

Protecting Streamflows in California

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INTRODUCTION

Since the turn of the century, the amount of water diverted from streams and rivers for agricultural and domestic uses has dramatically increased.¹ These diversions have severely damaged many valuable in-stream uses of water² by reducing the amount of water that remains in natural watercourses. As demand for offstream water uses increases,³ and available supplies diminish, inevitable conflicts will arise in allocating water. In the competition between instream and offstream uses for limited allotments, instream uses frequently lose. This Comment explores the legal means in California for protecting instream uses.

Full streamflows help to maintain water quality. The concentration of pollutants in the water is increased when streamflows are reduced by diversions.⁴ Moreover, when water diverted for irrigation returns to the stream, dissolved solids such as salts are carried with it.⁵

In addition to maintaining water quality, natural streamflows have recreational, aesthetic, and ecological value.⁶ Aesthetic attractions

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1. NATIONAL WATER COMMISSION, WATER POLICIES FOR THE FUTURE 7 (1973) [hereinafter cited as WATER POLICIES]. For example, water withdrawals for irrigation in the United States increased from 20 billion gallons per day in 1900 to 130 billion gallons per day in 1970. *Id.*

2. Instream uses are those uses that require water to be left in its natural course, such as for the preservation of fish and wildlife. Although water use for power generation can involve leaving water in its natural course, this Comment does not treat power generation as an instream use; power generation, unlike other instream uses, has been adequately protected by the law and itself can adversely affect other instream uses. See note 7 *infra*. Off-stream uses are uses that require diversion of water from its natural course, such as for irrigation.

3. In California, water demand may severely tax dependable supplies by the year 2000. GOVERNOR'S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, FINAL REPORT 1 (1978) [hereinafter cited as GOVERNOR'S COMMISSION].

4. WATER POLICIES, *supra* note 1, at 4. These harmful concentrations are also increased by evaporation caused by dams. *Id.*

5. *Id.*

6. *Id.* at 6-8, 25; GOVERNOR'S COMMISSION, *supra* note 3, at 99. Aesthetic values were recognized by Congress when it directed the National Water Commission to "consider . . . the impact of water resource development on . . . esthetic values affecting the quality of life of the American people." National Water Commission Act, Pub. L. No. 90-515, 82 Stat. 868 (1968).

often require the maintenance of natural streamflows, as do some recreational activities, such as swimming, canoeing, and whitewater boating. Full streamflows are also necessary to preserve fish and wildlife. Decreased flows in California streams, for example, have severely reduced fish populations.⁷ One study has concluded that "California will lose its valuable salmon and steelhead resources before the end of this century unless prompt, aggressive action is taken to halt the destruction."⁸ Although the effect of reduced flows on non-game fish and wildlife is difficult to calculate,⁹ it too is probably substantial.

Despite the desirability of protecting them, instream uses compete at an economic and political disadvantage with offstream uses of water. Demand for offstream uses of water is clearly defined. Water diverted from rivers and streams for agricultural and domestic purposes can be assigned economic values.¹⁰ Numerous individuals and groups, includ-

7. For example, in 1948, there was an annual steelhead run of 20,000 in the Santa Ynez River in Santa Barbara County. SECRETARY OF THE INTERIOR, REPORT AND FINDINGS ON THE CACHUMA UNIT OF THE SANTA BARBARA COUNTY PROJECT, CALIFORNIA, H.R. DOC. NO. 587, 80th Cong., 2d Sess. 40-41 (1948). The United States Fish and Wildlife Service estimated that building the proposed Cachuma dam on the river would reduce the steelhead run by half. *Id.* The Bureau of Reclamation proposed release flows substantially below the minimum amounts recommended by the Service for fishery maintenance. *Id.* at 42. Since the completion of the Cachuma project, this run has been virtually eliminated. CALIFORNIA DEP'T OF FISH AND GAME, AN ASSESSMENT OF FEDERAL WATER PROJECTS ADVERSELY AFFECTING CALIFORNIA'S SALMON AND STEELHEAD RESOURCES pt. 4 (Cachuma Project), at 2 (1975).

Central Valley king salmon populations dropped 46% in 16 years; North Coast steelhead and salmon counts have declined over 60% in the past 30 years. CITIZENS ADVISORY COMMITTEE ON SALMON AND STEELHEAD TROUT & CALIFORNIA DEP'T OF FISH AND GAME, REPORT ON CALIFORNIA SALMON AND STEELHEAD TROUT: AN ENVIRONMENTAL TRAGEDY 16 (1971) [hereinafter cited as ENVIRONMENTAL TRAGEDY].

Water projects destroy salmon and steelhead fisheries by blocking the fish's migration to their spawning grounds and by reducing downstream flows. Siltation caused by nonwater projects may also destroy spawning grounds. See, e.g., Hudson, *Sierra Club v. Department of Interior: The Fight to Preserve the Redwood National Park*, 7 ECOLOGY L.Q. 781, 841-42 (1979). A recent study for the U.S. Fish and Wildlife Service, however, cited "insufficient downstream flow during some critical period of the year" as the principal reason for the California salmon fishery decline. C. HAZEL, ASSESSMENT OF EFFECTS OF ALTERED STREAM FLOW CHARACTERISTICS ON FISH AND WILDLIFE, pt. B (California), at xi (1976) [hereinafter cited as HAZEL].

Because no single minimum flow standard will protect all instream uses, it is necessary to study various fish and wildlife requirements for each stream in order to decide which instream uses should be protected and to determine the flows necessary to protect those uses. See Tarlock, *Appropriation for Instream Flow Maintenance: A Progress Report on "New" Public Western Water Rights*, 1978 UTAH L. REV. 211, 217-20. Besides minimum flows, alrge, annual, flushing flows may be necessary to remove accumulated sediment from spawning grounds. HAZEL, *supra*, at xvi.

8. ENVIRONMENTAL TRAGEDY, *supra* note 7, at 30.

9. There is little data on the effects of reduced flows on non-game fish and wildlife. GOVERNOR'S COMMISSION, *supra* note 3, at 101; HAZEL, *supra* note 7, at xix.

10. WATER POLICIES, *supra* note 1, at 42-43. Estimates of market values of water used for crop irrigation range from \$15 to \$40 per acre foot. Water estimates for in-house domestic use center around \$100 per acre foot. *Id.* at 43.

ing agricultural interests and public utilities, are willing to devote economic and political resources to obtaining the benefits derived from offstream water appropriations.

In contrast, instream uses are difficult to value because they are enjoyed in small increments by many individuals.¹¹ Aside from state agencies, such as the California Department of Fish and Game,¹² and environmental organizations, few groups have enough economic or political interest or power to defend and promote instream uses actively. Although state and federal governments have taken some action to protect instream uses,¹³ they have also contributed to their destruction by subsidizing offstream water uses,¹⁴ which increases the demand for diversion of streamflows.

Instream uses are threatened under current law. California water law is designed to allocate rights of diversion rather than to ensure the integrity of natural streamflows. Recently, two California courts of appeal upheld the State Water Resources Control Board's view that instream uses, unlike diversions, cannot be appropriated as water rights.¹⁵ Although the law offers some protection of instream values

11. GOVERNOR'S COMMISSION, *supra* note 3, at 99. Salmon and trout fisheries and commercial recreation can be given a dollar value. SECRETARY OF THE INTERIOR, REPORT AND FINDINGS OF THE CACHUMA UNIT OF THE SANTA BARBARA COUNTY PROJECT, CALIFORNIA, H.R. DOC. NO. 587, 80th Cong., 2d Ses. 40-41 (1948); California Water Resources Control Bd., Decision 1422, at 17-18 (1973). A river's potential for supporting commercial river trips may also be estimated. *See, e.g.*, California Water Resources Control Bd., Decision 1422, at 17-18 (1973). It is difficult, if not impossible, however, to place a dollar value on protection of non-game fish and wildlife. It is also difficult to estimate in dollars the recreational and aesthetic value of streams where commercial operations are impractical or undesirable. WATER POLICIES, *supra* note 1, at 45.

12. The California Department of Fish and Game has filed protests to an estimated 70 to 80% of recent water rights applications. GOVERNOR'S COMMISSION, *supra* note 3, at 107. The Governor's Commission pointed out, however, that instream flows protect many desirable uses besides fish and wildlife, and that these needs are not adequately represented by the current process. *Id.* at 108.

13. *See* Part II *infra*.

14. In federal water projects, 90% subsidies to water users are common. WATER POLICIES, *supra* note 1, at 227-30. In some cases, the Bureau of Reclamation has spent \$1,000 to \$2,000 per acre to develop land that is then worth only \$200 per acre. *Id.* at 229.

States have also subsidized diversions. J. HIRSHLEIFER, J. DE HAVEN & J. MILLIMAN, WATER SUPPLY: ECONOMICS, TECHNOLOGY, AND POLICY 347-51 (1969) [hereinafter cited as HIRSHLEIFER]. For example, in 1959, Los Angeles sold water for irrigation within the city limits at \$11 per acre foot. *Id.* at 308. The next year, the state's voters approved the California Water Project. *Id.* at 373. One study estimated that at a 3.5% discount rate, the project's cost of supplying irrigation water to Los Angeles would be over \$70 per acre foot. At higher discount rates the estimated cost would be higher. *Id.* at 345-47. Under sound business practice, the water supplier should have raised the price of existing water supplies to the cost of potential new supplies, and then determined if there was sufficient demand to justify the new project. *See id.* at 373-76. Instead, Southern California water suppliers continued to develop expensive new water supplies while selling water at a much lower price, subsidizing the difference through property taxes. *Id.*

15. California Trout, Inc. v. State Water Resources Control Bd., 90 Cal. App. 3d 816,

through wild and scenic rivers acts¹⁶ and minimum flow standards,¹⁷ these measures are inadequate. This Comment argues that instream uses should be protected by the same system of appropriative water rights that protect other water uses.

I

CALIFORNIA LAW OF WATER ALLOCATION

Preventing harmful reductions in streamflows necessarily limits rights to divert water for offstream uses. A streamflow protection scheme, therefore, must be integrated with existing procedures for allocating water rights. This part briefly discusses the development of California water law and the current administrative system of water allocation.

Faced with a need to determine water rights and an absence of organized local government, early California miners adopted a water appropriation system.¹⁸ Under the appropriation doctrine, diverting water from its natural watercourse and using it for a beneficial purpose established a right to the continued use of that water.¹⁹ Anyone could appropriate available water by diversion, subject to prior downstream appropriations.²⁰ In its first session, the California Legislature gave legal effect to certain mining customs,²¹ including the appropriation system.²²

153 Cal. Rptr. 672 (1979); *Fullerton v. State Water Resources Control Bd.*, 90 Cal. App. 3d 590, 153 Cal. Rptr. 518 (1979). For a discussion of these cases see Part III *infra*.

16. See text accompanying notes 58-62 *infra*.

17. See text accompanying notes 94-111 *infra*.

18. W. HUTCHINS, *THE CALIFORNIA LAW OF WATER RIGHTS* 41 (1956) [hereinafter cited as HUTCHINS].

19. *Id.* at 40.

20. *Id.* A junior appropriator could not divert water if the diversion prevented senior downstream appropriators from using their established allotment. See, e.g., *Lower Tule River Ditch Co. v. Angiola Water Co.*, 149 Cal. 496, 499, 86 P. 1081, 1082 (1906).

21. 1851 Cal. Stats. 149, § 621. The legislation recognized those customs not in conflict with California's statutes or constitution.

22. In 1853, the California Supreme Court held that appropriative water rights were among those mining customs that the legislature recognized. *Eddy v. Simpson*, 3 Cal. 249 (1853). In *Eddy*, the court resolved a conflict between two diverters of water in favor of the senior appropriator. Two years later, the court reaffirmed that appropriative rights had been "fully recognized," even though no specific legislation had done so. *Irwin v. Phillips*, 5 Cal. 140, 146 (1855).

Eight Western States, Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming, recognize only appropriative rights. 5 R. BECK & E. CLYDE, *WATERS AND WATER RIGHTS* 40 (R. Clark ed. 1972) [hereinafter cited as CLARK]. Alaska's water law is similar to the law of these states. *Id.* at 9-10. The "Colorado doctrine" of recognizing only appropriative rights was first enunciated in *Coffin v. The Left Hand Ditch Co.*, 6 Colo. 443 (1882). In *Coffin*, the court ruled that the riparian doctrine, see text accompanying note 35 *infra*, which evolved in more humid climates, had no place in the arid Western States and would not be given effect without statutory authorization. *Id.* at 446-47.

Following judicial attempts to perfect the appropriation doctrine,²³ the California Legislature approved a statutory appropriation procedure in 1872.²⁴ The Water Commission Act of 1913²⁵ modified this procedure, and established it as the exclusive means for creating appropriative rights.²⁶

The State Water Resources Control Board currently administers California water rights.²⁷ Where water is available,²⁸ the Board must allow appropriations for beneficial purposes that it judges will "best develop, conserve, and utilize" water in the public interest.²⁹ The Board must reject applications for appropriations that it judges not to be in the public interest.³⁰ After the Board approves an application, it

23. See, e.g., *Bear River & Auburn Water & Mining Co. v. New York Mining Co.*, 8 Cal. 327 (1857); *Conger v. Weaver*, 6 Cal. 548 (1856). See also HUTCHINS, *supra* note 18, at 44-45.

24. 1871 Cal. Stats. 622. This Act's appropriation procedures were codified in CAL. CIV. CODE §§ 1410-1422 (Crocker 1872). Among the required procedures were posting of written notice, *id.* § 1415, and diligent construction of diversion works, *id.* § 1416.

25. 1913 Cal. Stats. 1012. The Legislature approved the Act in 1913, but the filing of a referendum petition necessitated its approval by the voters in 1914. 1915 Cal. Stats. at lxxi.

26. 1913 Cal. Stats. 1022, § 17. Previously perfected appropriations were still valid. *Id.* at 1031, § 33.

27. CAL. WATER CODE §§ 174-175 (West 1971 & Supp. 1979). The Board is composed of five members appointed by the Governor, some of whom must have legal, engineering, or agricultural qualifications. *Id.* § 175 (West Supp. 1979). The duties of the Board are specified by statute. *Id.* §§ 176-188.5 (West 1971 & Supp. 1979). Prospective appropriators must follow Board procedures to acquire water rights. *Id.* § 1225 (West Supp. 1979).

In addition to administering water rights, the Board also participates in water rights adjudication. See Ferrier, *Administration of Water Rights in California*, 44 CALIF. L. REV. 833 (1956). In a suit for determination of water rights, the court may order the Board to act as referee. CAL. WATER CODE § 2000 (West 1971). After investigation and hearings, the Board files its report with the court, where it is subject to review. *Id.* § 2017. These procedures are prescribed in *id.* §§ 2000-2076.

The Board also has "statutory adjudication" powers. Upon petition by one or more claimants to a stream system, the Board may determine claimants' rights to the water of the stream. *Id.* § 2525. After the Board's hearing, a court decree finally establishes the rights of the parties involved. *Id.* § 2768. These statutory adjudication procedures are prescribed in CAL. WATER CODE §§ 2500-2900 (West 1971 & Supp. 1979).

For detailed discussions of the Board's functions, see Ferrier, *supra*; Holsinger, *Procedures and Practice Before the California State Water Rights Board*, 45 CALIF. L. REV. 676 (1957); Robie, *Some Reflections on Environmental Considerations in Water Rights Administration*, 2 ECOLOGY L.Q. 695 (1972).

Most other Western States have similar statutory procedures for administering water rights. 1 W. HUTCHINS, *WATER RIGHTS LAWS IN THE NINETEEN WESTERN UNITED STATES* 312 (1971). Colorado and Montana have no state agency to administer water rights, but they do have special statutory procedures for determining the amount and priority of water rights. *Id.* at 344-46.

28. All water flowing in natural channels, except that necessary for prior appropriations or for present or prospective beneficial riparian use, is available for appropriation. CAL. WATER CODE § 1201 (West 1971). A recent California Supreme Court decision has affected the status of dormant riparian rights. See note 48 *infra* and accompanying text.

29. CAL. WATER CODE § 1253 (West 1971); see *East Bay Mun. Util. Dist. v. Department of Pub. Works*, 1 Cal. 2d 476, 481, 35 P.2d 1027, 1029 (1934).

30. CAL. WATER CODE § 1255 (West 1971).

grants the applicant a permit³¹ and, after the applicant completes necessary construction, the Board issues a license³² for the appropriated amount. The Board, again guided by the public interest, may impose conditions on any appropriation.³³

California water law also recognizes riparian water rights. Having an origin in English common law,³⁴ riparian rights entitle an owner of land adjacent to a stream to the reasonable use of water on those lands.³⁵ In *Lux v. Haggin*,³⁶ the California Supreme Court held that the California Legislature's adoption of English common law³⁷ protected common law possessory water rights.³⁸ The common law did not recognize the appropriation doctrine.³⁹ The court decided, therefore, that appropriations could not interfere with the common law riparian right to a stream's natural flow.⁴⁰

Recognizing both riparian and appropriative rights in California⁴¹

31. *Id.* § 1380. The permit grants the right to take and use a stated amount of water. *Id.* § 1381. Statutory provisions pertaining to permits are contained in CAL. WATER CODE §§ 1375-1415 (West 1971 & Supp. 1979).

32. *Id.* § 1610 (West 1971). The license confirms the right to the appropriation. *Id.* Statutory provisions pertaining to licenses are contained in CAL. WATER CODE §§ 1600-1677 (West 1971 & Supp. 1979).

33. *Id.* §§ 1253, 1257 (West 1971).

34. HUTCHINS, *supra* note 18, at 178.

35. *Id.* at 220-21. The owner may insist on the stream's natural flow past these lands, except as diminished by the reasonable uses of upstream riparians. See, e.g., *Lux v. Haggin*, 69 Cal. 225, 390, 10 P. 674, 753 (1886).

Eastern States uniformly adopted the riparian doctrine. D. ANDERSON, RIPARIAN WATER RIGHTS IN CALIFORNIA 10 (1977). Some of these states, however, have recently adopted permit systems to quantify these rights. *Id.* at 10-11.

36. 69 Cal. 255, 10 P. 674 (1886).

37. 1850 Cal. Stats. 219. English common law was adopted to the extent it was consistent with the United States and California Constitutions.

38. 69 Cal. at 379-380, 10 P. at 746-47.

39. *Id.* at 387, 10 P. at 751.

40. *Id.* at 390, 10 P. at 753.

41. California, Kansas, Nebraska, North Dakota, Oklahoma, Oregon, South Dakota, Texas, and Washington recognize riparian and appropriative rights. CLARK, *supra* note 22, at 232. No other state, however, allowed riparian rights to become as dominant as in California. I W. HUTCHINS, WATER RIGHTS LAW IN THE NINETEEN WESTERN UNITED STATES 188 (1971). For example, a 1909 Oregon statute limited riparian rights to those vested as of that year. OR. REV. STAT. § 539.010 (1977). Similar statutes were passed in Alaska, ALASKA STAT. § 46.15.060, .080 (1977); Kansas, KAN. STAT. §§ 82a-701(d), -703 (1977); North Dakota, N.D. CENT. CODE § 61-01-03 (1960); see Beck & Hart, *The Nature and Extent of Rights in Water in North Dakota*, 51 N.D. L. REV. 249, 251-64 (1974); Oklahoma, OKLA. STAT. ANN. tit. 82, § 105.2(B)(4), (6) (West Supp. 1979); see Rarick, *Oklahoma Water Law, Stream and Surface Under the 1963 Amendments*, 23 OKLA. L. REV. 19, 26-27 (1970); South Dakota, S.D. COMPILED LAWS ANN. §§ 46-1-9, -5-5 (1967); Texas, TEX. WATER CODE ANN. tit. 2, § 11.303 (Vernon Supp. 1980); and Washington, WASH. REV. CODE ANN. § 90.14.170 (Supp. 1978). Nebraska still fully recognizes riparian rights, weighing the "comparative reasonableness of uses" to determine priority between riparian and appropriative uses. *Wasberburger v. Coffee*, 180 Neb. 149, 158, 141 N.W.2d 738, 745 (1966).

These doctrines are not exhaustive. For example, California recognizes the pueblo rights of two cities, Los Angeles and San Diego. HUTCHINS, *supra* note 18, at 261-62. Ap-

caused inevitable conflicts. While appropriative rights purportedly guarantee a specific quantity of water,⁴² the exercise of dormant riparian rights, which are superior to prior appropriations and indefinite in quantity, can reduce the streamflows on which the appropriative rights depend.⁴³ Thus, riparian rights diminish the certainty intended by the adoption of the appropriation doctrine.⁴⁴

Article X, section 2 of the California Constitution,⁴⁵ which limits appropriative and riparian water rights⁴⁶ to quantities reasonably required for beneficial use,⁴⁷ was the first step in resolving the conflict between riparian and appropriative rights. Recently, the California Supreme Court clarified the relationship between riparian and appro-

proximately 50% of California water use is based on appropriative rights, 10% on riparian rights; the remainder consists mainly of imports from the lower Colorado River and groundwater. GOVERNOR'S COMMISSION, *supra* note 3, at 11. California groundwater flowing in known and definite channels is treated the same as surface water. CAL. WATER CODE §§ 1200, 2500 (West 1971). The California Supreme Court recently eliminated the possibility of obtaining water rights by prescription. *People v. Shirokow*, 26 Cal. 3d 301, 505 P.2d 859, 162 Cal. Rptr. 30 (1980).

42. See CAL. WATER CODE § 1610 (West 1971); see also *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 3 Cal. 2d 489, 45 P.2d 972 (1935).

43. See *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 355, 599 P.2d 656, 666, 158 Cal. Rptr. 350, 360 (1979).

44. *Id.*

45. CAL. CONST. art. 10, § 2 (West Supp. 1979) (formerly art. 14, § 3):

It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented. . . . The right to water or to the use or flow of water in 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 use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or watercourse attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section.

The amendment was adopted following the California Supreme Court's decision in *Herminghaus v. Southern Cal. Edison Co.*, 200 Cal. 81, 252 P. 607 (1926). In *Herminghaus*, plaintiff riparians claimed a right to the spring overflow of the San Joaquin River. *Id.* at 93, 252 P. at 612. The defendant power company's proposed hydroelectric facility would have appropriated these waters and retained them behind its dams for prolonged periods. *Id.* at 109-10, 252 P. at 618-19. The court, in upholding the superiority of the lower riparians' rights, held that plaintiffs were entitled to the river's full natural flow even though their actual use was limited to those waters that overflowed its banks.

This holding, derived from the recognition in *Lux* of riparian rights, see notes 36-40 *supra* and accompanying text, was the culmination of several decades of restrictions on appropriators. Prior to the constitutional amendment, appropriators could only obtain rights against riparians by prescription or by grant from a riparian owner. HUTCHINS, *supra* note 18, at 63. For examples of uses declared unreasonable, see note 73 *infra*.

46. *Peabody v. City of Vallejo*, 2 Cal. 2d 351, 367, 40 P.2d 486, 491 (1935).

47. The other Western States also have beneficial use requirements, either in their constitutions, statutes, or judicial decisions. I W. HUTCHINS, WATER RIGHTS LAWS IN THE NINETEEN WESTERN UNITED STATES 9-11 (1971). South Dakota's statutory provision is identical to the first part of CAL. CONST. art. X, § 2. S.D. COMPILED LAWS ANN. § 46-1-4 (1967).

priative rights by holding dormant riparian rights subordinate to existing appropriations.⁴⁸ Currently, the Water Resources Control Board's authority over riparian uses is commensurate with its dominion over appropriations; the Board may not allow any unreasonable riparian uses to interfere with existing water rights, nor may it permit new riparian uses where a stream's entire flow is subject to prior riparian or appropriative rights.⁴⁹ Thus, the Board conforms its appropriation procedures to the limitations on unreasonable use,⁵⁰ and may enjoin the exercise of an established right that places an unreasonable demand on water supplies.⁵¹

The Board's broad discretion in allocating water is enhanced by limitations on judicial review of Board decisions. Although issuing an appropriation permit was once a ministerial duty,⁵² the enactment of laws requiring the Board to consider the public interest in the allocation procedure⁵³ has granted it broad discretion to issue or deny a permit.⁵⁴ Courts may review Board action by writ of mandate,⁵⁵ but will overturn Board decisions only if the Board fails to follow required administrative procedures or base its decision on findings supported by the evidence.⁵⁶

48. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 358-59, 599 P.2d 656, 669, 158 Cal. Rptr. 350, 363 (1979). For a statement of the law prior to this change, see *In re Waters of Soquel Creek Stream Sys.*, 79 Cal. App. 3d 682, 689, 145 Cal. Rptr. 146, 150 (1978).

49. See *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal.3d 339, 348-49, 599 P.2d 656, 661, 158 Cal. Rptr. 350, 355 (1979).

50. See *Modesto Properties Co. v. State Water Rights Bd.*, 179 Cal. App. 2d 856, 859-60, 4 Cal. Rptr. 226, 228-29 (1960).

51. See, e.g., *People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal. App. 3d 743, 126 Cal. Rptr. 851 (1976).

52. *Tulare Water Co. v. State Water Comm'n*, 187 Cal. 533, 537-38, 202 P. 874, 876 (1921) (holding that the state water commission did not have the power to determine whether unappropriated water exists, and could not deny a proper application).

53. See notes 29-33 *supra* and accompanying text.

54. *Temescal Water Co. v. Department of Pub. Works*, 44 Cal. 2d 90, 100, 280 P.2d 1, 7 (1955).

55. *Id.* at 106, 280 P.2d at 11.

56. CAL. CIV. PROC. CODE § 1094.5(b) (West Supp. 1979) provides that:

The inquiry in such a case shall extend to the questions whether the respondent has proceeded without, or in excess of jurisdiction; whether there was a fair trial; and whether there was any prejudicial abuse of discretion. Abuse of discretion is established if the respondent has not proceeded in the manner required by law, the order or decision is not supported by the findings, or the findings are not supported by the evidence.

Under § 1094.5(c), the reviewing court exercises its independent judgment to determine whether an administrative agency's findings are correct only if a "fundamental vested right" has been substantially affected; otherwise, the court must uphold findings that are "supported by substantial evidence in light of the whole record." *Bixby v. Pierno*, 4 Cal. 3d 130, 143-44, 481 P.2d 242, 251-52, 93 Cal. Rptr. 234, 243-44 (1971). Appropriation applications do not create a fundamental vested right. *Temescal Water Co. v. Department of Pub. Works*, 44 Cal. 2d 90, 103, 280 P.2d 1, 9 (1955). No case has considered whether perfected appropriative rights are fundamental vested rights. In any event, the Board must issue find-

II

PROTECTION OF INSTREAM USES

A. Existing Means to Protect Instream Uses

Because California's system of determining water rights was designed to allocate water between different offstream uses,⁵⁷ protection of instream uses has received little consideration. This section considers several strategies for protecting beneficial instream uses and concludes that they are inadequate.

Federal and state wild and scenic rivers acts protect some streamflows. The Federal Act⁵⁸ prohibits the construction of any dam or water conduit that would directly affect a designated river.⁵⁹ Similarly, the California law⁶⁰ prohibits most dams on or diversions from designated rivers.⁶¹ The federal and state statutes, however, only apply to a few, selected rivers. Since they preclude nearly all development, they cannot be used to protect the majority of streams and rivers, which must serve offstream as well as instream uses.⁶²

In addition to the wild and scenic rivers acts, a number of statutory and common law doctrines might be used to protect streamflows. For example, the public trust doctrine⁶³ creates public rights⁶⁴ in the use of the state's navigable waters⁶⁵ for fishing and recreation. Because

ings that "expose its mode of analysis." *Topanga Ass'n for a Scenic Community v. County of Los Angeles*, 11 Cal. 3d 506, 515, 517 n.16, 522 P.2d 12, 17, 18 n.16, 113 Cal. Rptr. 836, 841, 482 n.16 (1974).

57. *See* *Gin S. Chow v. City of Santa Barbara*, 217 Cal. 673, 698-700, 22 P.2d 5, 15-16 (1933).

58. Wild and Scenic Rivers Act, 16 U.S.C.A. §§ 1271-1287 (West 1974 & Supp. 1979).

59. *Id.* § 1278(a) (West Supp. 1979). The Act applies only to detrimental acts that require federal action or approval. State control of water rights is not affected, *id.* § 1284(d), but federal compensation for water rights taken is authorized. 16 U.S.C. § 1284(b) (1976).

60. CAL. PUB. RES. CODE §§ 5093.50-.65 (West Supp. 1979).

61. *Id.* § 5093.55. Other Western States have similar acts. *See, e.g.* N.D. CENT. CODE § 61-29-03 to -06 (1979 Supp.); OKLA. STAT. ANN. tit. 82, §§ 1451-1469 (West Supp. 1979); OR. REV. STAT. §§ 390.805-.925 (1979 Supp.). South Dakota is considering protection of its scenic rivers. S.D. COMPILED LAWS ANN. § 46-17A-15, -20, -21 (1979 Supp.).

62. *See* GOVERNOR'S COMMISSION, *supra* note 3, at 112.

63. *See generally* Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970).

64. *Marks v. Whitney*, 6 Cal. 3d 251, 259, 491 P.2d 374, 380, 98 Cal. Rptr. 790, 796 (1971). Public ownership of California's waters is proclaimed by CAL. WATER CODE § 102 (West 1971). The public's right of free navigation is also guaranteed by CAL. CONST. art. X, § 4 (West Supp. 1979).

Public ownership of unappropriated waters, including a public right of use, is constitutionally recognized in other Western States. *See, e.g.*, *State ex rel. State Game Comm'n v. Red River Valley Co.*, 51 N.M. 207, 222, 182 P.2d 421, 430 (1945) (construing N.M. CONST. art. XVI, § 2); *Day v. Armstrong*, 362 P.2d 137, 145 (Wyo. 1961) (construing WYO. CONST. art. VIII, § 1).

65. Navigability is broadly defined. For example, a stream that can be used by only recreational boats during only part of the year is considered navigable. *Hitchings v. Del Rio*

public rights are paramount, private property rights may not interfere with the public trust.⁶⁶ In theory, the California Water Resources Board, as trustee of the public's rights,⁶⁷ could be enjoined⁶⁸ from permitting diversions for private use that interfere with the public's instream rights.⁶⁹ In practice, however, the public trust doctrine has not been used to prevent diversions in California. The state has broad discretion to administer the public trust,⁷⁰ and the state's power to promote commerce could be viewed as permitting the Board to allow diversions even if instream uses would be harmed.⁷¹

California's constitutional restrictions on unreasonable use⁷² also could protect instream uses. A determination that diversions depleting environmentally necessary streamflows are presumptively unreasonable⁷³ would require the State Water Resources Control Board to deny proposed appropriations⁷⁴ and forbid riparian diversions⁷⁵ threatening

Woods Recreation & Park Dist., 55 Cal. App. 3d 560, 568-70, 127 Cal. Rptr. 830, 835-36 (1976).

66. Any private interference with the public's right to use the state's navigable waters and fisheries constitutes a nuisance. *People v. Stafford Packing Co.*, 193 Cal. 719, 727, 227 P. 485, 488 (1924).

67. *See Marks v. Whitney*, 6 Cal. 3d 251, 260, 491 P.2d 374, 380, 98 Cal. Rptr. 790, 796 (1971).

68. A member of the public has standing to bring such an action. *Id.* at 261-62, 491 P.2d at 381, 98 Cal. Rptr. at 797.

69. A. SCHNEIDER, *LEGAL ASPECTS OF INSTREAM WATER USES IN CALIFORNIA* 25-29 (1978) [hereinafter cited as SCHNEIDER]. The public trust doctrine could be construed to restrict the Board's discretion in carrying out its statutory mandate to protect the public interest. See notes 29-33 *supra* and accompanying text. The Board's obligation to preserve the public's right to a stream's fish could conceivably prevent the approval of diversions, even if the Board believes those diversions would be in the public interest.

70. *See Marks v. Whitney*, 6 Cal. 3d 251, 260, 491 P.2d 374, 380, 98 Cal. Rptr. 790, 796 (1971); *City of Long Beach v. Mansell*, 3 Cal. 3d 462, 482, 476 P.2d 423, 437, 91 Cal. Rptr. 23, 37 (1970); Sax, *supra* note 63, at 542-43.

71. SCHNEIDER, *supra* note 69, at 27. Courts have stressed the right of the public to use the streams for "commercial intercourse." *Colberg, Inc. v. State ex rel. Department of Pub. Works*, 67 Cal. 2d 408, 419, 432 P.2d 3, 10, 62 Cal. Rptr. 401, 408 (1967). This attitude explains the prevailing view of the State's exercise of power under the public trust: "This right of control . . . extends in the case of streams . . . to deepening or changing the channel, to diverting or arresting tributaries; in short, to do anything subserving the great purpose." *Id.* at 418, 432 P.2d at 10, 62 Cal. Rptr. at 408.

72. CAL. CONST. art. 10, § 2 (West Supp. 1979). See note 45 *supra*.

73. The courts, the legislature, or the Board may determine unreasonableness. *See, e.g., People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal. App. 3d 743, 752-53, 126 Cal. Rptr. 851, 856-57 (1976) (upholding a Board regulation declaring that appropriation of limited Napa River water to spray grapevines for frost protection is unreasonable); *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 3 Cal. 2d 489, 568, 45 P.2d 972, 1007 (1935) (drowning gophers in an arid region is unreasonable); *Peabody v. City of Vallejo*, 2 Cal. 2d 351, 369, 40 P.2d 486, 492 (1935) (use of entire stream for irrigation by overflow is unreasonable); CAL. WATER CODE § 1004 (West 1971) (excessive irrigation of uncultivated land is not "beneficial").

74. *See Modesto Properties Co. v. State Water Rights Bd.*, 179 Cal. App. 2d 856, 859-60, 4 Cal. Rptr. 226, 228-29 (1960).

75. *See People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal. App. 3d

these flows. The courts could also use constitutional language prohibiting rights to water supplied by unreasonable methods of diversion⁷⁶ to modify or prohibit water projects endangering instream uses.⁷⁷ A determination of unreasonableness is unlikely,⁷⁸ however, except in individual cases, where feasible alternatives to reduced streamflows are available.⁷⁹

Another alternative for protecting streamflows is a statutory provision requiring the Water Resources Control Board to weigh instream uses in ruling on appropriation applications.⁸⁰ The Water Code re-

743, 126 Cal. Rptr. 851 (1976). In *Forni*, the Board sought to enjoin riparian diversions of water to spray on grapevines for frost protection. The Board alleged that the reduction in the river's flow was unreasonable, not because instream uses were injured, but because available flows were insufficient to satisfy all offstream users. *Id.* at 747 n.1, 126 Cal. Rptr. at 853 n.1.

76. CAL. CONST. art. X, § 2 (West Supp. 1979). For the text of the provision, see note 45 *supra*.

77. An environmental group attempted to use this constitutional provision to force modification of a proposed massive diversion from the American River in California. Moving the point of diversion downstream, it argued, would prevent destruction of a popular stretch of the river. The California Supreme Court refused to rule on the reasonableness of the upstream diversion, holding that federal law preempted the state constitutional provision. *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 20 Cal. 3d 327, 572 P.2d 1128, 142 Cal. Rptr. 904 (1977), *vacated*, 439 U.S. 811 (1978). The United States Supreme Court remanded the case for consideration in light of *California v. United States*, 438 U.S. 645 (1978). On remand, the California Supreme Court found no federal preemption, but remanded the reasonableness question to the trial court. *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 26 Cal. 3d 183, 605 P.2d 1, 161 Cal. Rptr. 466 (1980). The reasonableness issue would have become moot by passage of an assembly bill requiring the downstream diversion point in this case. A.B. 442, Cal. Reg. Sess. § 53 (1979). That bill, however, died in committee. For additional discussion of A.B. 442, see text accompanying notes 109-11 *infra*.

78. California courts will likely remand to the Board those reasonableness questions requiring the agency's expertise. See *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 20 Cal. 3d 327, 343-44, 527 P.2d 1128, 1137, 142 Cal. Rptr. 904, 913 (1977). The Board or the superior courts may hear other reasonableness questions. *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 26 Cal. 3d 183, 200, 605 P.2d 1, 10, 161 Cal. Rptr. 466, 475 (1980). The Board has failed in the past to protect streamflows adequately, see notes 7-8 *supra* and accompanying text, and its findings of unreasonableness have not rested on environmental considerations, see note 75 *supra*.

79. Alternatives to proposed harmful diversions include moving diversion points downstream, see note 77 *supra*, storing water withdrawn during high flow periods, *People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal. App. 3d 743, 750-52, 126 Cal. Rptr. 851, 855-56 (1976), and reclaiming and conserving existing supplies, *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 20 Cal. 3d 327, 341-43, 572 P.2d 1128, 1135-37, 142 Cal. Rptr. 904, 911-13 (1977).

80. Other statutes besides those specifically governing the Board's activity also provide means for protecting streamflows. The Board may not release or assign priority applications if such acts would deprive the county where the water originates of water necessary for its development. CAL. WATER CODE § 10505 (West 1971). A water project cannot be constructed or operated by the California Department of Water Resources so as to deprive any watershed of water reasonably required to supply its beneficial needs. *Id.* § 11460.

The California Environmental Quality Act (CEQA), CAL. PUB. RES. CODE §§ 21000-21176 (West 1977 & Supp. 1979), also may protect instream uses. An opinion of the attorney

quires the Board to consider recreational uses and the preservation and enhancement of fish and wildlife in determining whether water is available for appropriation.⁸¹ In acting on an application, the Board must consider the relative benefit of all beneficial uses concerned, including instream uses.⁸² The Board must notify the California Department of Fish and Game of all appropriation applications so that the Department can recommend amounts of water required to protect the stream's wildlife.⁸³ The Department may also propose modifications, subject to arbitration if challenged, to public and private water projects that substantially and adversely affect fish and wildlife.⁸⁴

These existing mechanisms have proved inadequate to protect streamflows.⁸⁵ A major weakness of the current scheme is its failure to specify the minimum flows necessary to protect instream uses. As a result, these uses must be defended against every application for an offstream appropriation. Some instream uses, such as recreation and scenic preservation, often go unrepresented in the appropriation process.⁸⁶ Because project planners face little opposition in the appropriation process, they can easily ignore instream values during project

general concludes that CEQA requires the Board to consider the preservation of California's fisheries. 57 Ops. Cal. Atty. Gen. 577, 583 (1974). The Act explicitly prohibits public agencies from approving projects if "there are feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." CAL. PUB. RES. CODE § 21002 (West 1977). Environmental Impact Report requirements, *id.* § 21002.1, can also be used to require consideration of instream uses. See SCHNEIDER, *supra* note 69, at 108-09.

81. CAL. WATER CODE § 1243 (West Supp. 1979) provides:

The use of water for recreation and preservation and enhancement of fish and wildlife resources is a beneficial use of water. In determining the amount of water available for appropriation for other beneficial uses, the board shall 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.

The board shall notify the Department of Fish and Game of any application for a permit to appropriate water. The Department of Fish and Game shall recommend the amounts of water, if any, required for the preservation and enhancement of fish and wildlife resources and shall report its findings to the board.

This section shall not be construed to affect riparian rights.

82. *Id.* § 1257 (West 1971). The Board also considers the public interest, see notes 29-33 *supra* and accompanying text. The Board additionally must consider water quality control plans, *id.* § 1258, which are established after consideration of instream uses. *Id.* §§ 13241(a), 13050(f). For a discussion of the role of streamflows in protecting water quality see notes 4-5 *supra* and accompanying text.

83. CAL. WATER CODE § 1243 (West Supp. 1979).

84. CAL. FISH & GAME CODE §§ 1601, 1603 (West Supp. 1979).

85. See notes 7-8 *supra*.

86. GOVERNOR'S COMMISSION, *supra* note 3, at 108. See note 12 *supra*. Although any person may protest approval of an appropriation application before the Board, CAL. WATER CODE § 1330 (West 1971), only the Department of Fish and Game is assured notice of new applications, *id.* § 1243 (West Supp. 1979). Other interested parties may receive notice by newspaper publication, *id.* §§ 1310-1312 (West 1971) (larger appropriations), or posting and mailing, *id.* §§ 1320-1322 (West 1971) (smaller appropriations—mailing limited to persons interested because of ownership or location near the proposed appropriation site). Even if notified, private interests may be financially unable to protest all harmful applications.

design.⁸⁷ Moreover, advocates of instream uses must bear the burden of proof when opposing a proposed appropriation.⁸⁸ Although the Board must consider instream uses in reaching its decisions, it is guided only by the requirement that it act in the public interest.⁸⁹ The Board therefore has broad discretion to disregard instream uses.

Even where the Board attempts to protect instream flows by rejecting or placing conditions on approvals of applications, stream destruction may be only temporarily delayed. Subsequent applications can still be approved if they are made when offstream demands are more compelling and advocates of instream uses are less persuasive, or when the Board is less sympathetic to instream uses.⁹⁰ The effectiveness of permit conditions that reserve the Board's authority to reevalu-

87. See SCHNEIDER, *supra* note 69, at 43-44.

88. See California Water Rights Bd., Decision D978 (1960). After considering testimony by experts representing the applicant, Pacific Gas and Electric, and the protestant, the Department of Fish and Game, the Board stated:

The production of a conflicting opinion as to the effect of different hypothetical flows on the fish life, which was admitted by both expert witnesses to be a field of science not subject to mathematical exactitude and in which well-qualified experts may be expected to differ is not considered to be a sufficient showing to meet the burden of proof assumed by the protestant.

Id. at 9.

89. CAL. WATER CODE §§ 1243, 1243.5 (West 1971 & Supp. 1979); see GOVERNOR'S COMMISSION, *supra* note 3, at 112.

90. GOVERNOR'S COMMISSION, *supra* note 3, at 107. In addition, the Board may purposely fail to impose conditions that would permanently protect instream uses. For example, to prevent destruction of a popular stretch of whitewater, the Board severely restricted an appropriation granted to the United States Bureau of Reclamation to store water in a reservoir. The Board intended these restrictions to be in effect only until the Bureau developed definite plans for offstream uses that outweighed the reservoir's damage to fish, wildlife, and recreation. California Water Resources Control Bd., Decision 1422, at 17-18, 28-29 (1973) (New Melones Project Water Rights Decision). The state's authority to impose these conditions on a federal appropriation, absent congressional preemption, was upheld in *California v. United States*, 438 U.S. 645 (1978). The Court noted, however, that Board conditions on federal projects are invalid if inconsistent with federal law authorizing the appropriation. *Id.* at 674-75.

Appropriations acceptable in normal years may be excessive under drought conditions, which severely strain fisheries. See GOVERNOR'S DROUGHT EMERGENCY TASK FORCE, STATE OF CALIFORNIA, ALTERNATIVE DROUGHT STRATEGIES FOR 1978, at 85 (1978). Recently, a federal court considered California's county of origin and watershed of origin statutes. *County of Trinity v. Andrus*, 438 F. Supp. 1368 (E.D. Cal. 1977). See note 80 *supra* for discussion of these laws. The Trinity River section of the Central Valley Project contained a minimum-flow requirement to protect fish. This requirement was usually exceeded; nevertheless, the fish population declined substantially. An experimental increase in the water released was maintained for a short period, but the Secretary of the Interior terminated the increase during a severe drought. A California county sued to force the Secretary to continue the increased flow. The court stated that increased minimum-flow releases to rehabilitate the drought-damaged Trinity River fishery would have been required if there had been a clear showing that such releases would have had a beneficial effect, *i.e.*, that they were reasonably required to increase the fish population. 438 F. Supp. at 1386-87. But under drought conditions, and with the inability to predict that the amounts requested would actually have any beneficial effect, the releases were not required. *Id.* The Secretary's termination of the increased flows was "plainly within the bounds of reasonableness." *Id.* at 1382.

ate appropriations⁹¹ has been undermined by the Board's inadequate follow-up investigation of project effects.⁹² Streamflows would be better protected by a system that determines instream needs before considering offstream demands.⁹³

B. Instream Flow Requirements to Protect Instream Uses

Recently, the California Water Resources Control Board adopted, but failed to implement, regulations for establishing "instream flow requirements,"⁹⁴ defined as "the amount[s] of water . . . determined to be necessary . . . to preserve, restore or enhance beneficial instream uses."⁹⁵ If these flows were made unavailable for offstream appropriations, streamflow protection would be greatly increased. Several features of the regulations, however, make it likely that much of their promise will remain unfulfilled.

The regulations were intended to help the Board carry out its duty to consider instream uses and the public interest in determining whether water is available for appropriation.⁹⁶ After selecting a stream

Unfortunately, the only way to prove the beneficial effects of the increased flows would have been to allow them to continue. This opportunity was foreclosed by the Secretary's decision.

91. The Board adds these terms to all new permits under 23 CAL. ADMIN. CODE § 761(a) (Aug. 5, 1978).

92. GOVERNOR'S COMMISSION, *supra* note 3, at 107.

93. R. Robie, *Modernizing State Water Rights Laws: Some Suggestions for New Directions*, 1974 UTAH L. REV. 760, 770.

94. Proposed Regulations to Chapter 3, Title 23, California Administrative Code Regarding Instream Uses, *reprinted in* CALIFORNIA EIR MONITOR, Jan. 30, 1980, at 5 and Ops. Cal. Atty. Gen. No. 79-1010, at 5 (Feb. 8, 1980) [hereinafter cited as Proposed Regulations]. The Board planned to implement the proposed regulations after the California Resources Agency certified them under the California Environmental Quality Act, CAL. PUB. RES. CODE § 21080.5 (West Supp. 1979). State Water Resources Control Board Resolution No. 79-102 (Dec. 20, 1979), *reprinted in* CALIFORNIA EIR MONITOR, Jan. 30, 1980, at 9. Before the regulations could be certified, the California Attorney General issued an opinion declaring that they were invalid. Ops. Cal. Atty. Gen. No. 79-1010 (Feb. 8, 1980). See text accompanying notes 100-03 *infra*.

Flow requirements have already been established in other Western States. An Oregon statute has declared certain waters unavailable for appropriation, OR. REV. STAT. §§ 538.110-.300 (1977), although diversions of these waters for municipal, domestic, and stockwatering purposes are sometimes permitted. *Id.* §§ 538.220, .260, .270, .300. The Oregon State Water Policy Review Board may withdraw other unappropriated waters from availability as the public interest requires. *Id.* § 536.410. Montana's procedure allows any state agency to reserve waters for maintenance of minimum flows so long as the reservation is in the public interest. MONT. CODE ANN. § 85-2-316(3)(d) (1979). Agency reservations are reviewed periodically by the state Board of Natural Resources and Conservation, which may extend, revoke, or modify the reservation. *Id.* § 85-2-316(9). Washington law requires that "base flows" be retained to preserve fish and wildlife, WASH. REV. CODE ANN. § 90.54.020(3)(a) (1978 Supp.), and allows the Department of Ecology to establish "minimum flows" for wildlife protection, *id.* § 90.22.010. The Department has interpreted "base flows" as those necessary to conserve fisheries and other instream uses, and "minimum flows" as those necessary for their enhancement. SCHNEIDER, *supra* note 69, at 119.

95. Proposed Regulations, *supra* note 94, § 822(d).

96. *Id.* § 821.

system for which it will establish flow requirements,⁹⁷ the Board intended to hold public hearings to determine instream needs and off-stream demands.⁹⁸ Balancing these considerations, the Board would have established the instream flow requirements.⁹⁹

As adopted by the Board, the regulations would have created a presumption in any Board proceeding that the established flows were in the public interest and thus unavailable for appropriation.¹⁰⁰ Once streamflows had dropped to the minimum levels, the Board could have allowed additional appropriations only if prospective appropriators offered persuasive evidence that the flow requirements were excessive or that the public interest in allowing further appropriations outweighed the public interest in maintaining streamflows.¹⁰¹

Before the regulations became effective, however, the California attorney general issued an opinion declaring the establishment of this presumption to be beyond the Board's authority since it relieved the Board of its obligation to balance instream and offstream uses.¹⁰² The Board is expected to readopt the instream flow regulations without this provision.¹⁰³

The attorney general's defense of would-be appropriators was probably unnecessary since, under the regulations, the Board would have retained much of its discretion in administering water rights. The instream flow requirements would have represented flows deemed "reasonably required" in light of the Board's perception of the public interest.¹⁰⁴ Since the Board would consider offstream demands in establishing the minimum required flows,¹⁰⁵ the scheme would have preserved the Board's discretion to balance instream uses against future offstream appropriations.

97. *Id.* § 823. The extent to which the regulations would have protected streamflows is uncertain; the Board could have limited the regulations' impact by applying them to only a few streams. The Board's proposed use of the present and prospective availability of unappropriated water as the criterion for selecting stream systems, *id.* § 823(a)(1), (3), indicates the regulations were only to be applied to streams on which they would have had an effect. Flow requirements could not have affected streams without unappropriated water since the requirements would not have impaired vested water rights. *Id.* § 820(b). Thus, the limitation of the regulations to selected streams would have focused administrative effort where it was needed and was not necessarily an attempt by the Board to avoid setting flow requirements for controversial stream systems.

98. *Id.* § 824.

99. *Id.* § 825(a).

100. *Id.* § 827.

101. *Id.* § 828.

102. Ops. Cal. Atty. Gen. No. 79-1010, at 14 (Feb. 8, 1980). The attorney general's opinion quotes extensively from two recent California Court of Appeal decisions discussed in Part III *infra*.

103. Telephone interview with William R. Attwater, Chief Counsel, State Water Resources Control Board (Mar. 4, 1980).

104. Proposed Regulations, *supra* note 94, § 827.

105. *Id.* § 824(a)(2).

The regulations would also have allowed the Board to reduce an instream flow requirement when it found that it was no longer in the public interest.¹⁰⁶ The Board need not have found that instream uses would be unharmed by the diminished flow. Nor did the Board's regulations contemplate increasing instream flow requirements.¹⁰⁷ Changes in the Board's perception of the public interest were assumed to favor only downward modifications of required flows.

A more effective minimum flow scheme would require legislation to limit the Board's discretion in establishing and enforcing flow requirements.¹⁰⁸ It is doubtful, however, that the California Legislature will pass such legislation. In 1979, the legislature considered a bill that would have required the state Department of Fish and Game to survey California's stream systems and select streams needing minimum-flow protection.¹⁰⁹ The Department was to have recommended instream-flow objectives to the Board without considering future offstream demands.¹¹⁰ This proposal died in committee.¹¹¹

In any event, minimum flow schemes probably will not fully protect instream uses because minimum flow requirements will quickly come to define maximum flows as well. Established minimum flows raise an inference that further consideration of instream uses is unnecessary. Rather than promote consideration of instream uses, the minimum flow procedures would likely limit Board consideration of instream values to the determination of these flows. The Board would have no need to consider the adverse effects of reducing stream flows if those flows would not be lowered below minimum levels. Offstream users could appropriate waters not covered by minimum flow standards even if the appropriations would damage instream uses.

Although the Board's minimum flow scheme might provide some additional protection for instream uses, it does not ensure lasting protection for the established minimum flows nor offer protection for valu-

106. *Id.* § 828(b). Although all persons who participated in the hearings prior to the original determination of the flow requirement would have been given notice before it was modified, *id.*, notice alone would not have ensured continued protection of streamflows.

107. *See id.*

108. The action of the attorney general's office, declaring that the Board exceeded its statutory authority in proposing its streamflow regulations, emphasizes the need for new legislation.

109. A.B. 442, Cal. Reg. Sess. (as amended June 28, 1979). The bill included many proposals of the Governor's Commission to Review California Water Rights Law. Compare A.B. 442 with GOVERNOR'S COMMISSION, *supra* note 3, at 112-31.

110. A.B. 442, Cal. Reg. Sess. § 37 (1979) (proposed CAL. WATER CODE § 3037). The Department would have determined the flows needed to enhance beneficial instream uses, regardless of whether sufficient unappropriated water was currently available. However, the proposal would have allowed the Board to balance prospective offstream uses against the Department's recommendation in establishing minimum flows. *Id.* § 37 (proposed CAL. WATER CODE § 3053).

111. ASSEMBLY WEEKLY HISTORY, Feb. 21, 1980, at 114.

able instream uses dependent on streamflows above the minimum levels. This protection can be accomplished by allowing instream uses to compete equally with offstream uses for appropriative rights.

C. *Instream Appropriations to Protect Instream Uses*

California's existing legal mechanisms to protect instream uses, including the Board's recently adopted scheme of minimum flow requirements, are inadequate because they treat instream uses differently from offstream uses. Treating instream and offstream uses on an equal basis by permitting appropriative rights to attach to water serving instream uses, would better allow instream uses to compete equally for available water supplies. As a result, beneficial streamflows would be more adequately protected against damaging diversions.

Instream uses would often satisfy California's prerequisites for a valid appropriation. Where unappropriated water is available,¹¹² the Board is required to allow an appropriation for proposed uses that are beneficial,¹¹³ reasonable,¹¹⁴ and in the public interest.¹¹⁵ The legislature has designated instream uses as beneficial.¹¹⁶ Leaving water in its natural watercourse is presumably reasonable unless it interferes with a more beneficial offstream use. Instream appropriations are in the public interest when they protect public fisheries and recreational areas.

Instream appropriation permit holders, whether state agencies or private organizations, would not be required to defend instream uses against each proposed offstream appropriation.¹¹⁷ In addition, the opportunity to acquire legal rights to streamflows would encourage diligent advocacy of instream uses before the Board.

112. See note 28 *supra*. Appropriative rights in streamflows could possibly be obtained even where no unappropriated water is currently available through the purchase of "pivotal" appropriation rights—senior downstream rights which, by necessity, protect streamflows above their diversion point. Hoose, *Leaving Water in Western Streams*, NATURE CONSERVANCY NEWS, Jan./Feb. 1979, at 25. The validity of these purchases is not certain, however, especially in states that require an actual diversion for an appropriation. *Id.*; SCHNEIDER, *supra* note 69, at 124.

A recent amendment to the California Water Code could also allow the conversion of offstream diversions to instream appropriations. An offstream appropriator whose water use is reduced by conservation efforts is allowed to retain the appropriative right to the entire amount formerly used, even though the quantities conserved now remain instream. 1979 Cal. Legis. Serv. ch. 1112 (to be codified in CAL. WATER CODE § 1011). As a result, conservation-minded offstream appropriators could protect instream uses by lessening their water use.

113. See text accompanying note 29 *supra*.

114. *Id.*

115. See text accompanying notes 46-51 *supra*.

116. The use of water for preservation and enhancement of fish and wildlife is a beneficial use. CAL. WATER CODE § 1243 (West Supp. 1979). Beneficial uses are those that confer benefits to the water users; they need not be reasonable or socially desirable. See *Joslin v. Marin Mun. Util. Dist.*, 67 Cal. 2d 132, 143, 429 P.2d 889, 896, 60 Cal. Rptr. 377, 384 (1967).

117. See text accompanying notes 85-93 *supra*.

Instream appropriations would also protect instream uses against the future exercise of dormant riparian rights. Since the exercise of these rights could substantially deplete many streams,¹¹⁸ their continued existence undermines the Board's present ability to protect instream uses.¹¹⁹ Although unexercised riparian rights cannot be extinguished, they can be subordinated to other recognized water rights.¹²⁰ Recognizing water rights for instream appropriations would allow the Board to grant instream uses priority over dormant riparian rights.

Even if instream uses had these protections, unreasonable instream appropriations could not prevent subsequent beneficial diversions, since all water rights are subject to California's constitutional provision limiting water use to quantities reasonably required for beneficial purposes.¹²¹ A finding that a use of water is unreasonable extinguishes the right,¹²² removing it as an obstacle to other water uses. Nevertheless, proposed offstream uses would face a substantial burden in seeking to extinguish or limit an established instream right in light of the presumption of reasonableness that would be accorded instream uses.¹²³ Thus, instream appropriations would allow balancing of instream and offstream uses while giving greater protection to existing streamflows.

Although instream appropriations are an excellent means for protecting instream uses, they have not been recognized in California.¹²⁴

118. For example, in the Long Valley Creek Stream System, one litigant claimed riparian rights to irrigate 2,884 acres of land, although he only irrigated 89 acres at the time. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 346, 599 P.2d 656, 660, 158 Cal. Rptr. 350, 354 (1979).

119. The requirement that the Board consider instream uses in the appropriation process does not apply to the exercise of dormant riparian rights. CAL. WATER CODE § 1243 (West Supp. 1979).

120. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 358-59, 599 P.2d 656, 668-69, 158 Cal. Rptr. 350, 362-63 (1979).

121. CAL. CONST. art. X, § 2 (West 1979). See notes 45-46 *supra* and accompanying text.

122. See, e.g., *People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal. App. 3d 743, 753, 126 Cal. Rptr. 851, 857 (1976); *Joslin v. Marin Mun. Util. Dist.*, 67 Cal. 2d 132, 143-44, 429 P.2d 889, 897, 60 Cal. Rptr. 377, 385 (1967).

123. In contrast, the present system places the burden of proof on those advocating streamflow preservation. See note 88 *supra* and accompanying text.

124. Although originally rejected, instream appropriations are now recognized in Colorado. In 1965 a Colorado water conservation district sought to appropriate water for use in its streams to preserve fish life, relying on a statute that allowed such districts to "file upon" and hold for public use those streamflows necessary to preserve fish. The state supreme court did not allow this attempted appropriation, holding that an actual diversion of water was necessary for an appropriation. *Colorado River Water Conservation Dist. v. Rocky Mt. Power Co.*, 158 Colo. 331, 406 P.2d 798 (1965). After this decision, the Colorado Legislature specifically authorized the Water Conservation Board to appropriate waters required to preserve natural environments. COLO. REV. STAT. § 37-92-102(3) (1973). The law also changed the definition of appropriation to include all beneficial water uses. *Id.* § 37-92-103(3). The Colorado Supreme Court recently upheld the constitutionality of these amendments and

The Board has rejected applications for instream appropriations, and this position has recently been upheld in two courts of appeal decisions. The following part analyzes the rationale of the Board and the courts of appeal and concludes that they did not persuasively justify their denial of instream appropriations.

III

ADMINISTRATIVE AND JUDICIAL REJECTION OF INSTREAM APPROPRIATIONS

A. *The Cases*

By 1975, California fisheries had been seriously damaged by reduced streamflows,¹²⁵ and increasing offstream demands threatened further destruction. In that year, two applications were filed with the Board for instream appropriations to protect fisheries in two California streams. The applicants recognized the advantages of securing instream appropriations, but were uncertain as to their validity since California courts and administrative agencies had never formally considered the question. The Board refused to accept either application, and two courts of appeal upheld the Board's action.

The California Department of Fish and Game filed one application, seeking to appropriate water in the Mattole River during low-flow months.¹²⁶ California Trout, a private corporation consisting of anglers, conservationists, and biologists, filed the other application, seeking an appropriation to preserve and enhance the fish and wildlife of Marin County's Redwood Creek.¹²⁷ The Board refused to consider ei-

allowed the Board several substantial instream appropriations. *Colorado River Water Conservation Dist. v. Colorado Water Conservation Bd.*, — Colo. —, 594 P.2d 570 (1979).

Other states have allowed appropriations for instream uses in special cases. For example, Washington allowed a fisheries professor to appropriate water for use in fish research. *In re Bevan v. State*, Wash. Pollution Control Hearings Bd. No. 48 (1972) (discussed in F. TRELEASE, *WATER LAW* 37-38 (3d ed. 1979)). An Arizona court of appeals ruled that state law allows the Game and Fish Department to appropriate waters stored in a reservoir for the benefit of fish, other wildlife, and recreation. *McClellan v. Jantzen*, 26 Ariz. App. 223, 547 P.2d 494 (1976). In Idaho, the supreme court upheld an instream appropriation specifically authorized by statute, but declared that state law generally contemplates an actual diversion for an appropriation. *State Dep't of Parks v. Idaho Dep't of Water Administration*, 96 Idaho 440, 530 P.2d 924 (1974). In other Western States, an actual diversion may still be required in all cases. *See, e.g., State ex rel. Reynolds v. Miranda*, 83 N.M. 445, 493 P.2d 409 (1972).

125. See note 7 *supra*.

126. *Fullerton v. State Water Resources Control Bd.*, 90 Cal. App. 3d 590, 593-94, 153 Cal. Rptr. 518, 520-21 (1979). The application requested an annual appropriation of 38,400 acre feet.

127. *California Trout, Inc. v. State Water Resources Bd.*, 90 Cal. App. 3d 816, 818, 153 Cal. Rptr. 672, 673 (1979). The application requested a year-long flow of three cubic feet per second, approximately 2100 acre-feet per year, considerably less than the Department of Fish and Game sought in *Fullerton*. See note 126 *supra*.

ther request, stating that the applications did not seek an "appropriation" as defined by California law because the applicants did not intend to divert or otherwise exercise physical control over the water.¹²⁸

Both applicants filed complaints against the Board in superior court, each seeking a determination that water could be appropriated to protect fisheries without diversion.¹²⁹ Since the Board did not determine whether the proposed appropriations were in the public interest, proper exercise of the Board's discretion¹³⁰ was not at issue. The sole issue was whether the Board could categorically deny instream appropriations.¹³¹

The trial courts split. One court ordered the Board to accept California Trout's application, stating that water may be appropriated in California "without the exercise of physical control."¹³² The Department, however, was unsuccessful. The trial court in that case concluded that, while using water for fishery preservation and recreation was a beneficial use, the Board was correct in requiring an appropriator to exercise "some physical control" over the water to be appropriated.¹³³ The court upheld the Board's "long standing" and "reasonable" determination that it lacked authority to grant instream appropriations.¹³⁴

The California courts of appeal, unlike the trial courts, were substantially in agreement. The Court of Appeal for the Third Appellate District, in *California Trout, Inc. v. State Water Resources Control Board*,¹³⁵ stated that "some form of diversion or physical control" over the water had historically been necessary to constitute an appropriation.¹³⁶ Similarly, in upholding the Department of Fish and Game's defeat, the Court of Appeal for the First Appellate District, in *Fullerton*

128. *California Trout, Inc. v. State Water Resources Bd.*, 90 Cal. App. 3d 816, 818, 153 Cal. Rptr. 672, 673 (1979); *Fullerton v. State Water Resources Control Bd.*, 90 Cal. App. 3d 590, 594, 153 Cal. Rptr. 518, 521 (1979).

129. *Id.* at 818, 153 Cal. Rptr. at 673; *id.* at 594-95, 153 Cal. Rptr. at 521. The Department's complaint alternatively sought a writ of mandate to order the Board to entertain the application. 90 Cal. App. 3d at 595, 153 Cal. Rptr. at 521.

130. See text accompanying notes 54-56 *supra*.

131. If instream appropriations were permitted, the Board would have had to approve the application unless it found denial to be in the public interest. CAL. WATER CODE § 1253 (West 1971). The Board is required to consider the public interest in all proper applications. See *id.* §§ 1250, 1255. Thus the grounds for a writ of mandate would be that the Board did not proceed "in the manner required by law." See CAL. CIV. PROC. CODE § 1094.5(b) (West Supp. 1979).

132. *California Trout, Inc. v. State Water Resources Bd.*, 90 Cal. App. 3d 816, 818, 153 Cal. Rptr. 672, 673 (1979).

133. *Fullerton v. State Water Resources Control Bd.*, 90 Cal. App. 3d 590, 595, 153 Cal. Rptr. 518, 521-22 (1979).

134. *Id.* at 595, 153 Cal. Rptr. at 522.

135. 90 Cal. App. 3d 816, 153 Cal. Rptr. 672 (1979).

136. *Id.* at 819, 153 Cal. Rptr. at 674. One justice dissented. *Id.* at 822, 153 Cal. Rptr. at 676.

v. State Water Resources Control Board,¹³⁷ concluded that “some physical act with respect to the water [is required] to manifest the possessory right.”¹³⁸ The California Supreme Court refused to review either case.¹³⁹

B. *Analysis of Fullerton and California Trout*

Even though instream uses are reasonable, beneficial, and in the public interest,¹⁴⁰ the California Water Resources Control Board decided not to allow appropriations for instream uses because they do not involve either a diversion of or physical control over water. The *Fullerton* court variously described this additional element as “some minimal actual physical use,”¹⁴¹ “some physical act with respect to the water,”¹⁴² and “some element of possession or other control.”¹⁴³ The *California Trout* court characterized the necessary ingredient as “some form of diversion or physical control,”¹⁴⁴ or “an actual diversion from the natural channel.”¹⁴⁵

The “physical control” requirement, as articulated by the Board and the courts, does not appear in the statutes governing the Board’s activity. To the contrary, Water Code section 1253 states that “[t]he Board shall allow the appropriation for beneficial purposes of unappropriated water under such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated.”¹⁴⁶ Since the Water Code expressly declares the preservation of fisheries to be a beneficial use,¹⁴⁷ the plain language of section 1253 requires the Board to allow instream “appropriations” where it finds such appropriations to be in the public interest. By defining “appropriation” to exclude the use of water without physical control, however, the Board has avoided any statutory obligation to consider the merits of the rejected applications.¹⁴⁸

Although no statute specifically sets forth a physical control requirement, the *California Trout* court found that a statutory provision

137. 90 Cal. App. 3d 590, 153 Cal. Rptr. 518 (1979).

138. *Id.* at 598, 153 Cal. Rptr. at 524.

139. 90 Cal. App. 3d at 825; 90 Cal. App. 3d at 605. Justices Mosk and Tobriner dissented in both decisions.

140. See text accompanying note 116 *supra*.

141. 90 Cal. App. 3d at 593, 153 Cal. Rptr. at 520.

142. *Id.* at 598, 153 Cal. Rptr. at 524.

143. *Id.* at 599, 153 Cal. Rptr. at 524.

144. 90 Cal. App. 3d at 819, 153 Cal. Rptr. at 674.

145. *Id.* at 820, 153 Cal. Rptr. at 674.

146. CAL. WATER CODE § 1253 (West 1971) (emphasis added). Instream appropriation applications could easily satisfy the administrative formalities, such as payment of fees, for the issuance of an appropriation permit. See *id.* § 1375.

147. *Id.* § 1243.

148. See note 131 *supra* and accompanying text.

implied this requirement. The court interpreted a section of the California Water Code, requiring an appropriation applicant to describe the "works" to be constructed and the place of diversion,¹⁴⁹ to require possession or control of water in order to constitute a valid appropriation.¹⁵⁰ Yet the Board and the courts have allowed numerous appropriations that did not involve construction.¹⁵¹ Thus the court's reliance on this statutory provision in prescribing a possession or control requirement is unwarranted.

California courts have long held that a diversion is unnecessary for a valid appropriation in California. Soon after the California Supreme Court recognized the appropriation doctrine, it held that water could be appropriated to power a waterwheel.¹⁵² The court subsequently described a similar appropriative right as the "right to the momentum of [the water's] fall . . . and to the flow of the water in its natural course above as subservient to that end."¹⁵³ Courts have also declared watering livestock from a natural stream, without a diversion or the use of mechanical devices, to be a use to which appropriative rights may attach.¹⁵⁴

The *Fullerton* court relied on the Board's "long-standing construction" of the Water Code requiring physical control over water to create a valid appropriation.¹⁵⁵ The only Board decision referred to by the court, however, is inconsistent with a physical control requirement. In that 1974 decision the Board allowed an appropriation of runoff water that had collected in a closed basin, irrigating the applicant's land.¹⁵⁶ In approving the application, the Board acknowledged that "neither the Water Code nor any other statute expressly provides that an appropriator of water must actually exercise some form of physical control over the water."¹⁵⁷ The Board concluded that the essential element was

149. CAL. WATER CODE § 1260 (West 1971) provides in part:

Every application for a permit to appropriate water shall set forth all of the following:

(d) The location and description of the proposed headworks, ditch, canal, and other works.

(e) The proposed place of diversion.

(f) The place where it is intended to use the water.

(g) The time within which it is proposed to begin construction.

(h) The time required for completion of the construction.

150. 90 Cal. App. 3d at 820, 153 Cal. Rptr. at 674.

151. See text accompanying notes 154-58 *infra*.

152. *Tartar v. Spring Creek Water and Mining Co.*, 5 Cal. 395 (1855).

153. *McDonald v. Askew*, 29 Cal. 200, 206 (1865).

154. *Hunter v. United States*, 388 F.2d 148 (9th Cir. 1967) (applying California law); *Fullerton v. State Water Resources Control Bd.*, 90 Cal. App. 3d 590, 598, 153 Cal. Rptr. 518, 524 (1979) (citing *Steptoe Livestock Co. v. Gulley*, 53 Nev. 163, 295 P. 772 (1931)).

155. 90 Cal. App. 3d at 601, 153 Cal. Rptr. at 526.

156. California Water Resources Control Bd., Order WR 74-25, at 2 (1974).

157. *Id.* at 3.

not physical control, but "possession," manifested in the applicant's case by the ownership of land.¹⁵⁸

The *Fullerton* court found the Board's 1974 decision to be consistent with a rule that "some physical act" is necessary for a valid appropriation.¹⁵⁹ The court also characterized an Oregon Supreme Court decision as holding similar overflows to be "natural diversion[s] from the watercourse."¹⁶⁰ However, there is no meaningful distinction between this type of appropriation and the applications denied in *California Trout* and *Fullerton*. Irrigation by "natural diversion" need involve no more physical control over water than does preserving fisheries and protecting recreational activity through the maintenance of streamflows.

The Board's brief¹⁶¹ in *Fullerton* cited an earlier Board decision purporting to impose a physical control requirement in denying a water conservation district's application to appropriate Russian River water to be stored in a reservoir and later released to protect instream recreational uses.¹⁶² In that decision, the Board found the use to be reasonable and beneficial, and imposed conditions on other permits to protect the river's flow, but refused to allow an appropriation of the water, stating that physical control was required.¹⁶³ The legislature overturned the Board's decision, however, by amending the Water Code to authorize such appropriations.¹⁶⁴

Although the Board's "long-standing" policy against appropriations without physical control may be illusory, the courts in *California Trout* and *Fullerton* are correct in noting that California courts had never previously recognized instream appropriations. Yet, since no California case had ever confronted an application for an instream appropriation, the court's reliance on prior case law is misplaced. The *Fullerton* court also relied on the Department's failure to cite authority finding "a valid appropriation in the absence of some physical activity or possession of the land."¹⁶⁵ Since the court cited no cases in which an appropriation was attempted in the absence of these factors, it confirmed only that it was deciding a case of first impression.¹⁶⁶ A deter-

158. *Id.* at 4-5.

159. 90 Cal. App. 3d at 599 n.8, 153 Cal. Rptr. at 524 n.8.

160. *Id.* (citing Warner Valley Stock Co. v. Lynch, 215 Ore. 523, 336 P.2d 884 (1959)).

161. Respondents' Brief at 24-25.

162. California Water Rights Bd., Decision D. 1030, at 30 (1961).

163. *Id.* at 30-31.

164. CAL. WATER CODE § 1242.5 (West 1971). Thus, streamflows may now be appropriated if stored and released, but not if allowed to flow naturally.

165. 90 Cal. App. 3d at 599, 153 Cal. Rptr. at 524.

166. Previous cases each involved what the *Fullerton* court would view as "some physical activity." See text accompanying notes 155-60 *supra*.

mination that California courts have never considered instream appropriations is hardly a reason for rejecting the application.

The cases on which the *Fullerton* and *California Trout* courts rely understandably failed to consider instream uses since they were decided before significant changes in both public attitudes and California water law had occurred.¹⁶⁷ Originally, California law was concerned with allocating the state's plentiful water supplies to mining, agricultural, and municipal users; public concern with water quality and instream uses was minimal.¹⁶⁸ Consequently, early cases required the courts simply to resolve conflicts between competing offstream users—the need to protect instream uses was never raised.¹⁶⁹ These early cases also preceded legislative recognition of instream values. For example, the declaration that the use of water for recreation and preservation of wildlife was beneficial was not added until 1959,¹⁷⁰ after the bulk of the cases cited favorably in *Fullerton* and *California Trout* had been decided. The courts' failure to acknowledge that instream uses were beneficial, prior to the enactment of this statute, is understandable. Since beneficial use is a prerequisite for an appropriation,¹⁷¹ failure of these courts to consider the validity of instream appropriations is also not surprising.

The precedential value of one early case, *McDonald & Blackburn v. Bear River & Auburn Water and Mining Co.*,¹⁷² cited in *Fullerton*,¹⁷³ is particularly suspect. Prior to 1872, the Water Code allowed a water

167. *California Trout* cites no post-1950 California water law cases at all. *Fullerton* cites only two, *People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal. App. 3d 743, 126 Cal. Rptr. 851 (1976), and *Joslin v. Marin Mun. Water Dist.*, 67 Cal. 2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967). Each is cited only for the proposition that riparian owners are subject to the same beneficial use requirements as other users. 90 Cal. App. 3d at 596, 153 Cal. Rptr. at 522. *California Trout* and *Fullerton* also cite *Hunter v. United States*, 388 F.2d 148 (9th Cir. 1967), which held that watering livestock, without additional acts by the appropriator, was a valid method of perfecting an appropriation under California law. 90 Cal. App. 3d at 819, 153 Cal. Rptr. at 674; 90 Cal. App. 3d at 599, 153 Cal. Rptr. at 524.

168. See Craig, *California Water Law in Perspective*, printed in CAL. WATER CODE at LXV, LXXI-LXXXIV (West 1971). The state failed to enact a strong water quality control law until 1969. *Id.* at LXXXIV.

169. See, e.g., *Simons v. Inyo Cerro Gordo Mining & Power Co.*, 48 Cal. App. 524, 192 P. 144 (1920). In this case, the court resolved a dispute between the successors of two miners, each claiming exclusive rights to the water of a spring. The court, while deciding the issue on other grounds, stated that an "actual diversion" of water was necessary to constitute a valid appropriation. *Id.* at 537, 192 P. at 150. This diversion requirement, although not determinative and inconsistent with both earlier and later decisions, see notes 152-54 *supra* and accompanying text, was incorporated in an important California water law treatise, HUTCHINS, *supra* note 18, at 108, which was cited in *California Trout*. 90 Cal. App. 3d at 820, 153 Cal. Rptr. at 674-75.

170. 1959 Cal. Stats. 4742, ch. 2048, § 1 (codified, as amended, in CAL. WATER CODE § 1243 (West Supp. 1979)).

171. CAL. WATER CODE § 1375(c) (West 1971).

172. 13 Cal. 220 (1859).

173. 90 Cal. App. 3d at 598, 153 Cal. Rptr. at 524.

user to perfect an appropriation only by openly putting the water to a beneficial use.¹⁷⁴ Thus, this pre-1872 decision predictably required "some open, physical demonstration of . . . intent" for a valid appropriation.¹⁷⁵ However, the presumed purpose behind this requirement, notice to other users, is now served adequately by the permit and licensing procedures of the California Water Resources Control Board.¹⁷⁶ Nonetheless, the *Fullerton* court treated this requirement of an open, physical demonstration of intent as a valid basis for its decision.¹⁷⁷

Water Code section 1243, which requires that the Board consider the water needs of fish and wildlife in determining the availability of unappropriated water, was discussed by both the *California Trout* and *Fullerton* opinions. The *California Trout* court, declaring that instream values had not been "callously overlooked,"¹⁷⁸ found that streamflows were adequately protected under existing law.¹⁷⁹ The court failed to discuss the evidence to the contrary.¹⁸⁰ The *Fullerton* court went further and interpreted this section to preclude appropriations for instream use.¹⁸¹ However, this requirement to consider the needs of fish and wildlife appears intended to allow the Board to determine that water for instream needs cannot be appropriated for offstream uses. A system allowing instream appropriations to lessen the availability of unappropriated water is consistent with this legislative scheme.

In concluding its argument, the *Fullerton* court reasoned that instream appropriations should not be allowed because they would preclude other beneficial uses of water. "A grant of prior in-stream appropriation rights," the court declared, "could tie the Board's hands as to future use. The water appropriated by the Department would be unavailable for other yet unforeseen and overriding uses."¹⁸² This argument, the court's only attack on the desirability of instream appropriations, is without merit. First, recognizing the validity of instream appropriations would not require the Board to allow any instream appropriations that are not in the public interest.¹⁸³ Second, although in-

174. See HUTCHINS, *supra* note 18, at 41.

175. 13 Cal. at 232-33.

176. See notes 31-32 *supra*.

177. 90 Cal. App. 3d at 598, 153 Cal. Rptr. at 524.

178. 90 Cal. App. 3d at 820, 153 Cal. Rptr. at 675.

179. *Id.* at 820-22, 153 Cal. Rptr. at 675.

180. See notes 7-14 *supra* and accompanying text.

181. 90 Cal. App. 3d at 603-04, 153 Cal. Rptr. at 527-28. The court also interpreted the statute to require a "balancing" of instream and offstream needs by the Board. This mandatory procedure, the court noted, "may be inadequate to protect the public fish and wildlife resources of this state." *Id.* at 604, 153 Cal. Rptr. at 528. However, the court declared that "the matter should be left to the Legislature." *Id.* at 605, 153 Cal. Rptr. at 528.

182. *Id.* at 604, 153 Cal. Rptr. at 528.

183. CAL. WATER CODE § 1255 (West 1971).

stream appropriations would certainly prevent other uses of the appropriated water, the same effect results from offstream appropriations. Third, the court exaggerates the extent to which instream appropriations would preclude future uses by failing to recognize that instream appropriative rights could not unreasonably bar offstream uses.¹⁸⁴

The arguments made by the *California Trout* and *Fullerton* courts in denying instream appropriations are not persuasive. The courts applied precedent mechanically, without regard to the value of instream uses and the desirability of instream appropriations. The courts' fear that instream appropriations would interfere with future uses simply expresses their concern that the Board not lose its power to subordinate instream uses to future offstream demands. Although the courts do not adequately justify the unequal treatment of instream and offstream uses, the precedent they establish is conclusive.¹⁸⁵ Further arguments for instream appropriations must be made before the legislature.

CONCLUSION

Despite several existing legal doctrines to protect streamflows, the California Water Resources Control Board retains broad discretion to subordinate instream uses to offstream demands. To prevent harmful diversions of the remaining waters, new mechanisms are needed. Among recent developments, minimum flow requirements may prove most effective. This strategy, however, fails to stop the diversion of streamflows exceeding the established minimums. Moreover, since they are established after consideration of offstream demands, these minimum levels could be insufficient to protect all instream uses. Allowing appropriations of water for instream use could solve these problems.

Appropriation systems allocate water between competing uses by creating a legal right in the continued application of a designated quantity of water to a beneficial use. Water appropriated for instream use, therefore, could not be used to meet future offstream demands. If instream appropriations are not recognized, streamflows will remain "unappropriated water," subject to diversion at the state's discretion. Thus, only a system allowing instream appropriations can ensure the permanent protection of instream values.

Unfortunately, instream appropriations do not satisfy California's requirement that an appropriator exercise physical control over the appropriated water. While this requirement once guaranteed that the

184. See notes 121-23 *supra* and accompanying text.

185. The California Supreme Court did not grant a hearing in either case. See note 139 *supra*.

state's waters would be applied to industrial and agricultural development, it now threatens the destruction of California's streams. In the face of judicial reluctance to overrule the physical control doctrine, the legislature must eliminate this requirement.

Ideally, the legislature should allow instream and offstream uses to compete equally for a stream's unappropriated water. Current protective measures, such as the requirement that the Board consider the water needs of fish and wildlife, would then be unnecessary. Instead, instream flows would be fully protected where appropriated, with appropriations allowed in the public interest.

Political realities make adoption of the ideal system unlikely. Continuing industrial and agricultural development requires that unappropriated water be available to meet future demands. Several states, however, have found the recognition of some instream appropriations to be consistent with state policies.¹⁸⁶ Although limited, these schemes promise greater protection for instream uses. The California Legislature should enact similar measures. Postponing action until changes in public attitudes allow more stringent alternatives could inflict irreversible damage to the state's remaining freeflowing streams.

186. Colorado, for example, allows instream appropriations by a state agency. Other states, such as Washington, allow private instream appropriations in special circumstances. See note 124 *supra*.

