The Legal Aspects of Appropriative Water Rights Transfers in California

This article examines the ways in which California water rights law and agricultural water use patterns impede the efficient use and conservation of state water resources. It proposes legislation to authorize and facilitate the transfer of appropriative water rights. This proposal substantially solves the problem of inefficient water distribution caused by the current statutory scheme.

The problem of maintaining adequate water supplies to irrigate California’s crops reached crisis proportions during the recent drought. Water shortage in agriculture and other industries, however, is not attributable solely to the lack of rainfall. It is in part attributable to the institutional framework of California water rights law. Currently, the system induces waste through the widespread overirrigation practiced by California farmers. Additionally, efficient distribution of water through the sale or lease of water rights is impeded by the uncertain application of the Water Code’s forfeiture provisions.

Economic analysis suggests that the most efficient use of water requires the transfer of water to be free of such obstacles. A statute to authorize and facilitate the transfer process would permanently remove this problem. The authorizing legislation should declare that reasonable and beneficial use by the transferee constitutes reasonable and beneficial use by the transferor. It also should require a notice and hearing prior to loss of an appropriative water right through forfeiture. Such a statute would encourage the efficient use and concomitant conservation of the state’s scarce water resources.

I. CALIFORNIA WATER RIGHTS: DEVELOPMENT AND CURRENT FRAMEWORK

An examination of California water rights law and agricultural water use patterns demonstrates how legal and economic factors perpetuate
misallocation of water supplies. The growth and development of the California water rights system reflects the 19th century transition of the state economy from mining to agriculture. The two principal systems that have emerged are riparian and appropriative rights. This article deals only with the appropriative rights system, which is the dominant form of water use in the state. The following discussion describes the development and statutory framework of that system.

A. Definition

An appropriative right is based upon a possessory taking of water for a beneficial use. Unlike the riparian right, it is not contingent upon ownership or proximity of the user's land to the water used. An appropriative right may be acquired in surface and subterranean streams and may be lost by non-use. Three methods of appropriation have been used during the development of the doctrine. These methods are: 1) common law appropriations made by simply claiming the right to a certain amount of water, 2) appropriations made under the Civil Code, enacted in 1872, and 3) statutory appropriations made under the Water Commission Act of 1914, codified in the current Water Code. Both common law and Civil Code appropriative rights are hereinafter termed pre-1914 appropriative rights. Statutory appropriations are referred to as post-1914 appropriative rights. The following discussion will trace the development of these appropriation methods from the common law miners' claims in the gold rush days to the current statutory scheme.

B. Development of the Appropriative Right Doctrine

Miners flocked to California with the discovery of gold in 1848. In the absence of a codified system of water law, they created a haphazard

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1. See generally G. Craig, California Water Law in Perspective, 68 West's Annotated California Codes LXIX (1971).
2. California water law recognizes five types of water rights although the riparian and appropriative right systems dominate. *Id.* The five types of rights include: 1) riparian rights (see W. Hutchins, The California Law of Water Rights 178-256 (1956)), 2) overlying rights (see Craig, *supra* note 1, at LXX), 3) prescriptive rights (see S. Weil, Water Rights in the United States 256 (1911)), 4) pueblo rights (see Hutchins, *supra* at 256), and 5) appropriative rights (see Hutchins, *supra* at 40, 178-256).
4. *Id.* at 40.
5. Craig, *supra* note 1, at LXX.
8. *Id.* This discussion relates only to the appropriation of surface waters or water in above ground water resources. For doctrines relating to groundwaters see Hutchins, *supra* note 2, at 454-61.
system of appropriation. Miners based their water claims on a first in time, first in right principle. Such rights could be lost if miners failed to use their right. In 1850, statutes of the newly admitted state recognized both the miners appropriative claims and the common law doctrine of riparian rights.

Due to frequent disputes arising from competing claims between appropriators, the California legislature formally codified a statutory appropriation doctrine in 1872. The Civil Code sections legitimized the first in time, first in right rule by authorizing a notice and claim procedure. Appropriate rights claims were given priority as of the date of notice.

During the latter part of the 19th century, the multiplicity of recognized water use methods caused widespread confusion. Disputes between Civil Code and common law appropriators and between appropriators and riparian users were common. This was in part due to the fact that the Civil Code system was not mandatory and thus did not promote a uniform water use system.

Due to these conflicts and concern over possible mismanagement of state water resources, the California legislature created the California Conservation Commission in 1911. The Commission was charged with the duty to investigate the state's natural resources and develop proposals to revise relevant state laws. As a result of its study, the Commission recommended a uniform mandatory appropriation system. The Commission's recommendation was adopted in the Water Commission Act of 1914.

The Water Commission Act and later amendments established the administrative structure and guidelines to enforce an exclusive appro-

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9. CRAIG, supra note 1, at LXXI.
10. GOVERNOR'S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, APPROPRIATIVE RIGHTS IN CALIFORNIA 4 (Staff Paper No. 1, May 1977) (hereinafter cited GOVERNOR'S COMMISSION).
11. The California Practice Act, ch. 5, § 621, 1851 Cal. Stats. 199. Thus, there existed side by side two dissimilar systems. One was based on the taking of water as a separate right, and the other was based on ownership of land abutting the water used.
12. See note 6 supra.
13. Under the statutory appropriation method, the claimants were required to post notice at the point at which they intended to divert or use the water, file a copy of the notice with the county clerk and commence use of the claimed right within sixty days. GOVERNOR'S COMMISSION, supra note 10, at 6.
14. See generally S. HARDING, WATER IN CALIFORNIA 39 (1960). The California Supreme Court in LUX v. HAGGIN, 69 Cal. 255, 372, 10 P. 674, 791 (1886), recognized the validity of riparian rights and held that riparian rights incident to private property were subject to earlier appropriations but prevail over later appropriations.
15. GOVERNOR'S COMMISSION supra note 10, at 7.
pere system. Under the Act, watermasters supervised water use and the Commission had the authority, subject to judicial review, to investigate and settle claims.

A 1928 Constitutional amendment fixed the standard of use for the retention of all types of water rights. This standard required "reasonable and beneficial use" of water consistent with the interests of conservation. Whether a use is beneficial is a question of fact decided by reference to the quantity of water actually applied for beneficial purposes. The Water Commission appropriation system is essentially re-

18. The Water Commission Act was amended to explicitly state that the permit system was the exclusive method of acquiring an appropriative right in the state. CAL. WATER CODE § 1225 (West Cum. Supp. 1977) (originally enacted as Act of May 2, 1923, ch. 87, 1923 Cal. Stats. 162).
20. The California Constitution provides:

It is hereby declared that because of the conditions prevailing in the State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of waters be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use of flow of water or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served and such right does not and shall not extend to the waste or unreasonable method of use or unreasonable method of diversion of water.

CAL. CONST. art. 10, § 2. This requirement has been held to apply to all uses exercised in the state. Peabody v. City of Vallejo, 2 Cal. 2d 351, 368-69, 40 P.2d 486, 495-96 (1935).
21. What constitutes reasonable and beneficial use depends on the facts of each case. Gin S. Chow v. City of Santa Barbara, 217 C. 673, 706-7, 22 P.2d 5, 18 (1933); Tulare Irrigation Dist. v. Lindsay Strathmore Irrigation Dist., 3 Cal. 2d 489, 567, 45 P.2d 972, 1011 (1935). In Tulare, the court stated that what is currently considered a reasonable beneficial use of water may become a waste of water due to changed conditions. The recent drought is an example of such changed circumstances.


The following uses have been declared to be non-beneficial: (1) diverting water for purposes of drainage, Maeris v. Bicknell, 7 Cal. 261, 262-63 (1857), (2) use for purposes of financial speculation, Weaver v. Eureka Lake Co., 15 Cal. 271, 275 (1860), (3) use of water for sole purpose of exterminating gophers and squirrels, Tulare Irrigation Dist. v. Lindsay Strathmore Irrigation Dist., 3 Cal. 3d 489, 45 P. 2d 972 (1935), (4) storage which is not in and of itself for a beneficial purpose, Lindbloom v. Round Valley Water Co., 178 Cal. 450, 173 P. 994 (1918); Hutchins, supra note 2, at 135. Additionally, the legislature mandated the reasonable beneficial use requirement in the Water Code. CAL.
tained under the current state water code. 23

C. Current Status of California Appropriative Rights System

Today, the State Water Resources Control Board, under the aegis of the State Resources Agency, administers California’s water appropriation system. 24 The Board is vested with general powers to investigate and supervise water distribution, 25 issue appropriation permits and licenses, 26 determine water rights, 27 and oversee water quality control. 28 The salient features of the present appropriation system are permit application, 29 notices, 30 issuance process 31 and licensing standards. 32

People who want to use surface or subterranean waters in identifiable channels are required to apply for a permit from the Board. 33 This is the exclusive method of obtaining a post-1914 appropriative right. The permit application requires information on the point of diversion from the water source, place of use and type of use. 34 The date of the application establishes the appropriator’s priority. Upon compliance with Board regulations, the priority remains in effect until the Board reaches a final decision regarding the application. 35

After an application is filed, the Board determines the availability of


24. CAL. WATER CODE §§ 120, 123 (West 1971).
25. Id. §§ 1051(a), 1051(c).
26. Id. §§ 1380, 1600-1677.
27. Id. §§ 2500-2900. This latter function is implemented by nine regional water control boards located throughout the state.
28. Id. § 13200. The California Water Commission acts in an advisory capacity to the State Water Resources Control Board (hereinafter Board) and the state legislature.
29. Id. §§ 1225, 1260, 1375 & 1450.
30. Id. §§ 1300, 1317, & 1324.
31. Id. §§ 1610, 1610.5.
32. Id. §§ 1600, 1605-1610, 1625-1626, 1675, CAL. ADMIN. CODE, tit. 23, § 764.10.
33. CAL. WATER CODE §§ 1200, 1201, & 1225 (West 1971). All underground water not flowing in a definite stream or channel is not subject to the provisions of the Water Code.
34. Id. § 1260. All applications must comply with the guidelines set forth in the California Environmental Quality Act. CAL. PUB. RES. CODE §§ 21000-21003 (West 1977).
35. CAL. WATER CODE § 1450 (West 1971). A defect in the application does not extinguish the applicant's priority if one has made a good faith attempt to comply and cure the defect within sixty days of notice. Id. § 1270, CAL. ADMIN. CODE, tit. 23, § 695. Riparian users, pre-1914 right holders, and municipalities with pueblo rights are exempt from permit application requirements. GOVERNOR'S COMMISSION, supra note 10, at 17. It is unsettled whether prescriptive rights may be acquired without compliance with the statutory permit procedure. See generally Kleitzing, Prescriptive Water Rights in California: Is Application a Prerequisite?, 39 CALIF. L. REV. 369, 376 (1951); CALIFORNIA STATE
unappropriated water.\textsuperscript{36} Such water is defined in the Water Code as water flowing in any natural stream which is not subject to reasonable and beneficial riparian rights or appropriative claims.\textsuperscript{37} There are four categories of water which the Board may declare unappropriated and available for distribution under a requested permit. They are: 1) water which was never appropriated, 2) all water appropriated prior to December 19, 1914 which is not currently being used for beneficial purposes, 3) all water appropriated after that date which is not used in a reasonable or beneficial manner, and 4) appropriated water which flows back into a body of water and is available for reuse.\textsuperscript{38}

Upon the issuance of a permit, the holder has a conditional right to appropriate water.\textsuperscript{39} The permittee must act diligently to use water in a beneficial manner\textsuperscript{40} and comply with any conditions the Board imposes to protect the public interest.\textsuperscript{41} A permittee must seek the Board’s approval for any change in place of use, diversion, or purpose.\textsuperscript{42}

A permit does not convey an absolute right to water use. Therefore, appropriators must obtain a license from the Water Board in order to perfect their right. Permittees become eligible for licenses once they use their water beneficially.\textsuperscript{43} A license, like a permit, may be conditional.\textsuperscript{44} The primary requirement is continued reasonable and benefi-

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\begin{itemize}
  \item \textsuperscript{36} CAL. WATER CODE § 1202 (West 1971).
  \item \textsuperscript{37} \emph{Id.} § 1201-1202.
  \item \textsuperscript{38} \emph{Id.} § 1202. The Board is empowered to conduct topographic surveys of above and below ground water to determine what water is available for distribution. \emph{Id.} §§ 225, 226.
  \item \textsuperscript{39} \emph{Id.} §§ 1300, 1330. Any member of the public may protest an application. \emph{Id.} § 1330. The Board conducts investigations and hearings in response to protests. \emph{Id.} § 183. The Board’s decision is reviewable on petition for a writ of mandate. \emph{Id.} § 1360.
  \item \textsuperscript{40} \emph{Id.} §§ 1375, 1380, 1382.
  \item \textsuperscript{41} \emph{Id.} § 1396. There is no appropriation where filing a notice is not followed up by construction of works for use of the water. Cardova v. Calkins, 117 Cal. 106, 112-13, 48 P. 1010, 1012 (1897). Nor does mere prior construction of a ditch and diversion of water give priority, where there is no actual appropriation or intention to appropriate followed by due diligence. Maeris v. Bicknell, 7 Cal. 261, 263 (1857).
  \item \textsuperscript{42} \emph{Id.} §§ 1394 (West 1971).
  \item \textsuperscript{43} \emph{Id.} § 1600. The Board conducts confirmatory investigations to ensure compliance with the licensing requirements. \emph{Id.} §§ 1605-1610.
  \item \textsuperscript{44} \emph{Id.} §§ 1625-1626. The permittee has a right to notice and an opportunity to protest if the Board alters the permit terms or the amount of water granted when it issues the license. \emph{Id.} § 1675. The license remains in effect so long as the water is applied to useful and beneficial purposes. \emph{Id.} § 1627. A change in the type of use or location of use requires Board approval and public notice. \emph{Id.} §§ 1700-1702. As of 1965, all per-
Water Rights Transfers

1978]

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cial use, as mandated by the California Constitution.45 This condition applies to both pre-
and post1914 rights. The appropriative right is thus a right measured by reasonable beneficial use.48 It is an estate in real property.49 It may theoretically be conveyed like other property,50 and is separately alienable from the land to which it becomes initially appurtenant.51

Conveyance of an appropriative right separate from the land to which it is appurtenant necessarily involves a change in place of use. There may also be a change in point of diversion and purpose of use. These changes are permissible only if they do not injure the rights of others.52 The Board makes this determination.53

Water Code section 124054 authorizes the post-1914 appropriations for useful and beneficial purposes. These rights cease when the water is no longer used for such purposes. Water Code section 124155 establishes three years as the period of nonuse after which unused water reverts to the public. Such water is regarded as unappropriated public water.

Failure to comply with conditions of the license, unreasonable use, or non-use are grounds for license revocation.56 A pre-1914 right reverts to

sons diverting water in the state are required to file a "Statement of Use and Diversion" with the Water Board. Id. § 5101.

45. CAL. CONST. art. 10, § 2.
48. Hufford v. Dye, 162 Cal. 147, 153, 121 P. 400, 403 (1912).
51. Hutchins, supra note 2, at 125 (citing Wright v. Best 19 Cal. 2d 368, 121 P.2d 702 (1942)).
52. Hutchins, supra note 2, at 175-78; CAL. WATER CODE § 1702 (West 1971).
54. CAL. WATER CODE § 1240 (West 1971) provides:
The appropriation must be for some useful or beneficial purpose and when the appropriator or his successor in interest ceases to use it for such a purpose the right ceases.

Id.

55. Id. § 1241. Section 1241 provides:
When the person entitled to the use of water fails to beneficially use all or any part of the water claimed by him, for which a right of use has vested, for the purpose for which it was appropriated or adjudicated, for a period of three years, such unused water reverts to the public and shall be regarded as unappropriated public water.

Id.

56. Id. §§ 1627, 1675. CAL. ADMIN. CODE, Tit. 23, § 764.12 (1977). Board findings may be reviewed on petition for writ of mandate. CAL. WATER CODE § 1677 (West 1971). Findings of the Board are assumed to be prima facie correct until set aside by a court of competent jurisdiction. Id. § 1676. Additionally, an appropriative right may be lost by prescription unless the right is held by a public entity, CAL. CIV. CODE § 1007.
the public after five years of non-use and a post-1914 right reverts after three years of non-use. If the right has not been used in order to comply with federal crop control or soil conservation contracts the forfeiture period will be extended. Board determined hardships are also grounds for extension of the normal forfeiture period.

II. THE IMPACT OF THE FORFEITURE PROVISIONS ON CALIFORNIA AGRICULTURAL WATER USE

The preceding summary of the history and law of appropriative rights outlines the legal mechanics of water use in California. The appropriative rights system, as presently administered, has implications for statewide agricultural water use. The following discussion explains this relationship and analyzes the legal and economic problems that emerged during the recent drought.

Agriculture constitutes a substantial portion of California’s economic activity and contributes significantly to the nation’s food supply. The heavy use of irrigation water and the inadequacies of the state’s water delivery system were made clear by the recent drought. Since the availability of water is a paramount factor in deciding whether to grow crops, these inadequacies are a farmer’s major concern.


57. In Smith v. Hawkins, 110 Cal. 122, 42 P. 453 (1895), the California Supreme Court held that a pre-1914 appropriative right may be lost if not used for a period of five years. This five-year period applies to vested appropriations made either under the Civil Code, or without conforming to the provisions of that code prior to the effective date of the Water Commission Act. Hutchins, supra note 2, at 295.


59. Id. § 1241.6. Storage of water underground, including diversion of streams, also tolls the forfeiture statutes. Id. § 1242.

60. Within the state the agricultural industry generates jobs and business amounting to 2-3 billion dollars a year. Address by James J. Youde, in Governor’s Drought Conference 25 (May 1977) (hereinafter cited as Youde).

61. Youde, supra note 60, at 25. In addition, California exports $1.5 billion worth of farm products annually. Id.

62. The fiscal impact of the drought on the agricultural industry was substantial. Drought related losses for 1976 totalled $510 million and losses for 1977 have been estimated at between $800 million and $21 billion. In Yolo County alone, the agricultural losses due to drought were $5,880,000 for 1975-76. Yolo County Department of Agriculture, Report on Drought Impacts in California Agriculture 2 (1975-76). Specific losses in the 1975-76 period in any farmed areas throughout the state totalled $315 million. State of California Resources Agency, the California Drought, 1976, at 29 (May 1976). As a result of these losses, 30 counties were declared Natural Disaster Areas. Id. See also Youde, supra note 60.

63. There are many factors that must be considered by the farmers who are deciding whether or not to grow crops. They must determine whether there will be sufficient water in the stream to enable them to use their full appropriative rights. They must decide whether it is economically viable for them to plant crops at all and whether it is legally possible to lease or sell their water rights in lieu of planting.
Most of the larger water delivery systems in the state were constructed between 1928 and 1934. Since that time, the state population has tripled and the demand for agricultural irrigation has doubled. The drought merely increased the strain on the system already caused by population increase. It is doubtful whether the state water plan can meet the future needs of the state. The California Department of Water Resources estimates that by the year 2000, the annual net water demand is expected to exceed dependable supply by 4.3 million acre-feet. Even with the planned expansion of the existing water systems, they cannot meet this projected demand.

Because of the reduced water level caused by the drought, state and local agencies apportioned water allotments on the basis of priority. Some farmers responded by planting fewer crops, switching to low water requirement crops, or attempting to irrigate the same acreage with a reduced allotment. Others did not plant at all and attempted to transfer their rights. The overall impact of water rationing on water use patterns was irrigation of the same or slightly reduced acreage with far

64. The following statistics describe the current agricultural water delivery system. The breakdown of total acreage used for agricultural cultivation in California is as follows: 9 million acres of irrigated land, 2 million acres of dry farmed grain, and 20 million acres of dry farmed rangeland. Ninety percent of the total acreage used for crop production is irrigated. Water for irrigated lands is procured from the State Water Project, Central Valley Project, local storage, conveyance systems, major and minor ground water basins, and from direct diversion of stream flow. STATE OF CALIFORNIA RESOURCES AGENCY, supra note 62, at 28. The delivery methods of agricultural water use include: irrigation districts, public utility districts, municipal utility districts, riparian uses, pre-1914 right holders, post-1914 right holders, pueblo rights, and ground water users. Accurate statistics on the percentage of use in each category are currently unavailable. The reduced water levels during the recent drought produced a trend in agriculture toward increased ground water use. Address by R. Robie, The California Water Problem, delivered to the Comstock Club (Aug. 22, 1977) (hereinafter cited as Robie).

65. CALIFORNIA STATE WATER RESOURCES CONTROL BOARD, POLICY AND ACTION PLAN FOR WATER RECLAMATION IN CALIFORNIA 7 (1977); CALIFORNIA DEPT. OF WATER RESOURCES, WATER CONDITIONS IN CALIFORNIA 5 (Report No. 4 1977).

66. HUTCHINS, supra note 2, at 131. See also CAL. WATER CODE § 4150 (West 1971).

67. Analysis of the drought impact on agriculture in Yolo County provides an example of crop switching. In Yolo County, farmers who normally cultivate rice, alfalfa, and corn experienced a $7,555,000 loss as a result of reduction in planting of these crops during the 1975-76 drought period. In addition, the county estimated that the cultivation of the crops grown during the drought period cost an additional $4,000.00 in irrigation expense. In assessing water management measures that were most useful in combating the drought, the use of alternate crops with lower water requirements was cited as a successful alternative. The county recommended that this practice of utilizing low requirement crops, along with non-planting of acreage, continue in the 1976-77 year. YOLO COUNTY DEPARTMENT OF AGRICULTURE, supra note 62, at 2.

68. Robie, supra note 64: "Crops requiring large amounts of water such as rice will be replaced to some extent with crops that require less water. There will be little if any double cropping in water short areas." YOUD, supra note 60, at 27.
less water.69

The conclusion that can be drawn from the reduced irrigation is that farmers have overirrigated in the past. Overirrigation is demonstrated in statewide surveys on agricultural water use. These surveys reveal that in 1976 farmers irrigated ninety-five percent of their acreage with eighty-six percent of their original water allotment. The decrease continued in 1977 as farmers irrigated seventy-nine percent of their acreage with sixty-three percent of their previous allotments.70 Therefore, by definition, farmers were overirrigating by nine percent before the drought, if in 1976, ninety-five percent of their land could be effectively irrigated with eighty-six percent of the water used in pre-drought years. The irony of the nine percent waste attributable to overirrigation is that it is institutionally created and perpetuated.71

A. The Encouragement to Overirrigate

Currently, the reasonable and beneficial use requirement, as enforced, conflicts with the constitutional mandate setting water conservation as the paramount goal of the state.72 The provision of the state constitution dealing with water consumption was initially interpreted to require only reasonable and beneficial use.73 However, in 1967 the court in Joslin v. Marin Municipal Water District74 distinguished two separate requirements in the “reasonable beneficial use” standard. It emphasized both a reasonable use and a reasonable limitation of that use with a view toward conservation.75

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69. Robie, supra note 64.
70. Id.
71. One commentator suggested:

As one means of minimizing problems I suggest that the state and federal water agencies do all they can to cooperate, to insure that water supplies which are available for use are not prevented from being used for institutional reasons. We need to make sure that artificial shortages are not created by providing incentives for farmers to use well water where it is available and make surface water available to farmers in other areas where ground water is not available . . .

R. Courtney, Impacts of the Drought on Agriculture, PROCEEDINGS GOVERNOR'S DROUGHT CONFERENCE 101 (March 7-8, 1977).

72. In Gin S. Chow v. City of Santa Barbara, 217 Cal. 673, 22 P.2d 5 (1933), the supreme court noted:

The present and future wellbeing and prosperity of the state depend upon the conservation of its life-giving waters . . . The conservation of other natural resources is of importance, but the conservation of the waters of the state is of transcendent importance. Its waters are the very lifeblood of its existence.

Id. at 701, 22 P.2d at 16.
74. 67 Cal. 2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967).
75. In Joslin, the supreme court stated:

. . . water must be conserved in California “with a view of the reasonable and beneficial use thereof in the interest of the people,” that the right to use
Nevertheless, under the current system waste is encouraged\(^\text{76}\) and conservation is punished. The pre-drought waste occurred because appropriators must use their entire allotment or be threatened with total or partial forfeiture for non-use.\(^\text{77}\) Even when farmers discover they can successfully irrigate with less water, they are discouraged from conserving by a water rights system that punishes conservation\(^\text{78}\) with forfeiture.

Conservation through transfer of unused water is also discouraged. Farmers who transfer their water rights risk forfeiture because neither statute, case law, nor Board policy include transfer within the definition of reasonable beneficial use.\(^\text{79}\) While some farmers coped with shortage by switching crops and reducing acreage, other farmers found it infeasible to plant at all. These farmers attempted to generate income and avoid total or partial forfeiture for non-use by leasing or selling their water rights. This course of action, however, carried the risk of forfeiture.

**B. The Transfer Process: Obstacles to Its Implementation**

Transfer is the generic term for either the sale or lease of one's water right. It is the deliberate exchange of a water right for adequate consideration. It results in a changed point of diversion, place of use or purpose of use.\(^\text{80}\) Under an economic analysis, water will be used most efficiently when the transfer process is free of any impediments.\(^\text{81}\)

The existing water rights system imposes many obstacles to the effi-

\(^{1}\) Water "shall be limited to such water as shall be reasonably required for the beneficial use to be served." (Emphasis by the court.)

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


\(^{4}\) CAL. WATER CODE § 1241 (West 1971).


\(^{6}\) On September 22, 1977, the State Water Resources Control Board found that Anderson Farms Company's proposal to transfer water to the Berrenda Mesa Water District via storage credits violated the Emergency Delta Regulations, was contrary to the public interest and was potentially a violation of the reasonable beneficial use requirement. CAL. STATE WATER RESOURCES CONTROL BOARD, DECISION 1474 (1977).


\(^{8}\) F. Maloney & R. Ausness, *The Modern Proposal for State Regulation of Consumptive Uses of Water*, 22 HASTINGS L.J. 523, 527 (1971). In economic terms, the value of any unit of water is measured by the maximum amount of resources a consumer will pay for the unit. The marginal value is the value of the last unit consumed. Thus, the most efficient allocation of water resources requires the equalization of all marginal values of all water consumed. As long as impediments to the transfer of water rights remain, equalization of the marginal values cannot occur. J. Hirshleifer, J. Dehaven & J. Milliman, *Water Supply, Economics, Technology and Policy* 43-47 (1960) (hereinafter cited as Hirshleifer); CAL. DEPT. OF WATER RESOURCES, WATER CON-
cient transfer of water rights. The major impediment is the reasonable and beneficial use requirement as presently enforced. All water rights in the state are subject to this use requirement. Its deterrent effect arises when potential economic return on the sale or lease of water exceeds that available to farmers from use for their own irrigation purposes. If a farmer decides to seek this higher rate of return, it will involve partial or total non-use of the appropriative right. This non-use may produce a forfeiture of the right to use that water because a lease or sale is not considered a beneficial use. Consequently, ownership of the unused amount reverts to the state.

The forfeiture provisions were included in the statutory framework to ensure that the water is actually used. The appropriative right ceases when the right-holder fails to apply the water to a beneficial purpose. The state is empowered to continually police this distribution system.


82. Economists contend that the existing water law creates diseconomies in the California water distribution system. M. Gaffney, Conference Proceedings, Committee on the Economics of Water Resources Development and Committee on the Economics of Range Use and the Development of the Western Agricultural Economics Research Council Rep. No. 9, at 55 (1961). The current law treats water rights differently than other mineral rights which are treated as property. As such, water rights are not capable of the same efficient economic treatment. Hirshleifer, supra note 81. The existing water rights system creates property rights which are uncertain to the extent that it reduces the potential for water rights transfers. Id.

84. See note 20 supra.
85. For example, some water users in Wyoming grow hay for cattle, some grow sugar beets. Late in the season, a rancher may hold stock that entitles him to so many acre feet of reservoir water while a beet farmer's stream has run dry. Hay produces $25 to $40 an acre, sugar beets $60 to $75. What happens is that the farmer 'rents' the rancher's water right at a price somewhere between the profit he will realize on the beets and the profit the rancher will lose on the hay.


Under this act, growers of beans who anticipate a high price buy water from potato growers who face a glutted market. Maximum efficiency is reached, since the high-value crop is produced, and both water users share the profits. The Code's Bureaucrat could not do as well. If he were charged with distributing Wyoming water on the basis of economic efficiency he would allocate the water to the beet grower, but the lucky farmer would get all his profits while the unfortunate rancher would suffer a severe loss.

88. Id. § 1240.
In theory, this threat of forfeiture promotes efficient water distribution by encouraging farmers to fully use their water rights.

In fact, forfeiture discourages efficient water use by impeding the flow of water rights to where they are most needed.\textsuperscript{89} Enforcement of the reasonable and beneficial use requirement by threat of forfeiture upon transfer of water rights prevents the most efficient use of water. The legal consequences of water rights transfers are thus uncertain. A reasonable and beneficial use by the transferee may trigger forfeiture and subsequent reversion of the water to the state.

The forfeiture and resulting reverter to the state affects both the transferor and transferee. In the lease of a water right, the forfeiture operates to divest the title held by the transferor. When the basis of the leasehold is forfeited, the transferee's right to water use reverts to the state along with that of the transferor. When a water right is sold, the effect of forfeiture is somewhat confused. This results from the uncertainty as to whether the transferor or transferee has title to the transferred right. In either event, the right will be forfeited and revert to the state if reasonable and beneficial use by the transferee does not toll the forfeiture provisions. If title is in the transferor, the right will revert after three years of nonuse by the transferor. If the right is in the transferee, the forfeiture period begins to run at the time of sale. This is because sale of a water right is not, per se, authorized under the current code as a reasonable and beneficial use.

These uncertainties and impediments\textsuperscript{90} to free transferability could be removed by a statutory declaration. The statute should declare that

\textsuperscript{89} Legal and institutional obstacles obstruct the smooth operation of the transfer process in much of the West. If these obstacles were removed and the transfer of water rights made more feasible and facile, it would be expected that high-value users, such as cities and industries, would purchase water rights from low-value users, such as agricultural owners of water rights. This reallocation process, operating in a framework of voluntary action in response to traditional economic incentives, would increase the benefits gained from the use of water and would tend to delay or make unnecessary the construction of new sources of supply.

\textsuperscript{90} The prior appropriation doctrine has also been criticized because it is based upon the use of chronological priorities. There is no pooling of the risk in times of drought. The loss falls almost entirely on junior appropriators and is economically inefficient. Gaffney, supra note 76, at 69, 80, 140.

\textsuperscript{89} National Water Commission, supra note 81 at 260-69 (1973).

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transfer of a water right, by lease or sale to a transferee who beneficially uses the right, is construed as reasonable and beneficial use by the transferee. This would toll the forfeiture provisions. Efficient distribution of water is the ultimate goal of the current statutory scheme. Legitimization of an open market transfer process is a more effective means to this end than the current forfeiture concept.

C. Legal Authority on the Transferability Issue

Legal authority on the transferability issue is limited and its meaning unsettled. The harmful effect of this uncertainty is that waste is encouraged and water rights transfers are prevented. To the extent that water is put to reasonable and beneficial use, both the Water Code and case law arguably support extension of the transferor's status to the transferee. This interpretation would prevent reversion of the transferred rights to the state. Interpretation of law applicable to both pre-1914 and post-1914 rights supports the theory of continued use. This view of continued use poses problems, however, because transfer, by definition, involves non-use by the transferor. The transferee receives use of the transferor's water right as consideration in exchange for money. On its face, this exchange violates Water Code forfeiture provisions because actual, personal use by the transferor is a condition of the right.

There is little authority for the proposition that the transferee's beneficial use of a leased or purchased water right is a continuation of the transferor's use. What exists is not dispositive, and this lack of finality does not ease the transfer process. There are two theories that address the issue. One is based on case law, while the other analyzes the statutory scheme.

Perry v. Calkins is the only relevant case authority. There, the

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involves the repeal of laws that forbid transfer, and the classification of laws that obscure the power of water rights holders to make transfers.


Additionally, the problem of abandonment prohibits efficient distribution since it hinders the free sale of water rights. Abandonment requires intent to abandon and relinquishment of possession. Ull v. Frey, 106 Cal. 392, 397-98, 39 P. 807, 809 (1895). Abandonment presents an obstacle to the sale, but not to the lease of water rights since there is no intent to permanently relinquish possession and enjoyment in a lease. The sale of water rights, however, contains both elements since the transferor manifests an intention to permanently relinquish and transfer possession to the transferee. Thus the transferee may be discouraged from purchasing water rights due to the threat of reverter through abandonment.

91. Cal. Water Code § 100 (West 1971). Additionally, "[T]he task of the policy maker is to provide an environment which will facilitate an orderly transition in water use where such a transition is desirable." Fox, Water: Supply, Demand and the Law, 32 Rocky Mt. L. Rev. 452, 456 (1960).


93. 159 Cal. 175, 181-82, 113 P. 136, 139 (1911).
court recognized the principle of tacking in relation to appropriative right transfers.\textsuperscript{94} The court held that an appropriative right could be supported by showing use through lessees as well as by the appropriators themselves. This interpretation would prevent the right from reverting to the state for nonuse if the transferee puts the water to a reasonable beneficial use.

Based upon the statutory scheme, it can also be argued that when the Board approves modification of a post-1914 right, this implies continuing beneficial use by the right holder. Water previously appropriated under the Water Commission Act or the Water Code is appropriated only for the specific purpose delineated in the permit. When right holders seek to change the water's use they must follow procedures\textsuperscript{95} prescribed by statute to obtain Board approval.\textsuperscript{96} These procedures ensure that the proposed change will neither initiate a new right nor injure any other appropriator or lawful use of water.

Since an entitlement change merely modifies a pre-existing, post-1914 appropriative right, the Board can only allow modifications for beneficial purposes in the public interest.\textsuperscript{97} Conversely, the Board must reject an application where the modification would not result in a reasonable beneficial use.\textsuperscript{98} To allow unauthorized uses would defeat the state policy requiring the "highest and greatest duty" from its water.\textsuperscript{99} Board approval implies their determination that the proposed change is consistent with this requirement.

It is not a large step to extend this Board process from modifying water rights to allow approval of water rights transfers. The statutory

\textsuperscript{94} \textit{Id.} The entire passage is included for its historical and legal significance:

The plaintiffs complain of a ruling of the court excluding a certain lease made by C. H. Calkins to some chinamen [\textit{sic}] in 1896 purporting to lease to them the right to use the forty-five inches of water claimed by Calkins except for two days and two nights each week. This evidence was offered by plaintiffs in rebuttal of Calkin's statement that he used the water for irrigating during the whole of each week. While it might tend to contradict his testimony in that respect we do not think it was material to the plaintiff's case. Calkins, as we have seen, was a riparian owner and was entitled to use the water on his land whether he claimed a right to it or not. If we consider him in the aspect of one claiming only by appropriation such right could be acquired only by continuous adverse use. This right would be as much supported by a showing that he used it through his lessees as by showing that he used it himself all the time. The effect of the use by the chinamen [\textit{sic}] would not impair the prescriptive right of Calkins but on the contrary would strengthen and support it.

\textit{Id.}

\textsuperscript{95} \textbf{Cal. Water Code} §§ 1700-1706 (West 1971).
\textsuperscript{97} \textbf{Cal. Water Code} § 1253 (West 1971).
\textsuperscript{99} Tulare Irrigation Dist. v. Lindsay Strathmore Irrigation Dist., 3 Cal. 2d 489, 597, 45 P.2d 972, 997 (1935).
scheme already exists to modify a Board entitlement. The transfer of a water right is also a modification requiring Board approval because it involves a change in use, place of use or point of diversion.100 If the Board approves an application for transfer, the transferee's use should be deemed beneficial. It should not be subject to forfeiture for nonuse merely because the right has been transferred to another person.

Farmers are reluctant to transfer any part of their appropriative allotment when reasonable beneficial use by the transferee might not toll the forfeiture statute. They would rather overirrigate than transfer their water right and risk forfeiture and reversion101 for non-use. A statutory declaration that reasonable and beneficial use by the transferee constitutes reasonable and beneficial use by the transferor would prevent that result. Reversion could still occur, however, if the transferee failed to actually make reasonable and beneficial use of the transferred water. California law governing the nature of such reverter is unsettled.

D. Problems Caused by the Nature of the Reverter

Water Code section 1240 authorizes appropriations. It does not, however, clarify the effect of the transferee's use on the running of the forfeiture statute. Water Code section 1241, the actual forfeiture provision, in and of itself embodies another deficiency in the distribution scheme. The forfeiture provision102 also inhibits free transfer of water rights because it does not specify whether reversion to the state is automatic or requires administrative or adjudicative proceedings. Farmers will avoid a transfer of their interests if the reverter of the appropriative right is automatic. With an automatic reverter, both transferor and transferee could lose their rights without prior notice or hearing. These proceedings are necessary to determine whether the transferee's use of water is reasonable and beneficial.

100. Cal. Water Code §§ 1700-1706 (West 1971). See also note 80 supra. The National Water Commission suggested the simplification of procedures for transferring water rights as one of the ways to facilitate voluntary transfer. They comment that:

This proposed change relates to procedures for changes in points of diversion, places of use, and nature of use. Western law uniformly requires some sort of proceeding before an owner of a water right can change its place or nature of use. The proceeding serves a necessary purpose—determination of the effect of a proposed change on junior appropriators. No change can be made without protection of these junior users and their rights. Protection is usually accomplished by limiting the amount of water than can be transferred to the amount consumptively used by the transferor. In other words, the seller cannot sell all the water he has a right to divert but only that portion of the water he diverts which he has a right to consume, i.e., that does not return to the stream.

National Water Commission, supra note 81, at 260-269.
101. See notes 76-78 supra.
An automatic reverter creates additional uncertainty as to who owns the water right and therefore has the concomitant power to dispose of it.\textsuperscript{103} Both the transferor and transferee should be entitled to notice and an adjudicative proceeding before their rights revert to the state.

Water rights attorneys are currently debating whether reverter of an appropriative right is automatic or requires action by the Board or court to become effective.\textsuperscript{104} There is substantial authority that reverter requires an adjudicative proceeding before forfeiture. Nevertheless, the current debate on the reverter's nature produces enough uncertainty to impede transfers. The issue of the reverter's nature has three aspects. Initially, there is statutory authority for the proposition that notice and hearing should precede reverter of a post-1914 right. Secondly, statutory and case law affect pre-1914 rights differently. Finally, an automatic reverter of either raises due process problems.

1. Post-1914 Appropriative Rights: Uncertain Nature of the Reverter

Under current law, it is unclear whether a post-1914 right requires a hearing before forfeiture or is forfeited automatically upon noncompliance with the beneficial use requirement.\textsuperscript{105} A literal reading of the forfeiture provisions could support the proposition that the reverter is automatic. The sections do not explicitly state what action, if any, must be taken prior to reversion.

The forfeiture and reversion of a post-1914 right may occur at the permit or license stage.\textsuperscript{106} A permit is the inchoate right to water use.\textsuperscript{107} Once the permittees divert and use their water beneficially, they are eligible for a license. A license vests the appropriative right in the license holder.\textsuperscript{108}

\textsuperscript{103} See text accompanying notes 89, 90 \textit{supra}.

\textsuperscript{104} Governor's Commission to Review Cal. Water Rights Law, Legal Aspects of Water Conservation in California 60.3 (Staff Paper No. 3, (1977)).

\textsuperscript{105} The nature of the appropriative right is discussed in an Internal Board Memorandum from Assistant Chief Counsel Henry Holsinger to Chief Counsel Spencer Burrough. Holsinger wrote that it is well settled in California that forfeitures are not favored, but that this principle is not applicable to the forfeiture provisions of Water Code § 1241. He stated that the various jurisdictions are not in accord as to how the forfeiture of a water right should be accomplished. In California there are three classes of forfeitures: legislative, judicial, and automatic. Under automatic forfeitures, failure to maintain the beneficial use for the statutory period automatically terminates the right. Internal Board Memorandum from Asst. Chief Counsel, Water Resources Board H. Holsinger to Chief Counsel, Water Resources Board Spencer Burroughs. Loss of Water Right by Statutory Forfeiture for Failure to Apply Continuously to Beneficial Use (May 3, 1948) (no. 1948.01).


\textsuperscript{107} Cal. Water Code §§ 1381, 1390 (West 1971); Hutchins \textit{supra} note 2, at 160-162.

There is conflicting case law on forfeiture of appropriative permits and licenses. Ironically, under these precedents, courts require a hearing before the "inchoate" permit can revert, while a "vested" license may revert automatically. In *Eaton v. State Water Rights Board*, the court held that a permit remains in force until revoked by the Board. Water Code section 1241, however, deals with forfeiture and reversion of unused water for which a right of use has vested. This involves a license rather than a permit. In *Erickson v. Queen Valley Ranch Company*, the court interpreting this statute stated, in *dictum*, that an appropriative license is forfeited by force of statute. The license reverts to the public if the appropriator fails to put it to beneficial use for the forfeiture period. Thus, according to *Eaton* a permit reverts only after Board action, while according to *Erickson* a license may be forfeited by force of statute.

Water Code section 1675 apparently conflicts with the *Erickson* court's conclusion. The Water Code also provides procedural protections for permit holders. Further procedural protections are provided when a violation of the reasonable beneficial use requirement has allegedly taken place. "Due notice" and a hearing are required when determining what water may be appropriated. This investigative and hearing process vitiates an automatic forfeiture. The determination of a reasonable beneficial use violation is a question of fact which requires the Board's adherence to procedural formalities. These notice and hearing procedures would be unnecessary if section 1241 were truly automatic.

In addition to the procedural protections expressed in the companion regulations, section 1675 explicitly extends procedural protections to licensees. This section defines the term "licensee" to include heirs, suc-
cessors or assignees of the licensee. A transferee clearly comes within the definition of a licensee and is thus protected by these provisions. Therefore, section 1675 guarantees due process for the licensee.

Reading the Eaton decision and Water Code section 1675, one would conclude that both a permit and a license remain in force until revoked by the Board. The statutory procedure and grounds for revocation are clear in both cases. The statutory definition of water subject to appropriation supports these conclusions. It excludes water which has been or is being used for reasonable and beneficial purposes. The waters of the State are thus subject to appropriation to the extent they are not preempted by vested rights. Similarly, language from the Water Commission Act can be read to prohibit reverter of previously appropriated water which is not currently being used beneficially. The water remains in a state functionally equivalent to appropriated water until it is determined by hearing to be unappropriated water.

Since the reverter is arguably not automatic, the statutory scheme requires an adjudicative process to divest an appropriative right. Upon violation of the reasonable beneficial use condition, the water would again be subject to appropriation. Such a process already exists in Water Code sections 1410 (permits) and 1675 (licenses). The Board uses these processes to revoke an appropriative right and declare the water "subject to further appropriation."

The Erickson dictum that a license is forfeited by force of statute

122. Id. §§ 1410, 1675. Eaton dealt with permits, but is also applicable to licenses since, "[t]he issuance of a license is merely confirmatory of a right acquired by use in accordance with the permit." Eaton v. State, 171 Cal. App. 2d 409, 415, 340 P.2d 722, 726-727 (2d Dist. 1959).
124. Section 1201, id., 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.
125. The relevant portion states, "excepting so far as it has been . . . applied to useful and beneficial purposes upon . . . " ch. 586, § 20A, 1913 Cal. Stats. 1012; ch. 554, § 2, 1917 Cal. Stats. 748.
126. In contrast to the Water Commission's Act definition of "unappropriated water," the language of the current Water code § 1201 does not imply that reverter is automatic. Section 1202 of the current code does contain language similar to the Water Commission Act definition of "unappropriated water." However, to construe 1202 as requiring automatic forfeiture is inconsistent with 1201 and the overall statutory scheme.
cannot be reconciled with the statutory scheme discussed above. Apparently, the *Erickson* court interpreted section 1241 merely to establish the time period of nonuse before forfeiture occurs. Any other interpretation causes section 1241 to conflict with Water Code sections 1410 and 1675. This conflict would violate the axiom that statutes concerning similar subject matter must be construed together so as to harmonize them if possible.\textsuperscript{129}

2. Pre-1914 Appropriative Right: Nature of the Reverter

The statutory forfeiture provisions of the Water Code and relevant case law do not apply to pre-1914 rights.\textsuperscript{130} Therefore, the nature of the reverter of these rights requires discussion. Here, too, it is unsettled whether the right is forfeited automatically by force of statute or requires court action. There is a body of law which suggests that reverter is automatic.\textsuperscript{131} However, specific provisions of the Civil Code and conflicting case law supports the requirement of a judicial determination before forfeiture. The uncertain nature of this reverter acts to constrain the transfer of pre-1914 rights, much as it does with newer rights. This issue will increase in importance as the amount of unappropriated water decreases and potential appropriators look to older water rights for sources of available water.

\textsuperscript{129} Eaton v. State, 171 Cal. App. 2d 409, 414-15, 340 P.2d 722, 726 (2d Dist. 1959). In Eaton, the court stated:

\begin{quote}
A statute is to be construed with a view to promoting rather than defeating its general purpose and the policy behind it . . . . Where a statutory remedy or proceeding is specially provided it cannot be . . . . made available except on the statutory conditions; that is, by strictly following the directions of the act . . . . “The provisions of the Water Code relating to the same subject matter must be examined . . . . The main purpose of the code was to provide an orderly method for appropriation of unappropriated water . . . . All its parts relating to permits to appropriate water are to be construed together so far as possible without doing violence to the language or spirit . . . . The provisions relating to revocation of permits should be construed in the light of the purpose sought to be achieved . . . . The provisions of the Water Code to which reference has been made clearly show a legislative intent that a permit, once issued and continued in force, shall remain valid until revocation . . . . by the Board.” (Citations by the court omitted.) \textit{Id.}
\end{quote}

Further support for the proposition that if the transferee puts the water to a reasonable beneficial use, the transferor's rights will not revert to the state can be found in Stevinson Water Dist. v. Roduner, 36 Cal. 2d 264, 270, 223 P.2d 209, 212-13 (1950). There, the court stated that a water district to “prevent waste of water could sell it to any willing purchaser for beneficial purposes.” \textit{Id.} \textsc{California Water Code} § 2225.9 (West 1971). The case was decided under the provisions of the California Irrigation District Law. \textit{Id.} § 20500.

\textsuperscript{130} The effective date of the Water Commission Act was December 19, 1914. \textsc{Hutcheson}, supra note 2, at 294-95.

\textsuperscript{131} Wright v. Best, 19 Cal. 2d 368, 121 P.2d 702 (1942); Lindbloom v. Round Valley Water Co., 178 Cal. 450, 173 P. 994 (1918); Smith v. Hawkins, 110 Cal. 122, 42 P. 453 (1895).
The courts have recognized two types of forfeitures, "common-law or judicial" and "legislative or statutory."\textsuperscript{132} The expression "statutory forfeiture" is ordinarily used in reference to section 1241 of the modern Water Code.\textsuperscript{133} Water Code sections 1240 and 1241 are usually read and construed together. Section 1240 was derived from the old Civil Code section which reads, "The appropriation must be for some useful or beneficial purpose, and when the appropriator or his successor in interest ceases to use it for such a purpose, the right ceases."\textsuperscript{134} It apparently authorizes automatic statutory forfeiture but does not specify the requisite forfeiture period.

Forfeiture of appropriative rights acquired under the Civil Code was eventually construed to take place if the right was not used for a period of five years.\textsuperscript{135} The California Supreme Court, in \textit{Smith v. Hawkins},\textsuperscript{136} prescribed this five-year period after which vested appropriations could be forfeited. This applied whether appropriations were made either under the non-mandatory Civil Code, or without conforming to that code.\textsuperscript{137}

The five-year, non-use period for forfeiture of these pre-1914 appropriations cannot be characterized as "legislative or statutory." Its foundation is in the common law, rather than the Civil Code. Judicial determination rather than legislative mandate created the forfeiture period.\textsuperscript{138} As to these forfeitures, the state's reverter does not operate or take effect without an adjudication of the dispute between the state and

\textsuperscript{132} \textit{Cal. Water Code} § 1241 (West 1971). The distinction is:

A common-law or judicial forfeiture does not operate or take effect until by a proper judgment in a suit instituted for that purpose the rights of the state or government have been established. But in the case of a statutory or legislative forfeiture the forfeiture takes place on the commission of the offense. But, after the commission of the offense resulting in the forfeiture, the title of the state is inchoate or incomplete until such time as there is a judicial determination of the forfeiture. Neither the Legislature nor the courts can dispense with the constitutional requirement of a notice and hearing. (25 Cal. Jur. [sic: Corpus Juris] 1175 Sec. 65 et seq.)
The only important difference between the two types of forfeitures [emphasis added] is that in the case of the common-law or judicial forfeiture the rights of the state date from the judicial determination; while in the case of a legislative or statutory forfeiture the rights of the state date back to the time of the offense, and cuts off even the rights of a bona fide purchaser.

\textsuperscript{133} Letter from G. Craig, \textit{supra} note 110.

\textsuperscript{134} \textit{Cal. Civ. Code} § 1411 (repeated by ch. 586, 1913 Cal. Stats. 1012). This section was in effect from 1872 to 1914. \textit{Hutchins}, \textit{supra} note 2 at 86.

\textsuperscript{135} \textit{Smith v. Hawkins}, 110 Cal. 122, 42 P. 453 (1895).

\textsuperscript{136} \textit{Id}.

\textsuperscript{137} See notes 17-18, \textit{supra}, and note 145 \textit{infra}.

\textsuperscript{138} \textit{Smith v. Hawkins}, 110 Cal. 122, 123, 42 P. 453 (1895).
the individual claiming the right.\textsuperscript{139}

Additionally, the language of the Civil Code requires a determination of non-use by competent authority.\textsuperscript{140} The requirement that the appropriation be for some useful or beneficial purpose changes over time. It is not a rigid, specifically defined concept that is easily grasped and applied. A prospective appropriator cannot tell whether previously appropriated water is now available because it is no longer being used beneficially. A legal scheme allowing automatic forfeiture invites chaos if appropriators could unilaterally declare the appropriative rights of others forfeited by force of statute.

Thus, the reverter is not automatic. It is "inchoate or incomplete until such time as there is a judicial determination of the forfeiture."\textsuperscript{141} Though subject to the interpretation that forfeiture and reverter are automatic, \textit{Smith v. Hawkins} is best read to establish a five-year period\textsuperscript{142} as a requisite question of fact. This fact must be found by a court of competent jurisdiction before the forfeiture and reverter are effective.\textsuperscript{143} The requirements of notice and hearing cannot be dispensed with.\textsuperscript{\textit{Id.}} Courts rather than the Board, have jurisdiction over vested appropriations which antedate the Water Commission Act.\textsuperscript{145}

3. Constitutional Considerations

Due process protections also support the position that the reverter of an appropriative right is not automatic. These due process protections radiate from the fifth and fourteenth amendments of the United States

\textsuperscript{139} People v. Grant, 52 Cal. App. 2d 794, 127 P.2d 19 (2d Dist. 1942).
\textsuperscript{140} \textbf{CAL. CIV. CODE} \S\ 1411 (1872) (repealed by ch. 586, 1913 Cal. Stats. 1012).
\textsuperscript{141} People v. Grant, 52 Cal. App. 2d 794, 127 P.2d 19 (2d Dist. 1942).
\textsuperscript{142} \textit{See note 57 supra.} However, the decision could be criticized as judicial legislation. Justice Holmes noted in Missouri v. Illinois, 200 U.S. 496, 520 (1906). "It would be contradicting a fundamental principle of human nature to allow no effect to the lapse of time, however long, yet the fixing of a definite time usually belongs to the legislature rather than the courts." \textit{Id.} In fact, the California Legislature recognized the due process requirements and subsequently adopted Water Code \S\ 1241 which sets three years of non-use as the term period after which the unused water reverts to the public.
\textsuperscript{143} This later interpretation is supported by the second-to-last sentence of the decision. It reads:
\textit{The failure of plaintiffs to make any beneficial use of the water for a period of more than five years next preceding the commencement of the action, as found by the court, results from what has been said in a forfeiture of their rights as appropriators.}
\textsuperscript{144} People v. Grant, 52 Cal. App. 2d 794, 127 P.2d 19 (2d Dist. 1942).
\textsuperscript{145} Hutchins, \textit{supra} note 2, at 94-95. \textit{See also} letter from G. Craig, \textit{supra} note 110. The contemporaneous construction given to a statute by the officials charged with its administration is entitled to great weight especially where it is long construed. A court will not depart from such construction unless it is clearly erroneous. \textit{REA Enterprises v. California Coastal Zone Comm'n}, 52 Cal. App. 3d 596, 611, 125 Cal. Rptr. 201, 211 (2d Dist. 1975).
Constitution. Analogous provisions are also found in the California Constitution. The amendments prohibit the federal government or the states from depriving any person of life, liberty, or property, without due process of law.

The concept of due process includes substantive and procedural aspects. The substantive aspect involves the protection of a fundamental right of liberty or property. The procedural aspect guarantees the adequacy of notice and hearing. The requirements of due process vary with the factual context. However, the basic procedural rule is that when governmental agencies make binding determinations which directly affect fundamental rights they must use traditional adjudicative methods. Both post-1914 and pre-1914 right holders have protectible interests in realty even at the permit stage. These protectible interests entitle them to due process safeguards. The underlying substantive claim is of particular importance in determining the due process rights of claimants. In focusing on the substantive right at issue, the initial question raised is whether the alleged right is one of property or liberty.

The following cases provide examples of the types of property rights the courts have found to require due process protections. In Board of Regents v. Roth, the United States Supreme Court held that non-tenured teachers had no right to hearings before non-renewal of their contracts. This result was reached because the rights to employment under these contracts were not vested property rights. The Court stated that to have a property right one must have a legitimate claim of entitlement.

146. U.S. CONST. amend. V, U.S. CONST. amend. XIV.
147. CAL. CONST. art. 1, § 13, cl. 6.
150. By substantive right we mean a constitutionally protected right of life, liberty or property. Stone, Due Process of "Due Process," 25 HASTINGS L.J. 785 (1974). Prior to 1969, the courts applied the due process mandate almost exclusively to judicial proceedings. In 1969, the U.S. Supreme Court in Snidach v. Family Fin. Corp., 395 U.S. 337, 339 (1969), expanded the reach of due process beyond the courtroom to administrative and other less formal proceedings. Recent decisions indicate that the scope of the due process requirements vary with the degree of deprivation that the individual might suffer. The greater the deprivation, the greater the procedural safeguards required. Id. at 802; Board of Regents v. Roth, 408 U.S. 564 (1972); Fuentes v. Shevin, 407 U.S. 67 (1972); Bell v. Burson, 402 U.S. 535 (1971); Goldberg v. Kelly, 397 U.S. 254 (1970). The degree of due process may also be affected by the nature of the proceeding (i.e. administrative or judicial), the underlying substantive issue, and the purpose of the procedural safeguard.
151. 408 U.S. 564 (1972).
A unilateral expectation is insufficient\textsuperscript{152} to establish a substantive right. In \textit{Fuentes v. Shevin},\textsuperscript{153} the court held that a Florida replevin statute constituted a deprivation of property without prior opportunity to be heard. Plaintiffs were purchasers of household goods on installment contracts. The court found a protectible possessory interest in the goods, notwithstanding plaintiff’s lack of full title, since they had made substantial installment payments. Thus, in \textit{Fuentes}, the court found that plaintiffs’ substantial investment in the goods caused title to vest sufficiently to create a protectible substantive right.\textsuperscript{154}

In order to demonstrate a protectible property interest in appropriative rights, the legitimacy of the right must be established. The permanence of this right is an unsettled area of law. The basis for extending procedural guarantees to this class of claimant must therefore be found in the nature of the right.

Holders of appropriative rights have no property interest in the water course itself. They have a usufructuary right,\textsuperscript{155} a right of use, subject to the reasonable and beneficial use requirement. No legal or equitable title attaches to this usufructuary right until appropriators divert and use their allotments.\textsuperscript{156} Substantively, an appropriative right is an estate in land which is separable and alienable.\textsuperscript{157} It may be putatively conveyed like any other property.\textsuperscript{158} Prior to perfecting the right, an appropriator obtains no property right against the state.\textsuperscript{159} Nevertheless, the courts have held that even before actual use or diversion, an appropriator has an inchoate right to an interest in reality against all but the state.\textsuperscript{160} The appropriative right is perfected upon completion and actual use of the means of diversion. When a water right is perfected,\textsuperscript{161} the “unilateral expectation of a future interest” in water use becomes a

\begin{footnotes}
\item 152. \textit{Id.} at 577.
\item 153. 407 U.S. 67 (1972).
\item 154. \textit{Id.} at 86.
\item 155. A usufructuary right entitles an appropriator to divert and use a given quantity of water in a stream. It does not give the appropriator a right to the corpus of the stream. \textit{Hutchins, supra} note 2, at 120, \textit{Rancho Santa Margarita v. Vail}, 11 Cal. 2d 501, 559, 81 P.2d 533, 554 (1937); \textit{Hargrave v. Cook}, 108 Cal. 72, 77, 41 P. 18, 19 (1895).
\item 156. \textit{United States v. Rickey Land \\& Cattle Co.}, 164 Fed. 496, 499 (N.D. Cal. 1908); \textit{Silver Lake Power \\& Irrigation Co. v. Los Angeles}, 176 Cal. 96, 101-02, 167 P. 697, 699 (1917).
\item 157. See note 51 supra.
\item 158. \textit{Thayer v. California Dev. Co.}, 164 Cal. 117, 125, 128 P. 21, 24 (1912).
\end{footnotes}
“legitimate claim of entitlement.” As such, the appropriative right holder’s property interest is protected by the provisions of the fifth and fourteenth amendments. Therefore, the procedural requirements of notice and hearing are applicable.

In summary, legislative history and judicial interpretation of similar statutes in other jurisdictions make clear that reverter requires an adjudicatory proceeding to be effective. The imposition of a notice and hearing requirement prior to forfeiture promotes stability and finality. Farmers will more readily transfer their rights when they can rely on a hearing to determine whether reasonable beneficial use by the transferee satisfies the statute. Unfortunately, existing law has not clar-

162. Id. at 318. Some water rights experts argue that due process guarantees do not attach to appropriative rights since they are conditional, thus privileges rather than substantive rights. This argument is without merit. While traditionally the constitutional right to notice and hearing was not construed to apply to privileges, Cafeteria & Restaurant Workers Union v. McElroy, 367 U.S. 886, 894-95 (1961), the current trend is to abandon the right-privilege distinction and to extend constitutional restraints over state power to both categories. Board of Regents v. Roth, 408 U.S. 564, 570-73 (1972); Bell v. Burson, 402 U.S. 535, 539-42 (1971).

163. See also Crane v. Stevinson, 5 Cal. 2d 387, 398, 54 P.2d 1100, 1105-06 (1936). This interpretation is consistent with the views of the time. S. Weil, supra note 2, at 615, states:

If there is any such thing as forfeiture of a water right as distinguished from abandonment, it rests in California’s Civil Code, Section 1411, as construed in Smith v. Hawkins. The distinction in principle would be a loss of the right in in vitum, as distinguished from a voluntary act.

Id. The term “in vitum” is a term applied to proceedings against an adverse party, to which he does not consent. Black’s Law Dictionary, 896 (4th ed. 1968). A proceeding is necessary before a water right can be forfeited. This is coexistent with the constitutionally mandated hearing requirements discussed above. People v. Grant, 52 Cal. App. 2d 794, 796-9, 127 P.2d 19, 21-22 (2nd Dist. 1942). Before the forfeiture of vested water rights occurs, there should be a judicial declaration of forfeiture.

164. This procedure has been required in decisions construing analogous statutes in other jurisdictions. In construing a Wyoming statute similar to California’s Civil Code § 1411, (repealed by ch. 586, 1913 Cal. Stats. 1012), the Wyoming Supreme Court determined that the statute operated to forfeit vested water rights only after a formal declaration by someone with proper authority. Horse Creek Conservation Dist. v. Lincoln Land Co., 54 Wyo. 320, 340, 92 P.2d 572, 579 (1939). The court stated:

Where an Act of Congress (March 3, 1891, § 20, 43 U.S.C.A. § 948) directed, ‘That if any section of said canal, or ditch, shall not be completed within five years after the location of said section, the rights herein granted shall be forfeited as to any uncompleted section of said canal, ditch, or reservoir, to the extent that the same is not completed at the date of the forfeiture.’ It was ruled by the court in United States v. Whitney, C.C., 176 F. 593, 595, that: ‘This requirement being in the nature of a condition subsequent, the rule undoubtedly is that failure to comply therewith does not operate ipso facto to divest the grantee of the title and reinvest the grantor therewith, but that to be effectual, the default must be followed with a declaration of forfeiture by some competent authority, and, the grant here being of a public nature, such declaration can be made only by an act of Congress, or in an appropriate judicial proceeding.’ (Citations Omitted).

Id.
ified whether reverter of pre and post-1914 appropriative rights requires these procedural safeguards. The issue must be resolved before an efficient transfer system can be developed.

III. PROPOSED SOLUTIONS

When examined, agricultural water use patterns reveal a statutory scheme which encourages overirrigation and discourages conservation. The transfer process which could promote efficient distribution is impeded by statutory inconsistencies. These obstacles, however, can be removed. The solutions include: 1) currently authorized Board action, 2) enforcement of the reasonable beneficial use requirement, 3) pragmatic solutions proposed by the legislature, and 4) statutory authorization for the transfer process. The latter provides the most effective solution to the problem. The Board has not considered these solutions previously because the problem was never clearly defined. The recent drought provided the opportunity to thoroughly evaluate the water delivery system. As noted, there is considerable waste through the widespread practice of overirrigation.165

A. CURRENTLY AUTHORIZED BOARD ACTION

Water Code section 1241.6166 provides a partial solution to the forfeiture problem. It authorizes an extension of the three year forfeiture period. Such an extension provides a mild incentive to farmers to conserve surplus water without fear of losing their full appropriative right.

Water users presently cannot retain their full right if they cease or reduce use of water through conservation or use of another source.167 Appropriators must use their allotment “for some useful or beneficial purpose” or lose the right to use the water.168 In an attempt to partially rectify this situation, section 1241.6 of the Water Code was enacted in 1957. It extends the three-year forfeiture period when water appropriated for irrigation purposes is not used by reason of compliance with crop control or soil conservation contracts with the United States. It also authorizes the Board to provide extensions in other cases of hardship as the board may by rule prescribe. Assuming that other statutory solutions are unavailable, the extension period encourages short-term transfers while forfeiture is temporarily suspended by the Board.

165. See notes 69-71 supra.
166. Cal. Water Code § 1241.6 (West 1971). Additionally, § 1241.5, provides for postponement of the forfeiture requirement for Indian Trust lands.
The Code gives the Board a broad grant of power. In view of the uncertainty of the user’s rights, the Board could easily find sufficient “hardship” in the recent drought to allow extensions. Such Board action would enable appropriative right holders to conserve water by reduced use or temporary transfer and still retain their full right. This would partially alleviate the drawbacks of the statutory current scheme during times of drought.

Extension of the forfeiture period carries out the legislative directive to authorize appropriations “under such terms and conditions as in its judgment will best develop, conserve, and utilize . . . the water sought to be appropriated.” Prudent conservation should be made an explicit condition of use. This is particularly important in a semi-arid climate where existing law emphasizes protection of the water supply. Conservation can be part of a perfected appropriative right as long as the right holder’s total allotment is not reduced by the degree that water is conserved. There is legislative precedent for Board imposition of similar conservation requirements. If the permittee does not conserve water in compliance with the condition, the Board may take appropriate action to prevent such abuse.

1. Administrative Regulations

The Board has continuing authority under the California Administra-

169. Id. § 1253 (emphasis added).

170. Additionally, the Wyoming Supreme Court made a persuasive policy argument that is equally applicable in California where water rights are of paramount importance. They noted the decline in realty value that would result from the uncertain status of the attached water right:

[unless some kind of formal determination of this character were had, no one dealing with real estate in the arid sections of our state, the value of which property would be very little without the water rights attached thereto, could at any time be sure as to his title to the most vital part of the property he held. Unsettlement of titles to real property is not a result to be reached lightly and without strong legal reasons to support it. It is quite obvious, too, that until a declaration of forfeiture has been made the owner of the water right still retains the title to it and is justified, of course, in his continued use thereof.]


171. When enacted in 1951, CAL. WATER CODE §§ 1005.1, 1005.2 (West 1971), contained the following language:

Sec. 3. The Legislature finds and declares that this act is necessary to the solution of a problem arising out of the following unique circumstances: The water supplies . . . are being rapidly depleted . . . during a period of prolonged drought conditions . . . this act is intended to save these water basins by protecting users of water . . . who cease or reduce the extraction of water therefrom . . . thereby preventing further depletion of the water in the basin. (Emphasis added)

Ch. 1361, § 3, 1951 Cal. Stats. 3277.

172. CAL. WATER CODE § 275 (West 1971).
tive Code\textsuperscript{173} to prevent waste by placing specific restrictions on the permits and licenses which it issues. Although the forfeiture provision has no related administrative regulation, the Board has statutory authority to enact such regulations.\textsuperscript{174} Given the Board's broad authority to determine "hardship," it may not wish to operate within the confines of administrative regulations. However, the Board must make its decision to extend the forfeiture period "by rule."\textsuperscript{175} This means that the Board may have to adopt administrative regulations before they can make a determination of "hardship." The Board should draft such regulations immediately. It must be prepared to deal with future crises comparable to the recent drought.

An administrative regulation should contain the following provisions: a definition of "hardship," a definition of "drought" including numeric indices, authorization for the Board to declare "hardship" on a regional basis, a public notice and hearing mechanism to determine "hardship," a provision for a semi-annual reevaluation of the Board's determination, and a means of informing Board entitlement holders of the determination. These provisions carry out the legislative intent of section 1241.6 and overcome the disincentive to conserve.

2. Problem With Currently Authorized Board Action

The Board may find sufficient hardship in a drought to allow an extension of the three-year forfeiture period. When the Board takes this action it is, in effect, declaring that water conservation is a reasonable beneficial use. The quantity of water saved will not reduce the amount of water the right holder was initially entitled to use. The only limitation on the user's right is the eventual expiration of the three-year extension period allowed for such hardships.

However, it contravenes the California Constitution to allow a user to retain unneeded irrigation water, under a conservation theory of reasonable beneficial use. Under this theory, conserving appropriators are still entitled to their full previous allotment. If farmers are irrigating their fields effectively with less water than before, they were never entitled to such a large allotment in the first place.\textsuperscript{176} The surplus irrigation water is waste and a violation of the constitutional reasonable beneficial use requirement.

In addition to the constitutional problem with this currently authorized alternative, there is a second problem in its application. Its use is too restricted because it can only be used in time of "hardship." Fur-

\textsuperscript{173} Section 761 of the administrative code provides the companion administrative regulations to water code § 1253. \textit{Cal. Admin. Code} tit. 23, § 761(a).
\textsuperscript{174} \textit{Cal. Water Code} § 1058 (West 1971).
\textsuperscript{175} \textit{Id.} § 1241.6.
\textsuperscript{176} \textit{Id.} §§ 1240, 1241.
ther, the statutory extension period is too short to grant significant relief. As a result, this alternative only temporarily solves a problem which requires a more permanent and efficient solution to water allocation. Until the law allows reasonable and beneficial use by the transferee as a continuation of use by the transferor, the threat of forfeiture for nonuse is only postponed. It remains too imminent to promote efficient distribution of water in the open market.

B. Enforcement of the Reasonable Beneficial Use Requirement

Theoretically, the Water Board has another partial solution to the waste caused by the disincentive to conserve. They can enforce the constitutional reasonable beneficial use requirement. The ascertainment of beneficial use is a question of fact. The measure of one's right is the quantity of water actually applied for beneficial purposes rather than the quantity actually diverted.

If a farmer is irrigating fields with the authorized allotment, using more water than needed to properly irrigate the fields, the surplus water is waste. The farmer is not entitled to that surplus amount since it is not being put to a reasonable beneficial purpose. If such a finding is made, the Board may revoke the farmer's entitlement and reissue it, authorizing only that water actually needed for irrigation.

The Board could investigate all its entitlement holders to determine if they were overirrigating. If, upon finding such waste, the Board actually reduced their allotments, there would be more water available for appropriation by other farmers. Enforcing the reasonable beneficial use requirement in this manner would obviously benefit the water-scarce state. It would produce a more efficient allocation of our water resources.

This enforcement alternative, however, is not practical. The Board does not have the time or resources to engage in a state-wide investigation and enforcement program. What is needed is a self-executing solution that will overcome the disincentive to conserve with minimal Board involvement.

C. The Legislative Response: Practical Solutions

In response to the drought, the California Legislature proposed a number of bills providing legal and economic incentives to conserve water. The improvements suggested include increased tax credits,

177. See note 21 supra.
178. See note 22 supra.
179. CAL. WATER CODE § 1675 (West 1971).
restrictions on increased water use for irrigation purposes, greater analysis of irrigation system efficiency, and construction of additional water delivery systems.

These bills do not address the major inadequacies of the current statutory scheme. They propose physical solutions which do not entirely dispose of the problem. Even if effective, they do not actually prevent farmers from using more water than necessary to effectively irrigate their fields. Unless farmers can freely transfer their water rights by lease or sale, they will continue to overirrigate in order to avoid losing their allotments through non-use.

D. Proposed Statutory Authorization for the Transfer Process

The recent drought provided an opportunity to analyze the efficiency of the agricultural water delivery system. Changes in water use patterns and cultivation practices revealed numerous inadequacies. Two major problems became apparent. Farmers overirrigate in order to maintain their full appropriated allotment. They also do not transfer any unused water rights due to the threat of forfeiture for non-use. The end result is the inefficient allocation of the state’s scarce water resources.

A statute is needed that defines and facilitates the transfer of water rights by sale or lease. This solution would eliminate the statutory incentives to waste water. Legislative response to the water crisis has not dealt with these issues. The deficiencies in the statutory scheme can be partially solved by currently authorized Board action, but this solution is inefficient. The lease and sale of water rights, arguably, is authorized under the present code. However, the uncertainty as to whether reasonable and beneficial use by the transferee prevents forfeiture requires statutory clarification.

Explicit authorizing legislation is needed to encourage water conserving transfers. The thrust of the proposed statute can be simply stated.

184. See text accompanying notes 66-71 supra.
185. The National Water Commission suggests that:
Any user of water . . . should be entitled to sell his right to use such water and to apply for a change in the place or nature of use of such water in accordance with the law and procedures governing changes in points of diversion, nature, and place of use of water rights. In such a proceeding, the applicant should not be required to prove ownership of an appropriation or permit right but should be allowed to transfer whatever right or privilege he may have, subject to the rule that such transfer shall not injure the rights of other water uses. Recommendation No. 7-33.
Each state having the appropriative system of water rights should provide
It need only declare that when a water right is transferred, reasonable and beneficial use by the transferee constitutes reasonable and beneficial use by the transferor, thus tolling the running of sections 1240 and 1241. A holder of a water right could then lease or sell the right without fear of forfeitures. The transfer would be approved in accordance with existing statutory procedures governing changes in points of diversion, nature, and place of use of water rights. Title could formally vest in the transferee when the right is sold and remain with the transferor when leased. Additionally, the statute could remove fear of an automatic reverter by requiring notice and hearing before water reverts to the State.

Such a statute would encourage the full use and concomitant conservation of the State’s water. The merit of this proposal is its simplicity. The proposed statute would remove statutory impediments to the transfer process by eliminating the uncertainty present in the current statutory scheme. It would be a self-executing solution costing little to implement.

Recently, the California Legislature passed a bill\textsuperscript{186} similar in theory to the legislation proposed here. The bill promotes the use of \textit{reclaimed} water. It amends the Water Code so that cessation of or reduction in water use under any existing right, by the use of \textit{reclaimed} water, is a reasonable beneficial use to the extent of the reduction. This precludes loss by forfeiture of the full existing right but the legislation does not go far enough. It is limited to the use of reclaimed water and does not authorize the transfer of water rights.

\section*{IV. Conclusion}

Widespread overirrigation during the recent drought and the uncertainty as to the legal status of water rights transfers reveal inefficiencies in the current appropriative rights scheme. The forfeiture provisions of the Water Code need added flexibility to solve these problems if the legislative mandate of highest and best use of water is to be achieved. This flexibility can be obtained by legislation which authorizes the

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\item for an administrative procedure for the transfer of such rights by changes in point of diversion, place of use, and nature of use. Protection should be provided for the vested rights of other water users. Any person or organization having the rights to use water should be entitled to transfer such rights, and all statutes, judicial decisions, and administrative regulations to the contrary should be repealed. Recommendation No. 7-35.
\item National Water Commission \textit{supra} note 89.
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transfer process. The legislature and Board should not wait for a crisis to promote intelligent use of the State’s most precious natural resource.

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