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WATERS AND WATER RIGHTS

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I.

Water Rights.

California led the states of the West in adoption of the prior appropriation system of water rights. From the time of the Gold Rush, miners in camps throughout the Sierra Nevada made extensive use of water resources, generally in accordance with local custom. Early on the Supreme Court of California concluded that “a universal sense of necessity and propriety” mandated judicial protection of beneficial users of water on federal public domain lands, in accordance with their temporal priority. *Irwin v. Phillips*, 5 Cal. 140, 146 (1855).

Although *Irwin* adopted prior appropriation, it did not reject common-law riparian doctrine. That doctrine was irrelevant in *Irwin* because the parties invoking it were deemed to lack sufficient interest in the land to possess riparian rights. *Id.* at 146. Shortly after *Irwin*, however, the Supreme Court of California appeared to accept riparianism where a claimant to water had “appropriated” land on a watercourse. *Crandall v. Woods*, 8 Cal. 136, 143 (1857). The existence of riparian water rights in California nonetheless remained in doubt until the famous decision in *Lux v. Haggin*, 69 Cal. 255, 10 P. 674 (1886). In that opinion, which runs two hundred pages in the reports and which amounts to a comprehensive treatise on the California water rights law of that time, the Supreme Court of California on a 4-3 vote decided that riparian and appropriative water rights are both to be recognized in the state. That remains the case today, and in fact California has been the most protective of riparian water rights of any of the Western states. [See generally *supra* Treatise ch. 8.]

California follows the “reasonable use” theory of riparianism. *Half Moon Bay Land Co. v. Cowell*, 173 Cal. 543, 551, 160 P. 675, 678 (1916). Although a California court in conventional fashion has said a riparian has “a correlative right ... [to be shared] reciprocally with the other riparian owners,” *Prather v. Hoberg*, 24 Cal. 2d 549, 560, 150 P.2d 405, 411 (1944), it has also suggested that “proportional” apportionment of water among riparians is desirable. *Id.* And the reasonable use extends only to the natural, albeit regulated, flow of a stream. The Supreme Court of California has stated that a riparian right does not permit the “seasonal” storage of water, e.g., the impoundment of water in the winter or spring for use in the summer. *Lodi v. East Bay Mun. Util. Dist.*, 7 Cal. 2d 316, 335, 60 P.2d 439, 447 (1936). “Regulatory” storage, “a mere temporary detention of water by dams,” as opposed to “extensive, prolonged, and indefinite storage,” is, however, permitted. *Herminghaus v. Southern Cal. Edison Co.*, 200 Cal. 81, 111, 252 P. 607, 619 (1926), *cert. dismissed*, *Southern Cal. Edison Co. v. Herminghaus*, 275 U.S. 486 (1927).

In recent years, some courts have stated by way of dictum that riparian rights are paramount to appropriative rights in California, as if that is a necessary priority. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 347, 158 Cal. Rptr. 350, 354, 599 P.2d 656, 660

(1979). But *Lux v. Haggin*, 69 Cal. 255, 372, 10 P. 674, 741–42 (1886), decided that appropriative rights initiated prior to a grant of a portion of the public lands of the United States take precedence by federal law over the riparian rights attached to such land, and that principle from *Lux* remains good law today. It was adhered to in *Pleasant Valley Canal Co. v. Borrer*, 61 Cal. App. 4th 742, 72 Cal. Rptr. 2d 1 (1998). “[W]here a settler diverts water on the public domain and thereby acquires a right to appropriate as much of it as he or she puts to a beneficial use within a reasonable time ... [the appropriative right] is superior to the right of a riparian owner who subsequently obtains title to public land from the government.” *Id.* at 774, 72 Cal. Rptr. 2d at 22 (citing *Haight v. Costanich*, 184 Cal. 426, 194 P. 26 (1920)). Furthermore, where there is a stream-wide settlement of water rights by means of a “statutory adjudication,” unexercised riparian rights may be given a very low priority. *In re Waters of Long Valley Creek Stream Sys.*, 25 Cal. 3d 339, 158 Cal. Rptr. 350, 599 P.2d 656 (1979).

To be riparian in California, land must be contiguous to the water source, unless an intent to reserve the riparian right for a severed parcel can be established by the language of the deed or by implication. *Hudson v. Daily*, 156 Cal. 617, 624, 105 P. 748, 757 (1909). *See also Eutenier v. Kluge*, 2006 WL 2879781*8 (Cal. App. 1 Dist. 2006) (failure to prove loss of riparian rights not intended by a grant deed). Thus, in most instances, a severed parcel rejoined with a riparian parcel will not enjoy riparian status—this is the so-called “source of title” rule that riparian land is defined as “the smallest tract held under one title in the chain of title leading to the present owner.” *Hudson v. West*, 47 Cal. 2d 823, 829, 306 P.2d 807, 810 (1957); *Pleasant Valley Canal Co. v. Borrer*, 61 Cal. App. 4th 742, 774–775, 72 Cal. Rptr. 2d 1, 23 (1998). Despite vehement arguments by the state to the contrary, the Supreme Court of California reaffirmed the view that land owned by a federal agency is deemed in California law to be riparian, if the usual requirements for that status are satisfied. *In re Water of Hallett Creek Stream Sys.*, 44 Cal. 3d 448, 467, 243 Cal. Rptr. 887, 898, 749 P.2d 324, 334 (1988). Unless the federal land is reserved for a federal purpose such as a national forest, however, federal law provides that the riparian rights of the federal government are subordinated to the rights of appropriators established under state law. *Id.* at 468, 749 P.2d at 335, 243 Cal. Rptr. at 898.

In *Herminghaus v. Southern Cal. Edison Co.*, 200 Cal. 81, 252 P. 607 (1926), *cert. dismissed*, *Southern Cal. Edison Co. v. Herminghaus*, 275 U.S. 486 (1927), the Supreme Court of California held that a downstream riparian could command the entire flow of a river to flood pastureland, for reclamation of alkaline soil and for irrigation, thus preventing the upstream development of a power project on the basis of an appropriation. The court deemed the downstream riparian use to be reasonable and in any event followed an earlier decision that riparians, limited by a standard of reasonableness among themselves, were held to no such standard in contests with appropriators. As a direct result of that decision, the California Constitution was amended in 1928 to extend a reasonableness standard to disputes between riparians and appropriators. This was done by prohibiting the waste of water and limiting all water rights to reasonable beneficial use.

The antiwaste language, now found in Article X, § 2 of the California Constitution, was considered in the leading case of *Joslin v. Marin Mun. Water Dist.*, 67 Cal. 2d 132, 60 Cal. Rptr. 377, 429 P.2d 889 (1967). In *Joslin*, which involved a highly unusual set of facts, the court held pursuant to the constitutional mandate that the use of water to transport sand and gravel is unreasonable “as a matter of law.” *Id.* at 141, 429 P.2d at 895, 60 Cal. Rptr. at 383. A more typical fact pattern, at least in that the use of water was agricultural (although nonirrigation), was presented in *People ex rel. State Water Res. Control Bd. v. Forni*, 54 Cal. App. 3d 743, 126 Cal. Rptr. 851 (1976). There the court held that pumping water directly from a potentially overtaxed river for the protection of grapevines from frost during cold snaps, instead of constructing storage

facilities which could be filled in advance of the time when frost protection was needed, might constitute a constitutionally unreasonable use of water. Even more typical are the facts in *Imperial Irrigation Dist. v. State Water Res. Control Bd.*, 225 Cal. App. 3d 548, 275 Cal. Rptr. 250 (1990), where the court upheld the authority of a state agency to require a water district wasting water in various ways to develop a water conservation plan.

Article X, § 2 also requires that “a permit to impound water in a reservoir must state, and the Water Board must determine, that an actual, intended beneficial use, in estimated amounts, will be made of the impounded waters.” *Central Delta Water Agency v. State Water Res. Control Bd.*, 124 Cal. App. 4th 245, 253 (2004). In that case the real parties in interest, Delta Wetland Properties and others, had been issued permits to divert water from the Sacramento-San Joaquin Delta into reservoirs to be constructed on two Delta islands. The plan was to red divert the water later on for sale to potential purchasers in unknown amounts. The water board had dealt with the uncertainties of the project through permit conditions. But the court disapproved of this technique. It said that since the permit applications failed to set forth the actual use or uses of the impounded water, “it was not possible for the Board to estimate the reasonable amount of water that could be put to any specific beneficial use.” *Id.* at 261.

Administrative control of water rights in California dates from the early part of the twentieth century. In 1911, the Conservation Commission was established to gather data and information on forestry, water, mining and other matters, in order to propose reform of the laws on these subjects. It recommended that a permit and license system for the appropriation of unappropriated surface water be established in order to reduce costly and repetitive litigation and to provide an administrative check upon hoarding of water resources by power companies or other large interests. This recommendation, enacted by the Water Commission Act of 1913, was approved by the people in a referendum in 1914. Since December 19, 1914, all new appropriations of surface water or of water flowing in subterranean streams in a known and definite channel have required application to and approval of an administrative agency of the State. This agency, today the State Water Resources Control Board (SWRCB), now routinely inserts in the permits and licenses it issues terms and conditions designed to protect both the public interest and the existing water rights of other users of the source. Some of the complexities of the terms and conditions used in the permitting and licensing of appropriative water rights in California are illustrated by *El Dorado Irrigation Dist. v. State Water Res. Control Bd.*, 48 Cal. Rptr. 3d 468, 473 (Cal. App. Ct. 3 Dist. 2006) (imposition of term against plaintiff, a senior appropriator, but not against various junior appropriators, contravened the rule of priority without adequate justification; although the rule of priority “is not absolute, the Board is obligated to protect water right priorities unless doing so will result in the unreasonable use of water, harm to values protected by the public trust doctrine, or the violation of some other equally important principle or interest”). A concurring opinion argued that priority was irrelevant to the case, but that the term, which related to water quality in the Sacramento—San Joaquin Delta, could not be imposed on the plaintiff because the SWRCB’s Delta water quality plan has not been extended to upstream diverters. *Id.* at 986. (Permit applications and brochures on the procedures to be followed may be obtained from the SWRCB at P.O. Box 100, Sacramento, CA 95801). [See generally *supra* Treatise ch. 15.]

Within the SWRCB, a Division of Water Rights is responsible for administering the water rights program. Historically over ninety nine percent of the division’s work was supported by California’s General Fund. But in 2003, the state legislature determined that this work would henceforth be paid for by fees. Stats. 2003, ch. 741, § 85. These fees thus far have survived a challenge that they are taxes which violate [article XIII A of the California Constitution](#) (Proposition 13, adopted in 1978). *Cal. Farm Bur. Fed’n v. Cal. State Water Res. Control Bd.*, 53

Cal. Rptr. 3d 445, 459-463 (Cal App. 3 Dist. 2007) (review granted Apr. 11, 2007) (noting that “[s]imply because a fee exceeds the reasonable cost of providing the service or regulatory activity for which it is charged does not transform it into a tax”). But the fee schedule formulas set forth in SWRCB regulations have been declared to be “unconstitutional and invalid.” *Id.* at 469.

California water rights law in the nineteenth century focused on the use of surface waters. By the turn of the century, however, groundwater in Southern California had become the object of disputes. The Supreme Court of California in *Katz v. Walkinshaw*, 141 Cal. 116, 70 P. 663 (1902), 74 P. 766 (1903), developed a set of rules for groundwater known as the “correlative rights” doctrine. Owners of land overlying a groundwater basin who use the water on the overlying land were recognized as holding the paramount right. Such owners among themselves are to share the water on a correlative basis, similar to the sharing of surface waters by riparians. Any water surplus to the needs of these overlying owners remains available for appropriation by others, in accordance with the usual “first-in-time, first-in-right” rule of priority.

The *Katz* rules for the allocation of groundwater were greatly undermined by *Pasadena v. Alhambra*, 33 Cal. 2d 908, 207 P.2d 17 (1949), which developed a new theory known as “mutual prescription” and which established that aggregate pumping of groundwater must be limited to the “safe yield” of an aquifer. The prescriptive theory of *Pasadena* in turn, however, was undermined by a later decision that public entities are not subject to mutual prescription, *Los Angeles v. San Fernando*, 14 Cal. 3d 199, 123 Cal. Rptr. 1, 537 P.2d 1250 (1975), so that today in a groundwater rights adjudication in California it seems that *Katz* once again would be considered important.

Percolating groundwater in California is not subject to the state permit and license system used for the appropriation of surface water and water flowing in subterranean streams in a known and definite channel, and it has been subject to only sporadic state regulation of any sort. In the absence of comprehensive state regulation of groundwater, some water districts have regulated groundwater pursuant to either general or special acts of the legislature. Districts created by special act include the following: Honey Lake Valley Groundwater Management District (Water Code Appendix §§ 129-101 *et seq.*), Long Valley Groundwater Management District (Water Code Appendix §§ 119-101 *et seq.*), Sierra Valley Groundwater Management District (Water Code Appendix §§ 119-101 *et seq.*), Mono County Tri-Valley Groundwater Management District (Water Code Appendix §§ 128-1 *et seq.*), Mendocino City Community Services District (Water Code §§ 10700 *et seq.*), Pajaro Valley Water Management Agency (Water Code Appendix §§ 124-1 *et seq.*), Ojai Basin Groundwater Management Agency (Water Code Appendix §§ 131-101 *et seq.*), Fox Canyon Groundwater Management Agency (Water Code Appendix §§ 121-102 *et seq.*), Orange County Water District (Water Code Appendix §§ 40-1 *et seq.*), Monterey Peninsula Water Management District (Water Code Appendix §§ 118-1 *et seq.*), Santa Clara Valley Water District (Water Code Appendix §§ 60-1 *et seq.*), and Willow Creek Valley Groundwater Management District (Water Code Appendix §§ 135-101 *et seq.*). *Great Oaks Water Co. v. Santa Clara Valley Water Dist.*, 170 Cal. App 4th 956, 88 Cal. Rptr. 3d 506 (2009), includes some discussion of how the Santa Clara Valley Water District manages groundwater. Furthermore, state legislation authorizes any local agency which provides water service (typically from surface water sources) to adopt a groundwater management plan. Groundwater Management Act, Cal. Water Code §§ 10750 *et seq.* (commonly known as “AB 3030”). AB 3030 plans exist in many areas of California.

In addition to groundwater regulation by water districts and water purveyors of other types, a number of counties in recent years have enacted ordinances regulating groundwater. Typically counties engaged in such activity have seemed particularly interested in controlling the

export of groundwater outside the county. In 1992, perhaps with an anti-export objective ultimately in view, the County of Tehama enacted an ordinance requiring a permit to extract groundwater for the purpose of use on land other than where the extraction occurs. This permit requirement was challenged, in part on preemption grounds, by farmers who desired to pump groundwater from beneath land they owned in Tehama County for use in other counties. The ordinance was, however, upheld in *Baldwin v. County of Tehama*, 31 Cal. App. 4th 166, 36 Cal. Rptr. 2d 886 (3d Dist. 1994).

In California, storage space in aquifers is a “water resource” subject to general water law provisions. Thus, the antiwaste language in Article X, Section 2 of the state constitution, which refers to “the water resources of the State,” encompasses “[s]ubsurface storage, which is akin to a natural reservoir.” *Central and West Basin Water Replenishment Dist. v. Southern California Water Co.*, 109 Cal. App. 4th 891, 905, 135 Cal. Rptr. 2d 486, 495 (2003). Control of such storage space has become increasingly important in California as interest in conjunctive use projects has grown. These include both “wet water” projects for the storage and later recovery of nonnative water and “in lieu” ones which substitute forbearance from groundwater pumping for physical recharge, with the pumper taking surface water in lieu of the groundwater. *See generally* Art Kidman, *Groundwater Storage: Not As Easy As It Sounds*, 14 Cal. Water L. & Pol’y Rep. 164 (2004). In a dispute over the control of storage space in the Central Basin, which underlies much of the western portion of Los Angeles County, the Court of Appeal ruled against the 148 public and private entities with adjudicated rights to extract water from the basin. It held that the storage space in the aquifer is a public resource, *Central and West Basin Water Replenishment Dist.*, 109 Cal. App. 4th at 904, 135 Cal. Rptr. 2d at 495 (2003) (review denied Aug. 27, 2003), which a water district is authorized to manage. *Id.* at 915, 135 Cal. Rptr. 2d at 504. The statute which governs the district only explicitly provides it with the authority to store water in order to replenish the basin and the authority to “manage and control water for the beneficial use of persons or property within the district.” *Cal. Water Code*, § 60221(e). But the court said “the plain language” of the statute gives a “broad power” which “necessarily encompasses management of at least some portion of the storage space because the water [the district] is authorized to manage and control is located in the basin’s storage space.” 109 Cal. App. 4th at 915, 135 Cal. Rptr. 2d at 504. The water the adjudicated right holders are authorized to pump is also, of course, located in the basin’s storage space.

In one other decision of interest on the subject of groundwater law in California, in an insurance coverage case the Court of Appeal concluded that for purposes of the “owned property” exclusion in a liability insurance policy, groundwater is not owned by the state. *State of California v. Superior Ct. of Riverside Cty.*, 78 Cal. App. 4th 1019, 93 Cal. Rptr. 2d 276 (2000). In litigation in which California is seeking to recover from various insurers environmental clean-up costs related to contaminated groundwater at the infamous Stringfellow Acid Pits in Southern California, the Court of Appeal set aside a trial court ruling that the exclusion applies. The appellate court concluded that although “[t]he State ‘owns’ groundwater in a regulatory, supervisory sense...it does not own it in a possessory, proprietary sense.” 78 Cal. App. 4th at 1033.

In California there has been considerable discussion of the proper definition of “subterranean streams flowing through known and definite channels,” a term used in Section 1200 of the Water Code to ensure such streams will be treated for certain purposes like surface water. The importance lies in the fact that new appropriations of surface water and of water in these subterranean streams are subject to the permit and license jurisdiction of the State Water Resources Control Board (SWRCB). After controversy over a draft decision by the board perceived by some as using a broadened definition of the term, the board commissioned Professor

Joseph Sax of the University of California at Berkeley to prepare a report with recommendations on the topic. The report, titled “Review of the Laws Establishing the SWRCB’s Permitting Authority Over Appropriations of Groundwater Classified as Subterranean Streams and the SWRCB’s Implementation of Those Laws,” was released by the board on January 29, 2002. It suggests the term should be read to create an “impact test,” where the key inquiry is the impact of groundwater pumping on surface water flows, “rather than seeking to identify a physical entity with a specific shape.” A critique of the report can be found at D. Aladjem, *Groundwater Management in California: The Sax Report and Beyond*, 12 Cal. Water L. & Pol’y Rep. 253 (July 2002). The chairman of the SWRCB has indicated that without legislative direction, the board will not adopt the impact test recommended by Professor Sax. Furthermore, the Court of Appeal said regarding the impact test that “we find no support for it in the legislative history or text of the statute.” *North Gualala Water Co. v. State Water Res. Control Bd.*, 139 Cal. App. 4th 1577, 1590 n. 8, 43 Cal. Rptr. 3d 821, 831 n. 8 (Cal. App. 1 Dist. 2006).

The SWRCB’s four-part test to determine whether groundwater falls within its permitting and licensing authority is as follows: a subsurface channel must be present; the subsurface channel must have relatively impermeable bed and banks; the course of the channel must be known or be capable of being determined by reasonable inference; and, finally, groundwater must be flowing in the channel. *In re Determination of Legal Classification of Groundwater in the Pauma and Pala Basins etc.* State Water Res. Control Bd. Dec. No. 1645 (Oct. 17, 2002); *In re Garraputa Water Co.*, State Water Res. Control Bd. Dec. No. 1639 (June 17, 1999). The SWRCB’s test was approved in *North Gualala Water Co. v. State Water Res. Control Bd.*, 139 Cal. App. 4th 1577, 1606, 43 Cal. Rptr. 3d 821, 844 (Cal. App. 1 Dist. 2006), subject to certain qualifications. The court noted that although the SWRCB would not have permit and license jurisdiction over an underground stream “that wanders independently of the banks of the putative channel,” *id.* at 1602, 43 Cal. Rptr. 3d at 841, it does have such jurisdiction if the stream generally follows the channel and local deviations can be satisfactorily explained. *Id.*

In 1980, the California legislature embraced “the voluntary transfer of water and water rights where consistent with the public welfare of the place of export and the place of import.” *Cal. Water Code § 109(a)*. After that there was much discussion and study of what today is often known as “water marketing,” but § 109 and other statutory provisions did not quickly lead to the development of a broad-based water market in California. Brian E. Gray, *A Primer on California Water Transfer Law*, 31 *Ariz. L. Rev.* 745, 780 (1989). [*See generally supra* Treatise § 14.04.]

Water marketing received a major boost in 1991, however, albeit via a government-operated market. As California experienced its fifth consecutive year of drought, the state Department of Water Resources (DWR), at the direction of the governor, established a “water bank.” This bank, operated by DWR independently of the State Water Project (also managed by DWR), purchased just over 820,000 acre-feet of water pursuant to a model contract developed for use with 351 sellers. A fixed price of \$125 per acre-foot was paid to all sellers. The water bank then sold close to 400,000 acre-feet of that water to those with critical needs, at a price of \$175 per acre-foot plus additional costs for conveying the water to the place of use. Most of the balance of the water purchased went to cover carriage water losses in the Delta and to provide carryover water for the State Water Project. The difference between the purchase price and the sales price was calculated to cover carriage water needs, contract administration and monitoring.

By and large those who sold water to the water bank either used groundwater in lieu of the surface water they sold or fallowed land. Both led to controversy in the areas of origin, where significant detrimental impacts on third parties were alleged. These included allegations that land fallowing, which amounted to 162,000 acres statewide as a result of water bank operations, led to

significantly increased social service expenditures in some counties. Fishing groups also claimed that substantial damage to certain fisheries occurred as a result of water marketing organized by the water bank.

Improved water supply conditions in 1992 led to a water bank operation much reduced in size. Just over 154,000 acre-feet of water were allocated to areas of critical need, fulfilling all requests. DWR policy for 1992 was to avoid transactions that would require the fallowing of land and to act as a broker rather than as a buyer. In view of the end of California's drought in 1993, the water bank handled no transactions that year, but an Environmental Impact Report on the water bank was prepared.

Over the years, the practice of water rights law in California has frequently involved the SWRCB. That board issues the permits and licenses for new appropriations of surface water and has the authority (seldom exercised) to file an action to protect the quality of groundwater. [Cal. Water Code § 2100](#). The permit allows the initial diversion and/or storage of water, whereas the license “confirms the right to the appropriation of such an amount of water as has been determined to have been applied to beneficial use.” [Cal. Water Code § 1610](#). A licensed water right is good in perpetuity, provided that the water continues to be put to reasonable beneficial use and that there is compliance with the terms and conditions in the license, although the right is subject to limitations imposed pursuant to the public trust doctrine. New nonriparian uses of surface water made without state approval are a trespass, and they may not be justified vis-à-vis the state on a theory of prescription. [People v. Shirokow](#), 26 Cal. 3d 301, 162 Cal. Rptr. 30, 605 P.2d 859 (1980). In very limited circumstances courts have recognized that water may be used in a nonriparian fashion, without showing either an appropriation perfected prior to the beginning of state control or the existence of a permit or license, if there is a “pueblo” right. That right, derived from Spanish and Mexican law, allows a city as the successor to a pueblo to use water naturally occurring within the city limits for the use of the inhabitants of the city. [Los Angeles v. San Fernando](#), 14 Cal. 3d 199, 123 Cal. Rptr. 1, 537 P.2d 1250 (1975).

For many years, the SWRCB also conducted “statutory adjudications.” These are administrative processes, largely conducted by water rights engineers, which end with a decree filed in court. They have only been utilized for smaller stream systems. But none has been undertaken since 1993, when the decree for the San Gregorio Creek System was filed. Staffing and funding difficulties apparently have caused this cessation of statutory adjudications, which is an unfortunate development.

Initially, the Water Commission Act was read to provide that persons who followed the specified procedures were entitled as of right to a permit to appropriate water if unappropriated water was available in the source. [Tulare Water Co. v. State Water Comm'n](#), 187 Cal. 533, 536–37, 202 P. 874, 876 (1921). Very soon, however, the administrative agency was given the power to reject applications on public interest grounds. Act of May 18, 1921 (Cal. Stats. 1921, c. 329, p. 443). Thus, in principle today the SWRCB could protect environmental values by refusing to issue permits for appropriations deemed contrary to the public interest. This, however, occurs very rarely. More commonly, if unappropriated water exists in a source and no wild or scenic river designation is relevant, the SWRCB protects environmental values by the imposition of terms and conditions in the permit. In this connection, the SWRCB may also reserve jurisdiction in order in the future to modify the terms and conditions as further studies warrant. [United States v. State Water Res. Control Bd.](#), 182 Cal. App. 3d 82, 128–29, 227 Cal. Rptr. 161, 186–87 (1986) (the “Delta Water Cases,” commonly known in California as “Racanelli” after the name of the author of the opinion).

Another important source of environmental protection vis-à-vis the exercise of water rights in California is the public trust doctrine. California was the first state to determine that the public trust doctrine may be used to modify established water rights, *National Audubon Soc’y v. Superior Ct.*, 33 Cal. 3d 419, 189 Cal. Rptr. 346, 658 P.2d 709, cert. denied, 464 U.S. 977 (1983) (the Mono Lake decision), and the doctrine has been raised in regard to several important water rights controversies in the state in order to protect or enhance instream flows. Somach, *The American River Decision: Balancing Instream Protections with Other Competing Beneficial Uses*, 1 Rivers 251 (1990), provides a summary of a widely-discussed unappealed trial court decision which utilized the public trust doctrine with regard to the American River. That decision also employed the notion of a “physical solution”—a “means to avoid waste while at the same time not unreasonably and adversely affecting the vested property rights of the paramount right holder.” *Id.* at 258. See also Joseph L. Sax, *Bringing an Ecological Perspective to Natural Resources Law: Fulfilling the Promise of the Public Trust*, in *Natural Resources Policy and Law* (L. MacDonnell & S. Bates eds. 1993). [See generally *supra* Treatise § 30.02 and § 33.02.]

Still another recently revitalized source of environmental protection is a statutory provision which requires the owners of dams to allow sufficient water to bypass their dams “to keep in good condition any fish that may be planted or exist below the dam,” Cal. Fish & Game Code § 5937, and which applies to the Mono Basin dams maintained by the City of Los Angeles, notwithstanding an agreement by the city to establish a fish hatchery in lieu of building fishways for the dams. *California Trout, Inc. v. State Water Res. Control Bd.*, 207 Cal. App. 3d 585, 255 Cal. Rptr. 184 (1989); see also *California Trout, Inc. v. Superior Ct.*, 218 Cal. App. 3d 187, 266 Cal. Rptr. 788 (1990). On the other hand, entities seeking instream flows for fishery maintenance have been denied the right to have their application to appropriate considered by the SWRCB, on the theory that physical control of water is an essential element of the appropriative water right in California. *California Trout, Inc. v. State Water Res. Control Bd.*, 90 Cal. App. 3d 816, 153 Cal. Rptr. 672 (1979); *Fullerton v. State Water Res. Control Bd.*, 90 Cal. App. 3d 590, 153 Cal. Rptr. 518 (1979). Repeated attempts to provide statutory authority for such “instream appropriations” have been unsuccessful.

1994 saw an apparent end to the contentiousness which followed the Mono Lake decision. After the 1983 Supreme Court decision and the 1989 Court of appeal decision noted above, in 1990 the Court of Appeal decided that the Mono basin licenses held by the City of Los Angeles must be amended to require it to “release sufficient water into the streams from its dams to reestablish and maintain the fisheries which existed in them prior to its diversion of water.” *California Trout, Inc. v. Superior Ct.*, 218 Cal. App. 3d 187, 213, 266 Cal. Rptr. 788, 803–4 (1990). The Court of Appeal also decided that the release quantities required would be set on an interim basis by the Superior Court, but that long-term flow rates should be established by the SWRCB.

On September 28, 1994, the SWRCB adopted Decision 1631 on the Mono Lake Basin and, to the surprise of many, the City of Los Angeles announced it would not oppose that decision in court. The substance of Decision 1631 is discussed in detail *supra* at Treatise § 33.02.

Another long-running dispute regarding water for fish in California has taken place in the federal courts, but it also has centered on Section 5937. Friant Dam on the San Joaquin River is a Central Valley Project facility which, except for flood flows and some minor releases for the benefit of water right holders immediately below the dam, diverts the entire flow of the river for beneficial use, mostly in agriculture. California fish and game officials raised Section 5937 when Friant was being completed, but their effort was suppressed. Environmental groups in 1988 filed a lawsuit against Friant’s operator, the Bureau of Reclamation, on NEPA grounds, but later both

ESA and Section 8 claims were added. Since the New Melones decision by the U.S. Supreme Court in 1978, it has been clear that Section 8 of the Reclamation Act requires the Bureau of Reclamation to comply with state law, absent a clear congressional directive to the contrary. *California v. United States*, 438 U.S. 645 (1978). After ten years of litigation, the Ninth Circuit agreed with the environmental groups that no clear congressional directive relieves the Bureau of Reclamation of compliance with Section 5937. *Natural Resources Defense Council v. Houston*, 146 F.3d 1118 (9th Cir. 1998). Rather than go to trial, however, on the question of just how much water must be released from Friant Dam to keep downstream fish in good condition, the parties settled their litigation in the fall of 2006. The settlement provides for flows below Friant Dam down to the confluence with the Merced River sufficient to maintain a salmon run, while managing water in a way designed to protect the highly productive agriculture in the southern San Joaquin Valley supplied with water from the reservoir created by Friant Dam. The settlement, however, requires that Congress pass legislation to provide both authority needed for federal agency implementation of much of the settlement and funding to pay for many of the actions anticipated by the settlement. After considerable delay, such legislation was included in the Omnibus Public Land Management Act of 2009, Pub. L. No. 111-11, sec. 10001-10203, 123 Stat. 991, 1349-1367 (2009).

In recent years significant judicial attention has been paid to the relationship between growth and water supply in California. In one important case, in 1993 pursuant to the California Environmental Quality Act (CEQA) the County of Stanislaus certified an Environmental Impact Report (EIR) for a proposed specific plan on a large destination resort and residential community (Diablo Grande), even though there is no on-site water source for the community and an off-site source was identified in the EIR only for the modest amount of water needed for the first five years of the twenty-five year project. The Court of Appeal rejected the argument that under CEQA “tiering” provisions the procurement and impacts of a permanent water supply for the community, estimated to be approximately 13,000 acre-feet a year, could be addressed in subsequent phases of the project and held the EIR to be legally deficient. *Stanislaus Natural Heritage Project v. County of Stanislaus*, 48 Cal. App. 4th 182, 55 Cal. Rptr. 2d 625 (1996). Subsequently a supplemental EIR on water supply was prepared, but this document was found to be largely inadequate by the trial court.

The Court of Appeal also has affirmed invalidation of an EIR prepared by a water agency on a plan to divert approximately 17,000 acre-feet of water a year from three lakes in the Sierra Nevada to support growth, as well as a decision by the water agency that the proposed purchase of a hydroelectric project from a utility in order to expand the project to include consumptive water use is categorically exempt from CEQA. *County of Amador v. El Dorado County Water Agency*, 76 Cal. App. 4th 931, 91 Cal. Rptr. 2d 66 (1999). The EIR was invalidated because it was based upon a draft rather than a final general plan, indeed one which was subsequently judicially determined to be inadequate. The appellate court noted that “approving a water program before enacting a general plan places the proverbial cart before the horse.” 76 Cal. App. 4th at 949. Other examples of the Court of Appeal invalidating EIRs for failure to deal adequately with the water supply issue are provided by *Santa Clarita Organization for Planning the Environment v. County of Los Angeles*, 106 Cal. App. 4th 715, 131 Cal. Rptr. 2d 186 (2003) (project relied on illusory State Water Project allotments) and *California Oak Foundation v. City of Santa Clarita*, 133 Cal. App. 4th 1219 (2005). In the Santa Clarita situation, a recertified EIR was approved in *California Water Impact Network v. Newhall County Water Dist.*, 2009 WL 1314719 (Cal. App. 2 Dist.) (2009).

CEQA treatment of the relationship between growth and water supply in California finally was examined by the state’s highest court in *Vineyard Area Citizens for Responsible Growth, Inc.*

v. City of Rancho Cordova, 150 P.3d 709 (Cal. 2007). There, a long-range community plan for a six thousand acre mixed use development project in a presently rural area had been approved, one which eventually would include over twenty two thousand dwelling units. A specific plan for the first phase of the project, involving nearly ten thousand dwelling units, was also approved. The environmental report on the project included a water supply plan, one which relied partly on a new well field. Although the court approved the report's treatment of the near-term water supply for the project, it held the report's analysis of the long-term water supply to be inadequate. One of several deficiencies mentioned was the report's failure adequately to analyze the impact of future groundwater extraction on flows in a nearby river, one which supports a salmon run. *Id.* at 732. The court also noted that the report failed to include "enforceable mitigation measures for the large new surface water diversions proposed." *Id.* at 731. On remand, revision and recirculation of the environmental report was ordered. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 62 Cal. Rptr. 3d 651 (2007).

A third development with regard to the relationship between growth and water supply in California pertains to the so-called "Monterey Agreement," which deals with the State Water Project (SWP). This large project is operated by the state's Department of Water Resources (DWR). Water is delivered pursuant to contracts between DWR and various urban and agricultural water suppliers. One article in the original 29 contracts negotiated in the 1960s dealt with shortage, both "temporary" shortage and permanent shortage. During the drought of 1988-1994, there was intense controversy over the proper interpretation of the temporary shortage provision, which specified that during a shortage due to drought or other temporary cause deliveries of project water for agricultural purposes should be reduced by up to fifty percent before deliveries of project water for all contractors were reduced at all. Some of the contractors engaged in secret negotiations over this provision, and these evolved into negotiations at Monterey over many changes in the SWP contracts. The result was an agreement with a statement of fourteen principles, which led to contract amendments for some of the SWP contracts. One amendment rewrote the temporary shortage provision to eliminate the urban preference it had contained.

In order to deal with potential adverse environmental consequences of the Monterey Agreement, an EIR was prepared. The lead agency for preparation of the EIR was the Central Coast Water Authority (CCWA), which recently had done the environmental documentation for completion of the coastal branch of the California Aqueduct, the SWP's major conveyance facility. In a lawsuit brought by two citizen groups and a dissident SWP contractor, the Court of Appeal ordered that the certification of the EIR be vacated. *Planning and Conservation League v. Department of Water Res.*, 83 Cal. App 4th 892, 100 Cal. Rptr. 2d 173 (Cal. App. 3d Dist. 2000). The court noted that DWR rather than the CCWA should have been the lead agency for the EIR, and it ordered the trial court to "retain jurisdiction over this action until DWR certifies an EIR in accordance with CEQA standards and procedures that meets the substantive requirements of CEQA." *Id.* at 199. More importantly for the issue of growth and water supply, the court faulted the EIR for failing as part of the "no project" alternative required by CEQA to analyze the elimination by the Monterey Agreement of the provision on permanent shortage. That provision had required that in case of permanent shortage, the entitlements of all contractors (with certain exceptions) be reduced proportionately "so that the sum of the revised maximum annual entitlements of all contractors will then equal such reduced minimum project yield." *Id.* at 180, quoting article 18(b) of the contracts. The SWP has long fallen far short of delivery of the 4.23 million acre-feet (maf) it was originally designed ultimately to deliver, but despite that fact there had been no proportionate reductions pursuant to the old permanent shortage provision. But the court said formal elimination of the permanent shortage provision should have been analyzed in the EIR. Firm yield of existing SWP facilities is about 2.4 maf, so that entitlements above that

amount are only “paper water.” *Id.* at 190. The court said the environmental consequence of removing the permanent shortage language is that paper water serves “as the basis for land planning decisions. Projects that are given the clearance to proceed based upon an entitlement to X acre-feet of water might not proceed if a contractor’s entitlement is reduced to (X-Y) acre-feet.” *Id.* at 190. The court pointed out that during the comment period on the EIR several commenters spoke directly to the issue of land-use planning, and it added that those comments “merely corroborate the common sense notion that land use decisions are appropriately predicated in some large part on assumptions about the available water supply. There is certainly the possibility that local decision makers are seduced by contractual entitlements and approve projects dependent on water worth little more than a wish and a prayer.” *Id.* at 191. After prolonged negotiations in the Monterey Agreement case, a settlement was announced in 2003. *Planning & Conservation League v. Department of Water Res.* (Super. Ct. Sacramento County, No. 95CS03216 (2003)). Work on a new EIR was then begun. As part of the settlement a nonprofit entity, Water for California, has been created and has been provided with several million dollars to work on California water management issues. Nonetheless, “notwithstanding the passage of more than five years, DWR still has not yet completed its EIR for the Monterey Agreement.” *California Water Impact Network v. Newhall County Water Dist.*, 2009 WL 1314719*3 (Cal. App. 2 Dist.) (2009).

An important case emphasizing the importance of water rights was decided by the California Supreme Court in 2000. This litigation was initiated when the City of Barstow and the Southern California Water Company filed suit asserting that groundwater production by upstream pumpers was adversely impacting the plaintiffs’ water supply. Most of the litigants agreed to a “physical solution” intended to assure minimum flows to the downstream parties, conserve local waters supplies and raise money to acquire supplemental water supplies, and the trial court imposed that physical solution on certain parties claiming riparian and/or overlying water rights who had not joined the agreement. But in 1998 the Court of Appeal reversed, *City of Barstow v. Mojave Water Agency*, 64 Cal. App. 4th 737, 75 Cal. Rptr. 2d 477 (1998). It characterized the issue on appeal as “whether the trial court could disregard overlying water rights in order to ‘equitably apportion’ water rights to all producers in an overdrafted groundwater basin,” 75 Cal. Rptr. 2d at 485, and held it could not. The Supreme Court of California agreed in *City of Barstow v. Mojave Water Agency*, 23 Cal. 4th 1224 (2000).

As water supplies in California become increasingly contested, there is greater interest in the state’s “area-of-origin” statutes. The first of these were enacted in 1931 and 1933 in the midst of a battle over a state Central Valley Project. *Cal. Water Code §§ 10505, 10505.5, 11460*. At that time, long before federal courts compelled state senates to be reapportioned on a one-person one-vote system, the California state senate was dominated by those elected from rural areas in northern California. To placate those senators, from whose areas water for the CVP would be taken, the area-of-origin statutes provided for a right of recapture for exported water when that water was deemed necessary for development of an area of origin. [*See generally supra* Treatise § 14.04(d)(2).]

Shortly after the people approved the state CVP, fiscal problems led California to turn the project over to the federal government. Later, when California was about to authorize its own large water project, one very similar in design to the CVP, the matter of area of origin came up again. A lengthy opinion from the State Attorney General was prepared, an opinion which today—in the absence of much case law on the subject—remains a leading source of understanding of the topic. *Constitutionality of Water Code Sections Protecting Water Rights of Counties and Watersheds of Origin*, 25 Op. Att’y Gen. 8 (Cal. 1955). Thereafter, the legislature enacted a third area-of-origin statute, the Delta Protection Act. *Cal. Water Code, §§ 12200 et seq.*

But the right of recapture remained largely theoretical in the years that followed. Even during a severe drought in 1977-78, a northern county was unable to obtain relief on an area-of-origin claim. *County of Trinity v. Andrus*, 438 F. Supp. 1368 (E.D. Cal. 1977). But a later trial court opinion did provide relief to a northern water district, in part on the basis of the county of origin and watershed protection statutes. *El Dorado Irrigation Dist. v. State Water Res. Control Bd.* (No. 01CS01319) (Sac. Sup. Ct. Dec. 23, 2003). That trial court opinion, however, was reversed insofar as it found that the county of origin and watershed protection statutes had been violated because, in the opinion of the Court of Appeal, there was no factual basis for such a determination. *El Dorado Irrigation Dist. v. State Water Res. Control Bd.*, 48 Cal Rptr. 3d 468, 496-7 (Cal. App. Ct. 3 Dist. 2006). The appellate court noted that the California area of origin protection statutes do not give water users within an area of origin the right to water stored by the Department of Water Resources or the Bureau of Reclamation without paying for it. *Id.* at 498.

II.

Water Disposal.

In 1873, the Supreme Court of California adopted the “civil law rule” with regard to the disposal of diffused surface waters, namely that each property owner’s duty is to leave the natural flow of surface water undisturbed. *Ogburn v. Connor*, 46 Cal. 346 (1873). Thereafter, that rule was applied many times in a rural setting, and in the leading case of *Keys v. Romley*, 64 Cal. 2d 396, 50 Cal. Rptr. 273, 412 P.2d 529 (1966), its validity was reaffirmed in an urban setting. *Keys* stated that, pursuant to the civil law rule, “the owner of an upper, or dominant, estate is entitled to discharge surface water from his land as the water naturally flows. As a corollary to this, the upper owner is liable for any damage he causes to adjacent property by the discharge of water in an unnatural manner.” *Id.* at 405–06, 412 P.2d at 534, 50 Cal. Rptr. at 278. [See generally *supra* Treatise §§ 59.02(b)(2), 59.02(b)(3).]

Keys also, however, heavily emphasized qualifications to the civil law rule in the name of reasonableness. All users of property were admonished to take reasonable care to avoid injury to adjacent property from the flow of surface waters, and it was held to be “the duty of any person threatened with injury to his property by the flow of surface waters to take reasonable precautions to avoid or reduce any actual or potential injury.” *Id.* at 409, 412 P.2d at 537, 50 Cal. Rptr. 281. Thus, in a lower court decision, the rule deduced from *Keys* and subsequent authorities to resolve a dispute over the disposal of surface and irrigation tail water was the following: “[T]he upper owner has the right to discharge reasonable and noninjurious amounts of irrigation water through natural areas of flow onto the lower owner’s property. The lower owner has a coequal burden to receive reasonable and noninjurious amounts of irrigation water through natural flowage channels The construction of artificial drainage systems by the upper owner may increase the velocity though not the volume of discharge.” *Martinson v. Hughey*, 199 Cal. App. 3d 318, 328, 244 Cal. Rptr. 795, 801 (1988).

The reasonableness approach of *Keys* was later applied to the disposal of diffused surface water into a natural watercourse. Where alterations or improvements of upstream property produce an increased velocity *or* volume of water in a watercourse, “[t]he test is whether under all the circumstances, the upper landowner’s conduct was reasonable. This rule of reasonableness applies to both private and public landowners, but it requires reasonable conduct on the part of downstream owners as well. This test requires consideration of the purpose for which the improvements were undertaken, the amount of surface water runoff added to the streamflow by the defendant’s improvements in relation to that from development of other parts of the watershed, and the cost of mitigating measures available to both upper and downstream owners.

Those costs must be balanced against the magnitude of the potential for downstream damage. If both plaintiff and defendant have acted reasonably, the natural watercourse rule imposes the burden of stream-caused damage on the downstream property.” *Locklin v. City of Lafayette*, 7 Cal. 4th 327, 337, 27 Cal. Rptr. 2d 613, 618, 867 P.2d 724, 729 (1994).

A reasonable conduct standard was also utilized in *Belair v. Riverside County Flood Control Dist.*, 47 Cal. 3d 550, 253 Cal. Rptr. 693, 764 P.2d 1070 (1988), an inverse condemnation action against public entities after a levee gave way following several days of heavy storms, and in *Bunch v. Coachella Valley Water Dist.*, 15 Cal. 4th 432, 63 Cal. Rptr. 2d 89, 935 P.2d 796 (1997). Following *Belair*, the court in *Bunch* said “[W]hen a water project fails . . . causing flood damage, the issue is whether the system’s design, construction, and maintenance were reasonable This inverse condemnation rule invokes constitutional balancing principles and is not governed by tort concepts of fault or negligence. It requires a balancing of the public need for flood control against the gravity of harm caused by unnecessary damage to private property.” *Id.* at 436, 935 P.2d at 798, 63 Cal. Rptr. 2d at 91.

Bunch left open whether the reasonableness standard applies when flood control measures cause flood damage to land that was not historically subject to flooding. *Id.* at 436 n.1, 935 P.2d at 797 n.1, 63 Cal. Rptr. 2d at 90 n.1. Subsequently the Court of Appeal in *Akins v. State*, 61 Cal. App. 4th 1, 71 Cal. Rptr. 2d 314 (1998), said it does not, at least not when a governmental flood control project “intentionally” diverts the water onto upstream private property not historically subject to flooding in order to protect lower-lying land. *Id.* at 8, 71 Cal. Rptr. 2d at 317. In the absence of a reasonableness standard, governmental entities will be strictly liable for damage from such flooding. The *Akins* court said, “[w]e do not see this conclusion as imposing artificial distinctions or arcane water law principles. We see a difference between the type of situation present in cases such as *Belair* and *Bunch II* and the instant case. On the one hand is the type of situation where a public entity tries to protect private property owners from a risk created by nature and in doing so may alter the risks created by nature, but the public entity’s efforts fail. On the other hand is a situation where government appropriates private property in order to protect other property, creating a risk which would not otherwise exist. We see no unfairness in applying a reasonableness standard to the first situation but not to the second.” *Id.* at 33, 71 Cal. Rptr. 2d at 334. *Akins* was settled in 2000. See *Sacramento County Flood Case Settles After 14 Years*, 10 Cal. Water L. & Pol’y Rep. 262 (July 2000). See also *Yamagiwa v. City of Half Moon Bay*, 523 F. Supp. 2d 1036 (N.D. Cal. 2007).

See also *Odello Bros. v. County of Monterey*, 63 Cal. App. 4th 778, 73 Cal. Rptr. 2d 903 (1998), on the emergency exception to inverse condemnation liability for flood water damage, and *Paterno v. State of California*, 74 Cal. App. 4th 68, 87 Cal. Rptr. 2d 754 (1999), on utilization of the *Locklin* test. *Paterno* reversed a trial court judgment for plaintiffs on a takings theory, where a levee failed in February 1986 during a ten-day storm. In returning the case for a complete retrial on all issues of the takings count, the Court of Appeal noted that after the trial court decision the Supreme Court in *Locklin* in 1994 “changed the factors which must be applied prior to imposing takings liability where damage is caused by failure of a flood control project.” 74 Cal. App. 4th at 79. It also observed that the trial court “conflated negligent maintenance with a negligent plan of maintenance. . . . ‘Takings’ liability attaches, if at all, only to the latter.” But when the case later returned to the Court of Appeal, it held the state liable for inverse condemnation damages on the theory the state’s plan for the levee was unreasonable. *Paterno v. State of California*, 113 Cal. App. 4th 998, 6 Cal. Rptr. 3d 854 (2003). The levee in question was built with mining debris created by hydraulic mining during California’s Gold Rush, and it later was taken over by the State of California. The court concluded that “[w]hen a public entity operates a flood control system built by someone else, it accepts liability as if it had planned and

built the system itself.” *Id.* at 1003, 6 Cal. Rptr. 3d at 857. Furthermore, it approved trial court findings that the levee was built with porous, uncompacted debris in a location which encouraged seepage, leading directly to its failure and that “long before the failure, feasible cures could have fixed the problems. Use of such technology ... would have ensured the planned flood control capacity was achieved.” *Id.* These conclusions were reached by balancing the *Locklin* factors to determine whether the owner, if uncompensated, would contribute more than his proper share of the public undertaking. One commentator, very critical of the court’s reasoning, concludes that *Paterno* makes the State of California and other flood control agencies “virtual insurers of flood control protection.” Scott Shapiro, *Will New Flood Case Mean A Flood of Damages Paid To A Flood of Plaintiffs? Supreme Court Denies Review Of Paterno Decision*, 14 Cal. Water L. & Pol’y Rep. 195, 200 (2004). There are several hundred plaintiffs in *Paterno*, and the damages may run into the hundreds of millions of dollars.

Finally, note that even where there ordinarily would be liability under the reasonable conduct standard, in some cases there may be an immunity to liability provided by California’s “right to farm” law, Civil Code § 3482.5. *Rancho Viejo, LLC v. Tres Amigos Viejos, LLC*, 100 Cal. App. 4th 550, 123 Cal. Rptr. 2d 479 (2002).

III.

Water Pollution.

The Porter-Cologne Water Quality Control Act of 1969, as amended, provides a relatively comprehensive means for the protection of water quality and for the regulation of waste discharges directly or indirectly to both groundwater and surface water. Cal. Water Code §§ 13000 to 13999.10. The foundation of the regulatory system is the water quality control plan or “basin plan” for the various water basins in California. Each plan contains an inventory of beneficial uses of water to be protected within the basin; a set of water quality “objectives,” which the state regards as enforceable standards, to ensure the reasonable protection of the designated beneficial uses; and a program of implementation.

Most water quality control plans and plan amendments are adopted by one of California’s nine regional water quality control boards (RWQCBs), which must act pursuant to the state Administrative Procedure Act. *State Water Res. Control Bd. v. Office of Admin. Law*, 12 Cal. App. 4th 697, 16 Cal. Rptr. 2d 25 (1993). See *infra* Figure 1 for the location of each of the nine regions. No plan or amendment is effective, however, until approved by the SWRCB, and in some circumstances the SWRCB itself initially adopts the plan. One important area where the SWRCB has thus taken the lead concerns water quality in the Sacramento-San Joaquin Delta, where salinity intrusion is a significant concern. *United States v. State Water Res. Control Bd.*, 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1986).

The Water Quality Control Plan for Salinity for San Francisco Bay/Sacramento-San Joaquin Delta has been particularly controversial. In September 1991, portions of the SWRCB’s final Water Quality Control Plan for Salinity for San Francisco Bay/ Sacramento-San Joaquin Delta Estuary were disapproved by the U.S. EPA. These portions dealt with water quality objectives established with regard to fish, wildlife, and estuarine habitat. EPA’s disapproval was prompted in large part by the recent precipitous decline in the Striped Bass Index (an index of the number of young bass that have survived through their first summer), which was long used as a measure of the health of the estuary.

In April 1993, a coalition of fishing and environmental groups filed suit in U.S. District

Court in Sacramento to compel promulgation of federal water quality standards for the estuary. The plaintiffs relied on the fact that the Clean Water Act, 33 U.S.C. § 1313(b), requires EPA “promptly” to prepare and publish its own water quality standards after disapproval of standards proposed by a state and provision of 90 days for the state to make the changes specified by EPA. In settlement of this lawsuit, EPA promulgated proposed federal quality standards on December 15, 1993.

Great controversy exists not only as to what salinity and temperature standards are required, but also as to the proper mechanism for providing the flows needed to ensure recovery of the public trust resources impacted by diversions of water from the Delta. Pursuant to a gubernatorial directive, the SWRCB held hearings in 1992 on a draft D-1630, which included “interim” water rights actions to protect the estuary. However, in response to another gubernatorial directive, the SWRCB announced on April 22, 1993, that it would not adopt D-1630 as an interim measure, as “changes in the water supply and the biological opinions by the National Marine Fisheries Service [NMFS, active on the Sacramento River winter-run chinook salmon] and the United States Fish and Wildlife Service [FWS, active on the Delta smelt and the Sacramento splittail] reduce the urgency of adopting D-1630 to protect the Bay-Delta ecosystem against further harm in the short-term.” In March 1994, however, in apparent response to EPA’s promulgation of proposed federal water quality standards, the SWRCB announced resumption of its Bay-Delta process.

After some feverish discussions in December 1994 which concluded negotiations undertaken pursuant to a June 20, 1994, “framework agreement” for coordination through a comprehensive ecosystem management approach between involved federal and state agencies, on December 15, 1994, “principles for agreement” on Bay-Delta standards were announced by federal and state officials. Representatives of a number of urban, agricultural and environmental entities also signed the document announcing these principles. On the same day, pursuant to a consent decree entered in the Clean Water Act lawsuit discussed above, the U.S. Environmental Protection Agency (EPA) adopted final federal regulations on water quality standards for the Bay-Delta, and the State Water Resources Control Board (SWRCB) issued a draft Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.

The essence of the Bay-Delta standards agreed to on December 15, 1994, consists of salinity standards for the protection of estuarine habitat; reductions in Delta exports during the period February to June; restrictions on the “take” of endangered species (Sacramento River winter run salmon and Delta smelt), to be implemented respectively by the National Marine Fisheries Service and the U.S. Fish and Wildlife Service; reductions in the export of San Joaquin River flows to protect fall run San Joaquin River salmon; closures of the Delta Cross Channel, a Central Valley Project facility, to keep outmigrating salmon from being carried into the central Delta; and a multimillion-dollar fund to be used to improve habitat conditions. On May 22, 1995, the SWRCB adopted a final Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary which largely conforms to the December 15, 1994, principles for agreement. Partial implementation of the water quality objectives of this plan was provided by the SWRCB in its Decision 1641 issued on December 29, 1999, and revised on March 15, 2000. This decision deals with material presented in the first seven phases of an eight-phase public hearing commenced by the SWRCB on July 1, 1998, much of which concerns the San Joaquin River watershed.

In litigation over Decision 1641, the Court of Appeal generally approved various rulings by the SWRCB. *State Water Res. Control Bd. Cases*, 136 Cal. App. 4th 674, 39 Cal. Rptr. 3d 189 (2006) (review denied May 17, 2006). It did decide, however, that the board has failed fully to

implement the Vernalis pulse flow objective of its 1995 Bay-Delta water quality control plan. *Id.* at 725-734, 39 Cal. Rptr. 3d at 230-237. Pursuant to the mandate in *United States v. State Water Res. Control Bd.*, 182 Cal. App. 3d 82, 227 Cal.Rptr.161 (1986), to consider “non-project” diverters, i.e. those other than the CVP and the SWP, in the implementation of water quality objectives through the restriction of water rights, the board had adopted a San Joaquin River Agreement developed by non-project diverters (the “San Joaquin River Group”) on various tributaries of the San Joaquin River. This agreement provided for a Vernalis Adaptive Management Plan (“VAMP”) to meet the water quality objective adopted in 1995 for water at Vernalis. But the VAMP provided for the possibility of less flow at Vernalis than specified in 1995. This was deemed experimental. The SWRCB characterized it as a “staged” implementation. *State Water Res. Control Bd. Cases*, 136 Cal. App. 4th 674, 726, 39 Cal. Rptr. 3d 189, 230 (2006) (review denied May 17, 2006). But the Court of Appeal said in reality VAMP provided for “delayed” implementation *State Water Res. Control Bd. Cases*, 136 Cal. App 4th 674, 726, 39 Cal. Rptr. 3d 189, 230 (2006) (review denied May 17, 2006) and it said such action was not authorized by law. “The Vernalis pulse flow objective required a minimum monthly average flow of water at a particular point in the San Joaquin River for a 31-day period in April and May each year, ranging from 3,110 to 8,600 cubic feet per second. Nothing in the 1995 Bay-Delta Plan authorized the Board to implement a different flow regime that could provide less than that amount of water.” *Id.* at 727, 39 Cal. Rptr. 3d at 231.

United States v. State Water Res. Control Bd., 182 Cal. App. 3d 82, 227 Cal. Rptr. 161 (1986), had criticized the practice followed by the SWRCB in the 1970s of combining its water quality and water rights proceedings on Delta salinity. Hence there had been a Delta water quality control plan proceeding in 1995 and a water rights proceeding later culminating in Decision 1641 in 1999 (revised in 2000). In its more recent decision, however, the Court of Appeal pointed out that the 1986 decision merely said to combine the water quality and the water rights decisions in a single proceeding was unwise, “not impermissible.” *State Water Res. Control Bd. Cases*, 136 Cal. App. 4th 674, 729 n. 21, 39 Cal. Rptr. 3d 189, 233 n. 21. “The reason the combination of functions was unwise was the ‘the Board compromised its important water quality role by defining its scope too narrowly in terms of enforceable water rights’ (quoting the 1986 decision)... .As long as the Board avoided any such compromise, we see no reason the Board could not have commenced a regulatory proceeding to amend the 1995 Bay-Delta Plan to modify the flow objectives in the plan for the purpose of authorizing the San Joaquin River Agreement and the Vernalis Adaptive Management Plan.” *Ibid.* Presumably, such a regulatory proceeding could also be held following the 2006 Court of Appeal decision in order to reinstate the VAMP.

The Court of Appeal similarly criticized Decision 1641 for delaying implementation of southern Delta salinity objectives at locations downstream of Vernalis without properly amending the 1995 plan. *Id.* at 734-5, 39 Cal. Rptr. 3d at 237-8. As implementation of one salinity objective was extended only to April 1, 2005, that delay was declared moot. *Id.* at 735, 39 Cal. Rptr. 3d at 238. But another modification was invalidated. *Ibid.*

In a related development, federal and state officials are continuing to work together in a process known as CALFED which brings together state and federal personnel. In the words of former Secretary of the Interior Bruce Babbitt, CALFED will seek “long-term solutions for the problems affecting the public values in the Bay-Delta Estuary,” i.e., it will seek a long-term reconciliation of water supply and environment protection needs in the region. Following many delays, in mid-1999 CALFED issued revised programmatic EIS/EIR and Phase II documents and in August 2000 it published a Record of Decision. Readers interested in obtaining those documents or any of the many reports and studies issued by CALFED can contact that organization at 1416 Ninth Street (Suite 1155), Sacramento, CA 95814 (telephone (916) 657-2666).

CALFED documents can be found on the web at calfed.ca.gov/. The programmatic EIS/EIR was approved by the Supreme Court. *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings*, 43 Cal. 4th 1143, 77 Cal. Rptr. 3d 578 (Cal. S. Ct. 2008).

For nine years, CALFED had no legal identity and operated entirely on the basis of memorandums of understanding among the various participating state and federal agencies. To remedy the administrative problems experienced with such a cumbersome institutional arrangement, in 2002 California legislation created a California Bay-Delta Authority to direct the CALFED work. 2002 Cal. Stat. 955. The authority has twenty voting members, as well as four non-voting ex officio state legislators. The twenty are as follows: representatives of six federal agencies, who require Congressional authorization to participate; six state officials, plus one member selected by a public advisory committee from its membership; and seven public members, appointed by the Governor (five), the President pro tem of the state Senate (one) and the Speaker of the state Assembly (one).

In a review of the California Bay-Delta Authority, California's Little Hoover Commission criticized the new scheme for not giving the agency adequate authority. Little Hoover Commission, *Still Imperiled, Still Important—The Little Hoover Commission's Review of the CALFED Bay-Delta Program (November 2005)*. Funding became a major problem for the agency, which has become a low visibility operation. In 2007 and 2008, more attention regarding the Delta was paid to the work of two groups appointed by the Governor: the Delta Vision Blue Ribbon Task Force, a committee of individuals outside state government; and the Delta Vision Implementation Committee, a cabinet-level group.

In California, one of the most notorious water pollution problems has arisen from contaminated agricultural drainage from the west side of the San Joaquin Valley. That contamination, which arises from natural sources, led to the closing of the Kesterson National Wildlife Refuge, and it presents serious problems today elsewhere in the valley where evaporation ponds are maintained for drainage water. An introduction to the situation is provided by Charles T. Du Mars, *What in the World is Kesterson: Agricultural Return Flows Degrading Water Quality*, 35 Rocky Mtn. Min. L. Inst. 24-1 (1989).

The addresses, telephone numbers and geographical jurisdiction of the various RWQCBs is shown *infra* in Figure 1.

IV.

Water Law Research.

A good starting point for research on California water law is William R. Attwater & James Markle, *Overview of California Water Rights and Water Quality Law*, 19 Pac. L.J. 957 (1988), also published at the beginning of the Cal. Water Code. Another excellent source is A. Littleworth and E. Garner, *California Water* (Solano Press, 1995). *See also*, S. Slater, *California Water Law and Policy*. Detailed treatment of the water quality provisions of California law can be found in several chapters in *California Environmental Law and Land Use Practice* (K. Manaster & D. Selmi eds. 1990), a loose-leaf treatise for which replacement pages are provided from time to time. Division IV of the treatise is devoted to water pollution control and includes the following: Zemelman & Davis, *Introduction to Water Quality Regulation in California* (ch. 30); Wilson & Zemelman, *The Porter-Cologne Water Quality Control Act* (ch. 31); and Wilson & Zemelman, *Control of Specific Water Quality Problems* (ch. 32). A review of an important evolution in California water policy and law is provided in Harrison Dunning, *Dam Fights and*

Water Policy in California: 1969-1989, 29 J. of the West 14 (No. 3 1990).

Unfortunately, many otherwise excellent sources on water law in California are now considerably out-of-date. One such basic reference is W. Hutchins, *The California Law of Water Rights* (USDA 1956). Another, which includes a good deal of material on the financing of water projects, is H. Rogers & A. Nichols, *Water for California* (Bancroft-Whitney 1967).

Some of the best analytical material on California water rights law, now, however, also dated in certain important respects, can be found in a series of unpublished staff papers prepared for the Governor's Commission to Review California Water Rights Law. Those papers, which are available in some libraries and from the Office of Legislative and Public Affairs of the SWRCB, are as follows:

Number 1: Archibald, *Appropriative Water Rights in California* (1977).

Number 2: Schneider, *Groundwater Rights in California* (1977).

Number 3: Lee, *Legal Aspects of Water Conservation in California* (1977).

Number 4: Anderson, *Riparian Water Rights in California* (1977).

Number 5: Lee, *The Transfer of Water Rights in California* (1977).

Number 6: Schneider, *Legal Aspects of Instream Water Uses in California* (1978).

Those interested in law reform may also wish to consult the Final Report of the Governor's Commission to Review California Water Rights Law. That report, submitted in December 1978, is available from the SWRCB. A symposium honoring the twenty fifth anniversary of that commission's report appears at [36 McGeorge L. Rev. 1 \(2005\)](#).

Comprehensive information on current developments is provided by *California Water Law & Policy Reporter*, a monthly newsletter published by Argent Communications Corporation.

The State Water Resources Control Board has a web site at www.swrcb.ca.gov.

See also supra Lawrence J. MacDonnell, *Colorado River Basin*, Treatise, pt. XI, subpt. A (River Basin Surveys).

Figure 1 STATE WATER RESOURCES CONTROL BOARD

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