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The Delta Decisions: The Quiet Revolution in California Water Rights

Ronald B. Robie*

INTRODUCTION

In 1967 the California Legislature created the State Water Resources Control Board (State Board) by merging two independent Boards, the State Water Rights Board and the State Water Quality Control Board.¹ This resulted in the unprecedented requirement that water rights and water quality be administered together.² The merged administrative process has resulted in major changes in California water rights law, especially with regard to the unique relationship between water quality and water rights in the Sacramento-San Joaquin Delta estuary.³ These changes are a result of amendments to California law enacted to implement the merger and to improve the regulation of water quality.

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1. 1967 Cal. Stat. ch. 284, sec. 2, at 1442 (operative December 1, 1967).

2. A water right has traditionally included the right to a usable *quality* as well as quantity of water but such consideration in California prior to 1967 and in other states has been quite limited. *United States v. State Water Resources Control Bd.*, 182 Cal. App. 3d 82, 116-17, 227 Cal. Rptr. 161, 178 (1986) (review denied Sept. 18, 1986). See R. Robie, *Relationships Between Water Quality and Water Rights* in CONTEMPORARY DEVELOPMENTS IN WATER LAW (C. Johnson ed. 1970) (discussion of this subject, with particular emphasis on California law). The right to usable water quality applies to both riparian and appropriative rights. See *Deetz v. Carter*, 232 Cal. App. 2d 851 (1965); *Wright v. Best*, 19 Cal. 2d 368 (1942) (respectively).

3. THE CALIFORNIA WATER ATLAS 104 (W. Kahrl ed. 1979). The location of the Delta is shown on Figure 1. The Sacramento-San Joaquin Delta carries more than forty percent of California's surface water. *Id.*

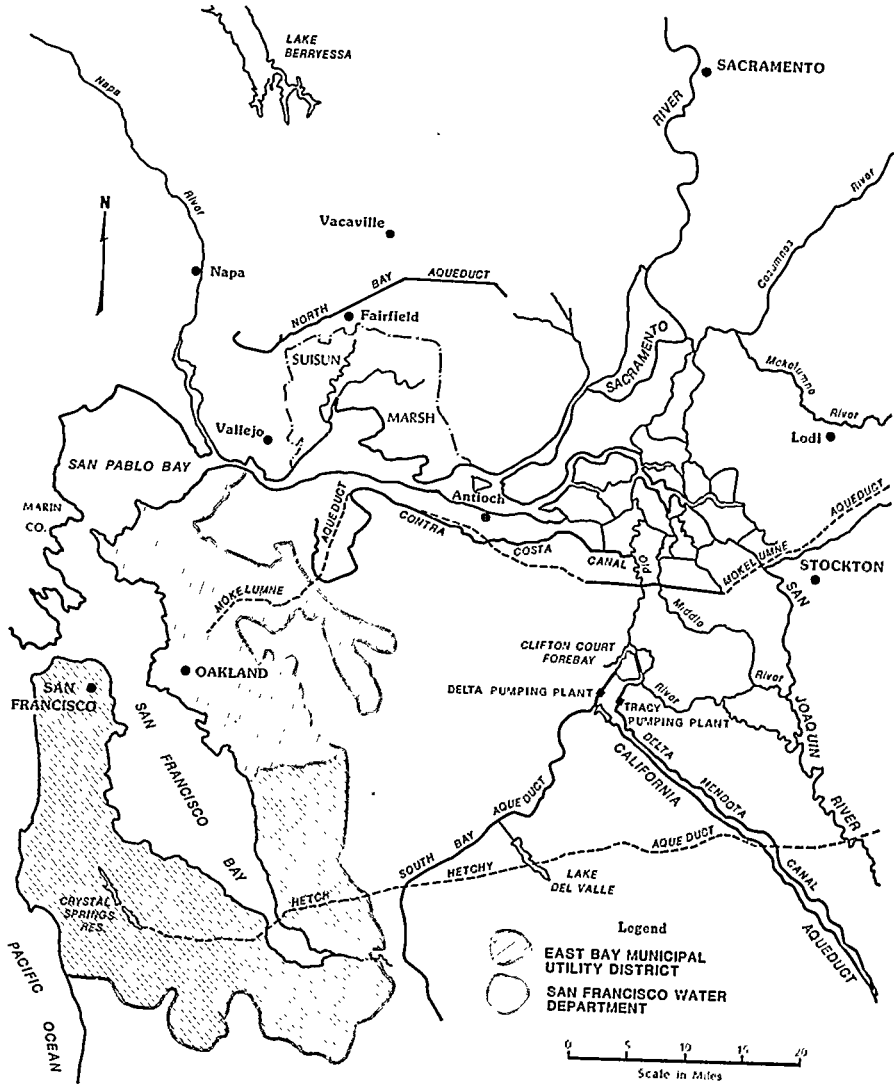


Figure 1

These changes also result from State Board decisions relating to the water rights of the two largest water projects in the state—the State Water Project (SWP) and the federal Central Valley Project (CVP). These two projects divert large quantities of water from the Delta and have a profound impact on water quality in the estuary.

The changes in water rights have been significant and far-reaching. But it was not until 1986, in *United States v. State Water Resources Control Board*,⁴ that these changes were considered by a California appellate court. This decision of the Court of Appeal for the First District, Division One, considered the most important aspects of the merger of water quality and water rights. It is the subject of this article.

After the 1967 legislation, the task of merging water quality and water rights in practice was left to the State Board which has issued two major Delta water right decisions⁵ and is now working on a third. To place these changes in water rights law in context, this article will briefly review California water rights and water quality law, the physical conditions which make the Delta so important to California, and the Board's Delta decisions.

I. BACKGROUND OF CALIFORNIA'S SURFACE WATER RIGHTS LAW

A. *Riparian Rights*

California is one of the few states which recognizes both appropriative and riparian rights.⁶ A riparian right is an incident of the ownership of land which abuts a stream, lake or pond. The right has two predominant characteristics. First, the right is part and parcel of the real estate and is not created by nor lost by nonuse. Second, a riparian has no right to a fixed quantity of water as against other riparians, but rather has a right to the use of the natural flow of the stream in common with the equal and correlative rights of other

4. 182 Cal. App. 3d 82, 227, Cal. Rptr. 161 (1986) (review denied Sept. 18, 1986) [hereinafter referred to as *U.S. v. SWRCB*]. The decision was authored by presiding Justice Racanelli, with Justices Elkington and Newsom concurring.

5. State Water Resources Control Board, Decision 1379, July 21, 1971 [hereinafter cited as Decision 1379] and Decision 1485, Aug. 16, 1978 [hereinafter cited as Decision 1485].

6. *In re* Rights to Water of Hallett Creek Stream System, 44 Cal. 3d 448, 749 P.2d 324, 243 Cal. Rptr. 887 (1988).

riparians. That is, in times of shortage all must reduce their use proportionally.⁷ The right is not based on priority of use.

The amount of water under riparian claim in the state is largely unknown. By definition these rights are not quantified and they are not subject to a permit system.⁸

B. Appropriative Rights

This type of right is the most common water right in the western United States. Developed initially for use on non-riparian lands, these rights are based on the mining principle of "first in time, first in right." "The person who first appropriates water and puts it to a reasonable and beneficial use has a right superior to later appropriators. In water-short years, junior appropriators with low priorities may be barred from exercising their rights in order to satisfy the rights of earlier, senior appropriators."⁹

Appropriative rights were first recognized in 1855 in *Irwin v. Phillips*.¹⁰ In 1872 the common law doctrine was codified and an optional procedure for posting written notice at the place of diversion (including amount and means of diversion and purpose and place of use) and recording the notice was enacted.¹¹ Since an appropriative right depends

7. *Lux v. Haggin*, 69 Cal. 255 (1884). GOVERNOR'S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, RIPARIAN RIGHTS IN CALIFORNIA (STAFF PAPER NO. 4) at 1-2, 13 (Nov. 1977).

8. *Id.* at 2. But these rights are quantified when the State Water Resources Control Board conducts a statutory adjudication of a stream under California Water Code sections 2500 through 2850. (West Supp. 1988). Both exercised and unexercised rights are included in the decree. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 357-58, 599 P.2d 656, 668, 158 Cal. Rptr. 350, 361 (1979). Recently the California Supreme Court held that the federal government as a landowner may assert a riparian right. In so holding, since the court was dealing with an unexercised riparian right, it required the United States to "apply to the Board whenever it proposes to exercise its riparian right, so that the Board may evaluate the proposed use in the context of other uses and determine whether the riparian use should be permitted in light of the state's interest in promoting the most efficient and beneficial use of the state's waters." *In re Rights to Water of Hallett Creek Stream Sys.*, 44 Cal. 3d 448, 472, 749 P.2d 324, 337, 243 Cal. Rptr. 887, 901 (1988). The extent of federal riparian rights is unknown. The CVP was constructed pursuant to the Reclamation Act of 1902 (43 U.S.C. § 383) and must comply with California water rights law in obtaining water rights. Decision 1485 conditions are not inconsistent with congressional directives. *U.S. v. SWRCB*, 182 Cal. App. 3d at 136, 227 Cal. Rptr. at 192.

9. GOVERNOR'S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, APPROPRIATIVE RIGHTS IN CALIFORNIA (STAFF PAPER NO. 1, AT 1-2) (May 1977). This is true unless an appropriative right is prior to a riparian right or if in a statutory adjudication an unexercised riparian right has lost its priority with respect to all rights currently being exercised. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d at 358-59, 599 P.2d at 668, 158 Cal. Rptr. at 362 (1979).

10. 5 Cal. 140 (1855).

11. 1871-1872 Cal. Stat. ch. 424, secs. 1-3, at 622.

on the placing of water to beneficial use, this procedure, if followed, assured that the use, if diligently undertaken, would relate back to the time of posting.

Today's permit system, which is now the exclusive means of obtaining an appropriative right, dates to 1914.¹² Between 1914 and 1956 various state agencies administered the program. From 1921 the principal administrator of water rights was designated the State Engineer as is common in western states. In 1956 the legislature, in order to separate the regulatory from the developmental responsibilities of the state, created the State Water Rights Board, an independent, full-time, three member board to administer appropriative rights.¹³ In 1967 the board was succeeded by the State Water Resources Control Board as discussed below.

Today one must first file an "application" to appropriate unappropriated water. Upon approval by the Board a "permit" is issued authorizing the applicant to construct necessary works and to take and use the amount of water specified for beneficial purposes. Upon the completion of the works and use of the water a "license" is issued and the appropriator gains a priority as of the date of the application.¹⁴

C. The Constitutional Requirement of Reasonable Use

All California water rights—surface and underground, riparian and appropriative—are subject to the overriding "reasonable use" limitation of the state constitution.¹⁵ This cardinal principle has "embedded

12. 1913 Cal. Stat. ch. 586, sec. 12, at 1018. The law went into effect on November 19, 1914, after an unsuccessful referendum at the General Election, November 3, 1914. The permit system is now found in California Water Code sections 1200 through 1851 (West Supp. 1988).

13. 1956 Cal. Stat. ch. 52, sec. 185, at 425 (1st extraordinary session). The Board consisted of an attorney, an engineer and a public member. For an account of the history of water rights administration, see Craig, *California Water Law in Perspective*, WEST'S ANNOTATED CALIFORNIA CODES, WATER, vol. 68, at LXV-CVIII (1971) [hereinafter Craig].

14. Craig, *supra* note 13, at LXXIV. "In undertaking to allocate water rights, the Board performs an adjudicatory function. . . [A water right decision] is a quasi-judicial document. . . [and] deferential latitude should be accorded to the Board's judgment involving valuable water resources." *U.S. v. SWRCB*, 182 Cal. App. 3d at 113, 227 Cal. Rptr. at 176.

15. *U.S. v. SWRCB*, 182 Cal. App. 3d at 105, 227 Cal. Rptr. at 170-71. Article X, section 2 of the California Constitution provides, in part, that:

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, 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 the use or

in the . . . Constitution the paramount policy of water conservation.”¹⁶ In addition to the requirement of a beneficial purpose, water use must also be reasonable. Determination of reasonable beneficial use is dependent on the facts of each case, considering factors such as existing circumstances, local customs and the public interest in water conservation.¹⁷

The California Supreme Court has recently added another “significant limitation” on water rights. In *National Audubon Society v. Superior Court of Alpine County*,¹⁸ the court held that “the state’s navigable waters are subject to a public trust and that the state, as trustee, has a duty to preserve this trust property from harmful diversions by water rights holders.”¹⁹ Thus, the court determined that no one has a vested right to use water in a manner harmful to the state’s waters.

II. BACKGROUND OF CALIFORNIA WATER QUALITY LAW

Modern California water quality law dates to 1949 when the Legislature enacted the “Dickey Act.”²⁰ This Act transferred control of water pollution from the State Department of Public Health to an independent State Water Pollution Control Board and nine Regional Water Pollution Control Boards. Primary responsibility for pollution control was with the latter, which consisted first of five and later of nine members appointed by the Governor. The Boards had jurisdiction

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.

CAL. CONST. art. X, § 2.

16. GOVERNOR’S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, LEGAL ASPECTS OF WATER CONSERVATION IN CALIFORNIA (STAFF PAPER No.3), at 6 (Aug. 1977).

17. *Id.* at 9.

18. 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346 (1983), *cert. denied*, 464 U.S. 977 (1983).

19. *U.S. v. SWRCB*, 182 Cal. App. 3d at 106, 227 Cal. Rptr. at 171. The Delta is clearly navigable and subject to the doctrine. See GOVERNOR’S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, LEGAL ASPECTS OF INSTREAM WATER USES IN CALIFORNIA (STAFF PAPER No. 6), at 8-29 (Jan. 1978) (discussion of navigable waters and the state of the law prior to *National Audubon*). See also CAL. HARB. & NAV. CODE § 105 (West 1978) (navigability of Sacramento and San Joaquin Rivers).

20. 1949 Cal. Stat. ch. 1549, sec. 1, at 2782. Note, *California Water Pollution Problem*, 3 STAN. L. REV. 649 (1951); Comment, *State Control of Water Pollution: The California Model*, 1 U.C. DAVIS L. REV. 1 (1969) (discussing this act and prior California programs). See also Robie, *Water Pollution: An Affirmative Response by the California Legislature*, 1 PAC. L.J. 2 (1970).

over pollution problems in nine geographic regions roughly based on hydrologic basins.²¹ The thirteen member State Board, which served a review function for the Regional Boards, consisted of appointees of the Governor and several state government department heads serving *ex-officio*.²²

Prior to 1963 the law's emphasis was on "pollution" caused by the discharge of waste by municipalities and industrial plants.²³ In 1963 the legislature introduced the concept of "water quality" with a new law²⁴ which authorized the establishment of "water quality control policy" by the state. While in theory this enabled consideration of problems broader than pollution, the legislature failed to provide for any method of implementation or enforcement of these initial water quality policies. Concern for water quality continued however, including concern over adverse impacts from the intrusion of salinity into the Delta caused in part by reduced outflow due to upstream water diversions. In 1969 the legislature completely overhauled the water

21. The Boards, now designated as "California Regional Water Quality Control Boards," currently consist of one person associated with each of the following: 1) water supply, conservation and production; 2) irrigated agriculture; 3) industrial water use; 4) municipal government; 5) county government; and 6) a responsible non-governmental organization associated with recreation, fish, or wildlife. Three other members are not to be specifically associated with any of these categories, however, two shall have special competence in water quality. CAL. WATER CODE § 13201 (West Supp. 1988).

22. The Department heads were the directors of Water Resources, Public Health, Conservation, Agriculture, and Fish and Game. The nine citizen members represented irrigated agriculture, domestic water supplies, industrial water use, recreation and wildlife, industrial waste, public sewage disposal, city government, county government, and the public at large. See, STATE WATER QUALITY CONTROL BOARD, FINAL REPORT - USEFUL WATERS FOR CALIFORNIA (1967) (comprehensive review of California water pollution control efforts from 1949 through 1967).

23. Pollution was defined as "an impairment of the quality of the waters of the state by sewage or other waste to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic, industrial, agricultural, navigational, recreational or other beneficial use. . . ." CAL. WATER CODE § 13005 (repealed by 1969 Cal. Stat. ch. 482, at 1051). The limited nature of the pre-1963 law was noted by the Attorney General:

Prior to 1963, the State Board's concern with water quality was limited to the effect thereon of the discharge of sewage and industrial wastes. For example, we advised the State Board by letter in 1950 that *deterioration of water quality caused by saline intrusion was not within its jurisdiction since no discharge of sewage or industrial waste was involved.*

44 Op. Att'y Gen. 126, 128 (1964) (emphasis added).

24. In 1963 the legislature changed the name of the State Board to the State Water Quality Control Board and added the following definitions to the law: "'Water quality control' means the control of any factor which adversely and unreasonably impairs the quality of the waters of the state for beneficial use;" and "'Water quality control policy' means water quality objectives for affected waters of the state where water quality control measures are necessary or may be needed in the future to assure suitable water quality for beneficial use." 1963 Cal. Stat. ch. 1463, sec. 4, at 3022-23 (former CAL. WATER CODE § 13005). In 1965, the legislature renamed the Regional Boards "Regional Water Quality Control Boards." 1965 Cal. Stat. ch. 1657, sec. 7, at 3761-62.

pollution and water quality laws by enactment of the "Porter-Cologne Water Quality Control Act."²⁵

Among its most important changes, this new law made water quality policy enforceable by regulation of waste discharges and other means. The State Board was given a significantly expanded role in the program. The Porter-Cologne Act also broadened the definition of "beneficial uses" to be protected against quality degradation to include aesthetic enjoyment,²⁶ and "preservation and enhancement of fish, wildlife, and other aquatic resources or preserves."²⁷

The principal vehicle for the state's water quality activities is the adoption of "Water Quality Control Plans" by the State and Regional Boards.²⁸ Such Plans consist of: 1) beneficial uses to be protected; 2) water quality objectives; and 3) a program of implementation. The Porter-Cologne Act also requires the State Board to adopt "State Policy for Water Quality Control," which includes water quality objectives directly affecting water projects.²⁹ The Board's authority

25. 1969 Cal. Stat. ch. 482, at 1051. See Robie, *supra* note 20 (detailed discussion of the Act). The Act's principal author, Assemblyman Carley V. Porter, was chairman of the Assembly Water Committee and also principal author of the "Burns-Porter Act" which authorized the State Water Project.

26. Ironically, just two years before the Assembly Interim Committee on Water rejected such a modification because it would "overturn more than . . . 100 years of California water law . . ." CALIFORNIA LEGISLATURE, ASSEMBLY INTERIM COMM. ON WATER, NEW HORIZONS IN CALIFORNIA WATER DEVELOPMENT, at 55 (1966).

27. CAL. WATER CODE § 13050(f) (West Supp. 1988).

28. *Id.* §§ 13050, 13240-13247 (West 1971 & Supp. 1988). "Water quality objectives means the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance." *Id.* § 13050(h) (West 1971). The Water Quality Control Plans and any revisions adopted by the Regional Boards are not effective until approved by the State Board. *Id.* § 13245 (West Supp. 1988). In addition to Plans adopted by the Regional Boards, the State Board adopts Plans for "interstate or coastal waters or other waters of interregional or statewide interest." *Id.* § 13142(c) (West Supp. 1988).

Water Quality Control Plans are the same as "Water Quality Standards" as defined in the federal Clean Water Act (33 U.S.C. § 1313). In this article the terms will be used interchangeably. The federal law requires the states to adopt and periodically revise these standards. The State Board may adopt Plans for waters for which water quality standards are required by the Clean Water Act. These plans supersede any conflicting Regional Water Quality Control Plans. CAL. WATER CODE § 13170 (West Supp. 1988). This is the authority utilized by the State Board for adoption of a Plan for the Delta and San Francisco Bay and reviewed in *U.S. v. SWRCB*. The Clean Water Act has a provision in which:

Congress has expressly declared a policy of noninterference with state authority 'to allocate [water] quantities . . . within its jurisdiction' and has declined 'to supersede or abrogate [water] rights . . . established by any state. . . ' (33 U.S.C. § 1251(g)). This section has been interpreted by at least one federal court to mean that the major [federal] responsibility for regulating water quality has been left to the states to permit water quality and water rights decisions to be coordinated. [citation]

U.S. v. SWRCB, 182 Cal. App. 3d at 125, 227 Cal. Rptr. at 184.

29. "State Policy for Water Quality Control," includes: "Water quality principles and guidelines for long-range resource planning, including ground water and surface water management

includes the formulation of Water Quality Control Plans to protect beneficial uses against salinity intrusion.³⁰

In 1972 Congress enacted the Federal Water Pollution Control Act amendments which established a national permit program (NPDES) for discharge of pollutants to surface waters. The program greatly expanded the federal role in water quality control.³¹ California became the first state to be delegated authority to administer the new federal law and the legislature modified the Porter-Cologne Act to bring it into conformity with the federal law.³² Control of salinity intrusion in the Delta from water project operations, however, is not within the scope of the federal permit program. Neither salt water intrusion,³³ nor changes in water quality caused by dam operations are considered discharges of pollutants.³⁴ The primary responsibility for regulation of water quality as affected by water projects remains then with the state—*through the regulation of water rights*.

III. WATER PROJECTS, THE DELTA AND UNIFICATION OF WATER QUALITY AND WATER RIGHTS

A. *The Setting*

With the approval of the State Water Project by the legislature in 1959³⁵ and the voters of the state in 1960³⁶ major new diversions from northern California streams through the Sacramento-San Joaquin Delta to central and southern California were to begin.³⁷ Funded primarily

programs and control and use of reclaimed water; and . . . or [w]ater quality objectives at key locations for planning and operation of water resource development projects and for water quality control activities. CAL. WATER CODE § 13142 (West Supp. 1988) (emphasis added).

30. *U.S. v. SWRCB*, 182 Cal. App. 3d at 110, 227 Cal. Rptr. at 174. In adopting a Water Quality Control Plan, the Board is acting in a legislative capacity and the plan is a quasi-legislative document and appellate review is necessarily limited. *Id.* at 112, 227 Cal. Rptr. at 175.

31. 33 U.S.C. §§ 1251-1376 (1986). The law is referred to both as the "Clean Water Act" and the "Federal Water Pollution Control Act Amendments of 1972."

32. 1972 Cal. Stat. ch. 1256, sec. 1, at 2485 (effective Dec. 12, 1972); CAL. WATER CODE §§ 13370-13389 (West Supp. 1988).

33. *United States ex rel T.V.A. v. Tennessee Water Quality Control Bd.*, 717 F.2d 992 (6th Cir. 1983), *cert. denied*, 466 U.S. 937.

34. *National Wildlife Fed'n v. Gorsuch*, 693 F.2d 156 (D.C. Cir. 1982).

35. Commonly known as the Burns-Porter Act. CAL. WATER CODE §§ 12930-12944 (West 1971 & Supp. 1988). 1959 Cal. Stat. ch. 1762, sec. 1, at 4235.

36. The measure was ratified by the people at the general election on November 8, 1960, and became effective on that date.

37. The principal water supply feature of the project is the 3.5 million acre-foot capacity Oroville Dam on the Feather River near Oroville. Water stored in this facility, which was

by a \$1.75 billion bond issue and operated by the California Department of Water Resources, the SWP at its maximum delivery levels will provide an annual yield³⁸ of 4.2 million acre feet of water.³⁹ Already an area of great controversy, attention focused on the Delta when the Department of Water Resources proposed a "Peripheral Canal" in 1965 to divert water from the Sacramento River near Sacramento directly to the SWP export pumps.⁴⁰ This raised new fears that the project water rights would not provide adequate protection to the Delta and would further reduce outflow.

The federal Central Valley Project, which is operated by the Bureau of Reclamation of the United States Department of the Interior, had been diverting from the Delta since 1940.

B. The Sacramento-San Joaquin Delta

The Sacramento-San Joaquin Delta, about which this water quality concern was raised, is an estuary formed by the confluence of the Sacramento and San Joaquin Rivers tributary to the San Francisco

completed in 1967, flows to the Delta via the Feather and Sacramento Rivers. The Harvey O. Banks Delta Pumping Plant located near Tracy in San Joaquin County pumps Delta flows from Clifton Court Forebay into the Governor Edmund G. Brown California Aqueduct which flows down the San Joaquin Valley and over the Tehachapi Mountains into Southern California. Off stream storage is provided near Los Banos at the 2.1 million acre-foot San Luis Reservoir. Additional storage is provided along the Aqueduct in Southern California. The 43 mile long South Bay Aqueduct began operations in 1962 and serves Alameda and Santa Clara Counties out of the Delta. A separate North Bay Aqueduct diverting from delta channels is now under construction and will serve Napa and Solano Counties. It will replace a temporary facility. CALIFORNIA DEPARTMENT OF WATER RESOURCES, *Bulletin 200, infra* note 38, at 32, 44, 46-49, 57.

38. This is the amount of water that can be delivered based upon operation studies for the historical period 1922 through 1954 and includes certain reductions in agricultural deliveries in dry years. CALIFORNIA DEPARTMENT OF WATER RESOURCES, *California State Water Project Volume I History, Planning and Early Progress* (Bulletin 200), at 16 (1974).

39. Use projections by contractors have been less than contemplated at the time of the project's authorization. For example, state project contractors requested delivery of 2.6 million acre-feet of water for 1988. The largest contractor, the Metropolitan Water District of Southern California, requested 1.02 million acre-feet. Due to poor water supply conditions, the State is not expected to meet all 1988 requests. Requests for 1989 are expected to be 3 million acre-feet. CALIFORNIA DEPARTMENT OF WATER RESOURCES, *Plan of Operation of State Water Project Facilities for 1988 and 1989*, at 18, 27 (Jan. 1988).

40. The canal was developed by the Interagency Delta Committee consisting of the Department of Water Resources, the United States Bureau of Reclamation, and the United States Army Corps of Engineers. INTERAGENCY DELTA COMMITTEE, *Plan of Development - Sacramento San Joaquin Delta* (Jan. 1965). The Canal was authorized as a feature of the SWP by administrative action in 1966. CALIFORNIA DEPARTMENT OF WATER RESOURCES, *Bulletin 200, supra* note 38, at 41-42. Although the Department of Water Resources considered this authority adequate, many years later the legislature authorized construction of the canal (1980 Cal. Stat. ch. 632) but the law was repealed by a referendum on June 8, 1982.

Bay.⁴¹ Originally a marsh, the Delta was reclaimed by the construction of levees during the latter part of the nineteenth century. The Delta, which is primarily agricultural, consists of 738,000 acres, including more than 700 miles of waterways.⁴² Most importantly, the principal rivers flowing into the Delta⁴³ and their tributaries carry forty-seven percent of the state's *total* runoff.⁴⁴

Beneficial uses of the Delta's waters are many and varied. Delta agriculture consists of 520,000 acres and an annual crop value of \$375 million. There are 1,800 agricultural users who divert from Delta waterways⁴⁵ and there are a number of large, water-using industries in the Western Delta.

The adjacent Suisun Marsh is an important wildlife area and a major part of the Pacific Flyway for migratory waterfowl.⁴⁶ There also are substantial resident and anadromous fisheries in the Delta,⁴⁷ which support 12 million recreation user days annually.

In *U.S. v. SWRCB*, the California Court of Appeal described the Delta:

[it is] a conduit for the transfer of water by the statewide water projects. Both the CVP and the SWP divert water from the rivers that flow into the Delta and store the water in reservoirs. Quantities of this stored water are periodically released into the Delta. Pumps

41. A recent publication by the California Department of Water Resources, *Sacramento-San Joaquin Delta Atlas* (Aug. 1987) provides extensive information on the Delta. See also THE CALIFORNIA WATER ATLAS 104-05 (W. Kahrl ed. 1979).

42. The Delta has been the subject of special legislation regarding its water use. See CAL. WATER CODE §§ 12200-12220 (West 1971 & Supp. 1988) (The Delta Protection Act). The act states that:

withdrawal of fresh water for beneficial uses creates an acute problem of salinity intrusion into the vast network of channels and sloughs of the Delta (§ 12200) . . . [and] [a]mong the functions of the [SWP], in coordination with the activities of the United States in providing salinity control for the Delta through operation of the Federal Central Valley Project, shall be the provision of salinity control and an adequate water supply for the users of water in the Sacramento-San Joaquin Delta (§ 12202).

Id. §§ 12200, 12202 (West 1971 & Supp. 1988). Also included is a definition of the Delta. *Id.* § 12220 (West 1971).

43. Sacramento, San Joaquin, Mokelumne, Cosumnes, and Calaveras.

44. SACRAMENTO-SAN JOAQUIN DELTA ATLAS, *supra* note 3, at 60.

45. *Id.*

46. Located in southern Solano County, the Marsh encompasses 55,000 acres of land and small waterways. It is the largest contiguous marsh in the continental United States. A major problem in the Marsh is increasing soil salinity which if not controlled could impair its usefulness for waterfowl. Physical facilities to resolve the salinity program have been constructed by the SWP in response to requirements of its water rights. To some extent the CVP has been a participant. ASSOCIATION OF STATE WATER PROJECT AGENCIES, THE SACRAMENTO-SAN JOAQUIN DELTA - A SUMMARY OF FACTS, at 1-4 (1979).

47. Salmon, Striped Bass, Steelhead Trout, American Shad, and Sturgeon. SACRAMENTO-SAN JOAQUIN DELTA ATLAS, *supra* note 3, at 60.

situated at the southern edge of the Delta eventually lift the water into canals for transport south to the farmers of the Central Valley and the municipalities of southern California. Water which is neither stored nor exported south passes through the Delta where it is used by local farmers, industries and municipalities. The excess flows out into the San Francisco Bay.⁴⁸

The major factor affecting water quality in the Delta is salinity intrusion which relates directly to the amount of outflow of fresh water through it. Natural conditions prior to construction of any upstream water projects included high flows in the winter and early spring and reduced flows in summer and fall when salinity intruded upstream.⁴⁹

Upstream from the Delta are several major diverters which export water to coastal areas so that these supplies do not reach the State and Federal pumps. These include the City of San Francisco and the East Bay Municipal Utility District which serves the City of Oakland and East Bay cities.⁵⁰ These uses, which began early in this century before the SWP and CVP, reduce the flows into the Delta. There are other upstream diverters which use water in the watersheds upstream from the Delta.⁵¹ These users also deplete the flows to the Delta but because of construction of dams which allow carryover storage from season to season, their uses augment natural flows during some times of the year, particularly the summer and fall months.

The SWP and CVP (or any other upstream water project) can be operated to *reduce the intrusion of salinity* into the Delta in three principal ways: 1) by stopping or reducing diversions to upstream storage facilities; 2) by stopping or reducing pumping at the export

48. U.S. v. SWRCB, 182 Cal. App. 3d 82, 97, 227 Cal. Rptr. 161, 165 (1986). See *Figure 1* for the location of the State and Federal projects in the Delta.

49. See Gindler & Holburt, *Water Salinity Problems: Approaches to Legal and Engineering Solutions*, 9 NAT. RESOURCES J. 329 (1969) (good discussion of salinity in estuaries and especially the Delta).

50. See *Figure 1* for the location of these diversions. San Francisco's diversion—the Hetch Hetchy Project—includes O'Shaughnessy, Cherry Valley, and Don Pedro Dams located in the Tuolumne River watershed and a 135 mile pipeline to the San Francisco area. The East Bay project is located on the Mokelumne River and includes Pardee and Camanche Dams and a pipeline to Alameda and Contra Costa counties.

51. For example, in 1980, water use of the Sacramento River watershed was over 7 million acre-feet, of which 2.8 million acre-feet was use from local surface supplies. In the watershed of the San Joaquin River and its tributaries, 1980 water use was over 7 million acre-feet, of which more than 3 million acre-feet was from local surface supplies. Some of the major water districts in this area include the Modesto Irrigation District, Turlock Irrigation District, Oakdale and South San Joaquin Irrigation Districts, Madera Irrigation District, and Merced Irrigation District. CALIFORNIA DEPARTMENT OF WATER RESOURCES, *THE CALIFORNIA WATER PLAN - PROJECTED USE AND AVAILABLE WATER SUPPLIES TO 2010*, (Bulletin 160-83), at 111-19 (1983).

plants; or 3) by making releases of water previously stored in upstream reservoirs. This release of "stored water," in effect, augments the natural flow into the Delta when these releases occur in traditional low flow times. Water released from storage must flow through the Delta past the pumping plants to effectively repel salinity. When such releases are made solely for salinity repulsion⁵² they reduce the amount of water available for export to water project customers.

C. Creation of the State Water Resources Control Board

The ability of the state to adequately meet its water quality needs was a concern of the Commission on California State Government Organization and Economy (commonly referred to as the "Little Hoover Commission"), when it issued a report in 1965 on governmental agencies.⁵³ The Commission recommended that the California Water Commission⁵⁴ be merged with the State Water Quality Control Board and have the primary water policy-making role in state government. Under this proposal the Department of Water Resources would establish water quality standards, subject to review by the California Water Commission.

A problem with this proposal was that the Department of Water Resources would have been in the position of regulating itself if the SWP were to meet water quality standards in its operation.⁵⁵ The legislature thus rejected the plan. The Assembly Interim Committee on Water issued a Staff Report in July 1966⁵⁶ which included an alternative recommendation: merge the State Water Rights Board and the State Water Quality Control Board in order to have an "independent" water quality agency.⁵⁷

52. Some project releases are necessary to maintain water quality at the export pumping plants.

53. COMMISSION ON CALIFORNIA STATE GOVERNMENT ORGANIZATION AND ECONOMY, *USE OF BOARDS AND COMMISSIONS IN THE RESOURCES AGENCY* (1965).

54. The Commission is a nine member body within the Department of Water Resources which has primarily a policy advisory role. CAL. WATER CODE §§ 150-166 (West 1971 & Supp. 1988).

55. In 1956 the recommendation that the water quality function be consolidated with the new Department of Water Resources was rejected by the Legislature. *See ASSEMBLY, CALIFORNIA LEGISLATURE, COMM. ON GOVERNMENTAL ORGANIZATION, A DEPARTMENT OF WATER RESOURCES FOR CALIFORNIA*, at 75 (Feb. 8, 1956).

56. CALIFORNIA LEGISLATURE, *ASSEMBLY INTERIM COMM. ON WATER, A PROPOSED WATER RESOURCES CONTROL BOARD FOR CALIFORNIA* (July 1966) [hereinafter *ASSEMBLY REPORT*].

57. *See ASSEMBLY REPORT, supra* note 56, at 16. The Administrator of the Resources Agency testified to the Water Committee that giving the Department both the authority to operate the

The Assembly Report criticized the existing Water Rights Board's inability to protect water quality as part of its control over water rights and particularly cited the Bureau of Reclamation's permits.⁵⁸ The Committee recommended creation of the new Board in its 1967 report to the legislature⁵⁹ and the proposal, with minor changes, was enacted that year.⁶⁰ As the Court of Appeal noted in *U.S. v. SWRCB*, "[t]he stated purpose of this merger was to ensure that 'consideration of water pollution and water quality' would become an integral part of the appropriative right process."⁶¹

The resulting legislation includes this explanation:

. . . the intention of the Legislature to combine the water rights and the water pollution and water quality functions of state government to provide for consideration of water pollution and water quality, and availability of unappropriated water whenever applications for appropriation of water are granted or waste discharge requirements or water quality objectives are established.⁶²

To this date California is the only western state which has the same decisionmaker responsible for both water quality and water rights.

The integration of water quality and water rights was simple enough in an individual water right application.⁶³ The Delta, however, posed a more difficult problem. A lack of answers to critical ecological

SWP and regulate water quality has "met with substantial objection" and would "create a conflict of interests between the different functions which the Department must perform." *Id.* at 17.

58. "After having recognized the need to protect water quality as a part of the rights of Delta water users, the Water Rights Board found itself unable to take the necessary steps to protect those rights [in the Bureau's permits]." ASSEMBLY REPORT, *supra* note 56, at 26. The Committee also stated that "The problem of resolving the protection which the Delta water users should receive, based on their vested rights, is beyond the ability of the presently organized State Water Rights Board to solve." *Id.* at 28.

59. CALIFORNIA LEGISLATURE, ASSEMBLY INTERIM COMM. ON WATER, NEW HORIZONS IN CALIFORNIA WATER DEVELOPMENT, at 52 (Dec. 1966).

60. 1967 Cal. Stat. ch. 284, sec. 2, at 1442 (effective Dec. 1, 1967).

61. 182 Cal. App. 3d at 125, 227 Cal. Rptr. at 184.

62. CAL. WATER CODE § 174 (West 1971). The legislation also added a requirement that, in acting upon applications to appropriate water, the board shall consider water quality control plans which have been established pursuant to Division 7 (commencing with Section 13000) of this code, and *may subject such appropriations to such terms and conditions as it finds are necessary to carry out such plans.*

Id. § 1258 (West 1971) (emphasis added).

63. The Board adopted a standard permit term for new permits and permits on which the Board retained jurisdiction to provide that:

The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans. . . .

State Water Resources Control Board, Decision 1381 (1971).

issues (despite millions of dollars spent on studies and particularly on the factors affecting its fishery resources),⁶⁴ has left the Delta without a definitive water quality control plan. Since a water quality control plan for the Delta involves many more factors in addition to the effect of the state and federal water projects, the Board has struggled to develop a plan with broad application. At the same time it is conditioning water right permits which deal with only a limited number of provisions in the water quality control plan.

IV. DELTA WATER RIGHT DECISIONS OF THE STATE BOARD

A. *Background*

Both the SWP and the CVP received appropriative water rights from the state prior to creation of the State Water Resources Control Board in 1967.⁶⁵

The priorities of the rights of the two projects are very complex.⁶⁶ Since the operations of the projects in the Delta are complicated, to apply priorities rigidly would have been cumbersome and very difficult. Although the State Water Rights Board recognized the problem, since it dealt with the SWP and CVP in separate proceedings it did not

64. A recent report on State Board's current hearings included the following:

Not everyone agrees that all is well with the Bay and Delta fisheries, and there is considerable disagreement over how much of a role water diversion has played. Striped bass, an introduced species now on the decline are receiving a lot of attention in the . . . hearing not only because of their economic importance, but because they serve as possible 'indicators' of the Bay and Delta's overall health. . . . Increased exposure to toxics, changes in food supply, and loss of habitat due to diversions are all implicated in the decline . . . , but it is unclear if water withdrawal has caused or just exacerbated the problems. Natural spawning salmon populations, too, are declining, although hatchery production has kept their overall numbers relatively stable. . . . Water industry groups argue that until a direct relationship between diversions and fishery declines can be proved, standards already in place are satisfactory. . . . Those concerned about the status of the Bay's natural resources hold that the amount of water discharged into the estuarine system is directly correlated to fish catches. . . .

G. Argent, *Bay-Delta Hearing - Part 1*, in WESTERN WATER, at 8 (Jan./Feb. 1988).

65. Major decisions of the State Water Rights Board involving rights of the CVP include: Decision 893 (Folsom Dam) (March 18, 1958); Decision 935 (Friant Dam and San Joaquin River diversions) (June 2, 1959); Decision 990 (Sacramento River and Delta diversions) (Feb. 9, 1961); and Decision 1100 (Stony Creek—Sacramento Valley) (Sept. 26, 1962). The principal water rights decision of the SWP is Decision 1275 (Oroville Dam and Feather River and Delta diversions) (May 31, 1967) (modified by Decision 1291 (Nov. 30, 1967)).

66. For example, the state and federal water right permits number 34. "For the most part, the CVP applications preceded those of the SWP, so that most appropriative water rights of the CVP have a higher priority than the rights of the SWP." *U.S. v. SWRCB*, 182 Cal. App. 3d at 97, 131, n.25, 227 Cal. Rptr. at 188 n.25.

allocate responsibility between the projects.⁶⁷ The state and federal governments responded to this operations problem by entering into a series of agreements to coordinate the storage and pumping by the two projects.⁶⁸ In operating the CVP, the federal government historically did not consider itself bound by state water right decisions and on several occasions refused to abide by the provisions of its water rights permits regarding releases for salinity repulsion.⁶⁹ The United States Supreme Court settled this conflict in 1978 in *California v. U.S.*⁷⁰ The Court held that the CVP was bound by state water right conditions unless they were inconsistent with congressional directives.

71

B. Decision 1379

In 1969, shortly after the State Water Resources Control Board was created, it began extensive water rights hearings under its reserved

67. In Decision 990, the State Water Rights Board did not impose specific salinity control permit terms on the CVP but reserved jurisdiction for "the purpose of allowing the United States, the State of California, and the water users in the Delta, an opportunity to work out their problems by mutual agreement." State Water Rights Board, Decision 990, at 58 (Feb. 9, 1961). A similar reservation for the SWP was included in Decision 1275. State Water Rights Board, Decision 1275, at 42 (May 31, 1967).

68. The earliest was entered into on May 16, 1960. In order to avoid a lengthy adjudication the agreement provided for coordination of the two projects *without respect to the relative priorities of water rights*. It also provided a method of allocating shortages of water supplies. A supplemental agreement was developed in draft form on May 13, 1971, but was never formally adopted although it was followed by the project operators until replaced with the Coordinated Operating Agreement of November 24, 1986. Until the 1986 agreement, the problem was not the sharing formula but what Delta standards would be met by the projects. For example, after Decision 1379 the United States did *not* agree that it was required by law to operate the CVP in compliance with the Delta Standards in that decision or in Decision 1485. Under the 1986 Coordinated Operating Agreement both projects will be operated to meet standards in Decision 1485. See *Agreement Between the United States of America and the State of California for Coordinated Operation of the Central Valley Project and the State Water Project* [hereinafter COA], art. 11(a). The COA is printed as Appendix A to the *Draft Environmental Impact Statement/Report: Coordinated Operation Agreement* (July 1985) (on file at the *Pacific Law Journal*). When the Decision 1485 standards are replaced sometime in 1990, the COA provides for CVP compliance subject to the escape hatch that if the United States ". . . determine[s] that the new Delta standards are inconsistent with Congressional directives then the United States shall promptly request the Department of Justice to bring an action for the purpose of determining the applicability of the new Delta standards to the Central Valley Project." *Id.* art. 11(b). Presumably, if this determination is not made, the CVP will comply with the terms of its revised water rights permits. Congress specifically authorized United States participation in this agreement by enacting Pub. L. No. 99-546 (Oct. 27, 1986).

69. For example, between January 1 and June 1, 1977, the SWP released 81,109 acre feet of water to make up for failure of the CVP to meet applicable standards. CALIFORNIA DEPARTMENT OF WATER RESOURCES, *THE CONTINUING CALIFORNIA DROUGHT*, at 15 (August 1977).

70. 438 U.S. 645 (1978).

71. See Walston, *Federal-State Water Relations in California: From Conflict to Cooperation*, 19 PAC. L.J. 1299 (1988) (discussion of this case and the impact on federal-state water operations).

jurisdiction in several water rights of the state and federal projects to provide salinity protection for the Delta and to coordinate the operations of the projects. This was the first such proceeding after the unification of the water quality and water rights functions and the first hearing which considered both SWP and CVP permits. The Board did not attempt to modify the existing water quality control plans for the Delta and San Francisco Bay. Rather, it conducted a water rights proceeding in which water quality was the major issue. After ninety days of hearings the Board issued its *Decision 1379* in July, 1971.⁷²

The Decision was unlike any prior Board action. Initially, the Board moved to integrate water quality into the Decision and determined that the Delta uses to be protected by imposition of conditions on the projects were those protected under the Federal Water Pollution Control Act and the existing water quality control plan.⁷³ These included "agricultural supply, protection of fish and wildlife, and municipal and industrial supply."⁷⁴ But the Board went further and concluded that it must protect *all* beneficial uses of the Delta regardless of whether the users have prior vested rights.⁷⁵ This was underscored by the Board's decision not only to protect uses such as enhancement of fish and wildlife and recreation but also enjoyment of aesthetic values.⁷⁶ The Board emphasized this action by utilizing a water quality term, "State Delta Standards," to characterize the water quality conditions imposed on the water projects; but the decision did not modify the existing water quality control plans for the Delta which had been adopted under water quality law. Most importantly, the Board required the two projects to meet the "standards" *without regard to the relative priority* of their water rights.⁷⁷

72. Decision 1379, *supra* note 5. See Note, *Delta Water Decision*, 2 *ECOLOGY L.Q.* 733 (1972) (discussing the decision).

73. STATE WATER QUALITY CONTROL BOARD, WATER QUALITY CONTROL POLICY FOR THE SACRAMENTO-SAN JOAQUIN DELTA (1967); STATE WATER RESOURCES CONTROL BOARD, SUPPLEMENTAL WATER QUALITY CONTROL POLICY FOR THE SACRAMENTO-SAN JOAQUIN DELTA (1968).

74. Decision 1379, *supra* note 5, at 28-29.

75. *Id.* at 8.

76. *Id.* at 36, 46. The famed mystery writer Earle Stanley Gardner, a frequent boater in the Delta, was a witness at the Board hearing on the aesthetic values of the Delta.

77. In Decision 1379, the State Board exercised the jurisdiction previously reserved in Decision 900 and Decision 1275. As Decision 1379 affected the rights of both the SWP and CVP it provided "Permittees shall maintain, either by a discontinuation of direct diversion at the project pumps and/or by release of natural flow or water in storage, water quality in the channels of the Delta equal to or better than those enumerated in the State Delta Standards." In effect, the projects were jointly and severally liable to meet these standards. Decision 1379, *supra* note 5, at 52. A similar provision was later included in D. 1485. Decision 1485, *supra* note 5, at 22.

Another notable aspect of the decision was the Board's conclusion that,

. . . on the basis of legislative policy declarations and the Board's statutory powers to condition permits so as to best develop, conserve and utilize in the public interest the water sought to be appropriated, it may not only require the project operators to refrain from interfering with natural flow required for proper salinity control and for fish and wildlife in the Delta, but also provide a reasonable quantity of water *that has been conserved by storage* under authority of their permits for these purposes.⁷⁸

The release of stored water created a problem for the projects in that the Board required that the State Delta Standards "come first" and ". . . must be maintained as a first priority operating criteria for any and all projects . . . that may be constructed or operated as part of the federal and state project facilities."⁷⁹ The state and federal projects were being required to guarantee the protection of these uses even though other water rights holders contribute to the depletion of Delta supplies.⁸⁰

The significance of the Board's decision in both legal and operational terms was recognized immediately⁸¹ and the decision became quite

78. Decision 1379, *supra* note 5, at 15-16 [emphasis added]. The Board was unanimous on this point except that Vice Chairman E. F. Dibble added in a separate opinion that ". . . water conserved by project storage can and should be required by the Board to be released only to the extent that the permittee is compensated for the release of stored water required of him." (opinion of Board Member E. F. Dibble concurring in part with and dissenting in part from Decision 1379, at 1). The Board was aware that requiring such releases could adversely affect the projects financially and noted in the decision that "The Board does not address itself to the subject of repayment of costs of enhancement of fish and wildlife but, hopefully, the Legislature and the Congress will give high priority to this matter." *Id.* at 16. The Board also recognized that vested water right holders in the Delta, for example, might receive water quality or quantity in excess of their vested rights. Noting that "Nowhere does the Board find any California law which provides that the Delta users shall be provided with supplies in excess of their vested rights without payment[.]" the Board suggested ". . . appropriate legal action including injunction against continued diversion." *Id.* at 15. In response to the California Department of Water Resources' request for reconsideration of this point to condition the release of stored water for fish and wildlife enhancement on the Department being appropriated funds to cover its cost, the Board said it was ". . . satisfied that its decision in this respect should not be changed." S.W.R.C.B., Order Denying Reconsideration of, and Clarifying and Correcting Decision 1379, at 2 (September 16, 1971).

79. *Id.* at 50.

80. As the Board noted, ". . . depletions of water in the Delta are also caused by diversions from upstream tributaries that have been made by many metropolitan and agricultural systems for the last century or more. . . . [A]ny measures for requiring the beneficiaries of these upstream depletions to share in the cost of protecting Delta water supplies must be taken by the legislature. The Board has no jurisdiction over these beneficiaries for that purpose." *Id.* at 15. This was based on the Board's historically narrow interpretation of its authority and its lack of jurisdiction to ". . . adjudicate or determine the validity of individual vested water rights. . . ." *Id.* at 8.

81. The Department of Water Resources estimated that the decision would have a "severe

controversial.⁸² Litigation challenging the decision, however, did not reach trial stage by the time the decision was replaced by the second major Delta decision.⁸³

C. Decision 1485

By its terms, Decision 1379 was an interim decision with hearings to be reopened no later than July 1, 1978.⁸⁴ On August 16, 1978 the Board issued Decision 1485. At the same time the Board adopted a Water Quality Control Plan for the Sacramento-San Joaquin Delta and Suisun Marsh. These were the product of a single *consolidated* hearing which considered both the Board's water quality and water rights responsibilities. This was the first time such a procedure was followed.

The water quality standards included in the Water Quality Control Plan were made obligations of both the SWP and CVP. The Board recognized the need to coordinate operation of the two projects and that "[s]eparation of the effects of the two projects on Delta water supplies, uses and environment is not possible. Therefore, terms and conditions related to the Delta, including those for protection of fish

impact on the water supplies available for export to water service contractors. The average reduction in water supply . . . would be about 300,000 acre-feet a year." CALIFORNIA DEPARTMENT OF WATER RESOURCES, CALIFORNIA STATE WATER PROJECT, VOLUME I, HISTORY, PLANNING AND EARLY PROGRESS (BULLETIN 200), at 17 (1974).

82. For example, the Oakland Tribune said "[C]onservationists and Contra Costa County Officials today won a major victory in the long-fought battle over water quality in the Sacramento-San Joaquin Delta and San Francisco Bay. In a monumental decision, the Water Resources Control Board ruled unanimously that the Department of Water Resources and Federal Bureau of Reclamation must maintain average flow almost twice as high as they sought." Oakland Tribune, July 29, 1971, at 1, col. 7. The Los Angeles Times reported the "strict new water quality standards . . . eventually could have a significant impact on water available to Southern California." It termed the decision a "major victory for conservationists." L.A. Times, July 29, 1971, at 28, col. 1. The Director of the Department of Water Resources said the stored water release provision "could be one helluva problem." Monterey Peninsula Herald, July 29, 1971, at ____, col. ____ (quoting W. R. Giannelli).

See Johnson, *Legal Assurances of Adequate Flows of Fresh Water into Texas Bays and Estuaries to Maintain Proper Salinity Levels*, 10 HOUS. L. REV. 598, 624-28 (1973) (discussing the decision and other methods of providing adequate estuarine flows).

83. The decision was stayed from October, 1971 as a result of litigation brought by the Central Valley East Side Project Association and the Kern County Water Agency. Decision 1485, *supra* note 5, at 4. The Department of Water Resources, however, operated the SWP to meet the provisions of the Decision as a matter of operating policy from 1975 until the adoption of Decision 1485. This included the critical drought years of 1976 and 1977.

84. Decision 1379, *supra* note 5, at 63. The Board initiated new proceedings on April 29, 1976. Thirty-five agencies, groups, and the general public testified during thirty-two days of evidentiary hearings.

and wildlife, must be the same in all of these permits.”⁸⁵ The water quality standards were primarily designed to protect consumptive uses (agricultural, industrial and municipal).⁸⁶

The basic logic of the decision was that “water quality in the Delta should be at least as good as those levels which would have been available had the state and federal projects not been constructed, as limited by the constitutional mandate of reasonable use.”⁸⁷ This concept of “pre-project” conditions was important to the state and federal projects since their customers did not want to be responsible for improving water quality beyond those effects which the projects caused. This limited the water quality standards applicable to everyone by tying them to the CVP and SWP operations.

The standards adopted were unique in that they varied by water year.⁸⁸ This allowed for all beneficial uses of fresh water flowing through the Delta, both in-Delta and export use, to share shortages and surpluses. It was an attempt to replicate the way droughts and wet periods affected the Delta under natural conditions. The Board did *not* consider the impact on the Delta of water projects other than the SWP and CVP. Since in dry and critical years the standards would only partially protect beneficial uses, the standards were substantially higher in below normal, above normal and wet years. The latter have historically represented about two-thirds of the years.

In some areas, such as the south Delta, the Board took its historic narrow view of its jurisdiction and did not set standards since the project facilities “do not appear to have a direct impact on water quality conditions” in that area.⁸⁹ The Board made this finding in the face of its own recognition that “[u]pstream depletion [by water projects] and water quality degradation of the San Joaquin River and its tributaries have greatly reduced the flows available for protection in the southern Delta.” Yet, it considered itself powerless to act since the upstream diverters were not before the Board.⁹⁰

85. Decision 1485, *supra* note 5, at 6. The Board said that inclusion of such terms in some but not all permits of the SWP and CVP would “create confusion and would be unworkable.”

86. *U.S. v. SWRCB*, 182 Cal. App. 3d 82, 115, 227 Cal. Rptr. 161, 178 (1986).

87. Decision 1485, *supra* note 5, at 10. Beneficial uses which the Board protected in the standards included: 1) fish and wildlife; 2) agriculture; and 3) municipal and industrial. *Id.*

88. Five water year types were used: wet; above normal; below normal; dry; and critical. *Id.* at 41. The “pre-project” concept and variable years approach were an attempt to *reduce* the impact of the water quality standards in Decision 1485 below of that of Decision 1379, which did not use a “pre-project” or “vested rights” approach. For example, in Decision 1485 the Board estimated that “160,000 acre-feet of additional yield will be conserved as compared to the conditions under the basin plans.” *Id.* at 17.

89. *Id.* at 10.

90. One such diverter—the CVP—was before the Board but its *water right permit* for its

Another major issue addressed by the Board was water quality protection for industrial users along the Delta near Antioch. Since for each acre foot diverted from the Delta by these industries twenty-five acre feet of fresh water must flow out of the Delta to repel salinity, the Board determined that adequate substitute overland supplies are available and the provision of such supply is consistent with the reasonable use requirement of the state constitution.⁹¹

In addition, the Board reiterated the requirement of Decision 1379 that the projects make releases of stored water, if necessary, to meet the water quality standards of the water right decision.⁹² The Board also continued its reservation of jurisdiction relating to 1) salinity control; 2) protection of fish and wildlife; 3) coordination of the CVP and SWP.⁹³ Other parts of the decision included a substantial monitoring program of both water quality and ecological changes. Also, specific works were required to be developed for the Suisun Marsh, including overland conveyance of water to keep soil salinity in the Marsh at acceptable levels.⁹⁴

A final issue concerned the impact of the water projects on the San Francisco Bay. At the time of the hearings no one had solid evidence as to the impact of Delta outflows on the health of the Bay, as contrasted to the Delta. The issue was the potential of significant losses of project water supplies balanced against preservation of the Bay ecology. The Board did not decide the issue and deferred establishment of salinity standards specifically for the Bay. The decision required research studies of the Bay and particularly a determination of the ecological benefits of unregulated outflows.⁹⁵

V. THE REVOLUTION IN WATER RIGHTS: RESOLUTION OF MAJOR LEGAL ISSUES

Although each of the State Board's Delta decisions was subject to judicial challenge, it was not until fifteen years after the first of the

Friant Dam (its most important San Joaquin River diversion) was not one of the permits with reserved jurisdiction being considered in the proceeding leading to Decision 1485. *Id.* at 12. The Friant diversion was severely damaging to the San Joaquin River. In fact, "Friant Dam has been primarily responsible for the elimination or destruction of those salmon runs in the San Joaquin River above the mouth of the Merced River which formerly commenced their migratory journey upstream during the spring months." State Water Rights Board, Decision 935, at 40 (June 2, 1959).

91. Decision 1485, *supra* note 5, at 25.

92. *Id.* at 22.

93. *Id.* at 21-22.

94. *Id.* at 26-27.

95. *Id.* at 30.

these decisions that the major issues they raised and the legal implications of the integration of water quality and water rights reached an appellate court. *United States v. State Water Resources Control Board*,⁹⁶ decided in 1986, resulted from multiple challenges to Decision 1485 and is one of the most important decisions on water rights in recent years.⁹⁷ In effect, it can be considered a “consolidation” of the many far-reaching changes in water rights which have occurred in the past two decades as a result of legislation and judicial decisions.

A. *Procedural Issues With Integrating Water Quality and Water Rights—Water Quality Standards Cannot be Limited by Water Project Considerations*

In 1967 when the legislature placed the responsibility for water rights and water quality in a single state agency, it did not set out procedures as to how the two functions were, in fact, to be carried out—particularly in the context of water rights. For the most part the two functions were considered separately⁹⁸ until Decision 1485 when the Board, for the first time, attempted to consolidate the process of adopting a Water Quality Control Plan and issuing a Water Rights Decision on reserved issues.⁹⁹

While a seemingly logical means of implementing the Board’s dual authority, the court in *U.S. v. SWRCB* held that since the standards in the Water Quality Control Plan were *limited* to those levels which were appropriate to directly implement through the water rights of the SWP and CVP, this resulted in *too narrow* an approach to water

96. 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1986).

97. Those challenging the decision, in addition to the United States, were: Central Valley East Side Project Association, Kern County Water Agency, San Joaquin County Flood Control and Water Conservation District, South Delta Water Agency, Contra Costa County Water Agency, Fibreboard Corp., and Crown Zellerbach Corp. The cases were coordinated in San Francisco Superior Court.

98. In fact, the legislation creating the State Board mandated that there be separate divisions of water quality and water rights, each with a chief appointed by the Board and serving as a “technical advisor” to the Board. CAL. WATER CODE § 186 (West 1971 & Supp. 1988). This provision was designed to prevent the water rights function (with 90 employees at the time of the merger) from swallowing up the water quality function (with fewer than 10 employees at that time).

99. Although the Board issued a water right decision (Decision 1485) and a Water Quality Control Plan as separate documents the Board conducted “a consolidated hearing pursuant to both the water quality control and water right authority of the Board.” Decision 1485, *supra* note 5, at 5. While the Board conducted “integrated actions under these authorities,” it recognized that “the Board’s water right authority is quite distinct and separate from its water quality control authority.” *Id.* at 7.

quality.¹⁰⁰ In other words, by looking at only the state and federal projects' *capabilities* of meeting the water quality standards, the Board restricted its obligations under the Porter-Cologne Act and the Federal Clean Water Act. The Court also said that in a Water Quality Control Plan, the Board must provide *reasonable protection of all beneficial uses*, not just those uses entitled to be protected as senior water right holders to the two projects.¹⁰¹ The Court rejected the Board's "pre-project conditions" basis for setting water quality standards in Decision 1485.¹⁰² That is, the water quality standards established cannot be limited to the water quality which would exist in the absence of the SWP and CVP.

In Decision 1485 the Board did not apply the same "pre-project" analysis to water quality standards for nonconsumptive, instream uses—particularly fish and wildlife. Although they approached without project levels of protection, the Board nevertheless limited the standards because a "higher level" of protection would require the "virtual shutting down of the project [CVP and SWP] export pumps."¹⁰³ As to these instream use water quality standards, the court relied primarily on the decision of the Supreme Court in *National Audubon Society v. Superior Court of Alpine County*¹⁰⁴ and the public trust

100. The court commented that combining water quality and water rights in a single proceeding was "unwise" and noted that the legislature had not mandated a single proceeding. *U.S. v. SWRCB*, 182 Cal. App. 3d 82, 119, 227 Cal. Rptr. 161, 180 (1986). The court did not cite California Water Code section 1258 which specifically provides that "in acting upon applications to appropriate water, the Board shall consider water quality control plans which have been established . . . , and may subject such appropriations to such terms and conditions as it finds are necessary to carry out such plans." CAL. WATER CODE § 1258 (West 1971).

The court pointed out that the water right function is quasi-judicial and the water quality function is quasi-legislative and the two decisions are subject to different standards of judicial review. *U.S. v. SWRCB*, 182 Cal. App. 3d at 112-13, 227 Cal. Rptr. at 175-76. Each function, the court said, has "distinct attributes." *Id.* at 112, 227 Cal. Rptr. at 176. The Board has responded to this distinction in its hearing process for Revision of the Water Quality Control Plan and issuance of a new water right decision. *See infra* note 107.

101. *See* Steinberg & Schoenleber, *Salinity Control and the Riparian Right*, 19 PAC. L.J. 1143 (1988) (discussing the extent to which Delta riparians have a right to salinity protection). The Board, beginning with Decision 1379, took a broad approach to the scope of the water quality standards applicable to the SWP and CVP. In Decision 1379 it said ". . . beneficial uses of water in the Delta must be protected in the public interest without regard to whether or not the users have prior vested rights, the legal basis upon which such rights depend is of significance only to indicate to what extent compensation is required for benefits to those rights by virtue of the subject projects." Decision 1379, *supra* note 5, at 8. The "pre-project conditions" concept of Decision 1485 was a modification of the earlier position of the Board.

102. *U.S. v. SWRCB*, 182 Cal. App. 3d at 116-18, 227 Cal. Rptr. at 178-80. The court noted as well that the pre-project approach did not take into account polluters discharging into the Delta. *Id.* at 118, 227 Cal. Rptr. at 179-80.

103. The court referred to these standards as "'modified without project' level of protection." *Id.* at 149, 227 Cal. Rptr. at 200.

104. 33 Cal. 3d 419, *cert denied*, 464 U.S. 977 (1983).

doctrine it enunciated. The court, in responding to challenges to the Board's authority to impose these standards on the water projects, firmly responded: "In the new light of *National Audubon*, the Board unquestionably possessed legal authority under the public trust doctrine to exercise supervision over appropriators in order to protect fish and wildlife. That important role was not conditioned on a recital of authority. It *exists* as a matter of law itself."¹⁰⁵

With regard to water project responsibility to provide flows to meet water quality standards, the decision in *U.S. v. SWRCB* confirmed the fears held for many years by water project beneficiaries that the broad provisions of the water quality law would result in unreasonable burdens on the SWP and CVP. As is discussed below, however, by also requiring the Board to consider upstream diverters from the Delta, the burden of higher water quality standards potentially can be spread more broadly.¹⁰⁶

In its current process of updating both water rights (Decision 1485) and the Water Quality Control Plan, the Board has fashioned a complex three-stage hearing process to meet the court's objections and still maintain the integration of the water quality and water rights functions.¹⁰⁷ Thus, twenty years after the creation of an entity to

105. *U.S. v. SWRCB*, 182 Cal. App. 3d at 150, 227 Cal. Rptr. at 201.

106. The court illustrated its ruling with a hypothetical.

The effect of the Board's failure to consider upstream users may be illustrated: If the upstream users left enough water in the stream flow to provide salinity control 300 days a year, then under the Board's approach the objectives would be to maintain that same level of water quality. In contrast, if upstream diversions and pollution effectively reduced salinity control in the Delta to only 200 days a year, the without project standards would maintain that lower level of water quality. We believe such an approach is legally unsupportable.

Id. at 120, 227 Cal. Rptr. at 181.

It is important to note that the court observed that "we think the imposition of without project standards upon the projects represents one reasonable method of achieving water quality control in the Delta." *Id.* at 120, 227 Cal. Rptr. at 181. Thus, it would seem that in imposing release requirements as contrasted to setting the standards on water rights holders, both SWP and CVP and upstream, the amount of contribution from each project to meet the standards may be based on a without project analysis for that water right holder, or group of holders. If the junior right holders are not to bear the entire burden, the senior contribution has to be equitably determined.

107. Phase I of the hearing process began in July 1987 and encompassed five subjects: 1) beneficial uses; 2) reasonable protection - in terms of flow and salinity levels - the beneficial uses should be given; 3) impact of pollutants on the beneficial uses; 4) means of implementing flow or salinity objectives; 5) means for identifying and mitigating adverse impacts on beneficial uses resulting from pollutants. The evidence was to differentiate between the effects of salinity and the effects of pollutants on beneficial uses. This evidence will be used by the State Board to prepare a draft *Salinity Control Plan* and a draft *Pollutant Policy Document* to guide the Regional Boards which will revise existing Water Quality Control Plans for the Delta estuary. The Plan will include the usual elements including identification of beneficial uses, objectives to protect these uses (but from salinity and flow effects), a program of implementation, and an

jointly consider water quality and water rights, a process has finally been put in place to accomplish this objective.

B. *Upstream Diverters Must Be Considered in Adopting and Enforcing Water Quality Standards: A Modification of the Priority of Appropriation Rule*

1. *Consideration of Upstream Diverters*

In one of its most significant holdings, the court, in rejecting the concept of "pre-project" conditions (which only included the SWP and CVP) as a basis for water quality standards, held that the Board must also consider other upstream diverters who affect Delta water quality in *setting* these standards.¹⁰⁸ The traditional view is that the Board would have to determine upstream rights before acting to adopt a water quality control plan taking these rights into consideration. This was objected to on the basis that the Board has no authority to do so, and, even, if it did, the result would be a "Frankenstein adjudication" of literally thousands of water rights. The court responded that for this purpose, the Board need only make a "reasonable estimate" of water uses, an analysis made regularly by the Board in determining whether unappropriated water exists for a new applicant.¹⁰⁹

analysis of environmental impacts of the Plan. A significant difference from past plans is the implementation program which will "review . . . the responsibilities of all appropriators to protect the beneficial uses of the Bay Delta Waters". STATE WATER RESOURCES CONTROL BOARD, *Workplan for the Hearing Process on the San Francisco Bay / Sacramento-San Joaquin Delta Estuary*, at 5-8 (Feb. 5, 1987) (emphasis added) [hereinafter WORKPLAN]. This phase, which included sworn testimony and cross examination, concluded on December 29, 1987. The Board took 54 days of testimony and received 22,000 exhibits.

Phase II is expected to begin in July 1988 and will consist of testimony on the draft Plan and Policy Document resulting from Phase I. This will be conducted as a quasi-legislative hearing without sworn testimony and cross examination and is essentially a water quality process. After this hearing the Board will adopt a new *Salinity Control Plan* and then the Board staff will prepare a set of *alternatives* for implementing the objectives in the Plan through a new water right decision. *Id.* at 7-8.

Phase III will begin in April 1989 and will consider evidence on the staff alternatives. *Id.* at 8-9. Finally, after the hearings are closed, the Board will circulate a draft environmental impact report (EIR) (required for a water right decision), hold a hearing on the EIR, and adopt a water right decision to replace *Decision 1485* about July 1990. *Id.* at 9.

108. *U.S. v. SWRCB*, 182 Cal. App. 3d at 118-19, 227 Cal. Rptr. at 179-80.

109. *Id.* at 119, 227 Cal. Rptr. at 180. The court added that "[w]e think a similar global perspective is essential to fulfill the Board's water quality planning obligations." *Id.* at 119, 227 Cal. Rptr. at 180.

In most cases upstream diverters are senior to the rights of the SWP and CVP.¹¹⁰ Thus, the court's decision is that all users—*regardless of priority*—must be considered in setting standards, and providing flows to meet them. This is a significant departure from traditional western water law.¹¹¹ The court has actually extended the concept originally adopted in Decision 1379 (and continued in Decision 1485) when the Board disregarded priority to make the CVP and SWP *equally responsible* for meeting the salinity flow requirements in that decision.¹¹²

110. For example, San Francisco and East Bay Municipal Utility District rights. The former is a pre-1914 appropriative right and the latter a post-1914 appropriative right. As to appropriative rights, the concept of priority, that is, first-in-time, first-in-right, is "the essence" of the doctrine. W. HUTCHINS, *THE CALIFORNIA LAW OF WATER RIGHTS* 130 (1956). "The first in time has the best rights" H. ROGERS & A. NICHOLS, *WATER FOR CALIFORNIA* 300 (1967). The only exception to its application is under statutory preferences for use of water. For example, California Water Code section 106 provides that use of water for domestic purposes is the highest use of water and the next highest is irrigation. CAL. WATER CODE § 106 (West 1971).

Under the dual "California Doctrine" of water rights, riparian rights are generally paramount to appropriative rights. H. ROGERS & A. NICHOLS, *supra*, at 473. *But cf. In re Waters of the Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 358-59, 599 P.2d 656, 668-69, 158 Cal. Rptr. 350, 362 (1979) (in adjudications, although riparian rights are "paramount" unexercised riparian rights may be accorded lower priority than appropriators). In addition, under the provisions of article X, section 2 of the California Constitution, all water rights are limited by "reasonable use." See *supra* note 15 and accompanying text.

111. The policy of the [State Board] has been to impose the burden of salinity control on the CVP and SWP without regard to priority of appropriation, and . . . a possibility that this policy will be extended to other diverters who impact on salinity levels in the Delta. . . can . . . be regarded as a[n] . . . example of state *equitable apportionment* of water resources.

Dunning, *State Equitable Apportionment of Water Resources*, 66 NEB. L. REV. 76, 107-08 (1987). Professor Dunning defines "equitable apportionment" as "[v]arious ways to replace the no-sharing rule of prior appropriation with a sharing rule." *Id.* at 97. His characterization of this development as a substitution of "equity" for "priority" as the paramount consideration in resolving this water controversy is an apt one. He views it as an "unconventional but important response to over appropriation." *Id.* at 78, 97. The usual response to over appropriation, he notes, is to expand the source but this is more difficult today as new water projects are not being developed.

The courts perhaps are uncomfortable with the idea of simply abandoning the established priority principle because of disruptive or counterproductive impact . . .

As time goes on and the difficulties created by adherence to priority become more apparent, however, I believe the significance of equitable considerations is likely to increase. [A]s the pressures on the prior appropriation system become greater, this precedent should be of increasing interest.

Id. at 77, 78, 97.

The concept of departing from rigid priority in *appropriative* rights was portended when the California Supreme Court ruled in 1979 that unexercised *riparian* rights may be given a lower priority than appropriative rights. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 599 P.2d 656, 158 Cal. Rptr. 350 (1979). Although the court said the law did not authorize a future riparian right to be extinguished altogether, the court said that the "Board may make determinations as to the *scope, nature and priority of the right* that it deems reasonably necessary to the promotion of the state's interest in fostering the most reasonable and beneficial use of its scarce water resources." *Id.* at 359, 599 P.2d at 669, 158 Cal. Rptr. at 362. (emphasis added). It is significant that the principal basis for this broad authority to modify riparian rights is the constitutional mandate of "reasonable use."

112. Although the State Board, in denying reconsideration of Decision 1485, disclaimed any

2. *Enforcement Mechanisms are Available to Require All Water Rights Holders, Regardless of Priority or Type of Right, to Meet Water Quality Standards*

While the effect of all diversions, regardless of priority, may now be considered in setting standards, what mechanism does the Board have to require these water right holders to comply with standards the Board adopts? This is a complex problem since upstream users include riparians, pre-1914 appropriators, and post-1914 appropriators. As to the latter category, many of the rights have vested into license status and are not subject to express reserved jurisdiction of the Board.¹¹³ The court responded by stating that the “principal enforcement mechanism available to the Board is its regulation of *water rights* to control diversions which cause degradation of water quality.”¹¹⁴

While the court did not suggest any specific means or legal procedures, the answer lies in the court’s reaffirmation of the rule of “reasonable use” as the cardinal principle of California’s water law.¹¹⁵ Under this constitutional authority and *independent* of its powers reserved in individual water rights permits or licenses, the Board is authorized to modify permit terms to prevent waste or unreasonable use or method of diversion. The court stated that this power of the Board should be *broadly interpreted*.¹¹⁶ A recent case decided by the

intent to alter the relative priorities of the projects, it in fact did so. The Court concluded that [T]he Board’s power to modify the permits [of the CVP and SWP] pursuant to its reserved jurisdiction includes the authority to impose responsibility to maintain water quality upon the projects equally. . . . [W]hen the Board imposed Term 2—requiring equal responsibility for maintaining water quality standards—it acted well within its authority and did not infringe upon or otherwise unlawfully impair the vested appropriative rights of the U.S. Bureau, . . . *U.S. v. SWRCB*, 182 Cal. App. 3d, at 132-33, 227 Cal. Rptr. at 188-90.

113. For example, the CVP San Joaquin River water rights. *See supra* note 90 and accompanying text.

114. *U.S. v. SWRCB*, 182 Cal. App. 3d at 125, 227 Cal. Rptr. at 184 (emphasis added). In making this comment the court noted that the only injunctive relief under water quality laws, for example, is against unauthorized dischargers of pollutants. *Id.* Thus, in California, the water rights function is an important element of water quality enforcement in areas such as the Delta where water rights diversions directly affect water quality.

115. *Id.* at 105, 227 Cal. Rptr. at 170.

116. *Id.* at 129-30, 227 Cal. Rptr. at 187-88. California Water Code section 275 is the Board’s tool to implement the constitutional mandate. Under it, the Board shall “take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state.” The Board and the Department of Water Resources have adopted administrative regulations to carry out this section. *See CAL. ADMIN. CODE* tit. 23, §§ 855-860 (1987). The Board has aggressively challenged unreasonable uses of water. *See, e.g., Imperial Irrigation Dist. v. State*

Court of Appeal for the Fourth District on the issue of the Board's authority under the constitutional provision concluded that the Board has the authority to *adjudicate* issues of unreasonable uses of water.¹¹⁷

It is well established that under the constitutional provision, courts may continuously review use of water and its reasonableness in light of current public policy.¹¹⁸ The Board's reasonable use authority applies to all types of water rights, surface and underground,¹¹⁹ and is the logical legal basis under which the Board can proceed to modify water rights, other than those of the CVP and SWP, as necessary, to implement its water quality authority.¹²⁰ Exercise of a water right not in compliance with water quality standards for the Delta should be

Water Resources Control Bd., 186 Cal. App. 3d 1160, 231 Cal. Rptr. 283 (1986); *People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal. App. 3d 743, 126 Cal. Rptr. 851 (1976). If the water right holder is a riparian, pre-1914 appropriator, or permittee or licensee without reserved jurisdiction, the California Water Code section 275 procedures may have to be followed.

117. A Board order imposing reasonable use restrictions is directly enforceable in court. *Imperial Irrigation Dist. v. State Water Resources Control Bd.*, 186 Cal. App. 3d. 1160, 1171, 231 Cal. Rptr. 283, 290 (1986). The Board also has an adjudicatory function in deciding whether water is appropriated. *Id.* at 1165, 231 Cal. Rptr. at 285.

118. Determination of reasonable use depends upon the totality of the circumstances presented: "The scope and technical complexity of issues concerning water resource management are unequalled by virtually any other type of activity presented to the courts. What constitutes reasonable water use is dependent not only upon the entire circumstances presented but varies as the current situation changes . . ." *Environmental Defense Fund v. East Bay Mun. Util. Dist.*, 26 Cal. 3d 183, 194, 605 P.2d 1,6, 161 Cal. Rptr. 466, 471 (1980). *See also U.S. v. SWRCB*, 182 Cal. App. 3d 82, 129-30, 227 Cal. Rptr. 161, 187 (1986). The constitutional provision is applicable to lawsuits between individual water rights holders. For example, in the leading case of *Joslin v. Marin Municipal Water District*, 67 Cal. 2d. 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967), the California Supreme Court held that a previously exercised riparian right to use water to convey sand and gravel downstream was not a reasonable use of water. *Id.* at 141, 429 p.2d at 895, 60 Cal. Rptr. at 377. The California Supreme Court stated that "what is a reasonable use of water depends on the circumstances of each case, [and] such inquiry cannot be resolved *in vacuo* isolated from state-wide considerations of transcendent importance." *Id.* at 140, 429 P.2d at 894, 60 Cal. Rptr. at 382. The California Supreme Court has suggested that unreasonable use as discussed in *Joslin* may be "any use less than the optimum allocation." *National Audubon Soc'y v. Super. Ct.*, 33 Cal. 3d 419, 447 n.28, 658 P.2d 709, 728 n.28, 189 Cal. Rptr. 346, 365 n.28, *cert. denied*, 464 U.S. 977 (1983).

After noting that public interest organizations have standing to sue to enjoin unreasonable uses of water and that any member of the general public may raise a claim of harm to the public trust, the Supreme Court recently concluded that "the Board's and the state's interest in the conservation and efficient use of water . . . may be asserted, and adequately protected, by initiative of the state itself or of concerned citizens." *In re Rights to Water of Hallett Creek Stream Sys.*, 44 Cal. 3d 448, 749 P.2d 324, 243 Cal. Rptr. 887 (1988).

119. *U.S. v SWRCB*, 182 Cal. App. 3d 82, 129, 227 Cal. Rptr. 161, 187 (1986).

120. The Board adopted this position in noticing the current water right hearing. *See WORKPLAN*, *supra* note 108, at 4. Upstream diverters who participated in Phase 1 of the Board's hearing included, inter alia: Modesto Irrigation District; East Bay Municipal Utility District; Pacific Gas and Electric Co.; City and County of San Francisco; Turlock Irrigation District; Butte Creek Farms; Sacramento Municipal Utility District.

considered an unreasonable use of water.¹²¹ It is clear that one does not have a property right in the unreasonable use of water.¹²² The court in *U.S. v. SWRCB* reaffirmed the Board's broad latitude in this area and stated that the "touchstone for the Board's actions is the 'public interest'."¹²³

Under the public trust doctrine of *National Audubon*, water rights are also subject to modification to meet water quality standards. The court in this case stated that,

[o]nce the state has approved an appropriation, the public trust imposes a duty of continuing supervision over the taking and use of the appropriated water. . . . [T]he state is not confined to past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs. The state accordingly has the power to reconsider allocation decisions. No vested rights bar such reconsideration.¹²⁴

121. *U.S. v. SWRCB*, 182 Cal. App. 3d 82, 129, 227 Cal. Rptr. 161, 187. The court in *SWRCB* addressed this issue directly:

We perceive no legal obstacle to the Board's determination that particular methods of use *have become unreasonable* by their deleterious effects upon water quality. Obviously, some accommodation must be reached concerning the major public interests at stake: the quality of valuable water resources and transport of adequate supplies for needs southward. The decision is *essentially a public policy judgment* requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of its special knowledge and expertise and its combined statewide responsibility to allocate the rights to, and to control the quality of, state water resources.

Id. at 130, 227 Cal. Rptr. at 188 (emphasis added).

122. *In re Waters of the Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 354, 599 P.2d 656, 665, 158 Cal. Rptr. 350, 359. (1979).

123. *U.S. v. SWRCB*, 182 Cal. App. 3d 82, 113, 227 Cal. Rptr. 161, 176 (1986). The Board's consideration of the public interest is derived from California Water Code section 1253 which provides "[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." CAL. WATER CODE § 1253 (West 1971) (emphasis added). This is the "*primary statutory standard*" controlling the Board's water rights function. *Bank of Amer. Nat. Tr. & Sav. Ass'n v. SWRCB*, 42 Cal. App. 3d 198, 116 Cal. Rptr. 720 (1974) (the court stated that the board has "broad discretion"). *See also Fullerton v. SWRCB*, 90 Cal. App. 3d 590, 153 Cal. Rptr. 518 (1979).

124. 33 Cal. 3d 419, 447, 658 P.2d 709, 728, 189 Cal. Rptr. 346, 365 *cert. denied*, 464 U.S. 977 (1983). The State Board cites *National Audubon* as authority for the current hearing. *See WORKPLAN*, *supra* note 107, at 4. Other authority cited include: the constitutional provision (which it refers to as "continuing jurisdiction"); reserved jurisdiction in SWP and CVP water rights and other water rights issued since about 1965; the Delta Protection Act (California Water Code sections 12200-12220); Watershed of Origin protections (California Water Code sections 11460-11463); County of Origin protections (California Water Code sections 1505 and 1505.5); and the San Joaquin River Protection Act (California Water Code sections 12230-12233). *Id.*

See also Golden Feather Community Ass'n v. Themalito Irrigation Dist., 199 CAL. App. 3d 402, 244 Cal. Rptr. 830 (March 6, 1988) (rehearing granted April 6, 1988). This case limited public trust to "navigable water" and water affecting navigable waters. The doctrine does not apply to artificial reservoirs. The court did not define navigable waters. *But see CAL. HARB. &*

It is important to note that the court in *U.S. v. SWRCB* placed primary emphasis on the constitutional provision, a long established provision, rather than the newer public trust doctrine, although the results would seem to be the same under either theory.

3. *Modification of CVP Water Rights to Meet Water Quality Standards Does Not Impair Contract Rights of the Project's Customers*

In this final issue, the court in *U.S. v. SWRCB* responded that imposition of water quality requirements on the CVP did not violate the contractual rights of the customers of the project.¹²⁵ The federal contractors argued that the water quality standards constituted an unconstitutional taking of property without due process or compensation as well as an unconstitutional impairment of contract.¹²⁶

In balancing the effect of the exercise of the state's police power against the rights of the users, the court concluded *as a matter of law* that no substantial impairment occurs. The court's logic tracked the remainder of its decision when it stated,

[t]he CVP's appropriated water rights are, by definition, conditional—subject to the continuing supervisory authority of the Board, the constitutional limitation of reasonable use, and the priorities of senior rights holders. Logically, neither the project *nor* the contractors could have any reasonable expectation of certainty that the agreed quantity of water will be delivered.¹²⁷

The court added that even if it were to find the impairment substantial, the Board's action was justified as a "valid exercise of the state police power." The court referred to the Board's "plenary power and duties of management and oversight of valuable water resources." Since the Board established a reasonable level of water quality protection it was authorized to apply the standards to the CVP "in the larger interest of the public welfare."¹²⁸

NAV. CODE § 36 (West 1978). The statute defines navigable waters as those which come under the jurisdiction of the United States Corps. of Engineers. *Id.* This jurisdiction was greatly expanded by the Clean Water Act. *See* United States v. Ashland Oil, 504 F.2d 1317 (6th Cir. 1974).

125. *U.S. v. SWRCB*, 182 Cal. App. 3d 82, 148, 227 Cal. Rptr. 161, 200 (1986). In earlier proceedings state water project contractors made the same argument.

126. *Id.*

127. *Id.* at 147, 227 Cal. Rptr. at 199.

128. *Id.* at 148, 227 Cal. Rptr. at 200.

VI. CONCLUSION

The water rights changes discussed in this article have evolved over the past two decades as a result of legislation, State Board decisions, and judicial decisions. The judicial decisions have recognized the public trust and given greater viability to the reasonable use requirements of the state constitution. This article has focused on that part of the process involving diversions affecting the Sacramento-San Joaquin Delta. But the legal principles which have been developed have state-wide application.

The emphasis in all the recent judicial decisions has been on giving greater authority to the state in management of water resources to take into account changing needs. A key element of this authority is the ability to re-open and reevaluate prior rights as well as to condition new ones.¹²⁹ The changes in water quality law have been particularly important in the Delta where the principal impact of water projects is on water quality. The California model of a single agency to regulate both water quality and water rights was developed because of dissatisfaction with the state's ability to relate water rights to salinity needs in the Delta.

The result of the merger of water quality and water rights in California is a unique system among western states. After years of evolutionary development by the State Water Resources Control Board, the process of implementation of the dual authority has been integrated with current constitutional requirements and the public trust in *U.S. v. SWRCB*. Based on the holdings in this case, the Board has embarked upon another round of water right and water quality hearings in the Delta.

This new process takes into account the Board's ability to require all upstream water rights, not just those of the SWP and CVP to

129. In summary, *Joslin v. Marin Municipal Water District*, 67 Cal. 2d 132, 429 P.2d 889, 60 Cal. Rptr. 377 (1967), and *People ex rel State Water Resources Control Board v. Forni*, 54 Cal. App. 3d 743, 126 Cal. Rptr. 85 (1976), and *In re Waters of the Long Valley Creek Stream System*, 25 Cal. 3d 339, 599 P.2d 656, 158 Cal. Rptr. 350 (1979), each dealt with limiting riparian rights in light of current conditions and public policy. *Environmental Defense Fund v. East Bay Municipal Utility District*, 26 Cal. 3d 183, 605 P.2d 1, 161 Cal. Rptr. 466 (1980), *Imperial Irrigation District v. State Water Resources Control Board*, 186 Cal. App. 3d 1160, 231 Cal. Rptr. 283 (1986), and *U.S. v. SWRCB*, 182 Cal. App. 82, 227 Cal. Rptr. 283 (1986), each dealt with a broadened scope of the constitutional provision limiting water rights to reasonable use. Finally, *National Audubon Society v. Superior Court of Alpine County*, 33 Cal. 3d 419, 658 P.2d 709, 189 Cal. Rptr. 346, cert. denied 464 U.S. 977 (1983), established the broadest authority of all—the public trust.

meet the standards. The Board will be required to base its water quality standards on reasonable protection of all beneficial uses in the estuary, and will not be limited by the needs of vested rights nor the ability of the CVP and SWP to meet the standards. The Board has a clear direction to protect fish, wildlife and other instream uses.

While the process has been evolutionary, the result is revolutionary when comparing the California system with those of other western states. It is also unique to the extent it gives discretionary authority to the state water rights administrator to consider a broad range of public policy issues and to impose its requirements on water right holders without regard to priority or nature of right. In this respect, the California procedure which has evolved is a one-of-a-kind modern water rights system.