1986, the LADWP estimated that it cost \$350 to maintain each fish in Rush Creek for one year.⁶⁶

Moreover, once the public trust doctrine was introduced as governing the lake's resources, multiple regulatory units intervened. Issues associated with the decline in Mono Lake's level and the drying of tributary streams would have attracted the interests of state and federal agencies in any event, but the broad sweep of the public trust doctrine, the various court rulings, and the corresponding narrowing of existing private water rights widened the scope for regulatory entry.

For example, in 1979, the Inter-Agency Task Force, involving the California State Department of Water Resources, the State Department of Fish and Game, the U.S. Forest Service, the U.S. Bureau of Land Management, the U.S. Fish and Wildlife Service, and Mono County, along with the LADWP, researched options for the lake and Los Angeles' ability to exercise its water rights. As shown in Table 2, these bodies became more involved over time, and additional agencies entered, including the U.S. EPA, California State Water Resources Control Board, Great Basin Unified Air Pollution Control District, and the National Research Council.⁶⁷ Further, in September 1984, the Mono Basin National Forest Scenic Area was created emphasizing the common use of federal lands

⁶⁵ Los Angeles Times, August 15, 1986 "Mono Lake Group Wins Round, Slows Diversion of Creek," Ronald B. Taylor, pg. 3.

⁶⁶ Los Angeles Times, June 20, 1986, "Lower Rush Creek Battle is put on Hold," Earl Gustkey, pg. 15.

⁶⁷ Los Angeles Times, August 5, 1987, "Scientists See a Stark Future for Mono Lake, Bill Boyarsky," pg. 1.

around Mono Lake.⁶⁸ This designation, in turn, required broader regulatory controls on water exports as emphasized by Inyo National Forest Supervisor Dennis W. Martin: “We have the option, and probably the responsibility, to identify a lake level that would best meet the overall management objectives of the Scenic Area.”⁶⁹ In its subsequent report, the Forest Service was joined by the California Department of Fish and Game.⁷⁰ A 75 percent reduction in Los Angeles’ diversions was recommended in a draft management plan.⁷¹ In 1990, the State Lands Commission agreed to file a friend-of-the-court brief supporting Audubon and the Mono Lake Committee to halt all diversions by Los Angeles.⁷² In 1993, the California Department of Fish and Game, under even more pressure to reallocate water from urban use to restore stream levels under Cal Trout I and Cal Trout II, adopted the highest lake level target of 6,405 feet above sea level. In September 1994, the State Water Resources Control Board voted to set the Mono Lake level at 6,392-feet, effectively halting Los Angeles’ diversions. Once the lake reached that level, in about 20-years, the city could then only divert an average of 30,800 acre-feet, about 1/3 of its previous water right.⁷³

VI. Concluding Remarks.

⁶⁸ Los Angeles Times, June 17, 1983.

⁶⁹ Los Angeles Times, August 7, 1987, “A Piece of the Mono Lake Puzzle,” pg. 4.

⁷⁰ Los Angeles Times, November 1, 1987, “US Forest Service to Recommend Water Level Minimum New Reports Expected to Turn up Heat on Mono Lake Debate, Robert Crabbe, pg. 2.”

⁷¹ Los Angeles Times, September 21, 1988, “75% Cut in Water Diversion by LA Urged to Protect Mono Lake Basin,” Robert W. Stewart, pg. 1.

⁷² Los Angeles Times, March 29, 1990, “State Backs Environmentalists on Mono Lake Water,” Virginia Ellis, pg. 1.

⁷³ Los Angeles Times, September 18, 1994, September 29, 1994.

In 1970, Professor Joseph Sax argued that the public trust doctrine could be used to re-allocate resources on behalf of environmental protection and natural resource conservation. A test case for his arguments arose with the filing of *National Audubon Society v. Superior Court* 685 P.2d 709 in 1979 in an effort to limit Los Angeles' export of water from Mono Lake. As described above, however, this public trust case was extremely contentious and costly to resolve. The controversy over the case and the costs associated with it may have limited the application of the public trust beyond what had been envisioned by its promoters following the *Audubon* ruling in 1983.⁷⁴

Indeed, a Lexus/Nexus search of public trust litigation for the period 1985 through 2004 reveals 32 court cases in 12 western states with three-fourths of them in California, Colorado, and Idaho. In general, the rulings have held that state responsibilities under the public trust doctrine may extend to maintenance of stream flow and water levels in rivers and natural lakes, including groundwater systems linked to them in order to guard for health, amenity values, and fish and wildlife habitat.⁷⁵ Even so, range of the issues addressed by the courts seems to be quite narrow. It does not involve the broad sweep of possibilities for extending the doctrine to curtail private appropriative water rights, to manage wildlife, or to administer the federal lands as has been proposed.

An alternative approach to address conflicting public and private values as occurred in the Mono Lake case that likely would be less costly and timelier is a market-related response. In the case at hand, rather than rejecting Los Angeles' water rights

⁷⁴ References

⁷⁵ *Shokal v. Dunn*, 109 Idaho 330, 707 P.2d 441, 1985; *Mineral County v. State of Nevada*, 117 Nev 235, 20 P.3d. 800, 2001; *Golden Feather Community Ass'n v. Termlito Irrigation District*, 199 Cal. App. 3rd 402, 244 Cal Rptr. 830, 1988.

under public trust claims, state and federal agencies might have purchased water to restore Mono Lake's level to address public concerns. Where narrower private concerns were involved, as in the case of the individual stream fisheries, private groups, such as California Trout, could have secured water in a manner similar to that done by the Oregon and Montana Water Trusts.⁷⁶ Reliance in purchases would have had the advantages of producing more information about the relative values of water and reduced the conflict associated with uncompensated reallocations. Extreme demands encouraged by open standing under the public trust would have been tempered by the requirement to purchase. Where no voluntary agreements on water transfers for public environmental or recreational uses were forthcoming due to bi-lateral monopoly conditions, eminent domain with compensation would have been an option for government acquisition of water.⁷⁷ All in all, the public trust doctrine appears not to be an attractive vehicle to advance environmental and natural resource objectives.

⁷⁶ See <http://www.owt.org/>. Libecap (2005, 19-23) describes some of the transaction costs of such exchanges, including bi-lateral monopoly, valuation, and third-party effects.

⁷⁷ The uses and problems of eminent domain and just compensation are outlined in Fischel (1998). Eminent domain has been used to acquire private inholdings in National Parks. There is, of course, potential for conflict in these compulsory exchanges, but since compensation was provided as to little or no compensation under the observed re-allocation, it seems likely that there would have been less contention.