

THE CONSTITUTION, PROPERTY RIGHTS
AND THE FUTURE OF WATER LAW

Western Water Policy Project
Discussion Series Paper No. 2

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NRLC Discussion Paper Series
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1990

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PREFACE

In 1988 the Natural Resources Law Center initiated the Western Water Policy Project with the support of a grant by the Ford Foundation. This project includes a broad-ranging review of the laws, policies, and institutions governing the allocation and use of water resources in the western United States. It is aimed at addressing the adequacy of western water policy to respond to the needs of the contemporary West.

A major objective of the Western Water Policy Project is to encourage discussion of water policy issues. To further this objective we are initiating this Discussion Paper series. The papers in this series are written in conjunction with periodic workshops primarily involving a water policy working group. The members of this group are F. Lee Brown, James E. Butcher, Michael Clinton, Harrison C. Dunning, John Echohawk, Kenneth Frederick, David H. Getches, Helen Ingram, Edwin H. Marston, Steven J. Shupe, John E. Thorson, Gilbert White, Charles F. Wilkinson, and Zach Willey.

We welcome comments and responses to these papers.

Larry MacDonnell

The Constitution, Property Rights and The Future of Water Law

Joseph L. Sax*

INTRODUCTION

Nearly twenty-five years ago the economist Kenneth Boulding wrote a brilliant article called "The Economics of the Coming Spaceship Earth".¹ Boulding said that we were moving from what he called a cowboy economy, in which achievement was measured by "throughput", growth in production and consumption; to a spaceship economy where achievement would be measured by our ability to maintain the stock of resources we had and to put them to effective and sustaining use. Boulding has proven uncannily foresighted, and nowhere is his vision more pertinent than in western water law.

Traditional water strategies were classic examples of Boulding's description of the cowboy economy. One has only to recall the developmental history of Denver and Los Angeles, or to have seen the old newsreels portraying cascading water supplies to celebrate the opening of the Owens Valley system or the Hoover Dam, to appreciate the literal aptness of Boulding's use of the word "throughput". Today virtually everyone acknowledges that the big dam era is over and that a central task of water policy is to stretch, reallocate and protect the quality of existing supplies of water; in short to move into the spaceship mode.²

Since the water agenda is changing, the question is how water law will in turn change. For more than a century western water law facilitated the goals of the cowboy-throughput economy. It aided the removal of water from rivers for application on land, and the damming, storing and transportation of new supplies from areas of abundance to those of shortage. In conjunction with other laws and policies (such as the federal reclamation program) state water law facilitated growth in demand by keeping prices low to users, and it generated means to meet

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¹ The essay is found in ENVIRONMENTAL QUALITY IN A GROWING ECONOMY (H. Jarrett ed. 1966).

² This is not a matter of absolutes. Certainly there will be new supply projects, but three factors combine to make them increasingly less attractive: declining subsidies, growing environmental and local opposition, and the reduced presence of economically and technically desirable sites. A major technological breakthrough, in the economics of desalting for example, could change all that, but no such development is on the horizon.

that demand by exploitation of new sources of supply. In a pristine example of throughput and consumption as its measure of progress, it defined beneficial use in terms of diversion of water out of streams, and considered water left in a stream as effectively wasted.³

The goals of a spaceship economy are, by definition, sharply different ones. It is not by accident that we are turning toward control of waste and water marketing as ways to reallocate existing supplies and meet new demand. There is also increasing interest in re-use of existing water supplies, and in technical means to achieve equal output with smaller inputs of water. Rising concern for maintenance and augmentation of instream flows is entirely congruent with these developments. It is a clear example of stock maintenance. As we move toward a fundamentally different water strategy a primary question is whether, and to what extent, claims of vested property rights constrain opportunities for change.

What exactly is the problem? At its crudest the claim would be that whatever uses an appropriator has been making, and that have been recognized as lawful in the past, must as a matter of property right be permitted to continue or be compensated as for a taking. If successful, such demands would deny a state effective authority to mandate more efficient use of existing supplies. The notion seems to be that to declare an existing use wasteful, or non-beneficial, is a sort of prohibited *ex post facto* law that impairs a vested right.

As we shall see, for practical reasons most states are not likely to want to enforce waste laws very rigorously. They are more likely to promote efficiency by letting appropriators sell the water they can conserve out of their present allotments. But a state's ability to do even this (as I shall explain later) depends in part on its ability to persuade appropriators that they can be subjected to laws requiring that long-standing inefficiencies be abated.

A second property dispute arises from the demand that existing appropriators give up some water in order to restore instream flows. Here the claim is that an appropriator with a recognized right to abstract and use a given quantum of water from a stream cannot be required to divert less, or to make discharges from storage, in order to produce desired water conditions in the stream. The appropriator would say that the right to abstract water from a stream is the very essence of property in water, and that to diminish that right because the state wants increased instream flows is the baldest sort of taking without compensation.

These two species of regulation broadly exemplify the property issues that modern and prospective water legislation raise. In this article I shall discuss the

³ The old thinking is not yet entirely gone. The following is a recent quotation from a lawyer who represented Denver's water interests: "[F]orgetting ... the civilization on which the good life exists in Colorado, many people often referred to as environmentalists have now come to the attitude that water should be wasted by leaving it in streams for the fish and the stream fishermen." *High Country News*, March 13, 1989, at 3, quoting Glenn G. Saunders.

constitutional property standards against which such concerns should be measured.

I shall draw my conclusions primarily from the constitutional law of property developed by the United States Supreme Court. While as a matter of state constitutional law the states may hold different and more property-oriented views than the Supreme Court, in fact they follow quite closely the precepts set down by it. In speaking generally about constitutional property law, the best one can do is to describe the shape of takings law as developed by the federal Supreme Court. Of course no one can warrant that one state or another will not go its own eccentric way. But at the present time I am aware of no state law interpretations that would make the federal standards an unreliable general guide.⁴

WATER RIGHTS AS CONSTITUTIONALLY PROTECTED PROPERTY

Water rights *are* property, but they have no higher or more protected status than any other sort of property. Insofar as "there appears to be a broadly held view that a water right is a special kind of property right which cannot be regulated in the same manner as other property rights"⁵, a simple response can be given: that view is wrong.

⁴ As will become clear my central observation is that the U.S. Supreme Court has been deferential toward state regulation that adversely impacts on property rights, routinely denying the owners compensation. See Sax, *Property Rights in the U.S. Supreme Court: A Status Report*, 7 UCLA J. ENVTL. L. & POL'Y 139 (1988).

The same is true of the states. Every major change in western water law, despite adverse effects on existing claims of right, has been sustained as valid non-compensable regulation. The abolition of riparian rights in one after another state, though controversial, has been upheld. E.g., *Town of Chino Valley v. Prescott*, 131 Ariz. 78, 638 P.2d 1324, appeal dismissed, 457 U.S. 1101 (1982); *In re Waters of Long Valley Creek Stream System*, 25 Cal.3d 339, 158 Cal.Rptr. 350, 599 P.2d 656 (1979). For older cases see J. SAX, *WATER LAW PLANNING AND POLICY* (1968), at 211-12. Even North Dakota finally came around. *Baeth v. Hoisveen*, 157 N.W.2d 728, 733 (N.D. 1968).

Another example is the addition of instream appropriations or reservations as "competitors" with traditional appropriations, which reduces the water available for traditional uses. Various claims that such new laws intrude on the constitutional right to appropriate have been rejected. E.g., *State, Dept. of Parks v. Idaho Dept. of Water Administration*, 96 Idaho 440, 530 P.2d 924 (1974); *Colorado River Water Conservation Dist. v. Colorado Water Conservation Board*, 197 Colo. 469, 594 P.2d 570 (1979).

One might cite many other examples, including the changes brought about when steps are first taken to integrate ground and surface water use, a field in which Colorado has been a leader. See J. SAX & R. ABRAMS, *LEGAL CONTROL OF WATER RESOURCES* (1986), at 850-61. The point is simply that the states have not imposed constitutional property obstacles to major reforms of water law, indicating that their perspective of property rights is congruent with that of the U.S. Supreme Court, discussed in the text, *infra*.

Based on an exhaustive review of California law, a recent article suggests that for at least the last 20 years, and indeed since 1928, "California courts show no great reluctance toward judicial redefinition of property interests in water." Schultz & Weber, *Changing Judicial Attitudes Towards Property Rights in California Water Resources: From Vested Rights to Utilitarian Reallocations*, 19 PAC.L.J. 1031, 1033 (1988). The authors, who are attorneys for Los Angeles in the Mono Lake litigation, lament this development. I cite the article here simply to emphasize that even those who represent water owners see state law interpretation as permitting significant changes to occur without compensation. While California is not the "typical" western state, the recognition that acceptance of uncompensated change goes back 60 years, to a pre-liberal era even in California, is significant.

Changed definition of longstanding property rules may raise a constitutional problem. See *Robinson v. Ariyoshi*, 441 F.Supp. 559, *aff'd*, 753 F.2d 1468 (9th Cir. 1985), *vacated*, 106 S.Ct. 3269 (1986); *Hughes v. Washington*, 389 U.S. 290 (1967)(Stewart, J., concurring). It is hard to imagine the courts developing such a doctrine very far. If they did, all the above-cited sort of changes, long accepted, would be in jeopardy. In any event, many water changes simply apply existing beneficial use or waste standards, rather than changing the definition of property.

⁵ Letter from Lawrence J. MacDonnell to Joseph L. Sax (Feb. 2, 1989).

The constitutional situation can be summarized this way:

1. Water rights have no greater protection against state regulation than any other property rights. They are in no sense "super-property."
2. In fact water rights have *less* protection than most other property rights for several reasons that will be described later in this paper: (a) Because their exercise may intrude on a public common, they are subject to several original public prior claims, such as the navigation servitude and the public trust, and to laws protecting commons, such as water pollution laws; (b) Their original definition, limited to beneficial and non-wasteful uses, imposes limits beyond those that constrain most property rights; (c) Insofar as water rights (unlike most other property rights) are granted by permit, they are subject to constraints articulated in the permits.⁶
3. Regulation may constrain pre-existing uses or rights, legal when initiated. Retroactivity is not the test of compensability.

From a constitutional perspective all property rights have exactly the same status. The constitutional law of water is the same as the constitutional law of potatoes and pork chops. Of course the definition of a particular property right may make it something less than a full fee simple interest; it may be defeasible, of a limited term, etc. But constitutionally no right can be greater than a fee interest, and no property right can be exempted from the full exercise of the police power.⁷ So long as that exercise does not constitute a taking in the constitutional sense, there is no constitutional obligation to provide compensation.⁸ The protection of the Constitution is afforded to "private property", and there is only one such category. Nowhere in the decisions of the Supreme Court is there any hint that water rights are a constitutionally favored form of property.

Plainly this is not the place to rehearse all the twists and turns of the "takings" question. There is a vast literature and a wide range of legal-philosophical views about the appropriate range of uncompensated regulation. But the law is a good deal clearer in practice than academic hand-wringing would suggest. It is much

⁶ An example can be found in the recent Delta water case in California, *United States v. State Water Resources Control Board*, 227 Cal.Rptr. 161, 182 Cal.App.3d 82 (1st Dist. 1986).

The limitation of a right to that which has been explicitly given (by permit, by statute, etc.), and no more, is spelled out in *United States v. Fuller*, 409 U.S. 488 (1973).

⁷ L. TRIBE, *AMERICAN CONSTITUTIONAL LAW* (1988), § 9-10, at 618.

⁸ It perhaps should be emphasized that a legislature is always free to provide some level of compensation as a matter of grace rather than constitutional obligation. See, e.g., *United States v. Gerlach Live Stock Co.*, 339 U.S. 725 (1950)(compensation for exercise of navigation servitude); and see *Penn Central Transp. Co. v. New York City*, 438 U.S. 104 (1978)(partial compensation provided in historic preservation).

The emphasis in this paper on the quite limited constitutional *duty* of compensation should not be taken as a suggestion that legislatures ought, as a matter of legislative policy, to refuse compensation unless it is constitutionally obligatory. We are in a transitional period, and some users will be innocently caught in the toils of that transition. Smoothing the adaptations that will be required may be highly desirable in some circumstances. For example, helping to pay for the development and installation of desired water-saving technologies may be desirable public investments. The point is that even when compensation is not constitutionally mandated, legislatures can target public funds in ways that aid the most sympathetic users, and promote desired new public policies.

easier to identify the operative law of takings than to spin out a perfectly coherent theory to explain all outcomes.

The following is a brief statement of the constitutional situation. The regulatory authority of the state under the aegis of the police power is very broad. Even the Court's most conservative and property-oriented Justices accept the capaciousness of the police power.⁹ The reason, no doubt, is reluctance to second-guess legislatures about the need for regulation, and a recognition that we live in a regulatory state. Significant changes in takings doctrine would put the Court at odds with the modern legislative style of governance. Short of regulation that is forbidden by some other constitutional provision (such as the religion or free speech provisions of the first amendment),¹⁰ or is seen as not serving a public function at all,¹¹ it is not easy to imagine subjects that might garner legislative majorities whose purpose would be viewed today as beyond the police power. Certainly legislation that constrains uses of property to achieve environmental protection goals is firmly within the police power.¹² So is legislation that constrains property use in order to conserve scarce natural resources by requiring more efficient use.¹³ The same is true of legislation whose purpose is to promote efficient administration.¹⁴ Those three categories cover just about all the regulatory proposals that are likely to be made as to western water law.

The question then is under what circumstances compensation is due even for a valid exercise of the police power? There are essentially only two grounds on which it is possible to win a takings case today. The first is where there is a "physical invasion", that is, where government physically appropriates to itself some part of an owner's property, as in the recent *Nollan*,¹⁵ *Loretto*¹⁶ and *Kaiser Aetna*¹⁷ cases. The second is where the effect of the regulation, though its purpose

⁹ "In my view, the aesthetic justification alone is sufficient to sustain a total prohibition of billboards within a community..." Rehnquist, J. in *Metromedia, Inc. v. City of San Diego*, 453 U.S. 490 (1981). "Of course all economic regulation effects wealth transfer... Singling out landlords to be the transferors may be within our traditional constitutional notions of fairness..." Scalia, J. in the rent control case, *Pennell v. San Jose*, 485 U.S. 1, 108 S.Ct. 849, 863 (1988).

¹⁰ E.g., *Schad v. Borough of Mount Ephraim*, 452 U.S. 61 (1981); *Metromedia, Inc. v. City of San Diego*, 453 U.S. 490 (1981).

¹¹ E.g., *Webb's Fabulous Pharmacies v. Beckwith*, 449 U.S. 155, 161 (1980) (expropriation of the interest in an interpleader fund held a taking. The Court said "No police power justification is offered for the deprivation"). Every so often the Court adjudicates directly the "public use" requirement of the fifth amendment. See *Hawaii Housing Authority v. Midkiff*, 467 U.S. 229 (1984). The issue there was whether it was a public purpose for Hawaii to force sale of rental properties to lessees in circumstances where there was a great concentration of fee simple ownership of land thought to affect housing prices. The Court said that breaking up such concentrations of ownership was a public purpose. The case was decided 8-0 with one abstention (Marshall, J.). It is not likely the Court will find legislative acts violate the public purpose requirement absent a corrupt use of governmental power for the exclusive benefit of a particular private owner.

¹² E.g., *United States v. Riverside Bayview Homes*, 474 U.S. 121 (1985) (wetlands); *Hodel v. Virginia Surface Mining and Reclamation Ass'n*, 452 U.S. 264 (1981) (strip mining); *Agins v. Tiburon*, 447 U.S. 255 (1980) (open space).

¹³ E.g., *State v. Dexter*, 32 Wash.2d 551, 202 P.2d 906 (1949), *aff'd per curiam*, 338 U.S. 863 (1949) (requiring those engaged in commercial logging operations to leave a certain number of trees standing for reseeded and restocking purposes). For a reference to the history of efforts at sustained-yield forestry, see Sibley, *An America That Did Not Happen*, *High Country News*, Dec. 22, 1986, at 8.

¹⁴ E.g., *Texaco v. Short*, 102 S.Ct. 781 (1981), where the Court upheld (unanimously on the takings issue) a state statute providing that mineral interests unused for many years lapsed unless the owner filed a statement of claim in the county recorder's office.

¹⁵ *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987).

¹⁶ *Loretto v. Teleprompter*, 458 U.S. 419 (1982). For reasons not germane to this discussion, I view *Loretto* as wrongly decided. Be that as it may, it nonetheless demonstrates that physical invasion is the event that primarily triggers a demand for compensation by the Supreme Court. Even physical invasion is not a guarantee of compensation, however. *Pruneyard Shopping Center v. Robins*, 447 U.S. 74 (1980).

¹⁷ *Kaiser Aetna v. United States*, 444 U.S. 164 (1979).

is valid under the police power, is so greatly to diminish the value of the property that it is no longer economically viable. As to this latter test—the so-called diminution of value standard—the Supreme Court has been extremely deferential to regulators and even diminutions approaching 90% of value have been sustained without compensation. That has been the Court's unvarying position for many decades.¹⁸

Under these standards, the only new water law regulation that would *prima facie* raise a taking problem is a release requirement: requiring existing appropriators to make releases in order to augment instream flows for public purposes such as ecosystem protection and public recreation. If the appropriator's property right were an unqualified one, such a requirement might well be viewed as a "physical invasion", and thus compensable.¹⁹ But, for reasons that will be detailed in a later section of this paper, original limitations on the property that can be acquired in water undermines this facially appealing claim for compensation.²⁰

Otherwise, the regulations most likely to be challenged are those that require existing uses to be cut back as wasteful.²¹ By definition there is no property right to waste water,²² and that would seem an end of the matter. But several claims may

¹⁸ For the old cases, see *Sax, Takings and Police Power*, 74 YALE L.J. 36,50 (1964). As recently as 1985, the Court in *United States v. Riverside Bayview Homes*, 474 U.S. 121,127 (1985), said nothing more is required to sustain the regulation than that there be an "economically viable" use of the [property] in question." Justice Rehnquist in his dissent in *Keystone Bituminous Coal Ass'n v. DeBenedictis*, 480 U.S. 470, 513 (1987) stated the test as whether the regulation went so far as to "completely extinguish the value" of the property. The farthest the Court has gone—totally prohibiting sale of previously lawfully acquired property—was in *Andrus v. Allard*, 444 U.S. 51 (1979), but Justices Rehnquist, Scalia and Powell were ready to limit that case to its specific facts. See *Hodel v. Irving*, 481 U.S. 704, 719 (1987).

Of course a diminution test, looking at the amount of the whole property lost, necessarily requires a view of what is the whole of the property in question. This is the so-called segmentation test. On this, the Court now takes a view favorable to the regulating government, the anti-segmentation position first articulated by Justice Brandeis's dissent in *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922), and affirmed in *Penn Central Transp. Co. v. New York*, 438 U.S. 104 (1978), and again in *Keystone*, *supra*.

While the constitutional test is economic viability, as noted above, in its most recent interstate equitable apportionment case—the one situation in which the Supreme Court devises its own substantive water law—the standard of waste employed was that a user is required to take "only conservation measures that are financially and physically feasible and within practicable limits." *Colorado v. New Mexico*, 467 U.S. 310, 104 S.Ct. 2433, 2440 (1984). Whether this is (a) a different test from the "economically viable" standard; and (b) whether, if different, the Court would sustain as constitutional a state regulation that went further than its own interstate waste standard, remains to be seen.

¹⁹ Even if the appropriator had a conventional unqualified property right, an argument against a "physical invasion" claim might be made. Under the recent decision in the *Keystone* case, *supra*, the Court (narrowly) held that an owner of property (coal) could be required to leave some of it in place in order to sustain the public interest in maintaining the integrity of the superjacent earth. By a parallel analysis, one might say that the owner of property (water) can be required to leave some of it in place (in the river) in order to maintain the public interest in maintaining the integrity of the river.

The appropriate question, both in *Keystone* and in a water case is whether property rights include a right to destroy the public interest in the supporting surface of the earth, or the river as a natural system. The close decision in *Keystone* perhaps suggests that as to ordinary property that is still considered a hard question, though I would not have thought it very difficult. In any event, for reasons that will be detailed in a later section of this paper, it is *not* a hard question as to water rights.

²⁰ Several important California decisions have already sustained the state's authority to require such releases. *National Audubon Society v. Superior Court of Alpine County*, 33 Cal.3d 419, 189 Cal.Rptr. 346, 658 P.2d 709, *cert. denied*, 464 U.S.977 (1983); *United States v. State Water Resources Control Board*, 227 Cal.Rptr. 161, 182 Cal.App.3d 82 (1st. Dist. 1986). A new Superior Court decision holds that the public trust applies to appropriations, constraining the permitted place of diversion in order to protect downstream recreational, riparian and fisheries values, and requiring specified downstream flows to be maintained. *Environmental Defense Fund v. East Bay Municipal Utility District*, No. 425955, Superior Court, County of Alameda (Tentative Decision, Nov. 27, 1989, R.A. Hodge, J.).

²¹ E.g., Order WR 88-20 (Cal. State Water Resources Control Board, Sept. 7, 1988). See *Imperial Irrigation District v. State Water Resources Control Board*, 231 Cal.Rptr. 283, 186 Cal.App.3d 1160 (4th Dist. 1986).

²² E.g., "...the right to water does not give the right to waste it." *A-B Cattle Co. v. United States*, 196 Colo. 539, 544-45, 589 P.2d 57, 60 (1978). See also *Tulare Irrigation District v. Lindsay-Strathmore Irrigation District*, 3 Cal.2d 489, 546-47, 45 P.2d 972, 997 (1935).

nonetheless be anticipated against such regulation: First, that it would be retroactive, illegalizing conduct that previously was considered legal. Second, insofar as such regulation is sought to be justified under the preexisting waste doctrine, it may be urged that the doctrine has been unused or loosely construed for a long time and should not be tightened up now. Or it may be urged that definitions of waste should not change over time.

The first of these issues is easily answered. There is no constitutional bar to retroactive regulatory legislation. The U.S. Supreme Court has recently and explicitly sustained retroactive legislation against taking challenges.²³ The issue no longer presents a substantial federal question. Nonetheless, a notion seems to have been advanced in some circles that what might be called the "non-conforming use" rule in land zoning states a constitutional proposition. The claim is that a use that is already being made and that was lawful when initiated cannot be regulated away without compensation, even though similarly situated new uses may be regulated.²⁴ The short answer is that there has never been a non-conforming use rule in federal constitutional property law. Valid preexisting uses have

²³ *Usery v. Turner Elkhorn Mining Co.*, 428 U.S. 1 (1976); *Connolly v. Pension Benefit Guaranty Corp.*, 475 U.S. 211 (1986). The one constitutional requirement is that the regulated party have acted (though lawfully at the time) to create the problem that the retroactive legislation is designed to solve. Both Justice White's and Justice O'Connor's opinions in *Connolly* emphasize the causal nexus issue. In the *Turner Elkhorn* case, the condition of the company's mines had caused the miners' diseases, though the company may not have known that at the time. In *Connolly*, the job was the source of the pension problems. Conversely, in the otherwise controversial New Deal case of *Railroad Retirement Board v. Alton Railroad Co.*, 295 U.S. 330 (1935) the one thing which the nine Justices, liberal and conservative alike, agreed was that simply to increase a former employee's salary retroactively because of his generalized need for funds, was unconstitutional. This is the setting in which retroactive legislation seems intuitively unfair and in which it has been held unconstitutional (*Cf. U.S. v. Security Industrial Bank*, 459 U.S. 73 (1982)) and it helps explain why some retroactive legislation (requiring retrofit of fire sprinklers in an existing building, *Queenside Hills Realty Co. v. Saxl*, 328 U.S. 80 (1946)) does not seem fundamentally unfair, and has been sustained.

In the water situation, alleged excessive use causes the problem of shortages which threaten either the viability of the economy for lack of water, or damage to the public by excess pressure on the development of new sources of supply. Thus, under the Supreme Court's test, retroactive regulation of waste would be constitutionally permissible.

²⁴ There are state cases that seem to adopt a "once valid, forever valid" rule on waste. E.g., *State ex rel. Crowley v. District Court*, 108 Mont. 89, 88 P.2d 23 (1939). But close examination of the cases usually reveals no such holding. In *Crowley*, for example, the court emphasized that the proposed waste standard would not be economically feasible, not simply that the use was beneficial when initiated. *Crowley* also does not appear to set down a constitutional rule. Indeed, it emphasizes that the junior appropriator (the complaining party) took with knowledge of the senior's use. Such a concern would not be germane to a subsequent state-initiated rule tightening up on wasteful uses. That is what happened in Idaho, where following court decisions protecting a groundwater senior's original pumping lift, the legislature enacted a statute limiting seniors' protection to "reasonable ground water pumping levels as may be established by the director of the department of water resources." IDAHO CODE § 42-226 (Supp. 1989).

For a case expressly holding that waste is a "dynamic concept", see *United States v. Alpine Land & Reservoir Co.*, 697 F.2d 851, 855 (9th Cir. 1983), *cert. denied*, 464 U.S. 863 (1983): "...beneficial use expresses a dynamic concept, which is variable according to conditions, and therefore over time...The district court...was correct to find beneficial use as of the present time as shown by the best available current information." See *In re Willow Creek*, 74 Ore. 592, 144 P. 505 (1914)(wasteful irrigation method must be replaced by modern methods). Cf. J. SAX, *WATER LAW PLANNING AND POLICY* (1968), at 275. Note too that some uses once thought wasteful are now considered beneficial, *Empire v. Cascade Town*, 205 F. 123 (8th Cir. 1913).

As a matter of policy a waste law that is not dynamic is self-defeating in a prior appropriation setting. Ordinarily there is no need to impose strict duty requirements on early users of a river when there are no other demands on the river. In such a situation it makes economic sense to permit one to irrigate by cheap, if extravagant methods (though it may not make good ecological sense). Only as more demand is placed on the river is there a need to constrain uses in order to meet the purposes of an anti-waste policy. Thus the very essence of a law of beneficial use implies revisions over time as needs and circumstances change.

Whether waste laws are primarily distributional in their effects (see discussion *infra*) or also have allocative implications (See Coase, *The Problem of Social Cost*, 3 J.L.&ECON. 1 (1960)) because of inherent limits on marketing is a question that I shall not engage here. As noted in the discussion *infra* I urge that distributional considerations alone justify the enforcement of waste laws.

been rezoned and owners have been required to change their use to conform to the new law.²⁵

While the non-conforming use rule may be a prudent one for certain relatively low priority public purposes (such as removing highway billboards or clearing commercial uses out of residential neighborhoods), if it were implemented as a constitutional principle it would fundamentally subvert the regulatory process. New fire and safety laws could hardly await a whole new generation of buildings; and for that reason required retrofitting of devices like fire sprinklers, or removal of hazards like asbestos, raise no constitutional taking problem.²⁶

The notion that a standard once set (such as a waste rule in water law) cannot be subsequently tightened up is just another version of the "non-conforming use" argument. It is answered by the example of a requirement that sprinklers be retrofitted on existing buildings. Indeed, if the argument were correct that standards cannot be upgraded, all our environmental statutes would be unconstitutional. We could not require industries to retrofit new air and water pollution control equipment to meet new, and tighter, standards so long as they had been in compliance with the standards that were in effect when their facility was built. While the Supreme Court has never in so many words sustained the constitutionality of new pollution standards applied to existing facilities, betting on the constitutionality of such laws as against taking claims is about as safe a wager as the law has to offer.²⁷

There is one respect in which new standards of permissible use in water law may seem to be different from most other upgraded regulation, as in air or water pollution laws. Waste laws in water are essentially efficiency laws. As demand increases they require older users to tighten up their existing uses so as to make more of the resource available for newcomers. In this respect they are directly redistributive of existing uses. In one sense this is different. We don't, for example require owners of existing homes on large lots to rebuild on a smaller lot as a city grows.²⁸ But the water laws are not as different as they may at first seem to be.

The fact is that some conventional regulatory laws *are* redistributive in the same way as water waste regulations. For example, as an area grows we tighten up air emission standards for existing facilities because there is only so much assimilative capacity available in the ambient air. We in effect require existing facilities

²⁵ *Queenside Hills Realty Co. v. Saxl*, 328 U.S. 80 (1946); *Goldblatt v. Town of Hempstead*, 369 U.S. 590 (1962); *Erie R.R. v. Public Utilities Comm'rs*, 254 U.S. 394 (1921).

²⁶ *Queenside Hills Realty Co. v. Saxl*, 328 U.S. 80 (1946).

²⁷ *See South Terminal Inc. v. EPA*, 504 F.2d 646 (1st Cir. 1974). *See also Union Electric Co. v. Environmental Protection Agency*, 427 U.S. 246 (1976).

²⁸ That is perhaps why a case like *Joslin v. Marin Municipal Water Dist.*, 67 Cal.2d 132, 60 Cal.Rptr. 377 (1967) continues to be cited by those who view tightened waste regulations in the face of new demand as a taking of property. *See Schultz & Weber, supra*, note 4, at 1087-88. *Cf. C. MEYERS, A. TARLOCK, J. CORBRIDGE AND D. GETCHES, WATER RESOURCE MANAGEMENT* (3d ed. 1987), at 125.

to "use" less of the ambient air than they have been doing, so as to make more of it available for new entrants. That is precisely what water waste laws would do at their most far-reaching.²⁹

Even to the extent that waste laws are seen as different from most other regulatory laws, there are two differences in water doctrine that put holders of water rights in a weaker position than other property owners subject to retrospective regulation. First, there has always been a law in effect saying that water could not be wasted, or could only be used beneficially. While owners of most property have a right to make inefficient uses if they so choose, that is not true of owners of water rights.³⁰

Second, new laws defining existing uses as wasteful are more prospective, and less retroactive, than a number of other laws whose constitutionality has been sustained by the Supreme Court. In the leading retroactive regulation cases, property owners were required to make supplemental payments for conduct wholly in the past and legal when engaged in.³¹ In the water situation, imposition of waste laws would only change the uses that can be made in the future. No reparation would be required for past wasteful uses.

THE TRADITION OF CHANGE IN WATER LAW

Up to this point only the constitutional limits on regulation of water rights have been considered. The preceding discussion shows that the Constitution permits extensive revision of previous rules without compensation. Nonetheless, it is appropriate to ask whether the sort of changes that are already underway in some states, like California, and which are in contemplation elsewhere, would be (albeit constitutionally tolerable) historically unprecedented and—at least in that sense—a cruel disappointment of expectations.

Only by ignoring the historical record could such a plea be made. The story of water law is a record of continual change. At one time riparian law rested upon the natural flow doctrine. That doctrine was appropriate to, and supportive of, a pre-industrial society where the highest value of water was instream, for aesthetic, navigation and recreational use. As the industrial revolution got underway, and water as a source of power for mills became crucial, the natural flow doc-

²⁹ Another common device for promoting efficient use in the face of growth is to use property tax laws to price out inefficient uses. See Comment, *Timber Taxation in New Hampshire*, 16 ME.L.REV. 189 (1964). The classic example is the old single-family brownstone house in Manhattan. High real estate taxes effectively force most owners to tear down those structures in favor of more intensive use of the land (often high rise development). Using taxes as a device, of course, is much more favorable to the owner who gets all the benefit of the new use. If water rights were taxed at a high price, that water now used for low-return agriculture would be sold to cities and industrial users. Assuming that a market existed, the user would reap the capital value of the water, rather than simply have it taken away. For reasons discussed *infra*, I would oppose the tax system which permits those who have wasted water to reap windfall profits.

³⁰ As to whether waste laws were always intended to be applied retrospectively, as well as at the time of initiation of a water right, see note 24, *supra*.

³¹ *Usery v. Turner Elkhorn Mining Co.*, 428 U.S. 1 (1976); *Connolly v. Pension Benefit Guaranty Corp.*, 475 U.S. 211 (1986). See note 24, *supra*.

trine (which effectively prohibited diversion of water from streams) gave way to the reasonable use doctrine, which permitted such abstraction.³² Reasonable use became the legal instrumentality of the industrial society's agenda as applied to water.

The prior appropriation doctrine, itself the product of felt necessity,³³ came as a rude shock to patentees of federal lands in the West who thought riparian rights were as much an incident of ownership of a riparian tract as were the trees upon it. Anyone holding appropriative rights who thinks that there is something fundamentally unconstitutional about a dynamic element in the rules of property should take a careful look at the pedigree of water doctrine in the "pure" appropriation State of Colorado which became pure only by judicial revisionism in reading the Territorial legislature's riparian statutes.³⁴

Far from being a modern invention of goal-oriented judges, change is the unchanging chronicle of water jurisprudence. When the question was getting timber to market in places which lacked highways or railroads but not rivers, those rivers suitable for floating logs to market magically became navigable.³⁵ When the needs of commerce required it, navigability was extended from tidal waters (which had been its historic limit) to nontidal waters suitable for waterborne navigation.³⁶ New needs have always generated new doctrines and, thereby, new property rights.

Water, as a necessary and common medium for community development at every stage of society, has been held subject to the perceived societal necessities of the time and circumstances. In that sense water's capacity for full privatization has always been limited. The very terminology of water law reveals that limitation: terms such as beneficial, non-wasteful, navigation servitude and public trust all import an irreducible public claim on waters as a public resource, and not

³² Justice Story's opinion in *Tyler v. Wilkinson*, 24 F.Cas. 472 (C.C.D.R.I. 1827) (No. 14, 312), though couched in the usual judicial denials, is generally cited as the crucial American case sounding the death knell for traditional natural flow doctrine. Lauer, *The Common Law Background of the Riparian Doctrine*, 28 MO.L.REV. 60, 60-63 (1963); Lauer, *Reflections on Riparianism*, 35 MO.L.REV. 1, 8 (1970).

These transformations were ordinarily accomplished without compensation to the losers whose traditional property rights were defined away. Where some compensation was given, as in the New England Mill Acts (J. SAX & R. ABRAMS, *LEGAL CONTROL OF WATER RESOURCES* (1986), at 168), it was less than the just compensation the Constitution requires.

Insofar as changes in the law are calculated to facilitate social and economic transformations (e.g., industrialization), the grant, limitation or denial of compensation is itself crucial. Whether or not compensation is paid is a measure of how much facilitation or impedance of change is desired. The cost of change will determine its pace, and perhaps even its occurrence. That is why changes in property rights have usually *not* been compensated during periods of desired social transition, such as the Industrial Revolution. The statement commonly made by some lawyers and economists that changes in the law may be freely made *so long as* they are fully compensated often misses the point of why the changes are sought at all (i.e., to facilitate, at some desired pace, a social/economic transformation).

³³ E.g., *Yunker v. Nichols*, 1 Colo. 551, 553 (1872): "...In a dry and thirsty land it is necessary to divert the water of streams from their natural channels, in order to obtain the fruits of the soil, and this necessity is so universal and imperious that it claims recognition of the law."

³⁴ I suggest a close reading of the Colorado Session laws of 1861, 1862 and 1864, set out—and blatantly misinterpreted—in the decision in *Coffin v. Left Hand Ditch Co.*, 6 Colo. 443 (1882).

³⁵ E.g., *Lancey v. Clifford*, 54 Me.487, 491 (1867): "The common law, in its wonderful adaptation to the vicissitudes of human affairs...as unfolded in the progress of society, furnishes a solution...by allowing the owner of the soil over which a floatable stream, which is not technically navigable, passes, to build a dam across it...provided he furnishes a convenient and suitable sluice or passageway for the public..."

³⁶ *Barney v. Keokuk*, 94 U.S. 324 (1876).

merely as a private commodity. In the following section I address those doctrines that limit full privatization of water. They will show why in demanding releases to meet instream flow needs a state is only asserting a right it has always had and never granted away.

A TRADITION OF PUBLIC SERVITUDES

THE PUBLIC TRUST AND ITS PREDECESSORS

There is a tradition that recognizes a pre-existing right of the State in the flow of its rivers. Private diversions have always been subject to a servitude and a trust in favor of the public, at least in tidal or navigable waters and affected tributaries.³⁷ Only California courts have thus far fully explored the implications of this tradition for the imposition of release requirements on existing appropriators. They have resolved the question strongly in favor of the public, first in the Mono Lake case,³⁸ then in the intermediate appellate decision in the Delta water case,³⁹ and most recently in a carefully crafted Superior Court decision in *Environmental Defense Fund v. East Bay Municipal Utility District*.⁴⁰

The California cases show an unmistakable progression. In the Mono Lake decision, the State Supreme Court held that a navigable lake was entitled to *in situ* protection against diminution caused by diversions of its tributaries, even by a long-standing appropriator of those tributaries.⁴¹

The Delta case held that where upstream diversions were causing water quality problems downstream by diminishing flows in a river, all appropriators—however senior—could be called upon to make releases sufficient to abate those problems. The Delta case has far-reaching implications because it implies that all appropriations are held "subject to call" for maintenance or restoration of the functioning of the river as a natural system.⁴²

The *EDF v. EBMUD* case holds that public trust considerations, such as protection of fisheries, riparian ecosystems and recreation must be satisfied in determining where a diversion may be made and to what extent appropriators may be per-

³⁷ In *Golden Feather Community Association v. Thermalito Irrigation District*, 199 Cal.App.3d 422 (1988), the intermediate appellate court held the public trust did not apply to a nonnavigable, artificially created reservoir in case where plaintiffs sought to enjoin the reservoir owners from releasing water for irrigation so as to interfere with public use and enjoyment of the lake.

³⁸ *National Audubon Society v. Superior Court of Alpine County*, 33 Cal.3d 419, 189 Cal.Rptr. 346, 658 P.2d 709, cert. denied, 464 U.S. 977 (1983).

³⁹ *United States v. State Water Resources Control Board*, 227 Cal.Rptr. 161, 182 Cal.App.3d 82 (1st. Dist. 1986).

⁴⁰ No. 425955, Superior Court, County of Alameda (Tentative Decision, Nov. 27, 1989, R.A. Hodge, J.).

⁴¹ The Mono Lake case appears to be in the process of legislative settlement in which Los Angeles will reduce its diversions from the Mono basin, and state taxpayers will cover at least some of the cost of its obtaining more costly replacement water from other sources.

⁴² The outcome of the case is still uncertain. It has led to the convening of extensive administrative hearings by the State Water Resources Control Board. No doubt the final outcome—which concerns virtually every water interest in the state, for virtually all are dependent on the Sacramento and San Joaquin Rivers—will be determined by administrative decision, legislation and negotiation, rather than by a court decree.

mitted to dewater a river. In that case the appropriator, a municipal supplier, sought to divert upstream, above an important recreational and natural stretch of the river. Objectors urged that the public trust required a downstream site in order to protect those values. The court found that the diversion was subject to the public trust, and ordered a physical solution that permitted upstream diversion but only subject to maintenance of specified flow maintenance downstream of the diversion.⁴³

Though the California cases have been widely viewed as dramatic new precedents, they are not nearly as novel in principle as they may at first seem. More than half a century ago in an offshore oil drilling case the California Supreme Court held that property rights granted by an oil lease were subject to subsequent regulation under the public trust in coastal waters, even to the extent of shutting down the operation entirely. In the 1928 case of *Boone v. Kingsbury*, the Court said:

[As to] alarm lest the 1200 miles of our sea coast will be barricaded by "a forest of oil derricks,"...The state may at any time remove structures from the ocean erected by its citizens, even though they have been erected with its license or consent, if it subsequently determines them to be purprestures or finds that they substantially interfere with navigation or commerce...⁴⁴

The California public trust cases are not aberrant. Both the federal navigation servitude⁴⁵ and the equitable apportionment doctrine⁴⁶ may operate to reduce or displace pre-existing private rights in order to meet public obligations, and there are statutes of long standing requiring minimum instream flows to sustain fish populations downstream of dams.⁴⁷ The same is true of state determinations of navigation for recreational use.⁴⁸ In some states the people of the area of origin have a servitude upon appropriations that divert water out of their region.⁴⁹ The federal government's reservation of waters for its own uses also imposes a significant public servitude on many of the West's rivers,⁵⁰ and even before the reserved rights doctrine was enunciated it was recognized that the federal government as a riparian had a prior claim on the flows of the rivers which no state law creating private rights could impair.⁵¹ The scope of private rights in water has always been sharply limited.

⁴³ The law governing transfer of water involving a change in point of diversion or place of use already requires by statute a finding that the transfer would not unreasonably affect fish, wildlife, or other instream beneficial uses or unreasonably affect the overall economy of the area from which the water is being transferred. CAL. WATER CODE § 386 (Supp. 1989).

⁴⁴ 206 Cal. 148, 273 P. 797, 816 (1928) (citations omitted).

⁴⁵ E.g., *Gibson v. United States*, 166 U.S. 269 (1897) (levee cuts off riparian's right of access to the river, no compensation required).

⁴⁶ *Hinderlider v. LaPlata and Cherry Creek Ditch Co.*, 304 U.S. 92 (1938) (pre-apportionment appropriator under state law has only such rights as can be accommodated within the state's share of an interstate river).

⁴⁷ See *California Trout, Inc. v. State Water Resources Control Board*, 207 Cal.App.3d 585, 247 Cal.Rptr. 259 (3rd Dist. 1989).

⁴⁸ E.g., J. SAX & R. ABRAMS, *supra* note 4, at 36-66.

⁴⁹ E.g., *Robie & Kletzing, Area of Origin Statutes—The California Experience*, 15 IDAHO L.REV. 419 (1979).

⁵⁰ See generally J. SAX & R. ABRAMS, *supra* note 4, at 493 et seq.

⁵¹ That public claim is founded not only in the reserved rights doctrine emanating from *Winters v. United States*, 207 U.S. 564 (1908); it also has roots in the statement in *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 702-03 (1899) "in the absence of any specific authority from Congress, that a state could not by its legislation destroy the right of the United States as the owner of lands bordering on a stream to the continued flow—so far, at least, as may be necessary for the beneficial use of the government property."

APPROPRIATORS AS POLLUTERS

Aside from claims based on the public trust, where releases are required to protect downstream water quality, appropriators may be seen as in no better position than conventional polluters. The water rights and uses of industrial and municipal polluters are subject to all controls necessary to restore desired water quality even though such controls prohibit or limit uses that have been lawfully made for many decades. For example, it seems unquestionable that both the intake and discharge of water by industrialists may be extensively regulated where their uses pollute the water body into which they discharge.

The situation of the industrial water user/polluter puts in perspective the appropriator's claim that the very essence of its right is to dewater a river, to destroy it as a natural system—and that if the state wants now to restore it for that purpose the public should pay. In exactly the same way the shoreline oil refinery or power plant that had water rights, and discharged heated or tainted water back into the source, was permitted to destroy the river as a sustaining natural system as the very essence of its permitted use of the water. Now the public is reclaiming rivers from industrial polluters in order to restore their natural functioning, and of course it is not paying.

In at least some circumstances the situation of irrigators and industrial polluters seems indistinguishable. The following illustration suggests the similarity in one familiar setting. Mineralized return flows from irrigation appropriators contaminated California's Kesterson refuge with selenium, killing birds that roosted there.⁵² One way to control the contamination is to reduce the total amount of water flowing through irrigation systems. Reductions in amounts of water diverted and passed over the irrigated lands would reduce the amount of mineral in the water. The result would be to reduce the concentration of the contaminated water downstream. Assuming that the reduced-diversion approach is part of the best and most economical strategy for dealing with the contamination issue, and that such a requirement would not deprive the irrigators of all economic viability, would such a release requirement be viewed as a physical invasion (government seizure) of the water, or as a legitimate noncompensable regulation?

No legally or factually significant difference is apparent between the Kesterson-type hypothetical case and a conventional case of industrial pollution. Both such cases involve a physical discharge of water that has been contaminated. Though the issue has not been authoritatively litigated, the operating premise has been that the pollution model applies, so that releases can be required by government without any compensable obligation arising.⁵³

⁵² See Comment, *Crisis at Kesterson: A Review of San Joaquin Valley Agricultural Drainage Problems and Possible Solutions*, 5 *J. ENVTL. L.* 187 (1986).

⁵³ The analogy was first urged in print by Professor Ralph Johnson of the University of Washington. Johnson, *Water Pollution and the Public Trust Doctrine*, 19 *ENVTL. L.* 485 (1989).

How about other factual settings? Consider the case where agricultural diversions upstream are reducing downward pressure on an estuary and permitting salt water to move upstream, thus contaminating the water. The effective result—pollution—is the same as in the Kesterson case. It is a basic precept of property jurisprudence no one can obtain a property right to pollute. So it would seem that an appropriator could not obtain a property right to make diversions where the result is pollution by salt water incursion. Only a formalistic distinction—and one even thinner than that between non-feasance and misfeasance—could be invoked to justify treating such a case differently from a standard pollution case. In one case water is removed from the stream, and in the other water (with contaminants) is added to the stream; in both cases what remains, because of the user's conduct, is unfit for use.

Consider yet a third variant. We regulate the industrial polluter because it is harming fish life in the water body by its discharges of contaminated water. How about the appropriator whose diversions are harming fish life by reducing necessary flows or effecting temperature changes, and who could mitigate the problem by reducing its diversions? Here one might say the diverter is suffocating the fish while the industrial user is poisoning them. But again, is there any substantial difference between the two cases? I think not.

In each case the industrial polluter might well have argued that traditionally it was permitted certain uses of water—to divert, to utilize it and then to discharge the water, modified by the necessary consequences of its industrial processes. By tradition the industrialist was permitted to use the water body as a waste sink, and the harm to the natural system there was a "natural and inevitable" cost of its use. The modern invocation of pollution laws effectively "took" that right of use away from industrial users, often at great cost to them. Is the agricultural diverter in any different situation? Its traditional uses required preempting the natural functions of the river (by dewatering rather than by contaminating); and that result was a necessary cost of its use. But now, just as we no longer permit rivers to be denatured by being used as waste sinks, we no longer want to permit them to be denatured by being dewatered. Are the different traditional users (industrialist and agricultural irrigator) in different constitutional positions as to these new public goals?

If there is a difference, it is too subtle for me. One hears it said by appropriators that the right to take water out of the river is the very essence of their property. That is certainly true. But the water is simply one raw material input into their business. Exactly the same can be said of the industrialist who has used water for processing or cooling and then returned it to the river. That water, taken as a property right, was simply one raw material input into its business.

For practical reasons rather than as constitutional limits, pollution controls have been fashioned so as not to destroy the industries they regulate. It seems reasonable to expect the same restraint to be applied to appropriators. But insofar as

industrial pollution control is the model, prudential limits rather than constitutional ones will govern the extent to which appropriators will be required to make uncompensated releases sufficient to protect downstream water quality.

JUSTICE HOLMES AND THE LAW OF PUBLIC RIGHTS IN WATERS

The subordination of private rights to public claims in natural resources is not new or unfamiliar. The issue was addressed by Justice Oliver Wendell Holmes three-quarters of a century ago. In a series of natural resources cases strikingly analogous to modern instream use controversies, the U.S. Supreme Court made clear that it would vouchsafe to each state the capacity to control its economy and its future by letting *it* determine the role its natural resources would play.⁵⁴

"A state has an interest", Mr. Justice Holmes said in *Georgia v. Tennessee Copper Company*, "independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air."⁵⁵ In that 1907 case involving land Holmes left open the question whether the exercise of the state interest would require compensation. A year later, however, he sustained the right of New Jersey to prohibit the diversion of water for export from the Passaic River against a water company's admitted property right. This time Holmes faced the property question directly. The language he used in that case, *Hudson County Water Company v. McCarter*, seems almost eerily prescient of the issues posed by California's Mono Lake or Delta water cases, or more generally by contemporary demands for renewed and retained instream flows. Here is what Holmes said:

...few public interests are more obvious, indisputable and independent of particular theory than the interest of the public of a State to maintain the rivers that are wholly within it substantially undiminished, except by such drafts upon them as the guardian of the public welfare may permit for the purpose of turning them to a more perfect use. This public interest is omnipresent wherever there is a State, and grows more pressing as population grows. It is fundamental, and we are of opinion that the private property of riparian proprietors cannot be supposed to have deeper roots...*The private right to appropriate is subject not only to the rights of lower owners but to the initial limitation that it may not substantially diminish one of the great foundations of public welfare and health.*⁵⁶

Again in *New Jersey v. New York*,⁵⁷ Holmes addressed the property question in a water rights case. New York's demands on the Delaware River, it was asserted,

⁵⁴ I have discussed those cases more fully elsewhere. Sax, *The Limits of Private Rights in Public Waters*, 19 ENVTL. L. 473, 479-81 (1989).

⁵⁵ 206 U.S. 230, 237 (1907).

⁵⁶ *Hudson County Water Co. v. McCarter*, 209 U.S. 349, 356(1908)(emphasis added). The case was approvingly referred to in *Sporhase v. Nebraska*, 458 U.S. 941, 102 S.Ct. 3456, 73 L.Ed.2d 1254 (1982).

⁵⁷ 283 U.S. 336 (1931).

would violate the riparian rights of landowners in New Jersey. By ordinary standards of water law, the claim of interference with property rights was potent, but Holmes brushed it aside with language reminiscent of what he had said in the *Georgia* case. "A river...offers a necessity of life that must be rationed among those who have power over it....[Notwithstanding riparian law] New Jersey [could not] be permitted to require New York to give up its power altogether in order that the River might come down to it undiminished."⁵⁸ These cases are entirely congruent with what the Supreme Court said in the now well-known language of *Illinois Central*, the lodestone public trust case, when it observed as a matter of trust obligation that "the general control of the State over lands under the navigable waters of an entire harbor or bay, or of a sea or lake" cannot be abdicated, and "cannot be relinquished by a transfer of the property."⁵⁹

Holmes' statement in *Hudson County* that "the private property of riparian proprietors cannot be supposed to have deeper roots...than the interest of the public of a State to maintain the rivers that are wholly within it substantially undiminished, except by such drafts upon them as the guardian of the public welfare may permit"⁶⁰ is probably the most far-reaching statement of a public right in water that has ever been made in an American judicial opinion.⁶¹

At first it is difficult to know what to make of the Holmesian statement. It seems to put ordinary property rights in a state of permanent disequilibrium and jeopardy, contrary to all traditional learning about the need for such rights to be stable and predictable, and sufficient to generate expectations and investment. And certainly his statements are at odds with generations of practice, where owners have been permitted—even encouraged—to dewater our rivers in order to make land economically productive. Is the Holmesian language just a rhetorical flourish?

⁵⁸ *Id.* at 342.

⁵⁹ *Illinois Central Railroad Co. v. Illinois*, 146 U.S. 387, 452-53 (1892).
⁶⁰ 209 U.S. at 356.

⁶¹ Is this principle undermined by the Supreme Court's decision in *Summa Corp. v. California ex rel. State Lands Commission*, 466 U.S. 198 (1984), which suggests that a property right *can* be acquired against the state, at least in the land beneath navigable waters. I think not. The case need not be read as asserting more than a process-fairness principle, requiring the state to come in and assert its public trust claim when there is what amounts to a general adjudication of a property right.

Limits on the possibilities of private ownership were reaffirmed by the Supreme Court recently in *United States v. Cherokee Nation*, 480 U.S. 700 (1987). Though under "very peculiar circumstances...the Indians were promised virtually complete sovereignty over their...lands" (480 U.S. at 705), and were held—despite the strong contrary presumption—to have obtained title to the land beneath the navigable waters of their reservation, nonetheless, the Court held, that did not turn the river into a "private stream" (480 U.S. at 706), or "a private waterway belonging exclusively" to the Cherokees (480 U.S. at 702). The United States was held not to have surrendered its public navigation servitude in the waters, a waiver of sovereign authority, the surrender of which, the Court held, will never be implied in recognition of the "unique position [of] the Government in connection with navigable waters." (480 U.S. at 704).

A rather different view, though expressed only as dictum, appears in Justice Stone's opinion in *Fox River Paper Co. v. Railroad Commission*, 274 U.S. 651, 655 (1927): "If the state chooses to resign to the riparian proprietor sovereign rights over navigable rivers which it acquired upon assuming statehood, it is not for others to raise objections: (citing *Barney v. Keokuk*, 94 U.S. 324, 338 (1876)). In the event, the Court found that the state had not surrendered to the riparian owner the rights the riparian claimed, and it made the above statement in the context of observing that state law controlled the question of what property the owner had, and therefore what property could be taken. Nonetheless, Stone's statement is in tone quite at odds with the views expressed by Justice Holmes.

I think not. Holmes, who was faced with the first great interstate pollution case many years ago, *Georgia v. Tennessee Copper Company*,⁶² and then with the water cases, came to an early recognition of the role of natural resources in undergirding and sustaining the economy and wellbeing of the entire community. He intuited what is indeed a radical idea, that basic resources must be seen not only as ordinary property subject to the rules and assumptions of the private property system; but also as elements of the whole community's capital stock upon whose use and protection the fate of the whole community could turn. What economist Kenneth Boulding would see much later, in light of growing scarcity as a need for stock maintenance, Holmes also saw as a public claim on the stock of state natural resources in the face of early large-scale pollution threats.⁶³

At the very heart of the spaceship image, as at the heart of Holmes' rhetoric in the *Tennessee Copper* and *Hudson County* cases, is the idea of a community of people endowed with a limited source of sustenance upon which they are mutually dependent. Because the survival of all of them depends upon the continuing ability of their resources to sustain them, their relationship is inevitably one of mutual dependence, common enterprise and joint responsibility.

The contemporary notion of the earth as a spaceship in the setting of problems such as global warming, acid precipitation, deforestation or intensifying species extinction, had its earliest recognition (as to water) in the proposition that no one could obtain a property right to pollute a river, or in the famous statement of the U.S. Supreme Court in 1913 "that the running water in a great navigable stream is capable of private ownership is inconceivable."⁶⁴ It is hardly surprising that as understanding grew of the biological importance of aquatic systems such conceptions were adapted to the protection of biologically productive tideland areas under the rubric of the modernized public trust doctrine,⁶⁵ or that it is being extended to flows needed for goals such as species protection.⁶⁶ Justice Holmes recognized far earlier than most the untenability of a private property claim incompatible with the sustaining capacity of his community's resource stock. The transformation now beginning to take place in state water law is a realization of his foresight.

⁶² 206 U.S. 230 (1907).

⁶³ I noted the modern emergence of this perspective in an article some years ago. Sax, *Some Thoughts on the Decline of Private Property*, 58 WASH.L.REV. 481 (1983).

⁶⁴ *United States v. Chandler-Dunbar Co.*, 229 U.S. 53, 69 (1913).

⁶⁵ Most prominently in the California Supreme Court's 1971 decision extending the doctrine to ecosystem protection. *Marks v. Whitney*, 6 Cal.3d 251, 98 Cal.Rptr. 790, 491 P.2d 374 (1971).

⁶⁶ See, e.g., *Riverside Irrigation District v. Andrews*, 586 F.Supp. 583, *aff'd*, 758 F.2d 508 (10th Cir. 1985). *Little Blue Natural Resources District v. Lower Platte North Natural Resources Dist.*, 210 Neb. 862, 317 N.W.2d 726 (1982). *Catherland Reclamation Dist. v. Lower Platte North Natural Resources Dist.*, 230 Neb. 500, 433 N.W.2d 161 (1988). *Nebraska v. Rural Electrification Admin.*, 12 Env't Rep. Cas. (BNA) 1156 (D. Neb. 1978), *appeal vacated and dismissed on stipulation*, 594 F.2d 870 (8th Cir. 1979)(Greyrocks Dam settlement).

APPLYING THE THEORY: AN ILLUSTRATIVE CASE

A recent Oregon statute exemplifies the likely future direction of water law throughout the West. The law encourages conservation by permitting appropriators to sell or lease water they save.⁶⁷ They must subtract from the saleable amount a portion of the conserved water (usually 25%) which is to be allocated to the state and held for instream flow maintenance.⁶⁸

As will no doubt be the case in other states,⁶⁹ Oregon has taken a positive rather than a negative approach to the waste problem. Instead of setting out to find waste and demand that the appropriator yield it up, the state gives the user an incentive to cut back existing diversions voluntarily by permitting him/her to profit by selling the conserved water.

This approach avoids the constitutional taking concerns about waste regulation discussed earlier in this article. If experience in California is any guide, however, states will still want to keep waste enforcement at the ready, even where voluntary conservation and marketing becomes their primary strategy. The reason is that, notwithstanding economic incentives, agricultural interests appear reluctant to dispose of water they have been using. Perhaps the fear is that they are giving up the best source to meet their own future needs, or that they are eventually going to put themselves out of business by selling water out of agriculture to urban areas. In any event, it was only after a state determination of waste and an order to cut back uses substantially that the Imperial Irrigation District finally agreed to market its conservable water to the Metropolitan Water District of Southern California.⁷⁰ So, paradoxically, waste enforcement may be needed even to induce "voluntary" conservation and sale.⁷¹

Though the positive approach will no doubt meet less resistance among appropriators than would non-compensable enforcement of waste laws, there is a price paid in distributive justice for thus greasing the wheels of reallocation. That price is the concession of a windfall to the least efficient appropriators. No doubt much of the water to be conserved will be "waste", rather than savings over and above ordinary efficient use achieved by special innovativeness. And to this extent the most wasteful users will profit the most. There is little to be said for such

⁶⁷ Only water saved that was previously unavailable to subsequent appropriators can be sold. ORE. REV. STAT. § 537.455(2) (1988). Thus, reduction in consumption, rather than recapture of runoff, is the law's target.

⁶⁸ The state is not obliged to retain the water as instream flow, but that is the primary intent of the statute. ORE. REV. STAT. §§ 537.455-480 (1988).

⁶⁹ E.g., CAL. WATER CODE §§ 1010(b), 1011(b) (Supp. 1989).

⁷⁰ "After five years of on again, off again negotiations, the Metropolitan Water District of Southern California has reached an agreement with the Imperial Irrigation District to 'buy' what is estimated to be some 100,000 acre feet of water each year through the financing of water conservation projects within the irrigation district." U.S. Water News (Feb. 1989), at 15.

⁷¹ Imperial Irrigation District v. State Water Resources Control Board, 186 Cal.App.3d 1160, 231 Cal.Rptr. 283 (4th Dist. 1986).

a plan as a matter of equity;⁷² its justification is the practical desire to get the job of conservation underway with as much dispatch as possible. Oregon mitigates the windfall to some extent by capturing a portion of the water saved for allocation to the state as instream flow.

How does such a plan—likely to be followed in its general outlines elsewhere—stand up against potential constitutional challenges? Oregon permits an appropriator to keep water it has conserved. Obviously this presents no harm to the conserving appropriator, who will actually be better off. Moreover, since the statute protects other appropriators who might have been using the water to be conserved (as return flow, for example), they will not be harmed.⁷³ The losers are junior appropriators who have not been getting water in most years, but who would get the conserved water if it were simply returned to the river and made available, rather than being held for instream flow maintenance.

While these juniors would get the water under traditional doctrine,⁷⁴ they do not have a strong constitutional claim to it. If the water is viewed as not being wasted, then the savings engendered by innovative conservation methods can be treated as "developed" water to which juniors are not entitled.⁷⁵ If the water is being wasted, then in theory it should be returned to the river where the next junior in line would be entitled to it. How can the state deny the juniors such water? It might determine that beneficial use is maximized by encouraging voluntary savings rather than by seeking to identify and regulate waste. Though no case so holds, it seems likely a legislative judgment as how best to promote efficient use would be sustained as a rational anti-waste policy. The juniors are unlikely to prevail in insisting they have a vested right to any particular form or degree of anti-waste enforcement. Any such claims by the juniors would be weakened by the fact that they had not been using the water in question previously. No existing use is being cut off. The courts have been quite willing to permit the abolition of unused water rights.⁷⁶

Finally, and most importantly, there is the problem presented by the state demanding that a percentage of the water conserved be allocated to it. On its face, this arrangement may seem to present the flaw the U.S. Supreme Court found in the *Nollan* case:⁷⁷ The state is using its regulatory power (to permit construction in *Nollan*, to permit a sale of conserved water in the Oregon case) to exact a benefit to

⁷² See Sax, *Selling Reclamation Water Rights: A Case Study in Federal Subsidy Policy*, 64 MICH. L. REV. 13 (1965).

⁷³ This is the standard protection given when transfers are made in western water law. E.g., Trelease & Lee, *Priority and Progress—Case Studies in the Transfer of Water Rights*, 1 LAND & WATER L. REV. 1 (1966).

⁷⁴ *Southeastern Colorado Water Conservancy District v. Shelton Farms, Inc.*, 187 Colo. 181, 529 P.2d 1321 (1974); *Salt River Valley Water Users' Ass'n v. Kovacovich*, 3 Ariz.App. 28, 411 P.2d 201 (1966).

⁷⁵ See *Southeastern Colorado Water Conservation District v. Shelton Farms, Inc.*, 187 Colo. 181, 529 P.2d 1321 (1974).

⁷⁶ See, e.g., *Town of Chino Valley v. Prescott*, 131 Ariz. 78, 638 P.2d 1324, *appeal dismissed*, 457 U.S. 1101 (1982); *In re Waters of Long Valley Creek Stream System*, 25 Cal.3d 339, 158 Cal.Rptr. 350, 599 P.2d 656 (1979).

⁷⁷ *Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987).

itself that has no obvious nexus with its asserted regulatory intervention.⁷⁸ That is, it would be argued that conservation and stretching existing water supplies to meet new demand—the state's presumed goal—would be fully achieved by letting the conserver sell 100% of the water saved. The state could then compete with other purchasers to obtain instream supplies. The claim would be that the state is simply using its power position to extort for its own account water it should buy.⁷⁹

The first response is that an owner of a water right has a lesser property right than the landowner in *Nollan*, and that under the Holmesian analysis, the public trust doctrine or the water pollution analogy, the state could require that appropriators make releases to restore or maintain desired conditions in its rivers. The state is not "taking" something belonging to an owner, but asserting a right it has always held as a servitude burdening owners of water rights.

The state need not rest only on its proprietary type claims, however. It can also justify the statute as a legitimate exercise of the police power. Perhaps the best answer to a taking claim is to turn the demand around, and see how much the state is giving to, rather than how much it is taking from, the appropriator. The state might—well within the confines of the police power—have imposed new and restrictive beneficial use requirements on all appropriators, mandating that they use water much more efficiently. For reasons explained previously in this article, no compensation would constitutionally be required for such regulation, designed to stretch existing supplies as efficiently as possible and to prevent all wasteful uses. So long as the permissible scope of such efficiency-driven regulation did not demand more than would be saved under a voluntary program, and would not transgress the broad diminution-of-value standard in taking cases, it would be within the permissible scope of the police power.

Had the state done that, the appropriators would have been required to return all the saved water to the river. The regulated appropriators would have had no right to keep, or to profit from, any of the conserved water. Under the statute as enacted, the state permits sale of 75% of the water simply as an administrative device to encourage rapid and effective compliance with its conservation goals.

⁷⁸ In some cases conservation will be achieved with funds provided by the state. See ORE. REV. STAT. § 537.480(2)(a)(1988). In such a case the state certainly can condition its grant of funds upon an agreement to turn over some of the benefit to it without running afoul of any constitutional property claim. It would simply be entering into a voluntary agreement with an appropriator. For a similar approach see 1989 Wash. Laws ch. 429, regarding conserved water in the Yakima River basin.

⁷⁹ There are several other potentially perplexing matters. One is that the state's claim under the Oregon statute does not seem to rest upon any finding of need for particular flows. The only water the state will get is water voluntarily conserved by appropriators, rather than water it has determined was needed after study, as was the situation in each of the California cases. While the statute does provide that the percentage of water to be kept by the state will vary "as necessary to satisfy identified in-stream needs as determined the commission", ORE. REV. STAT. § 537.480(2)(b)(1988), the total amounts available to the state will be determined by voluntary conservation, which totals bear no necessary relation to instream needs. The state might avoid this problem by taking the position that the best instream flows are the natural, original flows, and so every additional amount added to instream flows is a step toward the ideal (if impractical) goal of natural conditions.

Nor is it obvious why contributions to instream flows should be made only by those appropriators who are conserving water, and not by others. The form of the statute makes the state seem opportunistic in using its power to appropriate to itself water that appropriators wish to salvage and sell. The answer is that to meet instream needs only out of conservable, excess water voluntarily conserved is to achieve a public need in the least disruptive way possible, and thus a rational and appropriate approach.

Thus, rather than taking 25% of the appropriator's water, it has actually given the appropriator 75% of its (the public's) water. While the percentages do not correlate directly to public needs, they presumably represent the legislature's "ballpark" estimate of the incentive necessary to get the job of conservation and reallocation done as rapidly as feasible.

I have used the Oregon statute to illustrate the conclusion to which the main body of the article points, that the way is constitutionally clear for changes that will bring water law into phase with contemporary needs.

CONCLUSION

Water law in theory has always incorporated an intuitive appreciation of the public, common, systemic nature of the resource—in the duty not to waste, in the public navigation servitude and the public trust, and in the basic concepts of pollution law. For most of our history, largely because of the illusion of abundance we created, we have operated as if the private element of the property system was the whole of it, and the public elements could be relegated to a back corner.

Now the reality of the spaceship economy is upon us. Three interlocked programs will define the future of water policy: conservation of existing supplies, reallocation through marketing, and restoration and protection of instream flows to protect natural systems. No one of those elements will suffice without the other two. Taken together they promise a fruitful integration of private needs and public claims.

Underlying these steps is a recognition that one who holds a claim on natural resources stands in two roles, and not just one. The first, and traditional, role is that of the proprietor who is entitled to benefit economically from the uses that can be made of his or her appropriation and to turn that ingenuity to the enlargement of those benefits. In this respect water, and water rights, are part of the conventional economy.

But an appropriator stands in another role as well. The water to which the right attaches is part of a larger entity—the earth, Boulding's spaceship and the scientist's web of interconnections. It is an element of a watershed. It plays a role in the provision of potable water, of wildlife and species diversity, in public recreation, in navigation, in maintaining a sustaining supply of timber and energy, and in providing the raw materials of scientific knowledge. It is a part of our common capital, from which we sustain our limited capacity to furnish the means for our common survival and well-being. In this respect our water resources are integral elements of the spaceship economy.

The paradox is that all this is both very new and very old. Certainly it is new to proprietors of water rights in a practical everyday sense, for what is now being

urged represents a departure from the practice of many decades. And it is new in that it is a reflection of the new ecologically-oriented thinking, which sees systems and resources whole. But, as I have tried to suggest above, it is old too, for the special nature of water—its inevitably common and communal character—pervades every water law regime, including the Nineteenth Century constitutions of the western states.

As a practical matter striking changes are being required of those who hold, and aspire to hold, water rights. We are in a time of basic change in our relation to our resources. The changes that are required need not all be made tomorrow; there is time for a fairly gradual shift, and the sooner the need for change is recognized, the sooner planning for change can begin, and the less painful the ultimate changes will be.