A PRIMER ON CALIFORNIA WATER TRANSFER LAW

Brian E. Grav*

INTRODUCTION

Of the six states that comprise this study of water marketing in the West, California appears to have the strongest statutory mandate to promote the voluntary transfer of water and water rights. These laws are designed to redress some of the chronic, and increasing, problems of water allocation among competing urban, industrial, agricultural, instream, environmental, and other uses.¹ Paradoxically, for all of its legal efforts, there have been far fewer transfers of water in California than in any of the other five states reviewed in this symposium.²

This article will analyze one-half of this paradox—the powerful legislative inducements to the creation of a broad-based market for water and water rights in California. The second half—the disparity between California law and California's experience—is beyond the scope of this introductory article and therefore will be the subject of a more extensive analysis of water marketing in California during the 1980's.³ Part I provides a summary of California water rights law. Part II reviews the statutory and common law

^{*} Associate Professor of Law, University of California, Hastings College of the Law. B.A. 1976, Pomona College; J.D. 1979, Boalt Hall School of Law, University of California at Berkeley.

^{1.} According to the California Department of Finance, the state's population will increase by 10.2 million persons between 1985 and 2010. Based on these projections, the Department of Water Resources estimates that applied urban and industrial demand for water will increase 32 percent. Department of Water Resources, California Water: Looking to the Future 5-6 (1987) (Bull. 160-87). During this same period, the Department predicts, agricultural water demand will remain relatively constant at 1980 levels. Id. at 10-11. Yet, many observers have concluded that few major water developments will be constructed to supply the growing urban and industrial demands. See id. at 42; Rogers, Federal Budget Constraints Raise the Pressure in a Long-Running California Water Dispute, Wall St. J., Jan. 29, 1986, at 62; Peterson, Changes Are Confronting U.S. on Water Projects, N.Y. Times, Mar. 17, 1985, at 14. At the same time, environmentalists have succeeded in major efforts to reallocate water from consumptive to instream uses. See, e.g., California Trout, Inc. v. State Water Resources Control Board, 207 Cal. App. 3d 585, 255 Cal. Rptr. 184 (3d Dist. 1989) (Mono Lake); County of Del Norte v. United States, 732 F.2d 1462 (9th Cir. 1984) (North Coast Wild and Scenic Rivers), cert. denied, 469 U.S. 1189 (1985); cf. State Water Resources Control Board, Draft Water Quality Control Plan for Salinity: San Francisco Bay/Sacramento-San Joaquin Delta Estuary (1988) (proposed reallocation of flows for maintenance of water quality and migration of anadromous fish in the Delta withdrawn under political pressure). These reallocations among types of existing uses exacerbate the problem of finding additional water to supply the projected future demands.

^{2.} Between 1981 and 1989, the State Water Resources Control Board received only 23 applications to transfer water pursuant to the laws described in Part II of this article. B. Gray, Draft Report on Water Transfers in California: 1981-1989, at 29 (unpublished manuscript). The Board approved 19 of these applications and denied two; two applications were withdrawn. *Id.*

rules that govern water transfers and describes the California Legislature's extensive efforts over the past decade to promote water marketing within the state.

I. CALIFORNIA WATER RIGHTS LAW

California water rights law is a complex blend of constitutional, common law, statutory, and administrative law principles that are designed to balance, and to accommodate as harmoniously as possible, the demands of in-basin consumptive users, out-of-basin exporters, water quality considerations, and instream uses of the state's limited water supplies. With a few minor exceptions, the California Legislature has not provided for the integrated management of groundwater and surface water. Within the surface water category, California recognizes appropriative rights, riparian rights, and contract rights, along with an array of laws to protect areas-of-origin and in situ uses of water. Groundwater rights include both land-based entitlements and appropriative rights. Because California's water transfer laws deal exclusively with the transfer of surface water, this section will focus on the law of surface water rights.⁴

A. Appropriative Rights

With the decision of the California Supreme Court in *Irwin v. Phillips*⁵ in 1855, California became the first state formally to recognize the law of prior appropriation. In its pure form, the appropriation doctrine provides that the user who is first in time also is first in right.⁶ This means that in times of shortage, junior appropriators must curtail their diversions in reverse order of priority until the shortage is eliminated.⁷ In contrast to riparian rights, appropriative rights are not based on the ownership of land.

^{4.} For a thorough, but somewhat dated, analyses of California water resources law, see Governor's Commission to Review California Water Rights Law. Staff Papers Nos. 1-6 (1977). Other useful surveys include: H. Dunning, Water Allocation in California (1982); W. Hutchins, The California Law of Water Rights (1956); and Attwater & Markle, Overview of California Water Rights and Water Quality Law, 19 Pac. L.J. 957 (1988). The doctrinal development of the state's water rights law has recently been explored in Freyfogle, The Evolution of Property Rights: California Water Law as a Case Study, in Property Law and Legal Education: Essays in Honor of John E. Cribbet 73 (P. Hay & M. Hoeflich eds. 1988); Gray, In Search of Bigfoot: The Common Law Origins of Article X, Section 2 of the California Constitution, 17 Hastings Con. L.Q. — (1989) (to be published in December 1989); and Schultz & Weber, Changing Judicial Attitudes Towards Property Rights in California Water Resources: From Vested Rights to Utilitarian Reallocations, 19 Pac. L.J. 1031 (1988).

 ^{5. 5} Cal. 140 (1855).

^{6.} For an excellent, concise overview of the prior appropriation system, see J. SAX & R. ABRAMS, LEGAL CONTROL OF WATER RESOURCES 278-85 (1986).

^{7.} As discussed below, riparians as a class generally have priority over all appropriators. See infra text at notes 128-30. The California Court of Appeal recently summarized the "hornbook" law of prior appropriation in California:

The law of water rights involves a hierarchy of priorities: Riparian rights as a class have priority which must be satisfied before any appropriative rights are exercised. As among appropriators, 'the first in time is the first in right.' In times of water shortage, the most junior rights-holder must reduce use even to the point of discontinuance before the next senior appropriative rights-holder cuts back at all.

United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 131 n.25, 227 Cal. Rptr. 161, 188 n.25 (1986).

Appropriators therefore are not subject to place of use restrictions and may use the water on land that is removed from the watershed-of-origin.8

1. Establishment of the Appropriative Right

California recognizes two types of appropriative water rights: (1) appropriations commenced before December 19, 1914, the effective date of the Water Commission Act of 1913;9 and (2) appropriations commenced after that date, which must be based on a permit or license issued by the State Water Resources Control Board. The former are known as "pre-1914 appropriative rights;" the latter as "post-1914 rights" or "permitted" and "licensed" rights.

a. Pre-1914 Appropriative Rights

Originally, appropriators established their water rights simply by diverting water from a stream and applying the water to a beneficial use. Under this common law system, the priority of each appropriator was said "to relate back" to the date on which the appropriator took the first act of constructing his water diversion project, if the appropriator completed the project with due diligence. ¹⁰ In the 1872 amendments to the Civil Code, ¹¹ the California Legislature codified the law of prior appropriation, declaring that "[a]s between appropriators, the one first in time is the first in right." ¹²

b. Appropriative Rights Under the Permit System

This method of appropriating water lasted until the Water Commission Act of 1913 became law on December 19, 1914. The primary purpose of the Act was to consolidate control over the appropriation of water in a single state agency that would have the power to adjudicate disputes between competing water users. All appropriations commenced after December 19, 1914, are subject to the procedures set forth in the Water Commission Act. ¹³ The Act is limited to appropriations of water from bodies of surface water and

^{8.} See J. SAX & R. ABRAMS, supra note 6, at 278-79. For a description of allocation and place of use principles applicable to riparian rights, see *infra* part IB(1).

^{9. 1913} Cal. Stat. 1012.

^{10.} Kelly v. Natoma Water Co., 6 Cal. 105, 108 (1856). Actual commencement of construction was not required. The California Supreme Court recognized publication of a notice of intent to appropriate water as a "first act" of construction. De Necochea v. Curtis, 80 Cal. 397, 401, 20 P. 563, 565 (1889).

^{11.} Act of March 27, 1872, ch. 424, 1871-1872 Cal. Stat. 622.

^{12.} CAL. CIV. CODE § 1414 (West 1982). Although the amendments were essentially a restatement of existing law, the Legislature added a requirement that appropriators provide written notice to the public, describing the amount of water to be appropriated, the purpose of use, and the means of diversion. Id. § 1415. The amendments directed the appropriator to post the notice "in a conspicuous place at the point of intended diversion" and to record the notice in the county in which the diversion took place. Id. The Legislature also required the appropriator to commence construction within sixty days of the posting of the notice and to "prosecute the work diligently and uninterruptedly to completion, unless temporarily interrupted by snows or rain." Id. If an appropriator fulfilled these requirements, the Legislature provided that the priority date of the appropriative right would relate back "to the time the notice was posted." Id. § 1418.

^{13.} Although it was not until 1923 that the Legislature declared the permit system to be the exclusive means of acquiring an appropriative right, Act of May 2, 1923, ch. 87, 1923 Cal. Stat. 162 (codified as amended at CAL. WATER CODE § 1225 (West Supp. 1989)), the California Supreme

from "subterranean streams flowing through known and definite channels."14 The Legislature also exempted from pre-1914 appropriations and riparian rights the permit system.15

Originally, the Water Commission established by the 1913 Act had only ministerial authority over permit applications. The Commission's discretion was limited to determining whether there was unappropriated water in the river; if so, the Commission was required to grant a permit to the proposed appropriator. 16 "As the limits of available water resources were recognized, the ministerial system was modified and gradually strengthened to protect the public interest."17 Today, the State Water Resources Control Board the successor to the Water Commission—"exercises a broad discretion in determining whether the issuance of a permit will best serve the public interest."18

In considering an application to appropriate water, the Board must make a preliminary finding that there is sufficient unappropriated water in the river to supply the applicant.¹⁹ If there is water available for a new

Court has ruled that the Water Commission Act of 1913 supplanted the procedures of the 1872 Civil Code as of December 19, 1914. Crane v. Stevinson, 5 Cal. 2d 387, 398, 54 P.2d 1100, 1106 (1936).

In People v. Shirokow, 26 Cal. 3d 301, 605 P.2d 859, 162 Cal. Rptr. 30 (1980), the Supreme Court resolved a long-standing controversy whether a user could acquire a water right by prescription without obtaining a permit from the state. The Court held that, without a permit, an asserted prescriptive use is invalid against the state. Id. at 304, 605 P.2d at 862, 162 Cal. Rptr. at 32. Accordingly, the state may enjoin such a use under section 1052 of the Water Code, which provides in part that "[t]he diversion or use of water subject to this division other than as authorized in this division is a trespass." CAL. WATER CODE § 1052(a) (West Supp. 1988). The court stated, however, that its holding "will not result in the destruction of all beneficial uses of water originally undertaken in reliance on prescription," Shirokow, 26 Cal. 3d at 310, 605 P.2d at 866, 162 Cal. Rptr. at 36, and noted that it was not deciding "whether and under what circumstances prescriptive rights in water may be perfected as between private parties." Id. at 312 n.15, 605 P.2d at 867 n.15, 162 Cal. Rptr. at 38 n.15. These caveats leave open the possibility that the State Water Resources Control Board could grant a permit to an appropriator based on a preexisting prescriptive use and establish a priority date based on the date on which the prescriptive use commenced, rather than the date on which the permit application was filed.

14. CAL. WATER CODE. § 1200 (West 1971). 15. Section 1201 of the Water Code provides:

All water flowing in any natural channel, excepting so far as it has been or is being applied to useful and beneficial purposes upon, or in so far as it is or may be reasonably needed for useful and beneficial purposes upon lands riparian thereto, or otherwise appropriated, is hereby declared to be public water of the State and subject to appropriation in accordance with the provisions of this code.

Id. § 1201 (emphasis added); see also id. § 1202 (defining unappropriated water).

16. Tulare Water Co. v. State Water Comm'n, 187 Cal. 533, 536, 202 P. 874, 876 (1921). Indeed, the court suggested in Tulare that the Commission might not even have the discretion to ascertain the existence of unappropriated water. The court stated that, because of the seasonal variations in both water supply and consumptive use by riparians and existing appropriators, "it is manifestly impracticable for the Water Commission to authoritatively determine that there is not water in a given stream subject to appropriation. . . . To conclude the rights of would be appropriators by the extrajudicial and perhaps arbitrary action of a board of water commissioners would be to deprive [the] applicant of a valuable property right without due process of law." Id. at 537, 202 P.2d at 876.

17. M. Archibald, Appropriative Water Rights in California 12 (1977) (Governor's Commis-

sion to Review California Water Rights Law Staff Paper No. 1).

18. Temescal Water Co. v. Department of Public Works, 44 Cal. 2d 90, 100, 280 P.2d 1, 7 (1955); see CAL. WATER CODE § 1350 (West 1971): "The board may grant, or refuse to grant a permit and may reject any application, after hearing."

19. CAL. WATER CODE § 1375(d) (West 1971). In determining whether there is unappropriated water available for appropriation by the applicant, the Board must examine both the existing riparian and prior appropriative rights, Temescal, 44 Cal. 2d at 106, 280 P.2d at 11, and the reasonable requirements of instream uses. See infra text accompanying notes 32-38. The California appropriation, the Board then considers the application on the merits. Before it may grant a permit, the Board must decide that the appropriation would be in the "public interest."²⁰ Depending on its evaluation of the proposed appropriation, the Board may deny the application outright²¹ or grant a permit subject to "such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated."²² The Board also has the power to reserve jurisdiction "to amend, revise, supplement, or delete terms and conditions in a permit" as more information about the effects of the appropriation become known.²³

Supreme Court has held that the Board's determination that there is unappropriated water available confers no right on the applicant. Rather, the Board's decision is simply "a prerequisite to any exercise of its discretion in the issuance of a permit." *Temescal*, 44 Cal. 2d at 103, 280 P.2d at 9. The courts also have ruled that, in making this determination, the Board does not adjudicate the water rights of the respective parties. "[T]he rights of the riparians and senior appropriators remain unaffected by the issuance of an appropriation permit." United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 103, 227 Cal. Rptr. 161, 169 (1st Dist. 1986) (citing Duckworth v. Watsonville Water Co., 170 Cal. 425, 431, 150 P. 58, 60 (1915)). For a review and criticism of this procedure, see Gray, *A Reconsideration of Instream Appropriative Water Rights in California*, 16 Ecology L. Q. 667, 690-95 (1989).

20. CAL. WATER CODE § 1253 (West 1971).

21. Section 1255 of the Water Code provides: "The Board shall reject an application when in its judgment the proposed appropriation would not best conserve the public interest." Id. § 1255.

22. Id. § 1253. The Board maintains a list of standard terms and conditions, applicable portions of which are included in all permits. See CAL. CODE REGS. tit. 23, § 780 (1989). These terms and conditions range from limitations on the timing of diversions, to minimum release schedules for the maintenance of instream flows downstream of the project, to requirements of public access to reservoirs created by the project. See State Water Resources Control Board, Permit Term Index (1982) [hereinafter Standard Permit Terms]. The terms and conditions related to the protection of senior water rights, instream uses, water quality, reasonable use, and the public trust will be discussed in the text infra accompanying notes 57-84.

23. CAL. WATER CODE § 1394 (West Supp. 1989). The Board may reserve jurisdiction under either of two circumstances:

(1) If the board finds that sufficient information is not available to finally determine the terms and conditions which will reasonably protect vested rights without resulting in waste of water or which will best develop, conserve, and utilize in the public interest the water sought to be appropriated, and that a period of actual operation or time for completion of studies will be necessary in order to secure the required information.

(2) If the application or applications being acted upon represent only part of a coordinated project, other applications for the project being pending, and the board finds that the coordinated project requires coordinated terms and conditions which cannot reasonably be de-

cided upon until a decision is reached on the other pending applications.

Id. § 1394(a)(1) & (2). The Water Code also provides that "[j]urisdiction shall be reserved under this section for no longer period of time than the board finds to be reasonably necessary, and in no case shall jurisdiction be exercised after the issuance of the license." Id. § 1394(b). This time limit on the Board's reserved jurisdiction is not particularly significant, because the Board has independent authority under other sections of the Water Code, Article X, Section 2 of the California Constitution, and the public trust doctrine to modify permits and licenses as necessary to prevent waste and unreasonable use, to protect the public trust, and to accomplish the water quality objectives set forth in the state and federal pollution control laws. See infra Part IA(2)(b) & (c). Indeed, in 1984, the Board amended its regulations to provide:

Pursuant to California Water Code Sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto... are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

CAL. CODE REGS. tit. 23, § 780(a) (1989) (emphasis added).

The court of appeal recently affirmed the Board's power to modify the permits for the Central Valley Project and the State Water Project for the purposes of coordinating the operations of the various components of the two projects, to protect senior water rights holders, and to protect in-

Although the courts have declared that "the public interest is the primary statutory standard guiding the . . . Board in acting upon applications to appropriate water," ²⁴ neither the Legislature nor the Board has attempted to define the term with any degree of precision. The Court of Appeal has recently observed, however, that "[t]he nature of the public interest to be served by the Board is reflected throughout the statutory scheme." ²⁵ Citing a number of sections of the Water Code that help to give content to the public interest, the Court stated:

As a matter of state policy, water resources are to be used "to the fullest extent . . . capable" (§ 100) with development undertaken "for the greatest public benefit" (§ 105). And in determining whether to grant or deny a permit application in the public interest, the Board is directed to consider "any general or co-ordinated plan . . . toward the control, protection, development . . . and conservation of [state] water resources . . ." (§ 1256), as well as the "relative benefits" of competing beneficial uses (§ 1257). Finally, the Board's actions are to be guided by the legislative policy that the favored or "highest" use is domestic, and irrigation the next highest. (§ 1254).²⁶

The Court added that "[n]onconsumptive or 'instream uses,' too, are expressly included within the category of beneficial uses to be protected in the public interest."²⁷ These include instream uses recognized under California water rights law and water quality standards established pursuant to the state and federal pollution control statutes.²⁸

Several public interest factors merit special attention. First, although the Water Code provides that the Board must compare the relative benefits of a proposed appropriation with an array of potentially competing beneficial uses,²⁹ the Legislature has declared a preference for domestic water supply. "In acting upon applications to appropriate water, the board shall be guided by the policy that domestic use is the highest use and irrigation is the next highest use of water."³⁰ This policy is supplemented by the require-

stream beneficial uses in the Delta and in San Francisco Bay. United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 127-30, 148-52, 227 Cal. Rptr. 161, 185-88, 200-02 (1st Dist. 1986).

Johnson Rancho County Water Dist. v. State Water Rights Bd., 235 Cal. App. 2d 863, 874,
 Cal. Rptr. 589, 596 (3d Dist. 1965).

United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 103, 227 Cal.
 Rptr. 161, 169 (1st Dist. 1986).
 Id.

^{27.} Id.

^{28.} Id. at 103-04, 227 Cal. Rptr. at 169-70.

^{29.} Section 1257 requires the Board to consider "the relative benefit to be derived from (1) all beneficial uses of the water concerned including, but not limited to, use for domestic, irrigation, municipal, industrial, preservation and enhancement of fish and wildlife, recreational, mining and power purposes, and any uses specified to be protected in any relevant water quality control plan, and (2) the reuse or reclamation of the water sought to be appropriated." CAL. WATER CODE § 1257 (West 1971).

^{30.} Id. § 1254. This section implements the Legislature's general declaration that it is "the more established policy of this State that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation." Id. § 106. The domestic use preference is supplemented by section 106.5, which allows a municipality to acquire rights to water in excess of its current demands. Id. § 106.5. The Board may issue temporary permits for the appropriation of this excess water for so long as it is not needed by the municipality, but the appropriations may be preempted as the demands of the municipality increase. Id. §§ 106.5 & 1462.

ment that the Board grant priority to an application by a municipality for domestic water supply, "irrespective of whether it is first in time." ³¹

Second, interpreting the domestic use preference in National Audubon Society v. Superior Court, 32 the California Supreme Court held that it "must be read in conjunction with later enactments requiring consideration of instream uses . . . and judicial decisions explaining the policy embodied in the public trust doctrine."33 Two instream use statutes are of particular importance. Section 1243 requires the Board to "take into account, whenever it is in the public interest, the amounts of water required for recreation and the preservation and enhancement of fish and wildlife resources."34 Section 1243.5 provides that the Board must make a similar determination of "the amounts of water needed to remain in the source for the protection of beneficial uses, including any uses specified to be protected in any relevant water quality control plan."35 The public trust doctrine augments these statutory requirements by imposing a continuing duty on the Board to consider public trust uses whenever it allocates water resources.³⁶ Although these statutory and common law standards are vague, 37 their purpose and effect is to limit the Board's discretion to grant a permit for a new appropriation by requiring, at a minimum, that the Board consider the effects of the appropriation on instream uses and decide that on balance the benefits of the appropriation outweigh the harm to the instream uses.38

Third, the Board's discretion also is guided by several provisions of the Water Code that protect areas-of-origin from the exportation of water out of basin. The most comprehensive of these statutes is the "Protected Area" legislation of 1984.³⁹ This legislation protects most of the major river sys-

^{31.} Id. at § 1460. This priority applies vis-a-vis other competing applicants. It does not authorize the Board to grant the municipality priority over existing appropriations.

^{32. 33} Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983).

^{33.} Id. at 447 n.30, 658 P.2d at 729 n.30, 189 Cal. Rptr. at 366 n.30.

^{34.} CAL. WATER CODE § 1243 (West Supp. 1989). This section also requires the Board to notify the Department of Fish and Game of all applications to appropriate water so the Department may recommend that the Board set aside a certain quantity or flow of water for the preservation and enhancement of fish and wildlife.

^{35.} Id. at § 1243.5 (West 1971); see infra text accompanying notes 67-69.

^{36.} Audubon, 33 Cal. 3d at 452, 658 P.2d at 732, 189 Cal. Rptr. at 369. The public trust doctrine is discussed infra Part IA(2)(c).

^{37.} The instream use statutes are also circular with respect to the definition of the public interest. Both sections 1243 and 1243.5 are elements of the public interest standard, yet apply only if the Board finds that reserving water for instream uses would be in the public interest.

^{38.} See Gray, supra note 19, at 672-73 & 675-77.

^{39.} CAL. WATER CODE §§ 1215-1222 (West Supp. 1989). The Protected Area statute is modeled on four other statutes. The oldest of these, the so-called county-of-origin and area-of-origin laws, are applicable only to the federal Central Valley Project and the State Water Project. The county-of-origin statutes prohibit the Board from approving any application for appropriation of water by the CVP that would "deprive the county in which the water . . . originates of any such water necessary for the development of the county." CAL. WATER CODE §§ 10505 & 10505.5 (West 1971). The area-of-origin statute provides that neither the construction nor operation of the SWP may deprive a "watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom . . . of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein." Id. § 11460; see id. § 11128 (applying § 11460 to the CVP). In United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1st Dist. 1986), the Court of Appeal quoted with approval the Attorney General's interpretation of these statutes. The Court stated that the purpose of the county-of-origin and area-of-origin laws is "to

tems of the state from new exports that would deprive the protected areas of water needed for uses in the basin-of-origin. 40 The Act designates the Sacramento, Mokelumne, Calaveras, San Joaquin, Truckee, Walker, Carson, Smith, Klamath, Eel, and Russian river systems, along with the Mono Lake system and the Sacramento-San Joaquin River Delta, as protected areas.41 It then prohibits a new exporter from depriving, directly or indirectly, a protected area of "the prior right to all the water reasonably required to adequately supply the beneficial needs of the protected area, or any of the inhabitants therein."42 In addition to this limitation on exports, the Act grants to users within the protected area "the right to purchase, for adequate compensation, water made available by the construction of any works" operated by the exporter.43

In an effort to reconcile the various components of the public interest calculus, the courts have held that no one factor necessarily takes precedence over the others. Two recent cases provide good examples of this principle. In National Audubon Society v. Superior Court,44 the California Supreme Court decided that the public trust doctrine is applicable to water rights and held that "[t]he state has an affirmative duty to take the public trust into

reserve to the areas of origin an undefined preferential right to future water needs." Id. at 139, 227 Cal. Rptr. at 194 (citing 25 Ops. Cal. Atty. Gen. 8, 21 (1955)). According to this interpretation, the Board may authorize a new appropriation within a protected area "despite the needs of the projects, and the water projects must honor the vested water right thus created." Id. In this respect, the inchoate water rights of users within the protected areas resembles the dormant riparian right. See infra text accompanying notes 141-43.

The Delta Protection Act of 1959 augments the protections of the county-of-origin and area-oforigin laws. It declares that, along with supplying export uses from the Delta, it is necessary to ensure "an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta area. . . ." CAL. WATER CODE § 12201 (West 1971). The Delta area protected by the Act is defined in section 12220 of the Code. *Id.* § 12220. This policy is implemented by a requirement that the State Water Project and the Central Valley Project provide "salinity control and an adequate water supply" for users in the Delta, at § 12202, and by a prohibition of diversions of water "from the channels of the . . . Delta to which users within said Delta are entitled." Id. § 12203. The Act also proscribes the export from the Delta of water needed to meet these requirements. Id. § 12204.

In 1961, the Legislature supplemented the provisions of the Delta Protection Act with similar protection for the lower San Joaquin River. Declaring that "a serious problem of water quality exists in the San Joaquin River" between the Merced River junction and the confluence of the main river with Middle River in the South Delta, id. § 12230, the Legislature prohibited the diversion of water "from the San Joaquin River and its tributaries to which the users along the portion of the San Joaquin River described in Section 12230 are entitled." Id. § 12231. The Legislature also stipulated that neither the Board, nor the Department of Water Resources, nor any other state agency shall "cause further significant degradation of the quality of water in that portion of the San Joaquin River." Id. § 12232. It exempted from these proscriptions, however, all vested water rights and appropriations for which an application was filed prior to June 17, 1961. Id. § 12233.

40. The Act applies only to exports from the protected area based on "applications to appropriate surface water filed, or groundwater appropriations initiated, after January 1, 1985, that are not subject to Section 11460." Id. § 1215 (West Supp. 1989). Section 11460 of the Water Code is the watershed-of-origin protection statute applicable to the State Water Project. See supra note 39. Although the Act limits the export of both surface water and groundwater, it also provides that "it shall not be construed to authorize the [Board] to regulate groundwater in any manner." CAL. WATER CODE § 1221 (West Supp. 1989). This maintains the traditional exclusion of groundwater from the Board's jurisdiction and presumably means that enforcement of the Act against groundwater exporters is left to the courts.

^{41.} Id. at § 1215.5(a) & (b). 42. Id. at § 1216 (West Supp. 1989). 43. Id. at § 1217(a).

^{44. 33} Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983).

account in the planning and allocation of water resources, and to protect public trust uses whenever feasible."45 The Court ruled, however, that the public trust does not "trump" other competing uses of water. Rather.

[a]s a matter of current and historical necessity, the Legislature, acting directly or through an authorized agency such as the Water Board, has the power to grant usufructuary licenses that will permit an appropriator to take water from flowing streams and use that water in a distant part of the state, even though this taking does not promote, and may unavoidably harm, the trust uses at the source stream.⁴⁶

If the Board chooses to prefer a consumptive use over the public trust uses, the court concluded, the Board "must bear in mind its duty as trustee to consider the effect of the taking on the public trust . . . and to preserve, so far as consistent with the public interest, the uses protected by the trust."47 To the extent that the Board decides to protect the public trust, it must ensure that, as with all uses of water, the public trust uses "conform to the standard of reasonable use."48

United States v. State Water Resources Control Board, 49 also addressed the question of how to reconcile the public interest factors with pending permits to appropriate water. 50 At issue were the water quality and salinity control standards for the Delta and Suisun Marsh, as well as the interim water rights decision applicable to the various permits issued to the Central Valley Project ("CVP") and the State Water Project ("SWP") by the Board in 1978.⁵¹ According to the Court of Appeal, the Board established the water quality standards based on its assessment of the amount of water to which senior water right holders in the Delta were entitled and on its determination of the water quality that would have existed in the Delta and Suisun Marsh without the operations of the CVP and the SWP.52 In the water rights decision, commonly referred to as D-1485, the Board then modified the CVP and SWP permits to require the two projects to release water into the Delta system and to curtail their exports from the Delta as necessary to maintain these "without project" water quality standards.⁵³ The Court overturned water quality standards adopted by the Board, holding that the standards should be based on the "reasonable protection of beneficial uses" in the Delta and Suisun Marsh, rather than the water quality that would exist in the absence of the projects.⁵⁴ As did the California Supreme Court in Audubon, the Court of Appeal emphasized that this does not require the

^{45.} Id. at 446, 658 P.2d at 728, 189 Cal. Rptr. at 364 (footnote omitted).

^{46.} Id.

^{47.} Id. at 446-47, 658 P.2d at 728, 189 Cal. Rptr. at 365.

^{48.} Id. at 443, 658 P.2d at 725, 189 Cal. Rptr. at 362.

^{49. 182} Cal. App. 3d 82, 227 Cal. Rptr. 161 (1st Dist. 1986).
50. For an excellent overview of this litigation, see Robie, The Delta Decisions: The Quiet Revolution in California Water Rights, 19 Pac. L.J. 1111 (1988).

^{51.} State Water Resources Control Bd., Water Quality Control Plan: Sacramento-San Joaquin Delta and Suisun Marsh (1978); State Water Resources Control Bd., Water Right Decision 1485: Sacramento-San Joaquin Delta and Suisun Marsh (1978).

 ¹⁸² Cal. App. 3d at 115-19, 227 Cal. Rptr. at 177-80.
 Id.

^{54.} Id. at 119-20, 227 Cal. Rptr. at 180-81. The requirement that the Board establish water quality standards adequate to "ensure the reasonable protection of beneficial uses" is set forth in the California Water Quality Control Act, CAL. WATER CODE § 13241 (West 1971 & Supp. 1989).

Board to prefer instream or in-Delta uses over consumptive or export uses of the water. Rather, the "statutory charge grants the Board broad discretion to establish reasonable standards consistent with overall statewide interest. The Board's obligation is to attain the highest reasonable water quality 'considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." "55

These opinions demonstrate that the public interest element of California appropriation law is much more a grant of wide-ranging discretion to the Board than it is a limitation on the Board's authority. When it takes action "in the public interest," the Board sets state policy on such diverse issues as where population growth will occur; what the cost of farming operations will be; whether water will be recycled; the extent to which fish, wildlife, and recreational uses will be protected; and what water quality is adequate for domestic, industrial, and irrigation uses. Because there are no clear answers to any of these and the host of other questions that the Board must address under its permit jurisdiction, the Board has broad discretion to allocate the water on the basis of its assessment of the public interest. The courts will defer to the Board's public interest determinations if there is substantial evidence in the record to support the Board's policy judgment.⁵⁶

Administration of Appropriative Rights

The Board has direct authority to supervise the exercise of appropriative rights through its administration of the permits and licenses that it issues. In addition, the Board has substantial jurisdiction over all water rights—including riparian rights and pre-1914 appropriative rights—under Article X, Section 2, of the California Constitution, the public trust doctrine, and the federal and state water quality laws.

Permit Terms and Conditions

If the Board decides to grant an application to appropriate water, it will include in the permit a variety of terms and conditions designed to ensure that the new appropriation will not infringe on senior water rights and that the appropriator will serve the public interest.⁵⁷ The Board maintains a list of standard permit terms,⁵⁸ from which it fashions the terms and conditions applicable to individual permits. All permits contain a description of the project works, identification of the source of supply, location of the point of diversion and place of use, a definition of the purpose of use, as well as a schedule that sets forth the amount of water that may be diverted for direct use and for storage on a monthly basis.⁵⁹ The Board also includes a construction schedule, which requires the permittee to begin construction and to

^{55. 182} Cal. App. 3d at 116, 227 Cal. Rptr. at 178 (quoting CAL, WATER CODE § 13000 (West 1971)) (emphasis deleted).

^{56.} Id. at 113, 227 Cal. Rptr. at 176.

See CAL. WATER CODE § 1253 (West 1971).
 See CAL. CODE REGS. tit. 23, § 780 (1989); Standard Permit Terms, supra note 18.

^{59.} Standard Permit Terms, supra note 22, Term Nos. 1-5.

apply the water to the authorized beneficial uses by prescribed dates.⁶⁰ If the permittee complies with this schedule, the priority date of the new appropriation relates back to the date on which the Board initially approved the application.⁶¹

In addition to these basic provisions, five other terms and conditions warrant special attention. These terms are designed to recognize senior water rights, to protect instream uses, to maintain water quality, to ensure the availability of water for "protected areas" of the state, and to establish the Board's continuing authority over all permits and licenses.

i. Senior Rights

Because the prior appropriation system is based on a hierarchy of water rights, it is essential that all permittees respect the senior rights of riparians and prior appropriators.⁶² If a senior water rights holder protests an application to appropriate water filed by a new user, it is common for the applicant to agree to release water to fulfill the senior's rights or to supply the senior user with water from the project itself. With the approval of the Board, this agreement is embodied in the permit issued to the applicant. A good example of this procedure is Decision 1422, the original permit for New Melones Reservoir, in which the United States Bureau of Reclamation agreed to supply several downstream and upstream irrigation districts with water from the New Melones Project to replace water from the Stanislaus River to which the districts had senior rights.⁶³ The Bureau's rights under the permit were made subject to its agreements with the irrigation districts.⁶⁴

ii. Instream Uses

It is also common for the Board to include in its permits terms and conditions to protect stream flows and other instream uses. Typical terms require the applicant: (1) to bypass water under specified flow conditions for the protection of fish and wildlife; (2) to release water to augment natural stream flows downriver of the project; and (3) to release relatively large quantities of water, usually during periods of high water supply, to provide flushing flows to cleanse the riverbed of accumulated sediment.⁶⁵ The Board also has authority to require that the point of diversion for a new appropria-

^{60.} Id. Term Nos. 7-10. This schedule replaces the vague "due diligence" requirement of pre-1914 appropriation law. See supra text accompanying note 10. It is a vast improvement on the earlier practice, because the schedule notifies the permittee in advance of the time that the Board deems to be reasonable for the permittee to complete construction and to begin using the water. The "due diligence" approach created uncertainty, because the determination whether the applicant completed construction and put the water to beneficial use within a reasonable time was left to post hoc adjudication if the appropriation was challenged in court.

^{61.} CAL. WATER CODE § 1450 (West 1971).

^{62.} See supra note 7.

^{63.} State Water Resources Control Board, Decision 1422: New Melones Project Water Rights Decision 8-10 (1973).

^{64.} Id. at 36.

^{65.} See Standard Permit Terms, supra note 22, Term Nos. 60-69. Similar terms and conditions may be found in many water rights decisions and permits issued by the Board. State Water Resources Control Board, Decision 1587: South Fork American River Project Water Rights Decision (1982) is representative.

tion of water be moved to a downstream location in order to protect instream flows in the river between the proposed point of diversion and the downstream location.⁶⁶

iii. Water Quality

Beginning in 1976, the Board began to include in all permits a declaration that "the quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification . . . if . . . the Board finds that such modification is necessary to meet water quality objectives in water quality plans which have been or hereafter may be established." The purpose of this term is to state explicitly the Board's continuing obligation, under both the state and federal water quality control laws and the public trust, to ensure that consumptive uses of water do not unreasonably infringe on instream beneficial uses. The term provides, however, that the Board will not reduce the appropriator's entitlement unless the Board finds that "(1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality . . . , and (2) the water quality objectives cannot be achieved solely through the control of waste discharges."

iv. Protected Areas

Recently issued permits also include a term designed to implement the Protected Area Act.⁷⁰ All permits to export water from the water systems to which the statute applies⁷¹ provide that the "[a]ppropriation of water under this permit for export . . . is subject to the prior rights of water users within said system to all of the water reasonably required to adequately supply the beneficial needs within said system, regardless of when such use is initiated."⁷² This term is applicable only to permits based on applications filed after January 1, 1985.⁷³ The purpose of this condition is to make clear that the inchoate water rights granted to users within the protected areas may preempt the permittee's appropriations as the demands within the protected area increase.⁷⁴

v. Continuing Authority

Probably the most important permit term is that which establishes the Board's continuing authority to modify all other terms and conditions of its permits and licenses "in accordance with law and in the interest of the public

^{66.} See Environmental Defense Fund v. East Bay Municipal Utility Dist., 26 Cal. 3d 183, 605 P.2d 1, 161 Cal. Rptr. 466 (1980).

^{67.} CAL. CODE REGS. tit. 23, § 780(b) (1989); Standard Permit Terms, supra note 22, Term

^{68.} See supra text accompanying notes 27-28 & 32-38.

^{69.} CAL. CODE REGS. tit. 23, § 780(b) (1989); Standard Permit Terms, supra note 22, Term No. 13.

^{70.} CAL. WATER CODE §§ 1215-1222 (West Supp. 1989).

^{71.} See supra text accompanying notes 34-43.

^{72.} Standard Permit Terms, supra note 22, Term No. 95.

^{73.} Id.

^{74.} See supra note 39.

welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of . . . water."⁷⁵ This authority is based on Article X, Section 2 of the California Constitution, ⁷⁶ the public trust doctrine, ⁷⁷ and various sections of the Water Code. ⁷⁸ The Board has stated that its continuing authority includes the power to impose (1) additional requirements on permittees and licensees "with a view to eliminating waste of water and to meeting the [appropriator's] reasonable water requirements . . . without unreasonable draft on the source," and (2) "further limitations on the diversion and use of water by the permittee in order to protect public trust uses." The Board will not exercise its continuing authority, however, unless it determines that modification of the permit or license would itself constitute a reasonable use of water, would be consistent with the public interest, and would be "necessary to preserve or restore the uses protected by the public trust." ⁸⁰

Before 1984, the Board limited its continuing authority to permittees. The appropriative rights granted in a license were considered "vested" and therefore beyond the power of the Board to modify as conditions changed. Following the decision in *National Audubon Society v. Superior Court*, 81 however, in which the California Supreme Court held that all water rights (including licenses) are subject to reevaluation under the public trust doctrine, 82 the Board amended its regulations to extend its continuing authority to licensees, as well as permittees. 83 This amendment only applies to licenses granted after October 30, 1984. 84 As the following analysis will show, however, the Board has ample jurisdiction under both Article X, Section 2 of the Constitution and the public trust doctrine to supervise licenses issued without the continuing authority term and to modify them as necessary to implement the paramount state policies embodied in those two laws.

b. Article X, Section 2: The Doctrine of Reasonable and Beneficial Use

Along with its direct authority to supervise appropriators' compliance with the terms and conditions of their permits and licenses, the Board also has the power to modify all appropriative rights as necessary to ensure that the appropriator exercises its right in compliance with the constitutional requirement of reasonable and beneficial use. Article X, Section 2 of the California Constitution provides that "[t]he right to water . . . is and shall be limited to such water as shall be reasonably required for the beneficial use to

^{75.} CAL. CODE REGS. tit. 23, § 780 (1989); Standard Permit Terms, supra note 22, Term No. 12.

^{76.} See infra text accompanying note 85.

^{77.} See infra text accompanying notes 112-124.

^{78.} CAL. CODE REGS. tit. 23, § 780 (1989) (citing CAL. WATER CODE §§ 100, 106, 275, 1243.5, 1250, 1252, 1253, 1391, 1393, 1394 & 13000-13999.15 (West 1971 & 1989 Supp.).

^{79.} CAL. CODE REGS. tit. 23, § 780 (1989).

^{80.} Id

^{81. 33} Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346 (1983), cert. denied, 464 U.S. 977 (1983).

^{82.} Id. at 447-48, 658 P.2d at 728-29, 189 Cal. Rptr. at 365; see infra text accompanying notes 83-84.

^{83.} See supra note 23.

^{84.} Id.

be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water."85 In a series of opinions, the California courts have held that this provision grants the Board, the Department of Water Resources, and the courts themselves extensive authority to supervise the exercise of all water rights. Three of these opinions are particularly relevant to the subject of water transfers.

Joslin v. Marin Municipal Water District

Joslin v. Marin Municipal Water District, 86 is the leading case interpreting Article X, Section 2. Almost trivial on its facts, Joslin is potentially the most significant doctrinal decision in California water law. The case involved a dispute between the owners of a small sand and gravel company located along Nicasio Creek in Marin County and a publicly owned, municipal water supplier ("MMWD"). MMWD obtained a permit from the State Water Rights Board, the predecessor to the State Water Resources Control Board, to construct a dam across the creek about one mile upstream of the Joslins' land and to impound and divert the waters of the creek for domestic water supply. The Joslins did not protest the application, later claiming that they had no notice of the proceedings. Rather, after the dam was constructed and MMWD began diverting water, they sued for inverse condemnation on the ground that the dam had destroyed their sand and gravel business by blocking the suspended silt and gravel from flowing down the creek onto their land. The Joslins alleged that the value of their land had been diminished by \$250,000 and that they had been deprived of \$25,000 worth of gravel and rock by the time of the trial.87

In a unanimous opinion, the California Supreme Court rejected the Joslins' claim. The Court began by observing that, to prevail on their takings claim, the Joslins must "first establish the legal existence of a compensable property interest."88 Relying on Article X, Section 2, the court stated that "Isluch an interest consists in the right to a reasonable use of the flow of water."89 Although the evaluation of "what is a reasonable use of water depends on the circumstances of each case," the Court declared that "such an inquiry cannot be resolved in vacuo isolated from statewide considerations of transcendent importance."90 According to the Court, a paramount factor was "the increasing need for the conservation of water in this state, an inescapable reality of life quite apart from its express recognition in [Article X, Section 2]."91

The Court reasoned that the Joslins' use of the unimpaired flow of Nicasio Creek to deposit silt and gravel on their lands, although long-standing, had become unreasonable in light of the new demands of MMWD. It con-

CAL. CONST. art. X, § 2 (West Supp. 1989).
 67 Cal. 2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967).

^{87.} Id. at 134-35, 429 P.2d at 891, 60 Cal. Rptr. at 379.

^{88.} Id. at 143, 429 P.2d at 897, 60 Cal. Rptr. at 385.

^{89.} Id. (emphasis in original).

^{90.} Id. at 140, 429 P.2d at 894, 60 Cal. Rptr. at 382.

^{91.} Id.

cluded that, "since there was and is no property right in an unreasonable use [of water] there has been no taking or damaging of property by the deprivation of such use and, accordingly, the deprivation is not compensable."92

Although Joslin has come under some criticism, 93 it stands as the strongest statement yet from the California Supreme Court that Article X, Section 2 requires all water rights to be exercised in accordance with contemporary societal values. As demographic conditions change, as the economy evolves, and as environmental interests become more prominent, water rights are subject to modification to ensure that the water resources of the state are allocated to the individual uses that best serve these values. Thus, broadly construed, Joslin holds that all water rights are dynamic; as social conditions and values change, so too must water rights evolve to keep pace with these changes. 94

ii. The Delta Water Cases

This broad interpretation of Joslin was confirmed in United States v. State Water Resources Control Board. 95 As described previously, 96 on review in this case was the authority of the Board to establish water quality standards for the Sacramento and San Joaquin River Delta estuary and to adjust the permits of the two largest appropriators in the basin—the Central Valley Project and the State Water Project—as necessary to implement those standards. The court held that, independent of its reserved powers, the Board has the authority "to modify the permit terms under its power to prevent waste or unreasonable use or methods of diversion of water."97 It observed that the Board had determined that "changed circumstances revealed in new information about the adverse effects of the projects upon the Delta necessitated revised water quality standards."98 Following the rationale of Joslin, the court held that the Board could "modify the projects' permits to curtail their use of water on the ground that the projects' use and diversion of the water had become unreasonable."99 Moreover, relying on the supreme court's declaration in Joslin that the determination whether a particular use is unreasonable must be based on "statewide considerations,"100 the court emphasized that the Board has broad, discretionary powers. According to the court, the reasonable use decision is "essentially a policy judgment requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of its special knowledge and expertise and its combined statewide responsibility to allocate the rights to, and to control the quality of, state water resources."101

^{92.} Id. at 145, 429 P.2d at 898, 60 Cal. Rptr. at 386.

See Meyers, Book Review, 77 Yale L.J. 1036, 1050 (1968); Schultz & Weber, supra note 4, at 1086-91.

^{94.} See Gray, supra note 4.

^{95. 182} Cal. App. 3d 82, 227 Cal. Rptr. 161 (1st Dist. 1986).

^{96.} See supra text accompanying notes 49-55.

^{97. 182} Cal. App. 3d at 129, 227 Cal. Rptr. at 187 (citing CAL. CONST. art. X, § 2).

^{98.} Id. at 130, 227 Cal. Rptr. at 187.

^{99.} Id.

^{100.} See Joslin, 67 Cal. 2d at 140, 429 P.2d at 894, 60 Cal. Rptr. at 382.

^{101. 182} Cal. App. 3d at 130, 227 Cal. Rptr. at 188.

If Joslin is the most important doctrinal exeges is of Article X, Section 2, The Delta Water Cases decision surely is the most significant practical application of the reasonable use doctrine. The decision authorizes the modification of the water rights of the two largest appropriators in California and potentially affects the allocation of over one-third of the state's surface water supplies. 102 Moreover, the Court's reliance on, and reiteration of, the principles first articulated in Joslin establishes that the flexible and dynamic character of the reasonable use doctrine is a potent force in California water law. which can be used either to force the reallocation of water by administrative fiat or to induce reapportionment through privately negotiated transfers.

iii. Imperial Irrigation District v. State Water Resources Control **Board**

The third opinion on Article X, Section 2, Imperial Irrigation District v. State Water Resources Control Board, 103 illustrates the potential employment of the reasonable use doctrine to create strong incentives to private reallocation of water. This case arose with the petition filed by John Elmore. a farmer whose lands adjoin the Salton Sea, which asked the Department of Water Resources to investigate alleged waste and unreasonable use of water within Imperial Irrigation District ("IID"). Elmore claimed that the District's lack of regulating reservoirs and excessive deliveries of water to farmers produced unreasonable amounts of return flow, or "tailwater," which ran off the farmers' land into the Salton Sea and flooded Elmore's land. 104 DWR concluded that IID's practices were unreasonable and referred the matter to the Board. 105 The Board conducted hearings pursuant to section 275 of the Water Code. 106 In its Water Rights Decision 1600, the Board ruled that IID's failure to implement "practical measures available to reduce the present losses of water within the District . . . is unreasonable and constitutes a misuse of water under Article X, Section 2 of the California Constitution."107

IID challenged Decision 1600 on the ground that the Board does not have statutory authority, following its own administrative adjudication, to

^{102.} In 1985, surface water sources supplied 28 million acre feet of the net consumptive water use in the state. Department of Water Resources, supra note 1, at 40. Of this 28 million acre feet, the CVP accounted for 7 million acre feet and the SWP for another 2.4 million acre feet. Id.

^{103. 186} Cal. App. 3d 1160, 231 Cal. Rptr. 283 (4th Dist. 1986). 104. Id. at 1163, 231 Cal. Rptr. at 284.

^{105.} Id.106. This section empowers DWR and the Board to "take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state." CAL. WATER CODE § 275 (West Supp. 1989).

^{107.} State Water Resources Control Board, Decision 1600: Imperial Irrigation District Alleged Waste and Unreasonable Use of Water 66 (1984). The Board directed IID to monitor the tailwater discharge of all fields receiving water deliveries, to repair defective tailwater structures, to submit a "detailed and comprehensive water conservation plan," and to develop a plan for construction of regulatory reservoirs by February 1, 1985. *Id.* at 67-69. It did not order the District, however, to conserve a specific amount of water. As described infra note 206, the Board issued a follow-up order in September 1988, which directed IID to conserve 20,000 acre feet per annum ("afa") by January 1, 1991 and 100,000 afa by January 1, 1994. State Water Resources Control Board, Order 88-20: Order to Submit Plan and Implementation Schedule For Water Conservation Measures 44-45 (1988).

declare an existing use of water unreasonable. Rather, it argued, the Board must file suit to enforce the mandate of Article X, Section 2, in which litigation IID would have the right to a trial *de novo*. ¹⁰⁸ The Court of Appeal rejected this contention and held that the Board has "all-encompassing adjudicatory authority" under both section 275 and the California Constitution to enforce the reasonable use doctrine. ¹⁰⁹

In many respects, *Imperial* is a paradigm water transfer decision. For the Board essentially gave IID a choice: either negotiate a transfer of conserved water to another potential user, such as the Metropolitan Water District of Southern California, or lose a portion of its entitlement for waste and unreasonable use. ¹¹⁰ As discussed below, under the pressure of Decision 1600, IID did negotiate such a transfer with MWD. ¹¹¹ *Imperial* thus stands as a model for future potential transfers from old, relatively inefficient agricultural uses to new urban demands for water.

c. The Public Trust

The public trust doctrine augments the authority of Board and the courts to administer the water rights system. A long-recognized doctrine of California natural resources law, the public trust grants the public certain rights in the navigable waters of the state. These rights include navigation, commerce, fishing, boating, and other forms of water recreation. More significantly, the doctrine also confers on the public the right to preserve the navigable waters and adjacent lands embraced within the public

^{108. 186} Cal. App. 3d at 1162-63, 1164, 231 Cal. Rptr. at 283-84, 285.

^{109.} Id. at 1169-70, 231 Cal. Rptr. at 288-89. The Court of Appeal remanded to the Superior Court for a determination whether Decision 1600 was supported by substantial evidence. On remand, the Superior Court affirmed the Board's findings and conclusions in all respects. Imperial Irrigation District v. State Water Resources Control Board, No. 58706 (S.D. Co. Supr. Ct. filed Apr. 13, 1988).

^{110.} In Decision 1600, the Board relied in part on evidence submitted by the Environmental Defense Fund, which demonstrated that "it would be economically feasible for MWD to participate in financing water conservation measures [within IID], if the conserved water were made available for use within the MWD." Decision 1600 at 55. The Board also found that "[a] transfer of conserved water could partially satisfy future southern California needs." Id. at 56. In its order implementing Decision 1600, the Board took note of the IID-MWD negotiations that had taken place between 1984 and 1988. The Board observed that the parties had signed a memorandum of understanding to transfer 100,000 afa from IID to MWD in exchange for MWD's financing of various water conservation measures within IID, but that the negotiations had broken down over the price of the transfer. Order 88-20 at 21. The Board's decision to compel IID to conserve 100,000 afa by January 1, 1994, was based principally on its determination that the proposed transfer to MWD was feasible and would most expeditiously accomplish water conservation within IID. Id. at 41-42, 44; see supra note 107.

^{111.} See infra note 206.

^{112.} The public trust has been the subject of voluminous scholarly discussion. See, e.g., Symposium on the Public Trust and the Waters of the American West: Yesterday, Today and Tomorrow, 19 Envtl. L. 425 (1989); The Public Trust Doctrine in Natural Resources Law and Management: A Symposium, 14 U.C. Davis L. Rev. 181 (1980); Dunning, The Public Trust Doctrine and Western Water Law: Discord or Harmony? 33 Rocky Mtn. Min. L. Inst. 17-1 (1984); Gould, The Public Trust Doctrine and Water Rights, 37 Rocky Mtn. Min. L. Inst. 25-1 (1988); Lazarus, Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine, 71 Iowa L. Rev. 631 (1986); Littleworth, The Public Trust vs. The Public Interest, 19 Pac. L.J. 1201 (1988); Sax, The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention, 68 Mich. L. Rev. 471 (1970).

^{113.} National Audubon Society v. Superior Court, 33 Cal. 3d 419, 434, 658 P.2d 709, 719, 189 Cal. Rptr. 346, 356 (1983).

trust "in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area." 114

In National Audubon Society v. Superior Court, 115 the California Supreme Court ruled that the public trust may limit the exercise of appropriative rights, including licensed appropriations that previously were considered to be "vested." 116 As discussed above, 117 the Court held that "[t]he state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." 118 The Court recognized that "[t]he population and economy of this state depend upon the appropriation of vast quantities of water for uses unrelated to in-stream trust values." 119 Accordingly, it held that "the state may have to approve appropriations despite foreseeable harm to public trust uses. In so doing, however, the state must bear in mind its duty as trustee to consider the effect of the taking on the public trust and to preserve, so far as consistent with the public interest, the uses protected by the trust." 120

This aspect of Audubon did not significantly alter existing law. "[F]or 'at least the past 25 years' the board, pursuant to its constitutional mandate and its statutory public interest authority, 'has considered values that also are protected by the public trust.' "121 What was revolutionary about the case was its application of the public trust to existing water rights. In the court's words:

Once the state has approved an appropriation, the public trust imposes a duty of continuing supervision over the taking and use of the appropriated water. In exercising its sovereign power to allocate water resources in the public interest, the state is not confined by past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs.¹²²

The court declared that the state—acting through the Legislature, the Board, or the courts—has the power "to reconsider allocation decisions even though those decisions were made after due consideration of their effect on the public trust." Indeed, the court concluded, if the allocation of water to an appropriator was made without a review of its effects on the public trust, the state's duty to reconsider the allocation is "even stronger." 124

^{114.} Id. at 434-35, 658 P.2d at 719, 189 Cal. Rptr. at 356 (quoting Marks v. Whitney, 6 Cal. 3d 251, 259-60, 491 P.2d 374, 380, 98 Cal. Rptr. 790, 796 (1971)).

^{115. 33} Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346 (1983).

^{116.} Id. at 446-48, 658 P.2d at 728-29, 189 Cal. Rptr. at 364-66.

^{117.} See supra text accompanying notes 36-38.

^{118.} Id. at 446, 658 P.2d at 728, 189 Cal. Rptr. at 364.

^{119.} Id. at 446, 658 P.2d at 727, 189 Cal. Rptr. at 364. (footnote omitted).

^{120.} Id. at 446-47, 658 P.2d at 728, 189 Cal. Rptr. at 365. (citation omitted).

^{121.} Dunning, supra note 112, at 17-41 (quoting State Water Resources Control Board, Clarification of Water Rights Procedures Regarding Review and Consideration of Public Trust Values 1 (Nov. 2 & 3, 1983) (staff memorandum)).

^{122. 33} Cal. 3d at 447, 658 P.2d at 728, 189 Cal. Rptr. at 365.

^{123.} Id.

^{124.} Id.

B. Riparian Rights

Alone among the states represented in this study, California recognizes riparian rights along with appropriative rights to surface water. Under this dual system of water rights riparians as a class generally have superior rights to the water in a stream; appropriators follow in order of priority.¹²⁵

1. General Characteristics of the Riparian Right

Riparian rights are an incident of ownership of riparian land. As such, California law recognizes the riparian water right as real property. ¹²⁶ All riparians along a watercourse have correlative rights to as much water as each reasonably may use for beneficial purposes on riparian land. ¹²⁷ As a class riparians have first call on the water available in the stream. In the event of shortage, appropriators must cease their diversions in reverse order of priority to enable all riparians to satisfy their demands. If there is insufficient water to supply the demands of each riparian, the available water is allocated among the riparians according to flexible apportionment principles. ¹²⁸

Riparian rights are limited by the doctrine of reasonable and beneficial use. As a result of the 1928 amendment that added Article X, Section 2 to

^{125.} The exception is where the appropriation was commenced before the riparian land owner received his patent from the state or the federal government. In that case, the appropriator has superior rights vis-a-vis the riparian. See Lux v. Haggin, 69 Cal. 255, 344-49, 10 P. 674, 724-28 (1886).

^{126.} See Palmer v. Railroad Comm'n, 167 Cal. 163, 173, 138 P. 997, 1001 (1914).

^{127.} In Prather v. Hoberg, 24 Cal. 2d 549, 560, 150 P.2d 405, 411 (1944), the California Supreme Court offered the following description of the riparian right:

A riparian owner has no right to any mathematical or specific amount of the water of a stream as against other like owners. He has only a right in common with the owners to take a proportional share from the stream—a correlative right which he shares reciprocally with the other riparian owners. No mathematical rule has been formulated to determine such a right, for what is a reasonable amount varies not only with the circumstances of each case but also varies from year to year and season to season.

^{128.} The clearest description of the factors that a court may consider in allocating water among riparians is contained in Half Moon Bay Land Co. v. Cowell, 173 Cal. 543, 160 P. 675 (1916), in which the California Supreme Court stated:

In apportioning the waters of a stream among the riparian owners, where there is not sufficient [sic] for the needs of all, many different facts are to be considered. In Harris v. Harrison, 93 Cal. 681, the court, in considering this question, said: "The length of the stream, the volume of water in it, the extent of each ownership along the banks, the character of the soil owned by each contestant, the area sought to be irrigated by each—all these, and many other considerations, must enter into the solution of the problem. . . ." So far as we are aware, no court has ever undertaken to lay down a comprehensive rule on the subject. We are satisfied that the court may also consider the practicability of irrigation of the lands of the respective parties, the expense thereof, the comparative profit of the different uses which could be made of the water on the land, and that when the water is insufficient for all the land or for all of the uses to which it might be applied thereon, and there is enough only for that use which is most valuable and profitable, the shares may properly be limited to and measured by the quantity sufficient for that use, and the proportions fixed accordingly.

Id. at 549-50, 160 P. at 678-79. It is likely today that a court would add to this list of factors the mandate of section 106 of the Water Code, which declares that "the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation," CAL WATER CODE § 106 (West 1971), and the various statutory and common law protections for instream uses; see, e.g., CAL WATER CODE § 1740 (West Supp. 1989); Anaheim Union Water Co. v. Fuller, 150 Cal. 327, 88 P. 978 (1907).

the California Constitution, this rule applies to disputes between riparians and appropriators. Thus, an appropriator may have superior rights to a riparian based on a judicial determination that the riparian's use of water is unreasonable under the circumstances. 130

The riparian right entitles the holder to use water either on riparian land or for instream purposes. If water is diverted onto the land, it may be used only on land that is both adjacent to the watercourse from which the water is diverted and within the watershed-of-origin.¹³¹ The purpose of these land-based restrictions is to maximize the amount of water available to all riparians by ensuring that the return flow from each riparian's use stays within the watershed so that it may return to the stream.¹³² California follows the "source of title" definition of riparian land, which holds that water may be used only on riparian land that has been held as a single tract throughout its chain of title.¹³³ "This means that any non-abutting portions of the original tract which have been severed forever lose their riparian character Reuniting such severed tracts with the abutting tract will not reestablish their riparian status." Over time, the effect of the source of title rule is to diminish the amount of riparian land and consequently to enlarge the amount of water available for appropriation. ¹³⁵

Riparian rights also allow for the use of water *in situ*. The California courts have held that a riparian may demand water to maintain stream flows or lake levels for the purpose of promoting recreational uses and aesthetic enjoyment.¹³⁶ These decisions are supported by the California Legislature's declaration that "[t]he use of water for recreation and enhancement of fish and wildlife resources is a beneficial use of water."¹³⁷

In addition to an adequate quantity of water to serve its reasonable and beneficial demands for water, a riparian is entitled to receive water of reasonable quality. This aspect of the right confers on the riparian a claim for relief both against the upstream discharge of pollutants and against upstream diversions that unreasonably diminish the quality of the water available to the riparian. The concept of reasonable use is a key factor in determining whether a riparian's water quality rights have been impaired. Although the California Supreme Court has stated that riparians are entitled to "the same

^{129.} See supra text accompanying note 85.

^{130.} Joslin v. Marin Mun. Water Dist., 67 Cal. 2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967); Peabody v. City of Vallejo, 2 Cal. 2d 351, 40 P.2d 486 (1935).

^{131.} Anaheim Union Water Co. v. Fuller, 150 Cal. 327, 88 P. 978 (1907).

^{132.} See D. Anderson, Riparian Rights in California (1977) (Governor's Commission to Review California Water Rights Law, Staff Paper No. 4).

^{133.} See Boehmer v. Big Rock Irrigation Dist., 117 Cal. 19, 48 P. 908 (1897).

^{134.} Davis, Australian and American Water Allocation Systems Compared, 9 B.C.L. Rev. 647, 681 (1968).

^{135.} See C. Meyers, A. Tarlock, J. Corbridge & D. Getches, Water Resource Management 138-39 (3d ed. 1988).

^{136.} City of Elsinore v. Temescal Water Co., 36 Cal. App. 2d 116, 129-30, 97 P.2d 274, 280-81 (1939); City of Los Angeles v. Aitken, 10 Cal. App. 2d 460, 473-75, 52 P.2d 585, 591-92 (1935); cf. Prather v. Hoberg, 24 Cal. 2d 549, 560-62, 150 P.2d 405, 411-12 (1944) (dictum recognizing "swimming pools, ornamental pools, and boating" on a small creek as legitimate uses of a riparian right).

^{137.} CAL. WATER CODE § 1243 (West Supp. 1989).

^{138.} Wright v. Best, 19 Cal. 2d 368, 378, 121 P.2d 702, 709 (1942).

quality of water provided by nature in the stream,"¹³⁹ it also has held unreasonable claims to water of natural quality that, in view of competing upstream uses, requires too much of the flow of the river to provide.¹⁴⁰

In general, riparian rights are not quantified and are not subject to the permit authority of the State Water Resources Control Board.¹⁴¹ As the California Supreme Court has observed,

(1) the rights of a riparian owner are not destroyed or impaired by the fact that he has not yet used the water on his riparian lands, and therefore... the riparian right exists, whether exercised or not... [and] (2) a dormant riparian right is paramount to active appropriative rights....¹⁴²

The existence of the dormant riparian right—which enables riparians to claim additional water as their demands increase—creates uncertainty with which the courts and the State Water Resources Control Board are uncomfortable. In an opinion highly critical of the inchoate aspect of riparian rights, the California Supreme Court quoted the late Frank Trelease on the harm caused by uncertainty in the administration of water resources:

These rights constitute the main threat to nonriparian and out-of-watershed development, they are the principal cause of insecurity of existing riparian uses, and their presence adds greatly to the cost of obtaining firm water rights under a riparian system. They are unrecorded, their quantity is unknown, their administration in the courts provides very little opportunity for control in the public interest. To the extent that they may deter others from using the water for fear of their ultimate exercise, they are wasteful, in the sense of costing the economy the benefits lost from the deterred uses. 143

These place of use restrictions on riparian rights, as well as the uncertain and variable quantity of the water to which each riparian is entitled, render riparian rights generally nontransferable.¹⁴⁴

2. Statutory Adjudication of Riparian Rights

To address the problems of uncertainty caused by inchoate aspects of riparian rights, the State Water Resources Control Board has asserted the authority granted by the statutory adjudication provisions of the California Water Code. Section 2501 of the Code provides that, in a statutory adjudication, "[t]he board may determine . . . all rights to water of a stream system whether based upon appropriation, riparian right, or other basis of

^{139.} Crum v. Mount Shasta Power Corp., 220 Cal. 295, 312, 30 P.2d 30, 38 (1934).

^{140.} See Town of Antioch v. Williams Irrigation Dist., 188 Cal. 451, 205 P. 688 (1922).

^{141.} CAL. WATER CODE § 1201 (West 1971).

^{142.} In re Waters of Long Valley Creek Stream System, 25 Cal. 3d 339, 347, 599 P.2d 656, 660, 158 Cal. Rptr. 350, 354 (1979).

^{143.} Id. at 355, 559 P.2d at 666, 158 Cal. Rptr. at 360 (quoting Trelease, A Model State Water Code for River Basin Development, 22 LAW & CONTEMP. PROB. 301, 318 (1957); see also Governor's Commission to Review California Water Rights Law, Final Report 18-25 (1978) (critical report on the uncertainty created by dormant riparian rights).

^{144.} But see infra text accompanying note 151. For a discussion of the common law rules that govern the transfer of riparian land and riparian rights, see W. Hutchins, supra note 4, at 189-96. 145. Cal. Water Code §§ 2500-2866 (West 1971 & Supp. 1989).

right."¹⁴⁶ Pursuant to this directive, the Board ruled in two adjudications that the maintenance of unexercised riparian rights constitutes an unreasonable use of water and therefore should be extinguished.¹⁴⁷

In the case of *In re Waters of Long Valley Creek Stream System*,¹⁴⁸ the California Supreme Court reversed the Board's decision in statutory adjudications to extinguish the inchoate element of riparian rights, but held that the Board does have the power under section 2501 to quantify riparian rights, to allocate a specific amount of water to riparians based on their existing uses, and to relegate unexercised riparian rights to "a lower priority than any uses of water [the Board] authorizes before the riparian attempts to exercise his right." The Court also ruled that the Board may grant a permit to a riparian who desires to increase his use of water in the future. Because the purpose of the statutory adjudication is "to promote finality and certainty," the Court stated, "the Board may not grant the unexercised riparian claim a priority with respect to existing rights that is higher than it granted at the time the [statutory adjudication] decree became final." ¹⁵⁰

As a result of *Long Valley*, the Board, when acting under its statutory adjudication powers, may directly regulate riparian rights, fix the quantity of water that riparians presently may use, and require riparians to obtain a permit for the use of additional water based on the inchoate riparian right. Under these circumstances, the riparian right closely resembles an appropriative water right. For this reason, the California Legislature provided in 1988 that riparian rights that are fixed and decreed in a statutory adjudication may be transferred pursuant to the temporary and long-term water transfer sections of the Water Code. These sections are the subject of Part II, which follows. 152

^{146.} CAL. WATER CODE § 2501 (West 1971). In National Audubon Society v. Superior Court, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied, 464 U.S. 977 (1983), the Supreme Court held that section 2501 also authorizes the Board to determine how much water should be allocated to public trust uses and permits "a person claiming that a use of water is harmful to interests protected by the public trust to seek a board determination of the allocation of water in a stream system, a determination which may include reconsideration of rights previously granted in that system." Id. at 449, 658 P.2d at 730, 189 Cal. Rptr. 366-67.

^{147.} See In re Waters of Long Valley Creek Stream System, 25 Cal. 3d 339, 599 P.2d 656, 158 Cal. Rptr. 350 (1979); In re Waters of Soquel Creek Stream System, 79 Cal. App. 3d 682, 145 Cal. Rptr. 146 (1978).

^{148. 25} Cal. 3d 339, 599 P.2d 656, 158 Cal. Rptr. 350 (1979).

^{149.} Id. at 359, 599 P.2d at 668-69, 158 Cal. Rptr. at 362.

^{150.} Id. at 359 n.15, 599 P.2d at 669 n.15, 158 Cal. Rptr. at 362-63 n.15.

^{151.} CAL. WATER CODE § 1740 (West Supp. 1989); see infra text accompanying notes 22-35. 152. Before concluding this brief description of riparian rights, it is worth noting the California Supreme Court's recent confirmation of the existence of federal riparian rights. In the statutory adjudication that led to the Court's opinion in In re Water of Hallett Creek Stream System, 44 Cal. 3d 448, 749 P.2d 324, 243 Cal. Rptr. 887 (1988), the United States Forest Service asserted that it possessed "unexercised riparian water rights for future wildlife-enhancement use." Id. at 455, 749 P.2d at 326, 243 Cal. Rptr. at 889. Concluding that Congress had "relinquished all proprietary claims to the waters of the West through the enactment of the Mining Acts of 1866 and 1870 and the Desert Land Act of 1877," the Board rejected the government's contention. Id. at 461-62, 749 P.2d at 330, 243 Cal. Rptr. at 894 (emphasis deleted). On review, the Supreme Court held that "under California law riparian water rights exist on federal lands located within the State of California." Id. at 467, 749 P.2d at 334, 243 Cal. Rptr. at 898. The Court ruled specifically that the Forest Service may claim riparian rights to serve the "secondary uses" of the national forests, which are not entitled to water based on the federal reserved rights doctrine. Id. at 459-61, 749 P.2d at 328, 243 Cal. Rptr. at 992. In United States V. New Mexico, 438 U.S. 696 (1978), the United States Supreme Court held

II. CALIFORNIA WATER TRANSFER LAW

With only minor exceptions, all of the transfers of water that have occurred within the last decade have involved two types of water rights: (1) appropriative rights to surface water established by permit or license issued by the State Water Resources Control Board, and (2) contract rights to water owned by the United States Bureau of Reclamation, the California Department of Water Resources ("DWR"), or a local water agency. Accordingly, this summary of California water transfer law will focus on the laws that govern the transfer of water which is held by appropriative right or by contract.

A. Traditional Transfer Law

Early in its development of the state's water law, the California Supreme Court held that appropriative rights are transferable. The Court declared that "the ownership of water, as a substantive and valuable property right, distinct sometimes, from the land through which it flows . . . may be transferred like other property. Consistent with the practice in the other western states, however, the Court also held that the transfer of water or water rights "must not be to the prejudice of the rights of others." According to this principle, an appropriator may not move its point of diversion or return flow or alter the place or purpose of use if the change would deprive other junior or senior water rights holders of water to which they are legally entitled. Thus, the courts have enjoined an appropriator from changing its place of use because the change would reduce the return flow available to downstream users. As part of the common law of California, this

that the Forest Service may obtain water pursuant to the federal reserved rights doctrine only to the extent necessary to fulfill the primary purposes of the national forests. *Id.* at 715. The Court defined the primary purposes of the national forests as "securing favorable conditions of water flows" and "furnishing a continuous supply of timber." *Id.* at 704 (quoting Mimbres Valley Irrigation Co. v. Salopek, 90 N.M. 410, 412-13, 564 P.2d 615, 617-19 (1977)).

The significance of the California Supreme Court's recognition of federal riparian rights is limited in two important respects. First, the Court restricted its holding to federal reserved lands. The United States conceded, and the Court agreed, that on nonreserved federal lands the Desert Land Act "subordinates the riparian rights of the federal government . . . to the rights of appropriators established under state law. In re Water of Hallett Creek Stream System, 44 Cal. 3d at 468, 749 P.2d at 335, 243 Cal. Rptr. at 898. This means that on public domain lands, the United States' riparian rights may never take precedence over competing appropriative rights. Under this construction, federal riparian rights on nonreserved lands may as well not exist. Second, relying on Long Valley, the Court held that the United States' unexercised riparian right would be subordinate to all existing water rights recognized in the statutory adjudication and that the Government would have to apply to the Board for a permit to exercise its riparian right. Id. at 471-72, 749 P.2d at 336-38, 243 Cal. Rptr. at 900-01. On a fully appropriated stream—which the Hallett Creek system is—this relegation of the federal riparian right is tantamount to extinguishment. For a provocative appraisal of Hallett Creek, see Freyfogle, Context and Accommodation in Modern Property Law, 41 Stan. L. Rev. 1529 (1989).

^{153.} There were no transfers of water rights in California during the 1980s. Rather, each of the transfers analyzed in this study was simply a transfer of water; the water right or contract right remained with the transferor throughout the term of the transfer agreement. See B. Gray, supra note 2, at 29.

^{154.} These laws recently were reviewed in O'Brien, Water Marketing in California, 19 Pac. L.J. 1165 (1988).

^{155.} McDonald v. Bear River & Auburn Water & Mining Co., 13 Cal. 220, 232-33 (1859).

^{156.} Butte T.M. Co. v. Morgan, 19 Cal. 609, 615 (1862).

^{157.} Scott v. Fruit Growers Supply Co., 202 Cal. 47, 52-53, 258 P. 1095, 1097 (1927).

"no injury" rule stands as the principal limitation on the transferability of pre-1914 rights¹⁵⁸ and forms the basis of the statutory law that governs the transfer of water appropriated under permits and licenses issued by the State Water Resources Control Board. 159

B. Early Statutory Law

The Water Commission Act of 1913, which created the first permit system for appropriative rights, 160 also established a mechanism for changing those rights. 161 Although this statute does not refer specifically to water transfers, it is applicable to most transfers of water or water rights because such changes usually require an alteration of the point of diversion or return flow or a modification of the place or purpose of use. 162 The "change in water right" provisions are set forth in sections 1700 through 1706 of the Water Code.

Section 1701 provides that, subject to approval of the Board, "an applicant, permittee, or licensee may change the point of diversion, place of use, or purpose of use from that specified in the application, permit, or license."163 Although not required in all cases, the Board may direct the applicant to provide notice of the petition based on the Board's preliminary assessment of "the importance of the proposed change and whether legal uses of the water are likely to be injured."164 If a protest is filed, the Board must convene a public hearing. 165 The Board may grant the petition only if it finds that the requested change in the appropriative right "will neither in effect initiate a new right nor injure any other appropriator or lawful user of water, 166

The Modern Law

Frustrated that few water rights holders were using these laws to trans-

^{158.} In the 1943 amendments to the Water Code, the Legislature codified the common law rule. Section 1706 provides that persons "entitled to the use of water by virtue of an appropriation other than under the Water Commission Act or this code"—i.e., pre-1914 appropriators—"may change the point of diversion, place of use, or purpose of use if others are not injured by such change, and may extend the ditch, flume, pipe, or aqueduct by which the diversion is made to places beyond that where the first use was made." CAL. WATER CODE § 1706 (West 1971).

159. See C. Lee, The Transfer of Water Rights in California 31-34 (Governor's Commission to

Review California Water Rights Law, Staff Paper No. 5 1977); O'Brien, supra note 154, at 1169-71; see infra Part IIC.

^{160.} See supra text accompanying notes 13-15.

^{161.} Water Code section 1700 declares that "[w]ater appropriated under the Water Commission Act or this code for one specific purpose shall not be deemed to be appropriated for any other or different purpose, but the purpose of the use of such water may be changed as provided in this code." CAL. WATER CODE § 1700 (West 1971). The Code Commission Note that accompanies this section makes clear that it does not apply to pre-1914 rights. According to the Commission, an appropriator "claiming by virtue of an appropriation prior to the act is neither required nor permitted to proceed under the act to obtain permission to change the purpose of use." Id. Rather, a pre-1914 appropriator may change its use "without such permission and also without whatever protection such permission might afford him." Id.

^{162.} See, e.g., J. Sax & R. Abrams, supra note 6, at 377-81.
163. CAL. WATER CODE § 1701 (West 1971).
164. CAL. CODE REGS. tit. 23, § 795 (1989).
165. CAL. CODE REGS. tit. 23, § 791 (1989); CAL. WATER CODE § 1704 (West 1971).
166. CAL. CODE REGS. tit. 23, § 791 (1989); CAL. WATER CODE § 1702 (West 1971).

fer water or water rights, the California Legislature enacted a series of statutes during the 1980s for the purpose of facilitating and encouraging the voluntary transfer of water from existing appropriators to new uses. This modern statutory law may be divided into four categories: (1) policy declarations and directives; (2) authorization for the transfer of conserved or surplus water; (3) rules governing experimental, "urgent," and other short-term transfers; and (4) recognition of long-term transfers of water or water rights.

Policies and Directives

The Legislature's first foray into the field of water transfers was to announce its finding "that the growing water needs of the state require the use of water in an efficient manner and that the efficient use of water requires certainty in the definition of property rights to the use of water and transferability of such rights."167 In furtherance of this finding, the Legislature then declared that it is "the established policy of this state to facilitate the voluntary transfer of water and water rights where consistent with the public interest in the place of export and the place of import."168

The 1980 legislation that established these policies did not provide specific directives to implement them, however. Accordingly, in 1982, the Legislature ordered the Department of Water Resources, the Board, and "all other appropriate state agencies to encourage voluntary transfers of water and water rights."169 Because the 1982 legislation focused on the transfer of conserved and surplus water,170 the Legislature also authorized the state agencies to provide financial assistance "to identify and implement water conservation measures which will make additional water available for transfer."171

In 1986, the Legislature reiterated its policy of encouraging transfers as a means of promoting efficient water use and supplying new demands. This legislation declared that (1) "voluntary water transfers between water users can result in a more efficient use of water, benefiting both the buyer and the seller;" (2) "transfers of surplus water on an intermittent basis can help alleviate water shortages, save capital outlay development costs, and conserve water and energy;" and (3) the public interest requires water conservation and "the coordinated assistance of state agencies for voluntary water transfers to allow more intensive use of developed water resources in a manner that fully protects the interests of other entities which have rights to, or rely on, the water covered by a proposed transfer."172

The 1986 legislation also contained a variety of specific directives designed to increase the level of state involvement in the negotiation and implementation of water transfers. For example, section 480 of the Water Code provides that DWR "shall establish an ongoing program to facilitate the voluntary exchange or transfer of water and implement the various state

^{167.} *Id.* § 109(a) (West Supp. 1989). 168. *Id.*

^{169.} *Id*. § 109(b).

^{170.} See infra Part II(c)(2).

^{171.} CAL. WATER CODE § 109(b) (West Supp. 1989).

^{172.} Id. § 475.

laws that pertain to water transfers."173 Consistent with the Legislature's purpose to offer water transfers as a substitute for the development of new sources of supply, this section authorizes the Department "to facilitate these transactions only if the water to be transferred is already developed and being diverted from a stream for beneficial use or has been conserved."174 Section 481 requires DWR to maintain "a list of entities seeking to enter into water supply transfers, leases, exchanges, or other similar arrangements." as well as a list of "the physical facilities which may be available to carry out water supply transfers."175 In accordance with this directive, DWR has compiled a draft "Catalog of Water Transfer Proposals," which lists thirtyone transfers that range from completed transactions to mere ideas. 176 The Department also has prepared a draft water transfer guide, which outlines the law applicable to water transfers, describes DWR's role in the process. reviews the authority of the Board and other agencies, and summarizes the various possible effects of transfers on the environment and other water users. 177

Along with these directives to DWR in its administrative capacity, the 1986 legislation also required the Department to facilitate water transfers when acting in its role as manager of the State Water Project. Declaring that the transfer of water from the Central Valley Project would "offer potential benefits to California's hard-pressed farmers and to California's water-dependent urban areas," the Legislature ordered DWR to negotiate with the Bureau of Reclamation "to contract for interim rights to stored water from the [CVP] for use in the State Water Resources Development System by state water supply contractors." It also directed the Department to "pursue discussions" with the Bureau to permit federal contractors to transfer water "to any public entity which supplies water for domestic use, irrigation use, or environmental protection . . . during times of shortage." 179

Finally, the Legislature has required DWR and all other agencies that operate water conveyance facilities to make available to "bona fide transferors" unused aqueduct capacity for the transfer of water to transferees along the conveyance system.¹⁸⁰ This obligation is subject to the requirement that the transferor pay "fair compensation" for use of the aqueduct.¹⁸¹ DWR

^{173.} Id. § 480.

^{174.} *Id*.

^{175.} Id. § 481.

^{176.} Department of Water Resources, A Catalog of Water Transfer Proposals (Sept. 1986) (draft).

^{177.} Department of Water Resources, A Guide to Water Transfers in California (June 1989) (draft); see CAL. WATER CODE § 482 (West Supp. 1989).

^{178.} CAL. WATER CODE § 10008 (West Supp. 1989).

^{179.} Id. § 10009.

^{180.} Id. § 1810. The statute defines "bona fide transferor" as a person or public agency "with a contract for sale of water which may be conditioned upon the acquisition of conveyance facility capacity to convey the water that is the subject of the contract." Id. at § 1811(a). "Unused capacity" means "space that is available within the operational limits of the conveyance system and which the owner is not using during the period for which the transfer is proposed and which space is sufficient to convey the quantity of water proposed to be transferred." Id. § 1811(e). The statute also stipulates that it shall apply only to 70 percent of the unused capacity. Id. § 1814.

^{181.} Id. § 1810. The obligation to provide unused aqueduct capacity also is subject to a variety

has relied on these statutes to permit the Bureau of Reclamation to "wheel" CVP water through the California Aqueduct to federal contractors and other users in the San Joaquin Valley. 182

2. Transfers of Conserved and Surplus Water

The first comprehensive set of water transfer rules were enacted in 1982. This legislation, now codified in sections 380 through 387 and 1010 through 1011 of the Water Code, has two distinguishing characteristics. First, it is premised on the assumption that most of the water offered for transfer will be water that either is surplus to the needs of the transferor or is conserved by the transferor for the purpose of transferring it to another user. Second, the 1982 legislation attempted to decentralize the process of water transfers by empowering local agencies to sell water and to serve as brokers between individual users within their jurisdiction and potential purchasers of the water.

Consistent with these purposes, section 380 recognizes that the "various regions of the state differ widely in the availability of water supplies and in the need for water to meet beneficial uses"183 and that "[d]ecisions regarding operations to meet water needs depend in part upon regional differences."184 It then declares that "[m]any water management decisions can best be made at a local level, to the end that local and regional operational flexibility will maximize efficient statewide use of water supplies."185 The Legislature also stated that the policy of encouraging local agencies to transfer water based on local and regional economic considerations is "in furtherance of" the reasonable and beneficial use doctrine of Article X. Section 2 of the California Constitution and section 109 of the Water Code. 186

To clear away any uncertainty over the power of local water agencies to transfer water outside their jurisdictional boundaries, section 382 provides that "[n]otwithstanding any other provision of law, every local or regional public agency authorized by law to serve water to the inhabitants of the agency may sell, lease, exchange, or otherwise transfer water that is surplus to the needs of the agency's water users for use outside the agency."187 Section 381 supplements this declaration by directing that the authority of local and regional agencies "pursuant to this chapter shall control over any other

of other qualifications. For example, a contractor of the operator of the conveyance facility has a right to use unused capacity before it leased to a bona fide transferor that is not an existing contractor. Id. § 1810(a). In the event of an emergency (defined as a "sudden occurrence such as a storm, flood, fire, or an unexpected equipment outage impairing the ability of [the contractor] to make water deliveries," id. § 1811(b)), a contractor also may preempt a lease of unused capacity to a transferor that is not an existing contractor. Id. § 1810(c). The transfer of water through the conveyance facility may not diminish the quality of the water normally carried by the aqueduct, unless the transferor provides for treatment of the water. Id. § 1810(b). And, the transfer must be accomplished "without injuring any legal user of water and without unreasonably affecting fish, wildlife, or other instream beneficial uses and without unreasonably affecting the overall economy or the environment of the county from which the water is being transferred." Id. § 1810(d).

^{182.} See B. Gray, supra note 2, at 55-64.

^{183.} CAL. WATER CODE § 380(a) (West Supp. 1989).
184. Id. § 380(b).
185. Id. § 380(c).
186. Id. § 380(d); see supra text accompanying 85.

^{187.} Id. § 382 (West Supp. 1989).

provision of law which contains more stringent limitations on the authority of a particular public agency to serve water for use outside the agency, to the extent those other laws are inconsistent with the authority granted herein."¹⁸⁸ This pronouncement of the supremacy of the new water transfer law is important because there are provisions in the Irrigation District Law, as well as in local water supply contracts, that prohibit or restrict the transfer of water. ¹⁸⁹ According to section 381, these limitations are invalid to the extent that they may be applied to prohibit a transfer that satisfies the other requirements of sections 380 through 386. ¹⁹⁰

The reference in section 382 to water that is "surplus to the needs of the agency's water users" raises two questions. First, what constitutes "surplus water" and who determines whether it exists? Second, according to Article X, Section 2 of the California Constitution, an appropriator has rights only to the amount of water that it can put to a reasonable and beneficial use. How, then, may a user transfer water that by definition is surplus to its needs? The first question is answered in section 383; the second is addressed by sections 1010, 1011, and 1244, which are discussed below. 193

Section 383 defines "surplus water" in three different ways. In keeping with the goal of the legislation to decentralize the water transfer process. each of these definitions defers to the local water agency's determination that surplus water is available for transfer. The first two subsections address the transfer of "water to which the right is held by the agency." 194 Section 383(a) allows the agency to transfer water that it "finds will be in excess of the needs of water users within the agency for the duration of the transfer."195 Section 383(b) approves the transfer of conserved water. It defines as surplus water "of which any water user agrees with the agency on mutually satisfactory terms, to forego use for the duration of the transfer."196 The third subsection authorizes an individual water user within an agency, rather than the agency itself, to negotiate a transfer of water that is surplus to the user's needs. Section 383(c) provides that "the water user and the agency [may] agree, upon mutually satisfactory terms, that the water user will forego use for the period of time specified in the agreement" with the transferee and directs that the agency "shall act as agent for the water user to effect the transfer." 197 Although the purpose of this subsection is to allow an individual user within a water agency to conserve water and to transfer

^{188.} Id. § 381.

^{189.} See California Assembly Office of Research, Water Trading: Free Market Benefits for Exporters and Importers 40-45 (1985).

^{190.} Id. at 41-42.

^{191.} CAL. WATER CODE § 382 (West Supp. 1989).

^{192.} See supra Part IA(2)(b).

^{193.} See supra text accompanying notes 201-06.

^{194.} CAL. WATER CODE § 383(a) & (b) (West Supp. 1989).

^{195.} Id. § 383(a). The original version of the legislation limited the duration of transfers to seven years. 1986 Cal. Stat. ch. 867, p. 3221, § 2. The Legislature eliminated this time constraint in 1986. 1986 Cal. Stat. ch. 364, § 1. In muddled terms, section 387 now provides: "Any agreement for the transfer of water under the provisions of this chapter shall be for a period not to exceed seven years unless a longer period is mutually agreed upon by the agency and the transferce." CAL. WATER CODE § 387 (West Supp. 1989).

^{196.} CAL. WATER CODE § 383(b) (West Supp. 1989).

^{197.} Id. § 383(c).

the surplus, the approval of the agreement is subject to the consent of the agency. According to section 383, the agency, rather than its member water users, is the paramount actor.

In addition to the existence of surplus water, two other requirements must be met before water may be transferred pursuant to sections 380 through 387. First, just as the transferor agency must approve the agreement, so too must the water agency with jurisdiction over the area to which the water will be transferred. Section 385 stipulates that "[n]o water may be transferred pursuant to this chapter for use within the boundaries of a local or regional public agency that furnishes the same water service to the transferee without the prior consent of that agency." Second, all transfers must comply with the other provisions of the Water Code that govern water transfers. According to section 384,

Prior to serving water to any person for use outside the agency, the agency shall comply with all provisions of the general laws of the state relating to the transfer of water or water rights, including, but not limited to, procedural and substantive requirements governing any change in point of diversion, place of use, or purpose of use due to such transfer.¹⁹⁹

Moreover, section 386 declares that

the Board may approve any change associated with a transfer pursuant to this chapter only if it finds that the change may be made without injuring any legal user of water and without unreasonably affecting fish, wildlife, or other instream beneficial uses and does not unreasonably affect the overall economy of the area from which the water is being transferred.²⁰⁰

As this directive makes clear, notwithstanding the primacy of local agencies under the 1982 legislation, the ultimate decision whether to approve a transfer that involves a change in the transferor's water right remains with the Board.

The concern that "water that is surplus to the needs" of the transferor agency's users might be subject to forfeiture under Article X, Section 2 of the Constitution is addressed in sections 1010, 1011, and 1244 of the Code. These sections, originally enacted in 1979, allow a water user to reduce its demand for water by conserving or by substituting reclaimed wastewater without losing the rights to the water voluntarily foregone.²⁰¹ Their purpose is to encourage conservation and reclamation by removing the risk that the

^{198.} Id. § 385.

^{199.} Id. § 384.

^{200.} Id. § 386.

^{201.} Section 1010(a) provides in relevant part: "Cessation of or reduction in the use of water under any existing right... as the result of the use of reclaimed water or water polluted by waste to a degree which unreasonably affects such water for other beneficial uses, shall be and is deemed equivalent to, and for the purpose of maintaining any right shall be construed to constitute, a reasonable and beneficial use of water to the extent and in the amount that such reclaimed or polluted water is being used not exceeding, however, the amount of the reduction. Id. § 1010(a).

Section 1011(a) states that "[w]hen any person entitled to the use of water under any appropriative right fails to use all of any part of the water because of water conservation efforts, any cessation or reduction in the use of such appropriated water shall be deemed equivalent to a reasonable beneficial use of the water to the extent of such cessation or reduction in use." Id. § 1011(a).

user's ability to make due with less could be construed as an admission that the user did not reasonably need, and therefore has no rights to, the foregone water. The 1982 water transfer legislation extended this protection to water made available for transfer as a result of conservation or reclamation.

Section 1010(b) provides that "[w]ater, or the right to the use of water, the use of which has ceased or been reduced as the result of the use of reclaimed or polluted water . . . may be sold, leased, exchanged, or otherwise transferred pursuant to any provision of law relating to the transfer of water or water rights."202 Section 1011(b) creates identical rights to transfer water or water rights "the use of which has ceased or been reduced as a result of water conservation efforts."²⁰³ Although these provisions expressly authorize the transfer of reclaimed and conserved water, standing alone they would not alleviate the risk that the offer of such water for sale or lease could be used as evidence that the transferor does not need—and therefore has no rights to—the proffered water. Sections 1010(b) and 1011(b) must be read. however, in conjunction with section 1244, which the Legislature enacted in 1980. Section 1244 addresses the risk of forfeiture by declaring that "[t]he sale, lease, exchange, or transfer of water or water rights, in itself, shall not constitute evidence of waste or unreasonable use."204

These sections state the Legislature's policy to recognize the voluntary conservation and transfer of water that arguably does not belong to the transferor because it is in excess of the transferor's reasonable needs. They represent a legislative decision that it is better to encourage the reallocation of water to more valuable uses by voluntary arrangement than to rely exclusively on the powers of the Board, DWR, and the courts to monitor existing uses for compliance with the constitutional requirement of reasonable use.²⁰⁵ Notwithstanding their clear statement of purpose, however, sections 1010, 1011, and 1244 do not eliminate the risk that an offer of water for sale could result in a determination of waste or unreasonable use. They do not provide, for example, that a water user who has been wasting water can avoid forfeiture by negotiating a transfer. These sections do, however, afford potential transferors a reasonable assurance that, by offering water for sale, entering into negotiations, or conducting studies of potential conservation yields within their service areas, they will not lose their water rights. Neither the transfer nor the negotiating activity leading up to the transfer may be used as evidence that the transferor's permit rights exceed its actual reasonable needs.

These provisions are controversial both because they may not work and because they may work too well. Potential transferors are legitimately concerned that transfer negotiations will bring unwanted scrutiny of their ex-

^{202.} Id. § 1010(b).

^{203.} *Id.* § 1011(b). 204. *Id.* § 1244.

^{205.} Section 275 of the Water Code provides that "the department and the board shall take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state." Id. § 275. The courts have concurrent authority to enforce the reasonable use requirement of Article X, Section 2. Environmental Defense Fund v. East Bay Municipal Util. Dist., 26 Cal. 3d 183, 198-200, 605 P.2d 1, 9-10, 161 Cal. Rptr. 466, 474-75 (1980).

isting uses and that section 1244 will not deter the Board from conducting an investigation of waste and unreasonable use pursuant to section 275 of the Water Code. Other water users are equally concerned that, taken together, sections 1010, 1011, and 1244 reward waste by allowing transferors to profit from the sale or lease of "surplus" water.²⁰⁶

3. Short-term Transfers

In addition to authorizing the transfer of conserved and surplus water, the Legislature also has established more general rules to govern the transfer of water on a short-term basis. Originally, it created three categories of short-term transfers: (1) Temporary Urgency Changes, applicable during water supply emergencies; (2) Temporary Changes, which may last for up to one year; and (3) Trial Transfers, which authorized transfers for experimental purposes. Although the Legislature repealed the Trial Transfer provisions in 1988,²⁰⁷ they are described here because three of the transfer applications submitted to the Board during the 1980s involved this category of short-term transfers.²⁰⁸

a. Temporary Urgency Changes

The Temporary Urgency Change provisions of the Code were enacted to allow the Board to approve transfers of water and other changes in existing water rights in response to conditions that do not allow the petitioner to apply for a temporary transfer of water. According to section 1435, a permittee or licensee that has "an urgent need to change a point of diversion, place of use, or purpose of use... may petition for... a conditional, temporary change order without complying with other procedures or provisions of this division." It defines "urgent need" as the existence of circumstances from which the Board may determine that a temporary change in the water right "is necessary to further the constitutional policy that the water resources of the state be put to beneficial use to the fullest extent to which they are capable and that waste of water be prevented." 210

^{206.} Both of these issues arose during negotiation of the recently executed transfer of conserved water from the Imperial Irrigation District ("IID") to the Metropolitan Water District of Southern California ("MWD"). An important inducement to this transfer was the Board's finding that IID's use of unlined canals, failure to construct regulating reservoirs, and methods of irrigation constitute unreasonable use of water in violation of Article X, Section 2. State Water Resources Control Board, Water Rights Decision 1600: Imperial Irrigation District Alleged Waste and Unreasonable Use of Water (1984); see Imperial Irrigation Dist. v. State Water Resources Control Board, 186 Cal. App. 3d 1160, 231 Cal. Rptr. 283 (4th Dist. 1986). The Board ordered IID to conserve at least 100,000 acre feet per year by 1994. State Water Resources Control Bd., Water Rights Order 88-20: Order to Submit Plan and Implementation Schedule for Water Conservation Measures 44-46 (1988). Three months after the Board issued this order, IID agreed to transfer 100,000 acre feet per year to MWD for a minimum of 35 years in exchange for MWD's \$92 million funding of delivery and irrigation system improvements and other conservation measures in the Imperial Valley. See Water Market Update, Dec. 1988, at 4. For a history of the IID-MWD negotiations, see K. McMorrow & J. Schwarz, The Imperial Irrigation District—Metropolitan Water District Water Transfer: A Case Study, in M. Reisner & S. Bates, Oasis: Reform or Revolution for Western Water 149 (1990).

^{207. 1988} Cal. Stat. ch. 1145, § 2.

^{208.} See B. Gray, supra note 2, at 29.

^{209.} CAL. WATER CODE § 1435(a) (West Supp. 1989).

^{210.} Id. § 1435(c).

Before the Board may grant a Temporary Urgency Change it must make four findings:

- (1) The permittee or licensee has an urgent need to make the proposed change.
- (2) The proposed change may be made without injury to any other legal user of water.
- (3) The proposed change may be made without unreasonable effect upon fish, wildlife, or other instream beneficial uses.
- (4) The proposed change is in the public interest.²¹¹

Once the Board approves a Temporary Urgency Change, it must supervise the diversion and uses authorized by the change order to ensure the protection of consumptive and instream beneficial uses potentially affected by the change in water right.²¹²

Section 1440 stipulates that a Temporary Urgency Change order "shall not result in creation of a vested right, even of a temporary nature, but shall be subject at all times to modification or revocation in the discretion of the board." A Temporary Urgency Change may last for no more than 180 days, although it may be renewed by the Board.²¹⁴

b. Trial Transfers

The original 1980 water transfer legislation created two categories of short-term transfers: Temporary Changes and Trial Transfers.²¹⁵ The Legislature substantially revised the Temporary Change provisions in 1988 and eliminated the Trial Transfer category.²¹⁶

The purpose of the Trial Transfer provisions was to allow the Board to approve transfers for a limited period of time to assess the efficacy of the transfer and to evaluate its effects on downstream water users and instream uses. If all worked well, a Trial Transfer could serve as a prelude to a longterm transfer agreement. According to the statute, the Board could approve a Trial Transfer following notice and a public hearing if it concluded that (1) the transfer was unlikely to cause "substantial injury to any legal user of water:" (2) the transfer "would not unreasonably affect fish, wildlife, or other instream beneficial uses;" and (3) "the precise effect of the transfer on other legal users or instream beneficial uses is difficult to determine in advance of such a transfer."217 Following the Trial Transfer period, which could not exceed one year,²¹⁸ the parties could petition the Board to convert the Trial Transfer into a long-term transfer.²¹⁹ The Board was authorized to grant the petition if, based on the evidence developed during the Trial Transfer, it concluded that a long-term transfer "would not result in substantial injury to any legal user of water and would not unreasonably affect fish.

^{211.} Id. § 1435(b).

^{212.} Id. § 1439.

^{213.} *Id*. § 1440.

^{214.} *Id*. §§ 1440 & 1441.

^{215. 1980} Cal. Stat. ch. 933, § 12.

^{216. 1988} Cal. Stat. ch. 1145, §§ 2 & 3.

^{217. 1980} Cal. Stat. ch. 933, § 12.

^{218.} *Id*.

^{219.} Id. (former Water Code § 1737).

wildlife, or other instream beneficial uses."220

c. Temporary Changes

The final, and most frequently used, provisions governing short-term transfers are sections 1725 through 1732, entitled Temporary Changes. Section 1728 defines a Temporary Change as "any change of point of diversion, place of use, or purpose of use involving a transfer or exchange of water or water rights for a period of one year or less." A permittee or licensee may engage in a Temporary Change if it meets two criteria. First, the transfer must involve only the amount of water that the transferor would have "consumptively used or stored" during the period of the transfer. The statute defines "consumptive use" as "the amount of water which has been consumed through use by evapotranspiration, has percolated underground, or has been otherwise removed from use in the downstream water supply as a result of direct diversion." Second, consistent with the other provisions governing water transfers, the change must not "injure any legal user of the water" or "unreasonably affect fish, wildlife, or other instream beneficial uses." "224

Originally, an appropriator that wanted to engage in a Temporary Change did not need the Board's approval. Rather, the appropriator simply was required to notify the Board of its proposal. If the Board did not object to the proposal within thirty days, the Temporary Change went into effect.²²⁵ The 1988 amendments altered this procedure, requiring Board authorization of all Temporary Changes. According to section 1726, the potential transferor must notify the Board of the proposed Temporary Change.²²⁶ The notice must contain "information indicating the amount of water proposed for transfer, the parties involved in the transfer, and any other information the board by rule may prescribe."²²⁷ Following receipt of this notice, the Board may approve the change without conducting a public hearing if it concludes both of the following:

- (1) The proposed temporary change would not injure any legal user of water, during any potential hydrological condition, through resulting significant changes in water quantity, water quality, timing of diversion or use, consumptive use of the water, reduction in return flows, or reduction in the availability of water within the watershed of the transferor.
- (2) The proposed temporary change would not unreasonably affect fish, wildlife, or other instream beneficial uses.²²⁸ If the Board approves the Temporary Change, it must notify the transferor and those

^{220.} Id. (former Water Code § 1738).

^{221.} CAL. WATER CODE § 1728 (West Supp. 1989).

^{222.} Id. § 1725.

^{223.} Id.

^{224.} Id. § 1725.

^{225.} See 1980 Cal. Stat. ch. 933, § 12 (former Water Code §§ 1726-1728).

^{226.} CAL. WATER CODE § 1726 (West Supp. 1989).

^{227.} Id.

^{228.} Id. § 1727(a).

legal users of water described above.²²⁹

If it cannot make the requisite findings within sixty days of its receipt of the notice of proposed temporary change, the Board must conduct a public hearing on the matter.²³⁰

The 1988 legislation that amended the Temporary Change provisions also addressed an omission in the previous transfer laws that may have inhibited some appropriators from offering their water for transfer. Although reversion of full rights to the transferor probably was implicit in the earlier legislation, there was some concern that the law did not specifically state that, upon conclusion of the term of a transfer agreement, the transferor would have full rights to the water. Accordingly, section 1731 now states that following the "expiration of a temporary change period, all rights shall automatically revert to the original holder of the right without any action by the board."231

There are two main advantages to characterizing a short-term transfer as a Temporary Change. First, the administrative process is expedited because the Board may approve the change without a hearing, based solely on the written record submitted by the petitioner. Second, the statute exempts Temporary Changes from the environmental review procedures of the California Environmental Quality Act.²³² These advantages may be unavailable, however, where the Temporary Change involves large quantities of water or where the proposed transfer significantly alters stream flows. In such cases, downstream users and representatives of instream flow interests are almost certain to object and thereby cause the Board to convene a public hearing and require the transferor to conduct hydrologic and environmental studies to justify the proposal.

Long-term Transfers

The final set of water transfer rules, Water Code sections 1735 through 1738, governs the creation of long-term transfer agreements. Section 1735 defines a Long-term Transfer as one "for any period in excess of one year" and states that the Board "may consider a petition for a long-term transfer of water or water rights involving a change of point of diversion, place of use, or purpose of use."233 Section 1736 then authorizes the Board, "after providing notice and opportunity for a hearing, [to] approve such a petition for long-term transfer where the change would not result in substantial injury to any legal user of water and would not unreasonably affect fish, wildlife, or other instream beneficial uses."234 The statute does not place any limits on the duration of a Long-term Transfer. As with the Temporary Change laws, however, it does provide that "If lollowing the expiration of the long-term transfer period, all rights shall automatically revert to the original

^{229.} Id. § 1727(b).

^{230.} Id. § 1727(c).

^{231.} Id. § 1731. 232. Id. § 1729 (exempting temporary changes "from the requirements of Division 13 (commencing with Section 21000) of the Public Resources Code").

^{233.} Id. § 1735.

^{234.} Id. § 1736.

holder of the right without any action by the board."235

Although the Long-term Transfer provisions overlap with sections 380 through 386 discussed above, the Legislature did not explain how or whether the new law should be integrated with the old.

5. Transfers of Water Based on Contract Rights

Most of the surface water appropriated in California is not used by the appropriator but is sold to irrigation districts, water agencies, farmers, industry, and domestic consumers.²³⁶ Many water users therefore do not hold water rights. Rather, their rights are based on water supply contracts that they have entered into with some other agency. The existence of these contractual entitlements to water raises two important questions. First, can a contractor transfer water even though it does not hold the appropriative right? Second, are such transfers subject to the jurisdiction of the Board according to the laws discussed above?

Although the water transfer statutes refer to transfers of water or water rights by the holder of the rights,²³⁷ these laws apply equally to those who receive their water pursuant to contract. First, as described above, section 383 authorizes users within an irrigation or water district to transfer water supplied to them by the district that is surplus to their needs.²³⁸ In many such cases, the district would hold the water right and the transferor would be a contractor of water from the district. Thus, implicit in the surplus and conserved water transfer provisions is authorization for the transfer of water obtained by contract. Second, sections 1435, 1725, and 1735 apply whenever an appropriator changes the point of diversion, place of use, or purpose of use from that specified in its permit or license.²³⁹ If an appropriator sells water to a contractor and the contractor engages in a transfer that requires a change in the water right, the appropriator would have to petition the Board for approval of the transfer. The contractor-transferor therefore would be subject indirectly to the transfer provisions discussed above.

While transfers of water obtained under contract right generally fall within the jurisdiction of the Board, the broad scope of the water rights held by the largest purveyors of water in the state—the Bureau of Reclamation and the Department of Water Resources—allows many such transfers to escape the scrutiny of the Board. The permits for the Central Valley Project authorize the Bureau to divert water from the Trinity, Sacramento, Ameri-

^{235.} Id. § 1737.

^{236.} See Department of Water Resources, supra note 1, at 21-29; and supra text accompanying notes 240-48.

^{237.} For example, section 383 authorizes the transfer of "[w]ater, the right to which is held... pursuant to an appropriation made under the Water Commission Act or Division 2 (commencing with Section 1000)." CAL. WATER CODE § 383 (West Supp. 1989). The Temporary Urgency Change provisions refer to a "permittee or licensee who has an urgent need to change a point of diversion, place of use, or purpose of use." Id. § 1435(a). Similarly, the Temporary Change sections provide that a "permittee or licensee may temporarily change" its water rights. Id. § 1725. Section 1735, the Long-Term Transfer law, simply states that "the board may consider a petition for a long-term transfer of water or water rights." Id. § 1735.

^{238.} See supra text accompanying notes 183-87.

^{239.} See supra text accompanying notes 209, 221 & 233.

can, Stanislaus, and San Joaquin Rivers, and from the Delta.²⁴⁰ They define the place of use for this water as the entire service area of the CVP, which includes virtually the entire Central Valley as well as portions of the Bay Area.²⁴¹ The permits allow the Bureau to use the water for a multiplicity of purposes, including irrigation, municipal and industrial supply, hydroelectric power generation, flood control, recreation, and support of instream uses.²⁴² Consequently, a federal contractor may transfer water to another federal contractor without changing the point of diversion, place of use, or purpose of use of the water right held by the Bureau and therefore without invoking the transfer and change in use provisions of the Water Code. During the 1980s, over three million acre feet of water was transferred within the CVP system and was not subject to the jurisdiction of the Board.²⁴³

The same legal rules apply to the State Water Project. The permits for the SWP authorize the Department of Water Resources to divert water from the Feather River and from the Delta for distribution to users in the Bay Area, the San Joaquin Valley, and southern California.²⁴⁴ As with the CVP, the SWP permits allow the water to be used for multiple purposes.²⁴⁵ Unlike the federal project, however, there have been few transfers between state contractors of water supplied by the SWP.²⁴⁶

Finally, all of the water taken from the Colorado River and delivered to users in southern California is distributed by the Secretary of the Interior under the exclusive authority of federal law.²⁴⁷ Thus, when a contractor for Colorado River water enters into a transfer agreement with another user, the parties need not obtain the approval of the Board even if the transfer is accompanied by a change in the point of diversion, place of use, or purpose of use. The jurisdiction of the Board over such transfers is preempted by federal law. The recently consummated transfer of water from the Imperial Irrigation District to the Metropolitan Water District, described above,²⁴⁸ was exempt from the Board's jurisdiction for this reason.

CONCLUSION

As this review of California water transfer law indicates, there exist in the state both forceful legislative directives encouraging the voluntary reallocation of water resources and specific laws to implement those directives. These laws have not led, however, to the development of a broad-based water market in California. Between 1981 and 1989, the Board received

^{240.} United States v. State Water Resources Control Bd., 182 Cal. App. 3d 82, 98-99, 227 Cal. Rptr. 161, 166-67 (1st Dist. 1986).

^{241.} Id.

^{242.} W. KAHRL, THE CALIFORNIA WATER ATLAS 47-50 (1979).

^{243.} D. Williams & S. Yarnell, CVP Water: Transfers and Exchanges (1989) (unpublished manuscript prepared for Spring 1989 seminar on water transfers, University of California, Hastings College of the Law).

^{244.} United States v. State Water Resources Control Bd., 182 Cal. App. 3d at 99, 227 Cal. Rptr. at 167.

^{245.} W. KAHRL, supra note 242, at 50-56.

^{246.} See B. Gray, supra note 2, at 2.

^{247.} Arizona v. California, 373 U.S. 546, 575-90 (1963); see Department of Water Resources, supra note 1, at 26-28.

^{248.} See supra note 206.

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only twenty-three applications to transfer water pursuant to the laws described above. Of the nineteen applications that the Board approved, most were for specific and very short-term purposes such as augmenting supply during one irrigation season, conducting water quality studies, maintaining instream flows during times of low natural flow, and providing contingency supplies during the 1987-1989 drought. All of the transfers lasted for oneyear or less.²⁴⁹ Although longer-term transfers took place during this period, it is ironic that none was based on the water transfer laws that the Legislature enacted during the 1980s for the purpose of establishing a system of water marketing in California. Rather, the largest and most permanent transfers —those that could be viewed as evidence of a water market—all involved federal project water and were not subject to the jurisdiction of the Board.250

The reasons for this disparity between California water transfer law and the state's experience with water marketing will be explored in a follow-up article. For now, however, it is worth noting that the disparity may be the product of the law's failure to address the needs of the community that it purports to assist and to regulate. The Legislature has drafted a clear and detailed road-map. It just might be for the wrong road.

^{249.} See B. Grey, supra note 2, at 29.

^{250.} See supra note 206.