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California Water Law: Historical Origins to the Present

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CALIFORNIA WATER LAW: HISTORICAL ORIGINS TO THE PRESENT

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I. INTRODUCTION

This article will describe California water law from its historical origins to the present. California water law is a distinct body of law with a distinct history but is informed by recent congressional enactments that establish national goals and limit the reach of state laws. Therefore, broadly speaking, California water law is an amalgam of state and federal laws that establish both local and national goals in the field of water regulation. This amalgam of state and federal law is the product of California's—and the nation's—unique development and experience. As Justice Oliver Wendell Holmes once said, the life of the law has been experience rather than logic.[1] Justice Holmes's observation is not more true than as applied to California water law.

California water law has substantially changed from the early days when settlers and miners diverted water to their claims in accordance with local customs. In the modern era, California water law establishes a regime for the allocation of water among many

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1. Oliver Wendell Holmes, Jr., *The Common Law* 1 (Little, Brown & Co. 1943) (originally published 1881).

different economic groups and interests based on the "public interest" as defined under California law. This public interest takes into account the needs of those who depend on water supplies for their sustenance—the large cities and farming communities that form the backbone of California's economy—and the competing need to preserve water in its natural condition for environmental uses, such as the preservation of fish and wildlife. Unlike most other bodies of law that regulate the economy and welfare of California and the nation, California water law is the product of past historical experience—and indeed is a vital part of that experience—and can only be properly understood when viewed in that historical context.

This article will discuss California water law in four major aspects: (1) the California system of regulating water rights, from its historical origins to the present; (2) the federal and state water projects that develop water supplies for the people of California, and the federal and state laws that govern such projects; (3) Congress's recent enactment of various environmental laws, particularly the *Clean Water Act* and the *Endangered Species Act*, that have changed the shape of modern water law by establishing national environmental goals; and (4) the relationship between water supply planning and land use planning in California, as affected by California's environmental laws and other recent statutes that provide for coordination of planning efforts.

II. THE CALIFORNIA WATER RIGHTS SYSTEM

The California water rights system is a product of California's unique historical development. In the early days, California developed a custom recognizing the right to appropriate water based on "first in time, first in right" principles, and this custom ripened into a formal doctrine of water law—the doctrine of prior appropriation—that prevails in California and throughout the West.[2] Unlike most other western states, however, California has also recognized riparian rights, which are based on the English common law.[3] Thus, California, unlike virtually all other states, has a dual water rights system that recognizes

2. Wells A. Hutchins, *The California Law of Water Rights* 41, 43 (U.S. Dept. of Agric. 1956).

3. *See generally Bristor v. Cheatham*, 255 P.2d 173, 181 (Ariz. 1953); Arthur L. Littleworth & Eric L. Garner, *California Water* 29 (Solano Press Bks. 1995).

both appropriative and riparian rights.[4] The people of California, in 1928, adopted a constitutional amendment that placed riparian and appropriative rights on an equal footing, and—more importantly—established California's basic water rights law.[5] Under this basic law, water rights in California—whether riparian, appropriative, or other—exist only to the extent that water is put to "reasonable and beneficial use" and in accordance with the public interest.[6] Thus, California water law has evolved from simply settling disputes between competing users to providing a regime for the state to allocate its precious water resources for the benefit of both its economy and its environment.

A. *NATURE OF WATER RIGHTS: THE RIPARIAN AND APPROPRIATION DOCTRINES*

The riparian doctrine was the original water law doctrine of California, and of other American states. Under this doctrine, a landowner has the right to reasonable use of waters flowing across or adjacent to his land, subject to reasonable use by other riparian users.[7] The riparian doctrine is based on " 'parity rather than priority' " of rights, in that riparian users share equally and none has priority over others.[8] The riparian doctrine derived from the English common law, which recognized the riparian right as one of the attributes of land ownership.[9] Thus, the riparian right attaches to the land, and is one

4. *Franco-American Charolaise, Ltd. v. Okla. Water Resources Bd.*, 855 P.2d 568, 572 n. 15 (Okla. 1990); Hutchins, *supra* n. 2, at 40.

5. Cal. Const. art. XIV, § 3 (1928) (superseded 1976 by Cal. Const. art. X, § 2); *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972, 986 (Cal. 1935); *Peabody v. City of Vallejo*, 40 P.2d 486, 491 (Cal. 1935); Hutchins, *supra* n. 2, at 15 (quoting *U.S. v. Gerlach Live Stock Co.*, 339 U.S. 725, 751 (1950)), 16 (citing *Miller & Lux, Inc. v. San Joaquin Light & Power Corp.*, 65 P.2d 1289, 1292 (Cal. 1937); in turn citing *Chow v. City of Santa Barbara*, 22 P.2d 5, 18 (Cal. 1933)).

6. Cal. Const. art. XIV, § 3 (1928) (superseded 1976 by Cal. Const. art. X, § 2).

7. *People v. Shirokow*, 605 P.2d 859, 864 (Cal. 1980); *Rancho Santa Margarita v. Vail*, 81 P.2d 533, 550 (Cal. 1938).

8. Mary Ann King, Student Author, *Getting Our Feet Wet: An Introduction to Water Trusts*, 28 Harv. Envtl. L. Rev. 495, 500 (2004) (quoting David M. Gillilan & Thomas C. Brown, *Instream Flow Protection: Seeking a Balance in Western Water Use* 15 (Is. Press 1997)).

9. *State et rel. St. Game Commn. v. Red River Valley Co.*, 182 P.2d 421, 443 (N.M. 1945) (quoting Wells A. Hutchins, *Selected Problems in the Law of Water Rights in the West* 32 (U.S. Govt. Printing Off. 1942)).

of the "bundle of sticks" that defines land ownership under the common law. Since the riparian right attaches to the land, it is not created by actual use of water or lost by nonuse of water.[10] Because most American states adopted the English common law as their basic property law, the riparian doctrine became the prevalent water law doctrine in America, and remains the basic water law in most eastern states today.[11]

The riparian doctrine was poorly-suited to the needs of the early miners who hastened westward in search of gold and silver. The miners could not claim riparian rights, because the United States owned the lands on which their mining claims were located.[12] Disregarding the niceties of the common law, the miners developed the simple custom of diverting water to their mining claims on a "first come, first served" basis.[13] The custom ripened into the formal doctrine of prior appropriation, which was recognized by the early courts and legislatures and became the basic water law of the modern West.[14]

Under the appropriation doctrine, a person has the right to divert water for a "beneficial use," even though the appropriator may not own the lands where the water is found.[15] The appropriation doctrine, unlike the riparian doctrine, establishes priority rather than parity among competing users; to be "first in time" is to be "first in right."[16] The

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10. *Lux v. Haggin*, 10 P. 674, 754 (Cal. 1886); Hutchins, *supra* n. 2, at 40.

11. Rome G. Brown, *The Water-Power Problem in the United States: With Particular Reference to the Causes of the Present Stagnation of Water-Power Development in that Country*, 24 Yale L.J. 12, 19 (1914); Littleworth, *supra* n. 3, at 30.

12. Hutchins, *supra* n. 2, at 42-43 (quoting *Jennison v. Kirk*, 98 U.S. 453, 458 (1878)); Littleworth, *supra* n. 3, at 40.

13. Hutchins, *supra* n. 2, at 41, 43.

14. Littleworth, *supra* n. 3, at 39 (referencing Cal. Water Code Ann. §§ 100 *et seq.*, 120 *et seq.*, 175 *et seq.* (Westlaw current through Ch. 1 of 2008 Reg.Sess. and Ch. 6 of 2007-2008 Third Ex.Sess. urgency legislation); Cal. Civ. Code Ann. §§ 1410(a) *et seq.* (Westlaw current through Ch. 1 of 2008 Reg.Sess. and Ch. 6 of 2007-2008 Third Ex.Sess. urgency legislation); *Temescal Water Co. v. Dept. of Pub. Works*, 280 P.2d 1, 11 (Cal. 1955); *Yuba River Power Corp. v. Nev. Irrigation Dist.*, 279 P. 128, 130 (Cal. 1929) (quoting *Inyo Consol. Water Co. v. Jess*, 119 P. 934, 936 (Cal. 1912)); *Thayer v. Cal. Dev. Co.*, 128 P. 21, 24 (Cal. 1912).

15. *U.S. v. Gerlach Live Stock Co.*, 339 U.S. 725, 742-43, 751-52 (1950); *People v. Shirokow*, 605 P.2d 859, 864-65 (Cal. 1980) (quoting *City of Pasadena v. City of Alhambra*, 207 P.2d 17, 28 (Cal. 1949); Cal. Const. art. X, § 2); *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889, 891-93 (Cal. 1967) (citing *Peabody v. City of Vallejo*, 40 P.2d 486 (Cal. 1935); *Chow v. City of Santa Barbara*, 22 P.2d 5 (Cal. 1933)).

16. *Shirokow*, 605 P.2d at 864.

appropriative right arises when the water is diverted to beneficial use, and ceases when the use is discontinued or is no longer beneficial; thus, the appropriative right, unlike the riparian right, is created by use and lost by nonuse.[17] Whether a water use is "beneficial"—and thus forms the basis of an appropriative right—depends on the laws, policies and customs of the government that has jurisdiction over the water.[18] Thus, the appropriation doctrine is based on government management and regulation rather than on common law principles of land ownership, and "beneficial use" is the lodestar of the doctrine. The early miners' simple custom of diverting water to their mining claims became the foundation of the western states' water rights systems, and allows the large metropolitan and farming areas that form the backbone of the modern West's economy to obtain necessary water supplies for their growth and development.[19]

Most western states adopted the appropriation doctrine as their exclusive water rights law, thus rejecting the riparian doctrine that emanates from the common law. In an early landmark decision, *Lux v. Haggin*,[20] the California Supreme Court held that although California recognized appropriative rights, it also recognized riparian rights as well, because it retained the English common law on which riparian rights were based.[21] Thus, California, unlike most other western states, has a dual water rights system that recognizes both appropriative and riparian rights.[22]

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17. *Pleasant Valley Canal Co. v. Borror*, 72 Cal. Rptr. 2d 1, 8 (Cal. App. 5th Dist. 1998).

18. As one commentator has noted, "[b]eneficial use is a restrictive concept of valid water uses in the water law of the arid western states requiring that water only be used for purposes that are beneficial to the user and to society in general, such as irrigation and municipal uses." Sharon P. Gross, *The Galloway Project and the Colorado River Compacts: Will the Compacts Bar Transbasin Water Diversions?* 25 Nat. Resources J. 935, 945 (1985) (internal quotations omitted). In California, "beneficial use" includes, but is not limited to, "use for domestic, irrigation, municipal, industrial, preservation and enhancement of fish and wildlife, recreational, mining and power purposes, and any uses specified to be protected in any relevant water quality control plan." Cal. Water Code Ann. § 1257.

19. *See Natl. Audubon Socy. v. Super. Ct. of Alpine Co.*, 658 P.2d 709, 727 (Cal. 1983).

20. *Lux v. Haggin*, 10 P. 674 (Cal. 1886).

21. *Id.* at 749; *see* Cal. Civ. Code Ann. § 22.2 (Westlaw current through Ch. 3 of 2008 Reg.Sess. and Ch. 6 of 2007-2008 Third Ex.Sess. urgency legislation) (adopting English common law as rules of decision).

22. *St. Water Resources Control Bd. v. U.S. (In re Determination of Rights to*

B. *THE CONSTITUTIONAL STANDARD: "REASONABLE AND BENEFICIAL USE"*

In *Herminghaus v. Southern California Edison Co.*,[23] the California Supreme Court, in 1926, held that riparian rights based on the common law were paramount to appropriative rights based on local custom.[24] Under *Herminghaus*, a riparian user was entitled to full satisfaction of his right before appropriation rights could be satisfied, regardless of the relative importance and value of the rights.[25]

In response to *Herminghaus*, the California voters adopted a constitutional amendment in 1928 that placed riparian and appropriative rights on an equal footing, and, more importantly, established California's basic water law that remains in effect today.[26] The constitutional amendment, codified in Article X, Section 2 of the California Constitution, establishes three fundamental principles of California water law: (1) "the water resources of the State [shall] be put to beneficial use to the fullest extent of which they are capable"; (2) "the waste or unreasonable use or unreasonable method of use [shall] be prevented"; and (3) "the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof."[27] The first principle requires maximum utilization of California's water resources; the second requires efficiency of use by avoiding waste; and the third requires conservation of water by ensuring reasonable and beneficial use of water.

The California Supreme Court held that the constitutional amendment establishes a "rule of reasonable use" as California's basic water law, one that applies equally to riparian and appropriative rights.[28] "This amendment," the California Supreme Court stated,

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Water of Hallett Creek Stream System), 749 P.2d 324, 325 n. 2 (Cal. 1988); Hutchins, *supra* n. 2, at 40.

23. *Herminghaus v. S. Cal. Edison Co.*, 252 P. 607 (Cal. 1926).

24. *Id.* at 613.

25. *Id.* at 615.

26. Cal. Const. art. XIV, § 3 (1928) (superseded 1976 by Cal. Const. art. X, § 2); Hutchins, *supra* n. 2, at 13 (citing *Herminghaus*, 252 P. 607 (1926)).

27. Cal. Const., Art. X, § 2. This constitutional amendment is also codified in sections 100 and 101 of the California Water Code. Cal. Water Code Ann. §§ 100, 101 (Westlaw current through Ch. 3 of 2008 Reg.Sess. and Ch. 6 of 2007-2008 Third Ex.Sess. urgency legislation).

28. *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889, 893 (Cal. 1967) (quoting *Peabody v. City of Vallejo*, 40 P.2d 486, 498 (Cal. 1935)).

"establishes state water policy. All uses of water, including public trust uses, must now conform to the standard of reasonable use."[29] Summarizing this policy, the California Supreme Court stated that under the constitutional amendment, "[t]he right to the use of water is limited to such water as shall be reasonably required for the beneficial use to be served," "[s]uch right does not extend to the waste of water"; and "[s]uch right does not extend to unreasonable use . . . or unreasonable method of diversion of water."[30] As a result of the constitutional amendment, riparian and appropriative rights are governed by the same "reasonable and beneficial use" standard, and neither stands on a higher footing than the other.[31]

C. *THE STATUTORY WATER RIGHTS SYSTEM; THE "PUBLIC INTEREST"*

In 1913, the California Legislature adopted a statutory system governing appropriative water rights in order "to provide an orderly method for the appropriation of such waters."[32] This statutory system, which is codified in Divisions 1 and 2 of the California Water Code,[33] implements the constitutional "reasonable and beneficial use" policy, and mandates a state agency, the State Water Resources Control Board (State Board, or Board), to carry it out.[34] Under the statutory system, the State Board "exercise[s] the adjudicatory and regulatory functions of the state in the field of water resources."[35]

Under the statutory system, the State Board exercises its management responsibilities by granting permits for appropriation of water if the proposed water use is consistent with the "public

29. *Natl. Audubon Socy. v. Super. Ct. of Alpine Co.*, 658 P.2d 709, 725 (Cal. 1983).

30. *Peabody*, 40 P.2d at 491.

31. Generally, a "beneficial use" is one that, viewed in isolation, is beneficial to society, such as domestic and irrigation uses. Cal. Water Code Ann. § 1257. A "reasonable use" is one that, viewed in relation to competing uses, is more socially beneficial than other beneficial uses, where there is insufficient water supply to satisfy all uses. *See e.g. Joslin*, 429 P.2d at 891, 900 (upholding municipal needs over gravel washing needs); *Peabody*, 40 P.2d at 488 (upholding municipal storage needs over riparian orchards and vineyards). Thus, reasonable uses necessarily encompass all beneficial uses, but the converse is not true.

32. *Temescal Water Co. v. Dept. of Pub. Works*, 280 P.2d 1, 4 (Cal. 1955) (citing *Bloss v. Rahilly*, 104 P.2d 1049, 1051 (Cal. 1940)).

33. Cal. Water Code Ann. §§ 100-540, 1000-5976.

34. Cal. Const. art. X, § 2; Cal. Water Code Ann. § 1050.

35. Cal. Water Code Ann. § 174; *see Johnson Rancho Co. Water Dist. v. St. Water Resources Control Bd.*, 45 Cal. Rptr. 589, 596 (Cal. App. 3d Dist. 1965).

interest."[36] More specifically, the Board may grant a permit for appropriation of water for "beneficial purposes" under terms and conditions that will, in the Board's judgment, "best develop, conserve, and utilize in the public interest the water sought to be appropriated,"[37] and the Board must reject the application if the proposed use will not serve the "public interest."[38] The Board must consider the "relative benefit" to be derived from "all beneficial uses" of water, and may impose terms and conditions that are in the "public interest."[39] The Board may issue a license after the permittee has built the diversion works and actually put the water to beneficial use.[40] The Board may conduct hearings to determine whether to grant permits,[41] and its decisions are subject to judicial review.[42] Thus, the State Board is guided by the "public interest" in deciding whether to grant appropriative water right permits and in imposing conditions in the permits.[43]

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36. Cal. Water Code Ann. § 1050.

37. *Id.* at § 1253.

38. *Id.* at § 1255. The California Supreme Court, summarizing the statutory water rights system, has stated that the State Board must "consider specific factors relating to beneficial use and the public interest before deciding whether to grant a permit," and shall allow appropriation "only 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." *Envtl. Def. Fund Inc. v. East Bay Mun. Util. Dist.*, 605 P.2d 1, 7 (Cal. 1980) (citing Cal. Water Code. Ann. § 1253).

39. Cal. Water Code Ann. § 1257.

40. *Id.* at § 1600.

41. *Id.* at § 1350.

42. *Id.* at § 1126(a). In 1921, the California Supreme Court held that the Water Commission, the State Board's predecessor, exercised a ministerial function in determining whether sufficient unappropriated water was available for appropriation, and did not have discretion to deny a permit if sufficient unappropriated water were available. *Tulare Water Co. v. St. Water Commn.*, 202 P. 874, 876 (Cal. 1921). After passage of the 1923 constitutional amendment and implementing legislation that broadened the State Board's authority, the California Supreme Court overturned its earlier decision in *Tulare Water* and held that the Board "exercises a broad discretion in determining whether the issuance of a permit will best serve the public interest." *Temescal Water Co. v. Dept. of Pub. Works*, 280 P.2d 1, 7 (Cal. 1955) (citing Cal. Water Code Ann. §§ 1253, 1255).

43. In issuing permits and licenses, the Board must also consider coordinated statewide water development plans, including the California Water Plan, which is developed by the Department of Water Resources (DWR). Cal. Water Code Ann. § 1256. The current California Water Plan establishes the goal of "ensur[ing] that California has sustainable water uses and reliable water supplies in 2030 for all

Characterizing this water rights system, the California Supreme Court stated that the Legislature has adopted a "comprehensive regulatory scheme" to regulate water rights, which demonstrates a "legislative intent to vest in the board expansive powers to safeguard the scarce water resources of the state."[44] "[T]he function of the Water Board," the California Supreme Court stated, "has steadily evolved from the narrow role of deciding priorities between competing appropriators to the charge of comprehensive planning and allocation of waters."[45]

The Legislature has spelled out the public interest as applicable in specific contexts. According to legislative priorities, domestic uses of water—that is, the use of water for drinking and other local municipal and residential uses—has the highest priority, followed by agricultural water uses for irrigation purposes.[46] Additionally, water users in watersheds or areas of origin—that is, the counties or watersheds where the water supply originates—have a priority to the use of such water, and shall not be deprived of their prior rights to its use.[47] Further, the *Delta Protection Act* provides that water uses in the Sacramento-San Joaquin Delta are entitled to special protection,

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beneficial uses," and identifies "three foundational actions—use water efficiently, protect water quality, and support environmental stewardship—that will ensure sustainable water uses." Department of Water Resources, California Water Plan Update 2005, vol. 1, ch. 2, p. 2.1 (Dec. 2005). The Board must also take into account the water quality control plans adopted by the Board and its subordinate agencies, the regional water quality control boards, pursuant to the *Porter-Cologne Act*. Cal. Water Code Ann. § 21000 *et seq*.

44. *People v. Shirokow*, 605 P.2d 859, 865 (Cal. 1980).

45. *Natl. Audubon Socy. v. Super. Ct.*, 658 P.2d 709, 726 (Cal. 1983); *see also U.S. v. St. Water Resources Control Bd.*, 227 Cal. Rptr. 161, 169 (Cal. App. 1st Dist. 1986). The State Board has other responsibilities to administer the state's water rights system, beyond its responsibility to administer appropriative water rights. The Board has authority to quantify and prioritize "dormant"—*i.e.*, unexercised—riparian rights, *Rowland v. Ramelli* (*In re Determination of Rights to Waters of Long Valley Creek Stream Sys.*), 599 P.2d 656, 668 (Cal. 1979); to commence proceedings against riparian users who cause waste and unreasonable use of water, *People ex rel. St. Water Resources Control Bd. v. Forni*, 126 Cal. Rptr. 851, 856 (Cal. App. 1st Dist. 1976); to regulate prescriptive rights, *Shirokow*, 605 P.2d at 712; and to administer the public trust doctrine in California, *Natl. Audubon Socy.*, 658 P.2d at 712.

46. Cal. Water Code Ann. § 106.

47. *Id.* at § 11460.

although the specific nature of the protection and the extent to which it involves priority of use is not clear.[48]

The statutory water rights system authorizes the State Board to approve water appropriations for out-of-stream consumptive uses—such as domestic and agricultural uses—but not for instream, environmental uses, such as protection of fish and wildlife.[49] Conversely, other western states, such as Alaska and Colorado, allow the state's water rights agency to reserve or appropriate water for instream flows, and, once the water is thus reserved or appropriated, the water thereafter cannot be diverted to serve out-of-stream consumptive uses.[50] Thus, some western states authorize appropriation of water for instream uses and others, such as California, do not. In California, however, the State Board must fully consider the public interest—including the need to protect environmental uses, such as fish and wildlife—in deciding whether to grant appropriative permits, and in imposing conditions in the permits.[51] Thus, although California does not authorize the appropriation of water for instream, environmental uses, California requires such uses to be fully considered through the appropriative permit process.

D. *THE PUBLIC TRUST DOCTRINE*

When the original thirteen colonies formed a new nation, they acquired sovereign ownership and control of all navigable waters and underlying lands within their respective jurisdictions, subject to the federal government's subsequently-delegated constitutional powers.[52] As the United States Supreme Court has stated, "when the Revolution took place, the people of each State became themselves sovereign; and in that character hold the absolute right to all their navigable waters and the soils under them for their own common use, subject only to the rights since surrendered by the constitution to the

48. *Id.* at §§ 12200-12205.

49. *See Cal. Trout, Inc. v. St. Water Resources Control Bd.*, 153 Cal. Rptr. 672, 674-76 (Cal. App. 3d Dist. 1979).

50. Western States Water Council, *The Doctrine of Prior Appropriation and the Changing West* 15 (1987).

51. Cal. Water Code Ann. § 1257.

52. *U.S. v. Texas*, 339 U.S. 707, 716-17 (1950); *Shively v. Bowlby*, 152 U.S. 1, 49-50 (1894); *Pollard's Lessee v. Hagan*, 44 U.S. 212, 230 (1845); *Martin v. Waddell's Lessee*, 41 U.S. 367, 410 (1842).

general government."[53] When new states join the Union, they are admitted on an equal footing with the original states, and thus acquire the same sovereign interest in their navigable waters and underlying beds as that enjoyed by the original thirteen states.[54] This principle, often referred to as the equal footing doctrine, provides a constitutional basis for the states to regulate their water resources.[55]

The states hold their sovereign interests in water in trust for certain public uses, generally navigation, commerce and fisheries.[56] The California Supreme Court has held that the State of California holds its waters in trust for other public uses as well, principally certain environmental uses.[57] This principle—that the state holds its waters in trust for public uses—is generally referred to as the public trust doctrine.[58] The public trust doctrine is most immediately traceable to English law—the English King held sovereign interests in navigable waters—and is ultimately traceable to Roman law. Under Roman law, water, like air, belonged to all and therefore was incapable of private ownership.[59] Thus, the public trust doctrine is firmly rooted in the principles of western civilization.

In *National Audubon Society v. Superior Court*,[60] the California Supreme Court held that the public trust doctrine applies in the water rights context in California.[61] There, the City of Los Angeles diverted water from Mono Lake basin pursuant to appropriative permits issued

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53. *Martin*, 41 U.S. at 410.

54. *Texas*, 339 U.S. at 716-17; *Shively*, 152 U.S. at 49-50.

55. California and other western states have adopted constitutional or statutory laws reaffirming their sovereign authority over water resources. Some laws provide that water is the "property" of the people. *See e.g.* Colo. Const. art. XVI, § 5; Wyo. Const. art. VIII, § 1; Cal. Water Code Ann. § 102; Idaho Code Ann. § 42-101 (Westlaw current through (2008) Chs. 1-25 that are effective on or before Feb. 21, 2008). Other laws provide that water use is a "public use" subject to state regulation and control. *See e.g.* Cal. Const. art. X, § 5; Mont. Const. art. IX, § 3; Wash. Const. art. XXI, § 1. The "property" laws presuppose that the states have paramount proprietary rights, or *dominium*, in water, and the "public use" laws presuppose that the states have a sovereign right to regulate water, in the form of an *imperium*.

56. *Ill. C. R.R. Co. v. Ill.*, 146 U.S. 387, 452-60 (1892).

57. *Marks v. Whitney*, 491 P.2d 374, 378-80 (Cal. 1971).

58. *Id.* at 378.

59. *Natl. Audubon Socy. v. Super. Ct.*, 658 P.2d 709, 718-19 (Cal. 1983) (quoting J. Inst. 2.1.1.pr. (J. B. Moyle, D.C.L. trans., Clarendon Press 1906)).

60. *Id.*

61. *Id.* at 712.

by the State Board.[62] An environmental organization brought an action challenging the City's right to divert the water, arguing that the diversions harmed public trust uses—primarily environmental uses—in Mono Lake basin and therefore violated the public trust doctrine.[63] The City argued that it had acquired water rights through the state's administrative process, and that its water rights were "vested" and therefore could not be modified or abridged by the state, whether acting through the State Board or the courts.[64]

The California Supreme Court rejected the City's argument. The Court held that the public trust doctrine authorizes the state to reconsider past water rights decisions—and, if necessary, to modify or revoke prior water rights—in order to protect public trust uses, and therefore, that the water rights granted in such decisions are not "vested."[65] The Court also held, however, that the public trust doctrine—as applied in the water rights context—does not preclude the state from authorizing water diversions in order to maximize the state's water supply, even though this may impair public trust uses in the source rivers and streams.[66] The Court stated that California's economic growth and prosperity were dependent to a large degree on water diversions that may adversely affect public trust values.[67] Accordingly, the state must balance the economic values served by the diversions against the public trust values in determining whether to authorize such diversions.[68] In effect, the Court held that the state has the right to modify water rights in order to protect public trust uses, but that the state is not mandated to modify such rights in order to protect such uses. The *National Audubon Society* decision was the first in which the California courts held that the public trust doctrine specifically applies to water rights granted under state law.[69]

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62. *Id.* at 711.
63. *Id.* at 712.
64. *Id.* at 727.
65. *Id.*
66. *Id.* at 727-28.
67. *Id.*
68. *Id.* at 728.
69. The *National Audubon Society* Court relied heavily on the United States Supreme Court's decision in *Illinois Central Railroad Company v. Illinois*, which had held that the public trust doctrine authorized the Illinois Legislature to rescind its earlier grant of a fee interest in the Chicago waterfront to a railroad company. *Ill. C. R.R. Co. v. Ill.*, 146 U.S. 387, 463-64 (1892). Though *Illinois Central* primarily relied on federal case

The *National Audubon Society* Court did not consider whether the state has authority to reconsider past water rights decisions under traditional water rights law—as opposed to the public trust doctrine—even though the issue was presented to it. As noted earlier, the basic principle of traditional water rights laws is that water rights exist only to the extent that water is put to "reasonable and beneficial use" and in accordance with the "public interest." Since a water use may meet these standards under some circumstances but not as circumstances change, one might argue—as the State of California did in *National Audubon Society*—that the state's basic water rights laws authorize the modification of water rights where the rights are reasonable and beneficial under original conditions, but not changing conditions.

The California Supreme Court appears, at least in some cases, to have adopted this approach. In *Joslin v. Marin Municipal Water District*,[70] the Court held that a municipal water agency had a prior right to the flows of a river in order to serve the domestic needs of its citizens, as opposed to the right of an upstream gravel-washing operation to use the water for its own commercial needs—even though the gravel-washing company had initiated its diversions before those of the municipal agency.[71] In *United States v. State Water Resources Control Board*,[72] the California Court of Appeal held that the State Board has the right to modify conditions attached to federal and water rights permits in order to protect environmental values in the Sacramento-San Joaquin Delta.[73] Both decisions were based primarily, if not wholly, on traditional water rights laws, as those laws were established in the Constitution and statutes, and not on the public trust doctrine. Therefore, the state apparently has authority to modify water rights under traditional water rights laws

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authority, suggesting that the public trust doctrine may be rooted in federal laws, the United States Supreme Court later held that the *Illinois Central* decision was based on state law, not federal. *Appleby v. City of New York*, 271 U.S. 364, 393, 395 (1926). Under *Appleby*, each state has the right to determine whether the public trust doctrine applies, and to what extent, within its jurisdiction.

70. *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889 (Cal. 1967).

71. *Id.* at 891, 897-98.

72. *U.S. v. St. Water Resources Control Bd.*, 227 Cal. Rptr. 161 (Cal. App. 1st Dist. 1986).

73. *Id.* at 166.

at least under some circumstances, although the scope of such authority is not clear.

The *National Audubon Society* decision, which was rendered a quarter-century ago, has not become the progenitor of a widely-recognized principle of water law, contrary to some expectations at the time of the decision. Neither the courts of California nor of other states have modified existing water rights strictly under public trust principles. Thus, the *National Audubon Society* decision has, to date, not taken its place in the pantheon of California's preeminent precedents defining the right to allocate and use water, in the same way, for example, that the California Supreme Court's decision in *Lux v. Haggin*, which established California's system of dual water rights, has taken its rightful place in this pantheon. Whether *National Audubon Society* will produce an historic change in the water law of California and other states will be determined as the future of water law continues to unfold.

III. FEDERAL AND STATE WATER DEVELOPMENT IN CALIFORNIA

Congress has created a major water development project in California—the Central Valley Project—that redistributes much of the state's water supply, transferring water from areas of surplus to areas of need.[74] The State of California has created a parallel water project—the State Water Project—that similarly redistributes much of the state's water supply.[75] These federal and state projects are the source of much of California's economic prosperity.[76] The United States Supreme Court has held that the federal projects must—under laws enacted by Congress—be operated in conformity with state laws.[77] Thus, the federal and state projects, although created by different systems of government, are operated to a substantial degree under the same regime of laws.

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74. *U.S. v. Gerlach Live Stock Co.*, 339 U.S. 725, 731-32 (1950); *St. Water Resources Control Bd.*, 227 Cal. Rptr. at 165.

75. *St. Water Resources Control Bd.*, 227 Cal. Rptr. at 167.

76. *See Gerlach Live Stock Co.*, 339 U.S. at 732-33; *St. Water Resources Control Bd.*, 227 Cal. Rptr. at 166.

77. *See Cal. v. Fed. Energy Reg. Commn.*, 495 U.S. 490, 503-04 (1990); *First Iowa Hydro-Electric Coop. v. Fed. Power Commn.*, 328 U.S. 152, 167 (1946).

A. *FOUNDATIONAL PRINCIPLES: THE SEVERANCE DOCTRINE AND THE FEDERAL COMMERCE POWER*

The United States was the original owner of all public lands in the West, having acquired them through wars, treaties and negotiations.[78] Since the United States owned the public lands, it originally owned all water flowing across the lands.[79] The early miners and settlers who diverted water to their mining claims and settlements were regarded as trespassers on the public domain.[80] To remove this cloud on their water rights, Congress recognized their rights by enacting several laws regulating mining and desert lands. The *Mining Acts of 1866* and *1870* protected miners' claims that were based on "local customs, laws, and the decisions of courts."[81] The *Desert Land Act of 1877*, which provided cheap land to anyone willing to settle on the public domain lands, provided that surplus waters not used by the settlers were available for the "appropriation and use of the public."[82] These statutes, along with the homestead laws, paved the way for the settlement of the West.

In *California Oregon Power Company v. Beaver Portland Cement Company*,[83] the United States Supreme Court held that the *Mining Acts* and *Desert Land Act* "severed" the waters from the public domain lands.[84] As a result of the severance, the lands remain under federal ownership and control, but the waters flowing across them are subject to regulation and control by the states; thus, although the miners and settlers acquire title to their lands under federal law, they acquire their water rights under state law.[85] According to the Court, the states have a "plenary right" to control non-navigable waters flowing across the public lands, subject only to the federal government's constitutional powers.[86] The decision, beyond recognizing the appropriation doctrine

78. *See Cal. Or. Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142, 156-57 (1935).

79. *Id.* at 162.

80. *See id.* at 156-58.

81. *Act of July 26, 1866*, ch. 262, 14 Stat. 251 (as amended by *Act of July 9, 1870*, 16 Stat. 217).

82. *Act of Mar. 3, 1877*, 19 Stat. 377; 43 U.S.C. §§ 321-323 (Westlaw current through P.L. 110-185 (excluding P.L. 110-181) approved 2-13-08).

83. *Cal. Or. Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142.

84. *Id.* at 155-56, 158.

85. *Id.*

86. *Id.* at 163-64; *Pollard's Lessee v. Hagan*, 44 U.S. 212, 229 (1845).

as the paramount water law of the West, effectively recognized state law as the source of water rights.[87] The severance doctrine, along with the equal footing doctrine mentioned earlier, is the foundational principle of state water rights authority.[88]

The states' authority to regulate water rights under the severance doctrine, however, is limited by the federal government's paramount constitutional powers.[89] The federal government's primary constitutional power to regulate water is based on the Commerce Clause of the Constitution, which authorizes Congress to regulate commerce among the states.[90] The Commerce Clause authorizes the federal government to regulate navigable waters, because navigable waters are the "natural highways" of interstate commerce and the "public property" of the nation.[91] As the United States Supreme Court has stated, " '[f]or these purposes [of protecting navigation and navigable capacity], Congress possesses all the powers which existed in the States before the adoption of the national Constitution, and which have always existed in the Parliament in England.' "[92] The Commerce Clause imposes a "navigational servitude" on navigable waters, and thus water rights holders are not entitled to compensation when the federal government regulates their rights pursuant to its navigation authority.[93] The navigation servitude limits the states'

87. *Cal. v. U.S.*, 438 U.S. 645, 657-58 (1978); *Ickes v. Fox*, 300 U.S. 82, 95 (1937).

88. As discussed earlier, the states also acquired sovereign authority over navigable waters and underlying beds under the equal footing doctrine, subject to the federal government's paramount constitutional powers. *U.S. v. Texas*, 339 U.S. 707, 716-17 (1950); *Pollard's Lessee*, 44 U.S. at 229 (quoting *Martin v. Waddell*, 41 U.S. 367, 410 (1842)). In *Kansas v. Colorado*, the United States Supreme Court stated that the Constitution grants states the right to regulate water rights; this right is based on the Tenth Amendment of the Constitution, which reserves to the states the powers not delegated to the federal government. *Kan. v. Colo.*, 206 U.S. 46, 89-90 (1907) (quoting U.S. Const. amend. X). The Court held that the states have the right to determine the water laws that apply within their respective jurisdictions, and are free to recognize either the riparian doctrine or the appropriation doctrine; "Congress cannot enforce either rule upon any State." *Id.* at 94.

89. *Cal. Or. Power Co.*, 295 U.S. at 163-64.

90. U.S. Const. art. I, § 8; *Gibbons v. Ogden*, 22 U.S. 1, 189-93 (1824).

91. *U.S. v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 703 (1899) ("natural highways"); *Gilman v. Phila.*, 70 U.S. 713, 724-25 (1866) ("public property"); *see U.S. v. Appalachian Elec. Power Co.*, 311 U.S. 377, 426-27 (1940).

92. *U.S. v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53, 63 (1913) (quoting *Gilman v. Phila.*, 70 U.S. at 725).

93. *Kaiser Aetna v. U.S.*, 444 U.S. 164, 177-78 (1979); *U.S. v. Twin City Power*

authority to regulate water rights, because it precludes the states from granting rights that impair or affect the navigability of navigable waters.[94]

B. *THE* RECLAMATION ACT OF 1902; CALIFORNIA V. UNITED STATES

Early in the twentieth century, Congress considered whether to create a national program to reclaim the arid lands of the West and make them habitable and productive.[95] Although many, particularly those from the eastern states, argued that reclamation should be undertaken by private industry rather than the federal government, Congress ultimately rejected the argument and passed the *Reclamation Act of 1902*,[96] which President Theodore Roosevelt signed into law.[97] The *Reclamation Act* authorizes the federal government to build and operate water projects to reclaim the arid lands of the western states. The projects are operated by the United States Bureau of Reclamation (BOR), a branch of the United States Department of the Interior.[98]

Section 8 of the *Reclamation Act* requires the federal reclamation projects to comply with state water laws.[99] The provision states that the Secretary of the Interior must "proceed in conformity with" state laws "relating to the control, appropriation, use, or distribution of

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Co., 350 U.S. 222, 233 (1956); *see Chandler-Dunbar*, 229 U.S. at 81.

94. *U.S. v. Rio Grande Dam & Irrigation Co.*, 174 U.S. at 703.

95. *Reclamation Act of 1902*, ch. 1093, 32 Stat. 388 (1902) (amended by *Reclamation Act of 1920*, ch. 192, 41 Stat. 605 (1920)); 43 U.S.C. §§ 371-600 (Westlaw current through P.L. 110-198 (excluding P.L. 110-181) approved 3-24-08).

96. *Reclamation Act of 1902*, ch. 1093, 32 Stat. 388-390; 43 U.S.C. §§ 371-600.

97. Chester L. Brooks & Ray H. Mattison, NPS Historical Handbook: Theodore Roosevelt, *Theodore Roosevelt and The Dakota Badlands, Roosevelt and the Conservation Movement*, http://www.nps.gov/history/history/online_books/hh/thro/throo.htm (last modified Jan. 17, 2004) (accessed Apr. 14, 2008).

98. In *U.S. v. Gerlach Live Stock Co.*, the United States Supreme Court stated that the *Reclamation Act*, as applied to the Central Valley Project in California, was primarily enacted pursuant to the Commerce Clause, which provides for federal regulation of navigation, but that—to the extent the act regulates activities unrelated to navigation—the *Reclamation Act* can also be sustained under the General Welfare Clause, U.S. Const. art. I, § 8, cl. 1. *U.S. v. Gerlach Live Stock Co.*, 339 U.S. 725, 731 (1950); *see also Ariz. v. Cal.*, 373 U.S. 546, 587 (1963); *Ivanhoe Irrigation Dist. v. McCracken*, 357 U.S. 275, 294 (1958). In *California v. United States*, however, the Court did not mention the General Welfare Clause as the constitutional basis for the *Reclamation Act*. *See Cal. v. U.S.*, 438 U.S. 645, 647-48, 675 (1978).

99. 43 U.S.C. §§ 372, 383.

water."[100] In *Ivanhoe Irrigation District v. McCracken*,[101] the United States Supreme Court limited the scope of the provision, holding that it does not authorize the states to regulate water uses of federal reclamation projects; the provision, the Court stated, requires compliance only with state "proprietary" laws, not state regulatory laws.[102] "We read nothing in § 8," the Court stated, "that compels the United States to deliver water on conditions imposed by the State."[103]

In *California v. United States*,[104] the United States Supreme Court reversed course, holding that section 8 requires the federal government to comply with state water laws—both proprietary and regulatory—in operating the federal reclamation projects.[105] The Court stated that the federal government must comply with state laws both in acquiring water rights—whether by appropriation, purchase or condemnation—and in distributing water from the projects.[106] "Congress," the Court stated, "intended to defer to the substance, as well as the form, of state water law."[107] The Court also stated, however, that section 8 requires federal compliance with state water laws only to the extent that the state laws are "not inconsistent with clear congressional directives."[108] The conclusion that Congress deferred to state water laws, the Court stated, is supported by the "long and involved" historic relationship between the federal government and the states in the field of reclamation, "through [which]

100. *Id.* at § 383.

101. *Ivanhoe Irrigation Dist.*, 357 U.S. 275.

102. *Id.* at 291-92 (quoting 43 U.S.C. § 383; *Neb. v. Wyo.*, 325 U.S. 589, 615 (1945)).

103. *Id.* at 292; *see Ariz.*, 373 U.S. at 586-87; *City of Fresno v. Cal.*, 372 U.S. 627, 630 (1963). Earlier, in the so-called *Pelton Dam* decision, the United States Supreme Court held that the federal government had the right to license a private power project—and presumably to authorize water for the project—even though the waters were not navigable and the rights had not been acquired under state law. *Fed. Power Commn. v. Or.*, 349 U.S. 435, 437 (1955). The Court reasoned that the federal right is sustained under the federal property power because the lands that abutted the project had been reserved from the public domain. *Id.* at 437-39. The decision was widely criticized in the West because of its implication that state laws may not apply to federal water projects. *Id.*

104. *Cal. v. U.S.*, 438 U.S. 645 (1978).

105. *Id.* at 672-73.

106. *Id.* at 665, 667.

107. *Id.* at 675.

108. *Id.* at 672.

runs the consistent thread of purposeful and continued deference to state water law by Congress."[109]

C. *FEDERAL AND STATE WATER PROJECTS IN CALIFORNIA*

During the height of the Great Depression of the 1930s, California considered the construction of a massive water project that would advance California's economy by transferring water from areas of surplus to areas of need.[110] The California Legislature, in 1933, approved a plan to construct the Central Valley Project (CVP), which would transfer water from the Sacramento and San Joaquin Rivers and their tributaries to the water-deficient areas of the Central Valley, which is the source of most of California's agricultural economy.[111] Because of the Great Depression, however, the state was unable to finance the project and turned to the federal government for help.[112] In response, Congress approved the CVP as a federal project.[113] The CVP, similarly to other projects authorized under the *Reclamation Act of 1902*, is operated by the BOR.[114] The CVP was authorized for specific purposes—improving navigation, regulating river flows, controlling floods, and storing and delivering water.[115] The CVP consists of dams, reservoirs and other facilities—principally the Shasta Dam on the upper Sacramento and the Friant Unit on the upper San

109. *Id.* at 653; *see also Nev. v. U.S.*, 463 U.S. 110, 122 (1983); *U.S. v. Alpine Land & Reservoir Co.*, 878 F.2d 1217 (9th Cir. 1989). The *California* case arose in the context of conditions issued by the State Board in permits issued to the BOR for operation of the New Melones Project in California. *U.S. v. Cal.*, 694 F.2d 1171, 1172 (9th Cir. 1982). The conditions affected the distribution and use of water from the project. *Id.* at 1181. Although the Supreme Court in *California v. United States* held that the BOR must comply with state water laws to the extent they are not inconsistent with congressional directives, the Court did not consider whether the conditions imposed by the State Board on the BOR's operation of the New Melones Project were consistent or inconsistent with congressional directives. *Id.* at 1174. On remand, the Ninth Circuit, in a decision authored by then-Judge Anthony Kennedy, concluded that none of the conditions were inconsistent with clear congressional directives and thus all were valid. *Id.* at 1172, 1174, 1182.

110. *U.S. v. St. Water Resources Control Bd.*, 227 Cal. Rptr. 161, 166 (Cal. App. 1st Dist. 1986); *see U.S. v. Gerlach Live Stock Co.*, 339 U.S. 725, 731-32 (1950).

111. *Gerlach Live Stock Co.*, 339 U.S. at 732; *St. Water Resources Control Bd.*, 227 Cal. Rptr. at 166-67.

112. *See id.*

113. *Act of Aug. 26, 1937*, 50 Stat. 844, 850; *Act of Oct. 17, 1940*, 54 Stat. 1198, 1199-200; *Gerlach Live Stock Co.*, 339 U.S. at 731.

114. *See Gerlach Live Stock Co.*, 339 U.S. at 732.

115. *Id.* at 731.

Joaquin—that store water upstream from the Delta; the water, once released from the dams, eventually reaches the Delta, from which it is distributed through other facilities, principally the Delta Mendota Canal, to agricultural and municipal water users in the Central Valley and elsewhere.[116]

In 1951, the California Legislature authorized construction of the state's own water project, the State Water Project (SWP).[117] The Legislature authorized bonds for the project in 1959, which the voters approved the following year.[118] The SWP is operated by the California Department of Water Resources (DWR). The principal feature of the SWP is the Oroville Dam, which is located on the Feather River, a tributary of the Sacramento River. The SWP water, after reaching the Delta, is exported through the California Aqueduct to metropolitan areas and agricultural districts located in the lower Central Valley and in central and southern California.[119] The SWP provides water supplies for approximately two-thirds of the people of California.[120] The CVP and SWP are operated in coordination with each other, pursuant to a coordinated operating agreement between the BOR and DWR.[121]

The BOR and DWR have acquired appropriative water rights permits from the State Board, authorizing the projects to store and release water for their designated purposes.[122] The permits contain conditions—adopted pursuant to the "reasonable and beneficial" use and "public interest" requirements of California law—that restrict water exports from the Delta in order to protect Delta instream needs,

116. *U.S. v. St. Water Resources Control Bd.*, 227 Cal. Rptr. at 166.

117. Cal. Water Code Ann. §§ 12930 *et seq.* (Westlaw current through Ch. 3 of 2008 Reg.Sess. and Ch. 6 of 2007-2008 Third Ex.Sess. urgency legislation); *see Metro. Water Dist. of S. Cal. v. Marquardt*, 379 P.2d 28 (Cal. 1963); *Planning & Conserv. League v. Dept. of Water Resources*, 100 Cal. Rptr. 2d 173, 179 (Cal. App. 3d Dist. 2000).

118. Cal. Water Code Ann. § 12930.

119. *St. Water Resources Control Bd.*, 227 Cal. Rptr. at 166-67.

120. *Metro. Water Dist. of S. Cal. v. Imperial Irrigation Dist.*, 96 Cal. Rptr. 2d 314, 319 n. 8 (Cal. App. 2d Dist. 2000).

121. *St. Water Resources Control Bd.*, 227 Cal. Rptr. at 172.

122. The California Legislature, in 1927, authorized the DWR's predecessor agency to file applications to appropriate water for the contemplated CVP and, after the project was taken over by the federal government, the DWR assigned the applications to the BOR, which then applied for and received permits from the State Board. *Id.* The DWR, in 1967, acquired its own permits from the State Board to operate the SWP. *Id.*

such as maintenance of water quality and protection of fish and wildlife resources.[123]

Congress and the California Legislature have adopted measures that impose additional responsibilities on the federal and state project operators, respectively. For instance, Congress enacted the *Central Valley Project Improvement Act of 1992*,[124] which requires that the CVP reallocate a substantial portion of its water supply—approximately 800,000 acre-feet of water—to fish, wildlife and habitat purposes in the Delta.[125] The California Legislature has enacted Fish and Game Code section 5937, which requires the owner of any dam—such as the DWR—to allow sufficient water to pass through the dam in order to maintain in "good condition" any fish that may be planted or exist below the dam.[126]

In *Natural Resources Defense Council v. Patterson*,[127] a federal district court in California recently held that the BOR must comply with section 5937 of the California Fish and Game Code in operating Friant Dam, a CVP component located on the San Joaquin River.[128] The district court held that section 5937 is a state law relating to the " 'control, appropriation, use or distribution' " of water within the meaning of section 8 of the *Reclamation Act*, and therefore—under the Supreme Court's decision in *California v. United States*—the provision applies to the BOR's operation of Friant Dam.[129] The court concluded

123. *Id.* at 168-69.

124. *Central Valley Project Improvement Act of 1992*, 106 Stat. 4600, 4706.

125. *See O'Neill v. U.S.*, 50 F.3d 677 n. 7 (9th Cir. 1995).

126. Congress and the California Legislature have also enacted other statutes that impose restrictions on the operation of the CVP and SWP. For example, the federal *Fish and Wildlife Coordination Act* requires federal agencies to consider fish and wildlife needs in operating federal projects, including reclamation projects authorized under the *Reclamation Act of 1902*. 16 U.S.C. § 662 (Westlaw current through P.L. 110-198 approved 3-24-08). The federal *Endangered Species Act* requires federal agencies to consult with designated federal agencies before taking actions that may jeopardize endangered or threatened species. *Id.* § 1531 *et seq.*; *Bennett v. Spear*, 520 U.S. 154 (1997). The California Legislature enacted the *Delta Protection Act*, which requires state agencies to act for the "protection, conservation, development, control and use of the waters in the Delta for the public good." Cal. Water Code Ann. §§ 12200-12220 (Westlaw current through Ch. 3 of 2008 Reg.Sess. and Ch. 6 of 2007-2008 Third Ex.Sess. urgency legislation).

127. *Nat. Resources Defense Council v. Patterson*, 333 F. Supp. 2d 906 (E.D. Cal. 2004).

128. *Id.* at 908, 925-26.

129. *Id.* at 917.

that since the BOR's operation of the dam had caused a decline in the "historic" salmon fishery, section 5937 requires the BOR to adopt measures to restore the fishery, even though this may result in a reduction of water deliveries to water districts that have entered into contracts with the BOR.[130] The restorative measures, the court held, must primarily consider the needs of the fishery, but must also take into account the needs of water users who have entered into contracts and have relied on water deliveries for their economic needs and development.[131] The court stated that the *Central Valley Project Improvement Act* does not preempt section 5937 as applied to the BOR's operation of the dam, because the federal statute requires the United States to develop a plan to protect fish, which is consistent with section 5937's goal of protecting fish located below dams.[132] Notably, the court did not specifically consider whether section 5937 was inconsistent with the "clear Congressional directives" in the congressional legislation authorizing the Friant Dam, as required by the Supreme Court's decision in *California v. United States*.[133] The parties reached a negotiated settlement that provided for restoration of the fishery and reduced water deliveries to the users.[134]

D. *THE FEDERAL HYDROPOWER PROGRAM*

In the early twentieth century, Congress established a federal program to regulate hydroelectric power development. The *Federal Power Act of 1920 (FPA)*, as amended in 1935,[135] created a federal agency—now the Federal Energy Regulatory Commission (FERC)—that has permit authority over the construction and operation of hydropower projects.[136] Section 27 of the *FPA* provides that the *FPA* shall be construed as not interfering with state laws relating to the "control, appropriation, use, or distribution" of water.[137] Section 27, which applies to hydropower projects, is virtually identical to—and indeed was

130. *Id.* at 924.
131. *See id.* at 920.
132. *Id.* at 919.
133. *Id.* at 917.
134. *Id.* at 914.
135. 16 U.S.C. §§ 791(a)-793 (Westlaw current through P.L. 110-198 approved 3-24-08).
136. *Id.* at § 797(d)-(f).
137. *Id.* at § 821.

patterned after—section 8 of the *Reclamation Act*, which applies to federal reclamation projects.[138]

In *First Iowa Hydro-Electric Cooperative v. Federal Power Commission*,[139] decided in 1946, the United States Supreme Court held that section 27 of the *FPA* does not authorize the states to regulate hydropower projects licensed under the federal program.[140] The Court stated that section 27 has "primary, if not exclusive, reference to . . . proprietary rights" and therefore does not authorize state regulation of water.[141] Hence, an applicant for a federal hydropower license need not acquire a state water right permit, and the state does not have the right to otherwise regulate the water for the project.[142]

In 1990, in *California v. Federal Energy Regulatory Commission*,[143] the United States Supreme Court reaffirmed its earlier decision in *First Iowa*.[144] The State of California sought to impose conditions on a federally-licensed hydropower project under section 27 of the *FPA*.[145] California argued that the Supreme Court should overturn *First Iowa* and construe section 27 as applicable to state regulatory water laws.[146] According to the State, section 27 should be construed in the same way as section 8 of the *Reclamation Act* because section 27 was patterned after section 8, and—since the Court in *California v. United States* construed section 8 as applicable to state regulatory laws—the Court should construe section 27 in the same way.[147] The Supreme Court rejected the State's argument on *stare decisis* grounds.[148] The Court stated that it would not revisit *First Iowa* in light of "the deference this Court must accord to longstanding and well-

138. 43 U.S.C. §§ 372, 383 (Westlaw current through P.L. 110-198 approved 3-24-08).

139. *First Iowa Hydro-Electric Coop. v. Fed. Power Commn.*, 328 U.S. 152 (1946).

140. *Id.* at 175-76.

141. *Id.* at 176.

142. *See Sayles Hydro Assn. v. Maughan*, 985 F.2d 451, 454 (9th Cir. 1993) (*First Iowa* held that section 27 is "limited to proprietary rights in water").

143. *Cal. v. Fed. Energy Reg. Commn.*, 495 U.S. 490 (1990).

144. *Id.* at 496 (citing *Cal. ex rel. St. Water Resources Bd. v. Fed. Energy Reg. Commn.*, 877 F.2d 743, 750 (9th Cir. 1989)).

145. *Id.* at 493-95.

146. *Id.* at 498-99 (citing *First Iowa Hydro-Electric Coop.*, 328 U.S. at 175-76).

147. *Id.* at 503.

148. *Id.* at 498-99 (citing *Patterson v. McLean Credit Union*, 491 U.S. 164, 172-73 (1989)).

entrenched decisions, especially those interpreting statutes that underlie complex regulatory regimes."[149] The Supreme Court's decisions in *First Iowa* and *California v. FERC* have created the anomaly that state regulatory laws do not apply to hydropower projects, even though—as held in *California v. United States*—state laws do apply to federal reclamation projects.[150]

E. *FEDERAL RESERVED WATER RIGHTS*

The Property Clause of the Constitution authorizes the federal government to possess, regulate and control its own property.[151] Under the Property Clause, Congress has the right to reserve lands from the public domain for federal purposes—such as for Indian reservations, national forests, national parks, and national wildlife refuge areas—and also has the right to reserve water to accomplish the purposes of the reservations.[152] Under the reserved rights doctrine, Congress not only has the *power* to reserve water for the reservations, but also impliedly *exercises* this power when it reserves lands from the public domain.[153] Thus, under the reserved rights doctrine, the United States acquires a reserved federal water right to use water as needed for the purposes of the reservation, with a priority date based on the date that the lands are reserved from the public domain.[154] Since most federal lands were reserved before most water rights were acquired under state laws, federal reserved water rights generally have priority over appropriative rights granted under state law. Unlike the "public interest" test that applies under California law, which requires a balancing of different interests, the reserved rights doctrine does not provide for a balancing of interests. Rather, the federal right must be fully served before other rights with lower priority under state laws

149. *Id.* at 498-99.

150. As will be noted later, Congress partially corrected this anomaly by enacting section 401(a) of the *Clean Water Act*, which provides that no federal permit or license may be issued authorizing any discharge into waters that are inconsistent with state water quality laws. 33 U.S.C. § 1341(a), (d) (Westlaw current through P.L. 110-195 (excluding P.L. 110-181) approved 3-12-08); *Cal. v. U.S.*, 438 U.S. 645, 647 (1978).

151. U.S. Const. art. IV, § 3, cl. 2.

152. *Cappaert v. U.S.*, 426 U.S. 128, 138 (1976) (citing U.S. Const. art. IV, § 3, cl. 2).

153. *Id.*; *Ariz. v. Cal.*, 373 U.S. 546, 599-600 (1963) (citing *Winters v. U.S.*, 207 U.S. 564, 577 (1908)).

154. *Ariz.*, 373 U.S. at 600.

can be served, regardless of the relative importance or value of the rights.[155]

In *United States v. New Mexico*,[156] the United States Supreme Court substantially narrowed the scope of the reserved rights doctrine, holding that the doctrine applies only to the *primary* purposes for which the lands are reserved from the public domain, and not the *secondary* reservation purposes.[157] The Court held that the federal government must acquire water for secondary reservation purposes under state law, in the same manner as other appropriators. In the *New Mexico* case, the Court held that the *primary* reservation purposes of national forest lands (as reserved by the *Organic Administration Act of 1897* and the *Multiple-Use Sustained Yield Act of 1960*) are to conserve water flows and furnish a continuous water supply for timber, and the *secondary* reservation purposes are for aesthetics, recreation, and preservation of wildlife.[158] Therefore, the Court concluded, the United States must acquire water rights for instream uses—*i.e.*, aesthetic, recreation and wildlife uses—under state law, in the same manner as private appropriators.[159] By limiting the reserved rights doctrine to primary reservation purposes, the *New Mexico* Court substantially limited the doctrine's impact on state water laws and on rights granted under such laws.

Difficulties arise in quantifying the reserved water rights of Indian reservations. Should such rights be quantified based on agricultural uses, or other uses, or a combination of both? In *Arizona v. California*,[160] the United States Supreme Court adopted an agricultural standard in quantifying Indian reserved rights; such rights exist to the extent necessary to irrigate the "practicably irrigable acreage" of the reservation.[161] Subsequently, in quantifying the off-reservation fishing

155. *U.S. v. N.M.*, 438 U.S. 696, 715 (1978). The reserved rights doctrine originated in the Supreme Court's decision in *Winters v. United States*, which held that Congress impliedly reserved water for use on Indian reservations when it reserves the lands. *See Winters*, 207 U.S. at 576-77. The United States Supreme Court subsequently extended the reserved rights doctrine to other types of federal reservations, such as national forests and national wildlife refuges. *Ariz.*, 373 U.S. at 601.

156. *U.S. v. N.M.*, 438 U.S. 696.

157. *Id.* at 715.

158. *Id.* at 707-08 (citing *U.S. v. Grimaud*, 220 U.S. 506, 515 (1911)).

159. *Id.* at 702, 707-08.

160. *Ariz. v. Cal.*, 373 U.S. 546.

161. *Id.* at 600-01.

rights of an Indian tribe in Washington State, the United States Supreme Court held that the tribe's share of fish cannot exceed that necessary to enable tribal members to earn a moderate living.[162] The Court's decision raises the possibility that the "moderate living" standard may eventually replace the "practicably irrigable acreage" standard as the basis for quantifying Indian water rights.[163] In another case, the Arizona Supreme Court adopted a "homeland" standard rather than the "practically irrigable acreage" standard as the basis for quantifying Indian water rights, at least where the rights are not based on agricultural uses; under the "homeland" standard, the Indian tribes would have a right to sufficient water to maintain their reservations as a "homeland," which might theoretically involve either more or less water than under the "practicably irrigable acreage" standard.[164]

Since Indian reserved water rights generally have an early priority date, and in many cases have not yet been quantified in adjudications or otherwise, the recognition and application of Indian reserved water rights may have a significant effect on state water laws and rights granted under such laws. In one case, the Ninth Circuit held that the reserved rights doctrine, as applied to Indian water rights, includes fishing rights, and that the Indian fishing rights have a "priority date of time immemorial" and thus are paramount to virtually all other rights.[165] Thus, the quantification of Indian reserved water rights is an important, although largely unsettled, topic of California water law.

F. *FEDERAL RIPARIAN WATER RIGHTS*

In *State Water Resources Control Board v. United States (In re Determination of Rights to Water of Hallett Creek Stream System)*,[166] the California Supreme Court held that the United States has the right to possess riparian water rights under California law, in cases where

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162. *Wash. v. Wash. St. Comm. Passenger Vessel Assn.*, 443 U.S. 658, 661-62, 686 (1979).

163. *See id.* at 686; *see also Ariz.*, 373 U.S. at 600-01.

164. *In re the Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source*, 35 P.3d 68, 76 n. 5, 79 (Ariz. 2001) (citing *In re Gen. Adjudication of All Rights to Use Water in the Gila River Sys. & Source*, 989 P.2d 739, 749 (Ariz. 1999); in turn citing *U.S. v. N.M.*, 438 U.S. at 700)).

165. *U.S. v. Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983); *see also Klamath Water Users Protective Assn. v. Patterson*, 191 F.3d 1115, 1123 (9th Cir. 1999).

166. *St. Water Resources Control Bd. v. U.S. (In re Determination of Rights to Water of Hallett Creek Stream Sys.)*, 749 P.2d 324 (Cal. 1988).

water flows across or adjacent to federal lands.[167] Thus, although the United States may not be able to claim a *reserved* water right under federal law to maintain instream flows—as the Supreme Court held in *United States v. New Mexico*—the United States may be able to claim *riparian* water right under state law for the same purpose in California, because California recognizes riparian rights.[168] The *Hallett Creek* Court held that the United States is a riparian owner of national forest lands, and thus has the same right as other riparian landowners to use waters flowing through its lands, including the right to preserve instream flows.[169] The State of California had argued that the United States holds only *sovereign* interests in federal lands, which are fully defined under the laws of the United States, and that the federal government does not possess riparian water rights, which are an attribute of *private* land ownership.[170] The California Supreme Court rejected the argument, ruling that the riparian doctrine defines the attributes of both public and private lands in states, such as California, that recognize riparian rights.[171] The Court also held, however, that the State of California may regulate federal riparian rights in the same way that it regulates other riparian rights, such as by quantifying the amount of water necessary to satisfy the right and by establishing priorities of riparian rights in relation to appropriative rights.[172]

IV. FEDERAL ENVIRONMENTAL LAWS

In the late 1960s and early 1970s, Congress enacted several major environmental laws, principally the *Clean Water Act*[173] and the *Endangered Species Act*,[174] which authorize the federal government,

167. *Id.* at 334.

168. *Id.* at 328 (citing *U.S. v. N.M.*, 438 U.S. 696, 711-13 (1978); *Hutchins*, *supra* n. 2, at 40).

169. *Id.* at 336.

170. *Id.* at 328.

171. *Id.* at 459-60.

172. *Id.* at 471; *see Rowland v. Ramelli* (*In re Waters of Long Valley Creek Stream Sys.*), 599 P.2d 656, 676 (Cal. 1979) (holding that State Board may quantify and prioritize unexercised riparian rights).

173. 33 U.S.C. § 1251 *et seq.* (Westlaw current through P.L. 110-197 (excluding P.L. 110-181) approved 3-14-08).

174. 16 U.S.C. § 1531 *et seq.* (Westlaw current through P.L. 110-197 (excluding P.L. 110-181) approved 3-14-08).

either directly or indirectly, to regulate water resources.[175] These federal laws limit state water rights by preempting state laws that conflict with the federal goals of improving water quality and protecting endangered species.[176] The limits of the federal laws on state authority, however, are unclear. The United States Supreme Court has interpreted these federal laws narrowly in some circumstances and broadly in others, thus not fully indicating the extent to which these federal laws might override state water laws. Also, the Court has never answered the question whether federal constitutional principles require the federal government and the states to compensate water rights holders for the regulation of their rights, and this fundamental constitutional question remains open.

A. *THE* CLEAN WATER ACT

1. *General*

The *Clean Water Act (CWA)*, which was substantially amended in 1972, establishes a national program to eliminate water pollution.[177] The *CWA* prohibits the "discharge of any pollutant" unless authorized under specific provisions of the *CWA*.[178] The term "discharge of a pollutant" is defined as the "addition" of a pollutant from a "point source," such as a pipe or conduit, into "navigable waters."[179] The term "navigable waters" is defined as "waters of the United States."[180] Thus, the *CWA* broadly prohibits the discharge of pollutants from point sources into waters of the United States except as authorized by the *CWA*.

The *CWA* establishes two major permit programs that authorize and regulate point source discharges into water.[181] First, section 402 establishes the National Pollutant Discharge Elimination System (NPDES), often described as the "heart" of the *CWA* regulatory program.[182] Under the NPDES, the Environmental Protection Agency

175. 33 U.S.C. § 1251 *et seq.*; 16 U.S.C. § 1531 *et seq.*
176. 33 U.S.C. § 1251 *et seq.*; 16 U.S.C. § 1531 *et seq.*
177. 33 U.S.C. § 1251 *et seq.*
178. *Id.* at § 1311(a).
179. *Id.* at § 1362(12).
180. *Id.* at § 1362(7).
181. *Id.* at §§ 1342(a), 1344(a).
182. *Id.* at § 1342.

(EPA) exercises permit authority over the discharge of pollutants from point sources into navigable waters, and is responsible for establishing effluent limitations for such discharges in the NPDES permits.[183] The EPA must authorize a state to administer its own NPDES permit program, if the state submits a permit program to the EPA that meets specified criteria in the *CWA*.[184] California was the first state to obtain EPA-approval of its permit program.[185] To date, forty-five states have received such approval.[186]

Second, section 404 authorizes the Army Corps of Engineers to issue permits authorizing the discharge of dredged or fill materials into navigable waters.[187] The Tenth Circuit has held that the Corps, in exercising its section 404 authority, must consider not only the direct effects of the discharge of dredged or fill materials at the discharge site, but also the indirect effects that may occur in upstream or downstream areas.[188] The Fourth Circuit has held that the EPA may veto the Corps' issuance of a section 404 permit if the EPA determines that the permit fails to adequately protect environmental values.[189]

Section 303 of the *CWA* requires the states to adopt water quality standards for bodies of water, such as rivers and lakes, located in their respective jurisdictions.[190] Thus, the *CWA* not only establishes permit programs governing the discharge of effluents into water, but also requires the states to develop ambient water quality standards for the waters themselves. The state water quality standards, which must be reviewed by the state every three years, are subject to the EPA's approval; if the state revises its standards or adopts new ones, it must again submit the standards to the EPA for approval.[191] The EPA must

183. *Id.* at § 1342(a).

184. *Id.* at § 1342(b).

185. California Chronicle, *California Democratic Congressional Delegation Calls on EPA to Approve California's Waiver Request* [¶¶ 11-12], http://www.californiachronicle.com/articles/40172 (last accessed Apr. 14, 2008).

186. Bureau of Land Management, *Water Quality Law Summary, Chapter Two: Point Sources and NPDES Permits*, http://www.blm.gov/nstc/WaterLaws/Chap2.html (last accessed Apr. 14, 2008).

187. *See* 33 U.S.C. § 1344(e)(1).

188. *Riverside Irrig. Dist. v. Andrews*, 758 F.2d 508, 512-13 (10th Cir. 1985) (Corps must consider effect on endangered whooping crane in downstream area).

189. *James City Co. v. EPA*, 12 F.3d 1330, 1335 (4th Cir. 1993).

190. 33 U.S.C. § 1313.

191. *Id.* at § 1313(c)(1)-(2)(A).

adopt its own water quality standards for a state, if the state fails to establish its own standards or the EPA determines that the state's standards do not meet the *CWA*'s requirements.[192] The water quality standards must establish both the "designated uses" of the waters and "water quality criteria" for such uses.[193] The standards must be established on the basis of the "use and value [of the water] for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes."[194]

Under section 303(d), each state must adopt special measures for waters that fail to meet water quality standards, [195] which are often called "impaired waters." The state must identify and compile a list of impaired waters, after the effluent limitations established for point source discharges are taken into account.[196] The state must also establish a "priority ranking" for impaired waters, taking into account the severity of the pollution and the uses associated with the waters.[197] The state must establish a "total maximum daily load" (TMDL) for such waters that will implement the state's water quality standards; the TMDL is the maximum "load" of pollutants that a water body can receive from all sources—including point sources, non-point sources, natural causes, and with a margin of safety—without violating water quality standards.[198] The state must submit the TMDL to the EPA for approval, and the EPA must either approve the state TMDL or adopt its own.[199]

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192. *Id.* at §§ 1313(b), (c)(3)-(4).

193. *Id.* at § 1313(c)(2)(A); 40 C.F.R. § 130.2(d) (Westlaw current through February 28, 2008).

194. *Id.* at § 1313(c)(2)(A).

195. *Id.* at § 1313(d)(1)(A).

196. *Id.* at § 1313(d).

197. *Id.* at § 1313(d)(1).

198. *Id.* at § 1313(d)(1)(C).

199. *Id.* at § 1313(d)(2). Summarizing this statutory scheme, the Ninth Circuit has stated, "The upshot of this intricate scheme is that the CWA leaves to the states the responsibility of developing plans to achieve water quality standards if the statutorily-mandated point source controls will not alone suffice, while providing federal funding to aid in the implementation of the state plans. . . . TMDLs are primarily informational tools that allow the states to proceed from the identification of waters requiring additional planning to the required plans. . . . As such, TMDLs serve as a link in an implementation chain that includes federally-regulated point source controls, state or local plans for point and nonpoint source pollution, reduction, and assessment of the impact of such measures on water quality, all to the end of attaining water quality goals

The *CWA* also contains provisions recognizing the states' authority to regulate water and thus limiting the *CWA*'s preemptive effect. Section 101(a) declares that the states have the "primary responsibilities and rights" to eliminate water pollution and to plan the development and use of water resources.[200] Section 510 provides that the *CWA* shall not "be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters . . . of such States."[201]

More significantly, section 101(g) declares that "[i]t is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired" by the *CWA*.[202] Section 101(g) appears to significantly limit the preemptive effect of the *CWA* as applied to state regulation of water rights, by providing that the *CWA* does not interfere with such state regulation. The provision, which was added in 1977, is often referred to as the "Wallop Amendment," named for its principal sponsor, Senator Malcolm Wallop of Wyoming.[203] The scope of section 101(g), to the extent it limits the preemptive effect of the *CWA*, has never been fully determined by the courts.

2. *Interbasin Transfers of Water (Section 402)*

The question has arisen whether the NPDES permit program established under the *CWA* applies to the transfer of water from one water basin to another, where the transfer includes a pollutant that is introduced into the second basin. As noted above, section 402 prohibits the "addition" of a pollutant from a point source into waters of the United States except as authorized by an NPDES permit.[204] Some federal courts have held the transfer of water between different basins—where the transfer includes pollutants that are introduced into the second basin—constitutes the "addition" of a pollutant to the

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for the nation's waters." *Pronsolino v. Nastri*, 291 F.3d 1123, 1128-29 (9th Cir. 2002).

200. *Id.* at § 1251(b).

201. *Id.* at § 1370(2).

202. *Id.* at § 1251(g).

203. *Id.*; Reed D. Benson, *Pollution Without Solution: Flow Impairment Problems under* Clean Water Act *Section 303*, 24 Stan. Envtl. L.J. 199, 209 (2005).

204. 33 U.S.C. §§ 1342(a), 1362(12).

second basin and therefore that an NPDES permit is required for the transfer.[205]

The United States Supreme Court addressed this question in *South Florida Water Management District v. Miccosukee Tribe of Indians*.[206] There, a water management district in Florida conveyed waters in the Florida Everglades from a potential flood area to a conservation area. The conveyed water, which was pumped across a levee from the flood area to the conservation area, included a pollutant, phosphorus.[207] The Eleventh Circuit held that the Florida agency was required to acquire an NPDES permit as a condition for transferring the water across the levee, because the transfer resulted in the "addition" of a pollutant from a point source to the conservation area.[208] The Supreme Court, after granting review, rejected several arguments raised by the Florida agency.[209] First, the Court held that the pump that transferred the water was a point source under the *CWA*.[210] Second, the Court held that the NPDES requirements of the *CWA* apply even though the pump was not the origin of the pollutants but merely conveyed them from one location to another.[211] The Court, however, declined to decide the determinative issue—whether the transfer of pollutants from one water basin to another constituted an "addition" of pollutants under the *CWA* and thus triggered the NPDES permit requirements.[212] The Court remanded this issue to the lower courts for further review.[213] Thus, the question whether an NPDES permit is required for water transfers remains open.

The *Miccosukee Tribe* Court also declined to consider whether section 101(g) of the *CWA*—which provides that the *CWA* does not interfere with the states' authority to "allocate quantities of water within its jurisdiction"[214]—exempts water transfers from NPDES

205. *Catskill Mts. Ch. of Trout Unlimited v. N.Y.C.*, 273 F.3d 481, 494-93 (2d Cir. 2001) (on appeal after remand, *Catskill Mts. Ch. of Trout Unlimited v. N.Y.C.*, 451 F.3d 77, 87 n. 13 (2d Cir. 2006)).

206. *S. Fla. Water Mgt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95 (2004).

207. *Id.* at 99-101.

208. *Id.* at 103-04.

209. *Id.* at 104-06.

210. *Id.* at 105-07.

211. *Id.* at 105-06.

212. *Id.* at 108-09.

213. *Id.* at 109.

214. 33 U.S.C. § 1251(g) (Westlaw current through P.L. 110-198 (excluding P.L.

requirements, if such transfers are authorized by state water rights laws. The Court also remanded this issue for further consideration.[215] The Court commented, however, that the application of NPDES requirements to water transfers authorized under state water rights laws might violate section 101(g) by "rais[ing] the costs of water distribution prohibitively," although the Court also commented that such costs may be controlled by the adoption of *general* permit programs, which are adopted for categories of pollution rather than for individual pollution.[216] The Court's comments overlook the fact that section 101(g) is based on the states' sovereign interests in regulating water, not on avoidance of costs to the states. Section 101(g), regardless of how it is construed, is a sovereignty-recognizing measure, not a cost-saving one. In any event, since the Florida program transferred water for flood and conservation purposes rather than for water supply purposes—as is the case for most transfers in California and other western states—it is not clear that the program involved the "allocat[ion] of water" within the meaning of section 101(g) and thus fell within the scope of the provision.

3. *Wetlands Regulation (Section 404)*

Another question that has arisen is whether the Army Corps of Engineers can permissibly regulate wetlands under section 404 of the *CWA*, which authorizes the Corps to exercise permit authority over the discharge of dredged or fill materials into navigable waters.[217] As noted above, the term "navigable waters" is defined in the *CWA* as "waters of the United States."[218] The question, then, is whether wetlands are "waters of the United States." The Corps has adopted regulations broadly defining the phrase "waters of the United States" as including not only traditional navigable waters, but also "[a]ll other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds"—and also "[w]etlands

110-181) approved 3-24-08).

215. *S. Fla. Water Mgt. Dist.*, 541 U.S. at 111-12.

216. *Id.* at 108.

217. 33 U.S.C. § 1344.

218. *Id.* at § 1362(7).

adjacent to" any such waters.[219] Thus, the Corps has broad authority under its regulations to regulate virtually all wetlands in the nation.

The United States Supreme Court has issued several decisions addressing the Army Corps of Engineers' jurisdiction to regulate wetlands and other non-navigable waters under section 404. In *United States v. Riverside Bayview Homes, Inc.*,[220] the Court in 1985 held that the Corps has jurisdiction to regulate wetlands "adjacent" to waters of the United States.[221] In *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* ("*SWANCC*"),[222] the Court in 2001 held that the Corps does *not* have jurisdiction to regulate "isolated" waters—that is, non-navigable waters not connected to navigable waters—because such waters do not have a "significant nexus" to navigable waters.[223] "[I]t is one thing," the Court stated, "to give a word [navigable] limited effect and quite another to give it no effect whatever."[224] The *SWANCC* Court stated that the application of the *CWA* to "isolated" waters would result in a "significant impingement of the States' traditional [authority] . . . over land and water use[s]," and that Congress presumptively would not have " 'significantly changed the federal-state balance' " unless it "clearly" so provided.[225] Thus, the Corps has jurisdiction to regulate "adjacent" wetlands under *Riverside Bayview* but not "isolated" waters under *SWANCC*.

In *Rapanos v. United States Army Corps of Engineers*,[226] the United States Supreme Court, in 2006, considered whether the Army Corps of Engineers has jurisdiction to regulate wetlands that are neither "adjacent" to navigable waters (unlike *Riverside Bayview*) nor "isolated" from navigable waters (unlike *SWANCC*).[227] The Court issued three opinions, none commanding a majority of the justices.[228] The Court's plurality opinion, written by Justice Scalia and signed by four justices, stated that the term " 'waters of the United States' "

219. 33 C.F.R. § 328.3(3) (Westlaw current through Mar. 20, 2008).
220. *U.S. v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985).
221. *Id.* at 129.
222. *Solid Waste Agency of N. Cook Co. v. Army Corps of Engrs.*, 531 U.S. 159 (2001).
223. *Id.* at 167-68.
224. *Id.* at 172.
225. *Id.* at 173, 174 (quoting *U.S. v. Bass*, 404 U.S. 336, 349 (1971)).
226. *Rapanos v. U.S. Army Corps of Engrs.*, 547 U.S. 715 (2006).
227. *Id.* at 729-30.
228. *Id.* at 718.

includes only "relatively permanent, standing or continuously flowing bodies of water . . . that are described in ordinary parlance as 'streams[,] . . . oceans, rivers, [and] lakes.' "[229] The plurality opinion also stated that the only wetlands within the Corps' jurisdiction are those having a "continuous surface connection to bodies that are 'waters of the United States' in their own right, so that there is no clear demarcation between 'waters' and wetlands."[230] A dissenting opinion, written by Justice Stevens and signed by three other justices, argued that the Court should defer to the Corps' regulations in defining "waters of the United States"; as noted above, the Corps' regulations broadly authorize the Corps to regulate virtually all wetlands in the nation.[231] Justice Kennedy wrote a solitary concurring opinion arguing that the term "waters of the United States" includes non-navigable waters, including wetlands, that have a "significant nexus" to navigable waters—the same test employed by the Supreme Court in *SWANCC*.[232] According to Justice Kennedy, a "significant nexus" exists if the wetlands "either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical and biological integrity of other covered waters more readily understood as 'navigable' "—a conclusion that can only be made on a "case-by-case basis."[233]

The federal circuit courts have been unable to agree on whether Justice Kennedy's concurring opinion is the Court's "controlling" opinion. The Ninth, Seventh, and Eleventh Circuits have held that the Kennedy opinion is the controlling opinion, because his opinion reflects the position taken by a majority of the justices who concurred on the "narrowest [possible] grounds."[234] The First Circuit, on the other hand, has held that the Army Corps of Engineers has jurisdiction to regulate wetlands if its jurisdiction is supported by either the Scalia plurality opinion or the Kennedy concurring opinion; the court

229. *Id.* at 739.

230. *Id.* at 742.

231. *Id.* at 788 (Stevens, Souter, Ginsburg & Breyer, JJ., dissenting).

232. *Id.* at 760-61, 779 (Kennedy, J., concurring).

233. *Id.* at 779, 780, 782.

234. *U.S. v. Gerke Excavating*, 464 F.3d 723, 724 (7th Cir. 2006); *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 999-1000 (9th Cir. 2007), *withdrawing*, *N. Cal. River Watch v. City of Healdsburg*, 457 F.3d 1023 (9th Cir. 2006); *S.F. Baykeeper v. Cargill Salt Div.*, 481 F.3d 700 (9th Cir. 2007); *U.S. v. Robison*, 505 F.3d 1208, 1221 (11th Cir. 2007).

reasoned that if the Corps' jurisdiction is upheld by either opinion, a majority of the justices would support the Corps' jurisdiction because the four justices who signed the Stevens dissenting opinion would uphold the Corps' jurisdiction under these and almost all other circumstances.[235] The Supreme Court has, to date, declined to review the conflict between the circuit courts on this issue.

In *Northern California River Watch v. City of Healdsburg*,[236] the Ninth Circuit upheld the Corps' jurisdiction to regulate municipal discharges into a pond—which was a wetland under the Corps' regulations—where the pond was connected to an underground aquifer, which in turn was connected to the navigable Russian River.[237] First, the court held the Corps had jurisdiction to regulate the pond under the Supreme Court's *Riverside Bayview* decision, because the pond—which was a wetland—was "adjacent" to a navigable waterway.[238] The court observed that the United States Supreme Court in *SWANCC* and *Rapanos* specifically declined to overrule *Riverside Bayview*, which had upheld the Corps' jurisdiction to regulate wetlands "adjacent" to navigable waters, and therefore *Riverside Bayview* was still good law.[239] Second, the court held that the Corps also had jurisdiction to regulate the pond under Kennedy's concurring opinion in *Rapanos,* because the pond had a "significant nexus" to navigable waters in that it: (1) seeps into the navigable Russian River (through both surface and groundwater connections), (2) is a significant part of the Russian River ecological system, and (3) affects the chemical integrity of the Russian River because it increases chloride levels in the river.[240]

In *San Francisco Baykeeper v. Cargill Salt Division*,[241] the Ninth Circuit held that the Corps does *not* have jurisdiction to regulate salt ponds in San Francisco Bay.[242] There, the salt waste from the ponds seeped into another pond that was directly adjacent to a slough, and the slough emptied directly into San Francisco Bay. The pond was not

235. *U.S. v. Johnson*, 467 F.3d 56, 64 (1st Cir. 2006).
236. *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993.
237. *Id.* at 995.
238. *Id.* at 1000.
239. *Id.* at 998-99.
240. *Id.* at 1000-01.
241. *S.F. Baykeeper v. Cargill Salt Div.*, 481 F.3d 700 (9th Cir. 2007).
242. *Id.* at 707.

directly connected to the slough, however, and thus the salt waste did not reach the slough or the bay.[243] The court stated that under *Riverside Bayview* the Corps can regulate non-navigable wetlands adjacent to navigable waters—even if the wetlands are not connected to the navigable waters—but that the Corps cannot similarly regulate other waters, such as ponds, that are *not* connected to navigable waters.[244] In other words, *wetlands* adjacent to navigable waters can be regulated regardless of whether they are physically connected to the navigable waters, but other non-navigable waters—such as ponds—cannot be similarly regulated unless they are physically connected to navigable waters.[245] The court thus distinguished between wetlands and other waters in determining whether the Corps can regulate non-navigable waters not connected to navigable waters.[246] This distinction does not seem consistent with Justice Kennedy's concurring opinion in *Rapanos*, which emphasized that the Corps' jurisdiction depends on the *effect* of the regulated waters rather than their characterization.[247]

The Army Corps of Engineers and the EPA recently adopted a Joint Guidance describing the Corps' jurisdiction to regulate wetlands in light of *Rapanos*.[248] Generally, the Guidance provides that: (1) the Corps *categorically* has jurisdiction to regulate certain waters, such as traditional navigable waters and wetlands adjacent to traditional navigable waters; (2) the Corps generally does *not* have jurisdiction to regulate certain other waters, such as swales, erosional features, and roadside ditches; and (3) the Corps' jurisdiction to regulate all other waters (such as wetlands adjacent to non-navigable, non-permanent tributaries) depends on whether the waters meet the "significant nexus" test articulated in Justice Kennedy's concurring opinion.[249] Under the Guidance, whether the waters meet the "significant nexus" depends on several factors, such as the volume, duration and frequency of flows

243. *Id.* at 708.
244. *Id.* at 705.
245. *Id.*
246. *Id.* at 707.
247. *Id.* at 708.
248. U.S. Environmental Protection Agency, June 2007 Legal Memorandum, *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in* Rapanos v. United States & Carabell v. United States 1, http://www.epa.gov/owow/wetlands/pdf/RapanosGuidance6507.pdf (last accessed Apr. 14, 2008).
249. *Id.* at 4-5, 7-8, 11.

and the relative proximity of the regulated waters to traditional navigable waters.[250] The Corps and EPA recently issued an Advance Notice of Proposed Rulemaking, stating that after reviewing public comments on whether further regulatory guidance was needed, the agencies had decided not to undertake a rulemaking describing the Corps' jurisdiction to regulate "Waters of the United States."[251]

4. *State Water Quality Certifications (Section 401(a))*

Section 401(a) of the *CWA* prohibits the issuance of a federal license or permit authorizing a discharge into navigable waters unless the state in which the discharge is located has certified that the discharge will comply with the state's water quality standards.[252] Thus, for example, the federal agency authorized to license hydropower projects—the Federal Energy Regulatory Commission (FERC)—cannot issue a permit authorizing a hydropower project unless the state in which the project is located has certified that the FERC permit complies with the state's water quality standards.[253] As noted earlier, the Supreme Court has construed section 27 of the *Federal Power Act*—which requires federally-licensed hydropower projects to comply with state laws relating to the "control, appropriation, use, or distribution" of water—as not including state regulatory water laws.[254] Thus, although section 27 of the *Federal Power Act* does not authorize the states to apply their regulatory laws to federally-licensed hydropower projects, section 401(a) of the *CWA* does allow the states to apply their regulatory laws—in the form of water quality standards—to the same projects.

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250. *Id.* at 9.

251. *See* U.S. Environmental Protection Agency, *Advanced Notice of Proposed Rulemaking on the Clean Water Act Definition of "Waters of the United States,"* http://www.epa.gov/owow/wetlands/guidance/SWANCC/anpom -bg.html (last updated June 4, 2007) (last accessed Apr. 14, 2008).

252. 33 U.S.C. § 1341(a) (Westlaw current through P.L. 110-198 (excluding P.L. 110-181) approved 3-24-08).

253. *Cal. v. Fed. Energy Reg. Commn.*, 495 U.S. 490, 496-97 (1990); *First Iowa Hydro-Electric Coop. v. Fed. Power Commn.*, 328 U.S. 152, 184 (1946) (Frankfurter, J., dissenting).

254. *Cal. v. Fed. Energy Reg. Commn.*, 495 U.S. at 497; *First Iowa Hydro-Electric Coop.*, 328 U.S. at 175.

In *PUD No. 1 of Jefferson County and City of Tacoma v. Washington Department of Ecology*,[255] the Supreme Court held that a public utility in Washington, which had applied to FERC for a federal license to operate its hydropower project, was required under section 401(a) to obtain a certification from Washington's Department of Ecology that the discharges authorized by the FERC license complied with the state's water quality laws.[256] The Court held that Washington had authority to adopt water quality standards under section 303, and that the public utility was required to comply with the standards under section 401(d).[257] The Court also held that Washington had authority to apply both its "designated uses" and "water quality criteria" to the discharges.[258]

The *Jefferson County* Court rejected the public utility's argument that section 101(g) precludes Washington State from applying its water quality laws to the project.[259] The public utility had argued that its project was subject to Washington State's water rights laws, and that section 101(g) exempts state water rights laws from the *CWA*'s reach—and the reach of the section 401(a) certification requirement.[260] The public utility thus argued that the *CWA* distinguishes between state *water rights* laws—which govern water quantity—and state *water quality* laws, and that the statute applies only to the latter.[261] The Court rejected the argument, stating that "[i]n many cases, water quantity is closely related to water quality; a sufficient lowering of the water quantity in a body of water could destroy all of its designated uses, be it for drinking water, recreation, navigation, or . . . a fishery."[262] The Court also said—citing Senator Wallop's statement during the congressional debates relating to section 101(g)—that the *CWA* authorizes "incidental" impacts on state water rights laws, and that the impacts of Washington's certification requirements on its water rights laws were only "incidental" and thus permissible under section

255. *PUD No. 1 of Jefferson Co. & City of Tacoma v. Wash. Dept. of Ecology*, 511 U.S. 700 (1994).
256. *Id.* at 708-10.
257. *Id.* at 711-13.
258. *Id.* at 715.
259. *Id.* at 720.
260. *Id.*
261. *Id.* at 719.
262. *Id.*

401(a).[263] The Court thus suggested that the *CWA* may permissibly apply notwithstanding state water rights laws if the *CWA*'s impacts on such laws are only "incidental."[264] In any event, the case presented no clear conflict between the *CWA* and state water rights laws, because both section 101(g) and section 401(a) require deference to state laws, albeit the former to state water rights laws and the latter to state water quality laws.[265] Since the case presented no clear conflict between the *CWA* and state laws, the Court's decision offers little guidance for how to resolve such conflicts.

In *S. D. Warren Co. v. Maine Board of Environmental Protection*,[266] the Supreme Court recently held that the states' certification authority under *CWA* section 401(a) applies even to discharges that do not cause water pollution.[267] There, the operator of several hydropower projects applied to FERC for renewal of its license to operate the projects, and also applied to the Maine Board of Environmental Protection for a certification under section 401(a) that the FERC license complied with Maine's water quality laws.[268] The Maine agency issued the certification but imposed new water quality conditions on the projects.[269] The project operator argued that the *CWA*—including its certification requirement—does not apply to the projects and therefore the Maine agency was powerless to impose additional water quality requirements on the projects.[270] In support of his argument, the project operator argued that the projects did not cause water pollution and thus did not "add" pollutants to waters of the United States; the waters may contain pollutants as they flow through the dams, but the dams themselves do not add any pollutants to the waters.[271]

The United States Supreme Court rejected the dam operator's argument.[272] First, the Court held that the release of the water from the hydroelectric turbines into the river constitutes a "discharge" within the

263. *Id.* at 721.
264. *Id.* at 722.
265. *Id.*
266. *S. D. Warren Co. v. Maine Bd. of Envtl. Protec.*, 547 U.S. 370 (2006).
267. *Id.* at 385.
268. *Id.* at 374-75.
269. *Id.* at 375.
270. *Id.* at 377.
271. *Id.* at 379.
272. *Id.* at 379 n. 5.

meaning of the *CWA*.[273] Second, the Court held that the state certification requirement of section 401(a) applies to a "discharge" even though it does not cause the "addition" of pollutants to the water.[274] The Court reached this conclusion because section 401(a) specifically applies to a "discharge" but does not mention that the discharge must include a "pollutant."[275] The Court distinguished section 401(a), which establishes the state certification requirement, from section 402, which establishes the NPDES program, because the latter provision specifically applies to the discharge of a "pollutant" and the former does not.[276] Under the Court's decision, the NPDES program of section 402 applies *only* to discharges that include pollutants, while the state certification program of section 401(a) applies to *all* discharges, regardless of whether or not they include pollutants.[277]

B. *THE* ENDANGERED SPECIES ACT

1. *General*

According to the United States Supreme Court, the *Endangered Species Act* (*ESA*),[278] enacted in 1973, "represented the most comprehensive legislation for the preservation of endangered species ever enacted by any nation."[279] Under section 4 of the *ESA*, either the Secretary of Interior or the Secretary of Commerce (hereinafter jointly

273. *Id.* at 381.
274. *Id.* at 383.
275. *Id.* at 384.
276. *Id.* at 383-84.
277. *Id.* at 377, 380-81, 387.
278. 16 U.S.C. § 1531 *et seq.* (Westlaw current through P.L. 110-198 (excluding P.L. 110-181) approved 3-24-08).
279. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 180 (1978).

"Secretary")[280] are required to list species that are threatened or endangered, based on the best possible science.[281]

The *ESA* establishes two major programs to protect listed endangered or threatened species. First, section 9 prohibits any person from a "take"—that is, killing or harming[282]—of a listed species.[283] Under section 10, however, the Secretary may issue a permit authorizing an "incidental" take of the species if a conservation plan is adopted that minimizes or mitigates the adverse effects.[284] The United States Supreme Court has held that the Secretary may, as part of his responsibility to prevent the unlawful "take" of a listed species, prohibit the destruction or modification of the species' habitat, because the destruction or modification of the habitat may affect the species' survival.[285]

Second, the *ESA* requires federal agencies to avoid taking actions that may harm an endangered or threatened species. Under section 7(a)(2), federal agencies must "insure" that any actions "authorized, funded, or carried out" by them are not likely to "jeopardize" a listed species or impair its critical habitat.[286] Before taking any action that may affect a listed species, the agency must consult with either the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS), depending on which agency has jurisdiction over the species; if the FWS or NMFS determines that the proposed action will jeopardize a listed species or impair its critical habitat, it must issue a biological opinion proposing "reasonable and prudent alternatives" to avoid such jeopardy.[287] Generally, the action agency will comply with

280. Generally, the Secretary of the Interior has jurisdiction over terrestrial species and the Secretary of Commerce has jurisdiction over ocean species. Steven G. Davidson, *Federal Agency Action Subject to Section 7(A)(2) of the* Endangered Species Act, 14 Mo. Envtl. L. & Policy Rev. 29, 32 n. 11 (2006). The Secretary of the Interior has delegated his consultation authority under the ESA to the Fish and Wildlife Service (FWS), and the Secretary of Commerce has delegated his authority to the National Marine Fisheries Service (NMFS). *Id.*

281. 16 U.S.C. § 1533.

282. *Id.* at § 1532(19).

283. *Id.* at § 1538.

284. *Id.* at § 1539.

285. 50 C.F.R. § 17.3 (Westlaw current through P.L. 110-185 (excluding P.L. 110-181) approved 2-13-08); *Babbitt v. Sweet Home Ch. of Communities for a Great Or.*, 515 U.S. 687, 708 (1995).

286. 16 U.S.C. § 1536(a)(2).

287. *Id.* at § 1536(b)(3)(A).

the alternatives recommended by the consultation agency, because the action agency is exempt from the section 9 prohibition against the "take" of an endangered species if it complies with the alternatives recommended in a biological opinion.[288]

In *Tennessee Valley Authority v. Hill*,[289] the United States Supreme Court broadly construed the prohibitory provisions of the *ESA*.[290] The Court held that the *ESA* prohibits the Tennessee Valley Authority (TVA) from completing construction of the Tellico Dam, because the completed dam would jeopardize the continued existence of the endangered snail darter.[291] The Court stated that the *ESA* reflects a "conscious decision by Congress to give endangered species priority over the 'primary missions' of federal agencies," and that Congress's intent was to "halt and reverse the trend towards species extinction, whatever the cost."[292]

2. *Citizen Suit Provision:* Bennett v. Spear

The *ESA* authorizes private citizens to maintain actions to prevent a "violation" of the *ESA*.[293] In *Bennett v. Spear*,[294] the United States Supreme Court held that the citizen suit provision authorizes an action to challenge a biological opinion issued under the *ESA*, even though the action alleges that the biological opinion has gone too far, rather than not far enough, in regulating the species—in other words, that the biological opinion has overregulated rather than underregulated the species.[295] Thus, the court held that water users whose rights are adversely affected by a biological opinion may challenge a biological opinion, and that the right to challenge the opinion does not belong exclusively to environmental organizations seeking to further the *ESA*'s goal of protecting endangered species.[296] The Court also held, however, that the citizen suit provision only authorizes actions to

288. *Id.* at § 1536(b)(4); *Aluminum Co. of Am. v. Bonneville Power Administration*, 175 F.3d 1156, 1159 (9th Cir. 1999).
289. *Tenn. Valley Auth. v. Hill*, 437 U.S. 153 (1978).
290. *Id.* at 194-95.
291. *Id.* at 168, 195.
292. *Id.* at 184-85.
293. 16 U.S.C. § 1540(g).
294. *Bennett v. Spear*, 520 U.S. 154 (1997).
295. *See id.* at 160, 179.
296. *Id.* at 164-66.

challenge a "violation" of the *ESA*, and that a federal agency does not "violate" the *ESA* if it issues a biological opinion, even though the opinion may not be supported by scientific evidence.[297] The Court held, however, that—in cases where a party challenges a biological opinion on grounds that it is not supported by scientific evidence—the party may challenge the opinion under the *Administrative Procedure Act (APA)*,[298] which authorizes actions to challenge final agency actions that are arbitrary and capricious, "or otherwise not in accordance with law."[299] According to the Court, a biological opinion not supported by scientific evidence is arbitrary and capricious and therefore subject to challenge under the *APA* even though it may not "violate" the *EPA* and be subject to challenge under the *ESA* itself.[300]

3. *Federal Responsibilities Under Section 7(a)(2): The* Home Builders *Decision*

The Secretary adopted a regulation interpreting the responsibilities of federal agencies under section 7 of the *ESA*.[301] The regulation states that section 7 applies to "all actions in which there is discretionary Federal involvement or control."[302] Thus, section 7(a)(2), which requires action agencies to consult and avoid jeopardy to endangered species, applies to "discretionary" federal action, but not non-discretionary action.[303]

In *National Association of Home Builders v. Defenders of Wildlife*,[304] the United States Supreme Court held that section 7(a)(2) of the *ESA*, construed in light of the Secretary's regulation, does not authorize the EPA to disapprove a state's application to administer its own NPDES permit program under the *CWA*, even though the state

297. *Id.* at 160-74.

298. 5 U.S.C. § 701(a)(2) (Westlaw current through P.L. 110-195 (excluding P.L. 110-181) approved 2-13-08).

299. 5 U.S.C. § 706; *Bennett*, 520 U.S. at 176, 179.

300. *Bennett*, 520 U.S. at 174, 176-79.

301. 50 C.F.R. § 402.03 (Westlaw current through Feb. 21, 2008).

302. *Id.*

303. *Defenders of Wildlife v. Norton*, 257 F. Supp. 2d 53, 66, 69 (D.D.C. 2003); Mary Jane Angelo, *The Killing Fields: Reducing the Casualties in the Battle Between U.S. Species Protection Law and U.S. Pesticide Law*, 32 Harv. Envtl. L. Rev. 95, 97 (2008).

304. *Natl. Assn. of Home Builders v. Defenders of Wildlife*, 127 S. Ct. 2518 (2007).

program may jeopardize endangered species.[305] There, the State of Arizona applied to the EPA for authority to administer its own NPDES permit program.[306] As noted earlier, the *CWA* mandates the EPA to approve a state NPDES program if it meets specific criteria in the *CWA*.[307] The EPA determined that the Arizona program met the *CWA* criteria and approved the program.[308] The Ninth Circuit overturned the EPA decision, reasoning that the EPA must comply with *ESA* requirements before approving the Arizona program because the EPA approval may jeopardize endangered species; thus, the EPA must consult with the FWS and, if the FWS concludes that the Arizona program will jeopardize endangered species, the FWS must adopt alternatives to avoid these effects.[309] In effect, the Ninth Circuit held that the ESA requirements override the specific provisions of the *CWA* mandating the EPA to approve the Arizona program—and by inference, that the *ESA* overrides all other federal statutes requiring federal agencies to take actions that may affect endangered species.[310]

The United States Supreme Court overturned the Ninth Circuit decision.[311] Relying on the Secretary's regulation, the Supreme Court held that section 7(a)(2) applies only to "discretionary" federal action, and—since the *CWA* mandates the EPA to approve the Arizona program—the EPA does not have discretion in deciding whether to approve the program; thus, the consultation and jeopardy-avoidance requirements of section 7(a)(2) did not apply to the EPA's approval of the Arizona program.[312] In effect, the Court resolved the conflict between the *ESA* and other federal statutes by holding that the *ESA* applies only to actions that the agency has discretion to take under its other statutory authority, and that the *ESA* does not apply where the agency lacks such discretion.[313] The Court distinguished its earlier

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305. *Id.* at 2524-25.

306. *Id.* at 2526.

307. 33 U.S.C. § 1342(b) (Westlaw current through P.L. 110-185 (excluding P.L. 110-181) approved 2-13-08).

308. *Natl. Assn. of Home Builders*, 127 S. Ct. at 2527-28.

309. *Id.* at 2528. The Ninth Circuit reasoned that the EPA's approval of the Arizona program may jeopardize endangered species in Arizona by removing protections for the species that had been put in place while the program was under federal control. *Id.*

310. 33 U.S.C. § 1342(a)(1).

311. *Natl. Assn. of Home Builders*, 127 S.Ct. at 2538.

312. *Id.*

313. *Id.* at 2534.

decision in *Tennessee Valley Authority v. Hill*, stating that the federal agency in *Hill* may have had discretion to comply with *ESA* requirements before completing construction of the Tellico Dam and, in any event, that *Hill* was decided before the Secretary adopted his regulation.[314] The Supreme Court in *Home Builders* thus interpreted the *ESA* more narrowly than in *Hill*.[315]

Since *Home Builders* held that the *ESA* does not apply to non-discretionary federal action, the *ESA* presumably does not apply to actions that an agency is mandated to perform pursuant to its contracts—assuming of course that the contracts do not allow the agency to exercise discretion in carrying out the contractual terms—even though the contracts may have an adverse effect on endangered species. For example, if the U. S. Bureau of Reclamation has signed contracts with water users that require the Bureau to deliver water from federal reclamation projects to the users, and if the contracts do not grant discretion to the Bureau to deliver the water, the Bureau presumably must deliver the water even though this may adversely affect endangered species that are dependent on the same water source.[316] The question whether an agency has discretion to reallocate water for endangered species in such cases, however, may turn on how broadly to view an agency's discretion under the contractual terms. Some courts have construed agency discretion very broadly, although most of these decisions were rendered prior to the Supreme Court's decision in *Home Builders*.[317] Other courts have interpreted agency

314. *Id.* at 2536-37.

315. *Id.* at 2537.

316. In *Defenders of Wildlife v. Norton*, the federal district court for the District of Columbia Circuit determined that the U.S. Bureau of Reclamation does not have "discretionary" authority to reallocate Colorado River water in order to benefit endangered species in Mexico, and thus that section 7(a)(2) does not apply to the Bureau's operation of its Colorado River facilities. *Defenders of Wildlife v. Norton*, 257 F. Supp. 2d 53, 68 (D.D.C. 2003). The court stated that "it seems unlikely that any case will present facts that more clearly make any agency's actions nondiscretionary than this one: a Supreme Court injunction, an international treaty, federal statutes, and contracts between the government and water users that account for every acre foot of lower Colorado River water." *Id.* at 69.

317. *See e.g. Nat. Resources Defense Council v. Houston*, 146 F.3d 1118, 1123 (9th Cir. 1998) (Bureau of Reclamation has discretion to consult under *ESA*, and therefore is required to consult, before renewing water delivery contracts); *Rio Grande Silvery Minnow v. Keys*, 333 F.3d 1109 (10th Cir. 2003), *opinion vacated as moot*, 355 F.3d 1215 (10th Cir. 2004) (Bureau of Reclamation's contracts with water users authorize Bureau to exercise discretion to reallocate contracted-for water supplies to benefit

discretion more narrowly.[318] Although the Supreme Court's *Home Builders* decision held that section 7(a)(2) applies only to discretionary federal action, the decision does not directly address the question of how to determine whether such action is discretionary—and in particular, whether agency discretion should be construed broadly or narrowly. This question remains open.

4. *The Delta Litigation*

In 2007, a federal district court in California invalidated a biological opinion issued by the FWS relating to the operation of the federal and state water projects in California, and required the projects to reduce their water deliveries to their contractors.[319] The decision may have significant consequences concerning California's future water supplies.

The FWS' amended biological opinion, issued on February 16, 2005, concluded that the "coordinated operation" of the federal and state projects, the CVP and SWP, does not jeopardize the continued existence of the Delta smelt, a tiny fish located in the Sacramento and San Joaquin rivers that has been listed as an endangered species by the Secretary of the Interior.[320] The biological opinion determined that the Delta smelt population had declined over the past twenty years, as the result of the operation of the SWP and other causes.[321] The biological opinion also determined that the project operations would adversely affect the smelt through entrainment.[322] Relying on a computer modeling program, however, the opinion concluded that the project operations would not likely jeopardize the continued existence of the smelt, because the level of take resulting from the project operations is at or below historic take levels.[323] The opinion based this conclusion, in part, on the establishment of various conservation measures and a

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endangered species).

318. *See generally e.g. Sierra Club v. Babbitt*, 65 F.3d 1502 (9th Cir. 1995) (Bureau of Land Management does not have discretion in a right-of-way agreement to prevent a logging company from building a road that affects endangered species).

319. *Nat. Resources Defense Council v. Kempthorne*, 506 F. Supp. 2d 322 (E.D. Cal. 2007).

320. *Id.* at 328 n. 1, 333-34.

321. *Id.* at 334-335.

322. *Id.* at 339.

323. *Id.* at 336, 339.

risk assessment program that would avoid or minimize adverse effects.[324] The risk assessment program established an adaptive management program to protect the smelt; under the program, a Delta smelt working group would work with a management team, which, in turn, would consider whether to reduce export diversions from the projects and other measures to protect the smelt.

The district court held that the biological opinion was inadequate on various grounds.[325] The court stated that the biological opinion failed to provide any certainty or requirement that the working group or management team would take any actions to protect the smelt, and also failed to provide reasonable assurances that adverse impacts identified in the biological opinion would be mitigated.[326] The court stated that the biological opinion failed to use the best available science in analyzing the existing Delta smelt population, and that the most recent information indicated that the smelt was at historically low levels.[327] The court also stated that the biological opinion failed to use the best available science in addressing the effect of climate change on the smelt's critical habitat.[328] The court stated that the biological opinion failed to adequately analyze the indirect and cumulative impacts of the project operations on the smelt.[329]

The district court subsequently issued an order requiring the federal and state projects to reduce water exports from the Delta in order to protect the smelt, which must remain in effect until the FWS issues a new biological opinion to provide long-term protection for the smelt.[330] The court ordered that the FWS prepare the biological opinion by no later than September 2008.[331] Some California water agencies have estimated that the court's order will require the projects to reduce their water deliveries to contractors by as much as one-third, which will have a significant effect on California's water supplies.[332]

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324. *Id.* at 339.

325. *Id.* at 387-88.

326. *Id.*

327. *Id.* at 388.

328. *Id.*

329. *Id.*

330. *Nat. Resources Defense Council v. Kempthorne*, 2007 WL 4462391, slip op. at 1 (E.D. Cal. Dec. 14, 2007).

331. *Id.*

332. Another pending action challenges a biological opinion issued in 2004 by NMFS relating to the effect of CVP and SWP operations on endangered salmon

5. *The* California Endangered Species Act

The *California Endangered Species Act (CESA)*,[333] the state counterpart of the federal *ESA*, also protects endangered species in California.[334] The *CESA* authorizes the California Fish and Game Commission to list endangered and threatened species in California.[335] Under the *CESA*, no person may "take" a listed species.[336] The Department of Fish and Game (DFG) may, however, authorize the "incidental" taking of an endangered species, if the impacts are minimized and mitigated and the incidental take will not jeopardize the species.[337] If the DFG issues an incidental take permit, the *CESA*'s prohibition against the "take" of an endangered species does not apply.[338] The "take" prohibition also does not apply if the federal government has issued a permit authorizing an incidental take under the federal *ESA*, and if the DFG determines that the federal incidental take permit is "consistent" with the *CESA*.[339]

In March 2007, the Superior Court for Alameda County held that the DWR's operation of the SWP had violated, and was continuing to violate, the *CESA*, because the SWP operations were resulting in a prohibited "take" of the Delta smelt.[340] The court ordered the DWR to cease and desist further SWP operations within sixty days unless it obtained take authorization from the DFG as provided in the *CESA*.[341] The DWR and several other parties appealed the decision to the California Court of Appeal, the effect of which was to stay the decision

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species in the Delta. *P. Coast Fedn. of Fishermen's Assn. v. Guitierrez*, 2007 WL 2897546 (E.D. Cal. 2007).

333. Cal. Fish & Game Code Ann. §§ 2050-2115.5 (Westlaw current through Ch. 2 of 2008 Reg. Sess. And Ch. 6 at 2007-2008 Third Ex. Sess. urgency legislation).

334. *Id.* at § 2052.

335. *Id.* at § 2070.

336. *Id.* at § 2080.

337. *Id.* at §§ 2081(b)(2), 2081(c), 2081.1.

338. *Id.* at §§ 2081(b), 2081.1.

339. *Id.* at § 2080.1.

340. *Watershed Enforcers v. Cal. Dept. of Water Resources*, No. RG06292124, slip op. at 25-34 (Cal. Super. for Co. of Alameda Judgment entered Apr. 18, 2007) (available generally at http://alameda.courts.ca.gov), *appeal filed*, Case Nos. A117715 & A117750 (Cal. App. 1st Dist.).

341. *Id.* at 34.

pending the outcome of the appeal, and the appeal is currently pending.[342]

6. *Applicability of the Takings Clause to Water Regulation*

The Takings Clause of the U. S. Constitution prohibits the federal government and the states from taking private property for public use without payment of compensation.[343] Under the regulatory takings doctrine, a government regulation of property may constitute an unconstitutional takings if the regulation goes "too far."[344] According to the United States Supreme Court, government regulation goes "too far" if property owners are required to "bear public burdens which, in all fairness and justice, should be borne by the public as a whole."[345] In *Penn Central Transportation Company v. City of New York*,[346] the Supreme Court adopted a three-part balancing test to determine whether government regulation has gone "too far."[347] The balancing test examines: (1) the "economic impact of the regulation on the [property owner]"; (2) whether the regulation interferes with the property owner's "distinct investment-backed expectations"; and (3) the "character of the governmental action," including whether the regulation amounts to a permanent "physical invasion" of the property or promotes the " 'health, safety, morals, or general welfare.' "[348] In *Loretto v. Teleprompter Manhattan CATV Corp.*,[349] the United States Supreme Court held that a government regulation that authorizes a "physical invasion" of property results in a categorical taking of property within the meaning of the Takings Clause, and therefore the

342. The DWR initially notified the DFG that it was relying on its "incidental take" authorization under the biological opinions issued by FWS in 2004 and 2005 for CVP and SWP operations, and requested that the DFG determine whether its incidental take authorization under federal law was "consistent" with the *CESA*. *Id.* at 24-25. The DWR subsequently withdrew its request and notified the DFG that it no longer intended to rely on its incidental take authorization under the federal law. *Id.* at 25.

343. U. S. Const. amends. V, XIV.

344. *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922).

345. *Armstrong v. U.S.*, 364 U.S. 40, 49 (1960).

346. *Penn C. Transp. Co. v. N.Y.C.*, 438 U.S. 104 (1978).

347. *Id.* at 124.

348. *Id.* at 124-25 (quoting *Nectow v. City of Cambridge*, 277 U.S. 183, 188 (1928)).

349. *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982).

government must always compensate the property owner in such cases and the *Penn Central* balancing test does not apply.[350]

The United States Supreme Court has never determined whether the Takings Clause applies to state regulation of water rights, nor whether the clause applies to federal regulations—such as the *CWA* and the *ESA*—that affect water rights granted under state laws. In early cases, the Court held that the states have the right to regulate private property under their police power—if the regulation is supported by a rational basis—and that the states are not required to compensate property owners under these circumstances.[351] Similarly, the Court has held that the state's regulation of water rights under the police power does not violate the Due Process Clause.[352] The Court has also held that the federal government is not required to compensate property owners when it regulates their rights pursuant to its authority to regulate navigable waters under the Commerce Clause, because there is no "property" right to use water adversely to the federal navigation power.[353] The Supreme Court has not determined, however, whether the Takings Clause otherwise applies to government regulation of water and, if so, the circumstances under which it applies.

In two recent Court of Federal Claims cases, one arising in California and the other in Oregon, the court reached divergent conclusions concerning whether federal regulation of water under the *ESA* results in an unconstitutional taking of water rights.

In the California case, *Tulare Lake Basin Water Storage District v. United States*,[354] the Court of Federal Claims, through Judge John Wiese, upheld the takings claims.[355] There, the DWR had entered into contracts with agricultural water users in California to deliver water

350. *Id.* at 426.

351. *See generally e.g. Mugler v. Kansas*, 123 U.S. 623 (1887).

352. *Hudson Co. Water Co. v. McCarter*, 209 U.S. 349, 355-57 (1908).

353. *Compare e.g. U.S. v. Willow River Co.*, 324 U.S. 499 (1945); *U.S. v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53, 76 (1913) *with e.g. Kaiser Aetna v. U.S.*, 444 U.S. 164, 170-80 (1979). The United States Supreme Court has suggested, however, that the United States' regulation of navigable waters may require the payment of compensation if the regulation is not truly related to the protection of navigation or commerce interests. *Kaiser Aetna v. U.S.*, 444 U.S. at 172.

354. *Tulare Lake Basin Water Storage Dist. v. U.S.*, 49 Fed. Cl. 313 (2001).

355. *Id.* at 314.

supplies from the SWP.[356] The FWS and NMFS issued biological opinions concluding that the water deliveries were harming endangered species, the Delta smelt and the winter-run Chinook salmon, respectively.[357] To avoid jeopardy to the species, the DWR reduced its water deliveries to the agricultural users.[358] The court upheld the water users' claims that the United States' application of the *ESA* had unconstitutionally taken their water rights.[359] The court stated that the water users had "property," in the form of their contracts for SWP water, and that the United States had "physically taken" their property by reallocating a portion of their water supplies to benefit endangered species; therefore, the United States was categorically liable for their loss under the Supreme Court's decision in *Lucas v. South Carolina Coastal Council*,[360] which held that government must categorically pay for the "physical invasion" of property.[361] The court stated that "[t]he federal government is certainly free to preserve the fish; it must simply pay for the water it takes to do so."[362] The United States and the water users eventually reached a settlement, under which the United States agreed to pay $16.7 million to compensate the water users for the loss of their rights.[363]

In the Oregon case, *Klamath Irrigation District v. United States*,[364] the Court of Federal Claims, through Judge Francis Allegra, reached the opposite conclusion.[365] There, the Bureau of Reclamation had entered into contracts with agricultural users in Oregon to deliver water supplies from the Klamath Project, a federal reclamation project on the Klamath River.[366] The FWS and NMFS issued biological opinions concluding that the water deliveries were harming endangered species, the shortnose and Lost River suckerfish and the coho salmon,

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356. *Id.* at 314-15.

357. *Id.* at 315.

358. *Id.* at 314.

359. *Id.* at 320.

360. *Id.* at 318-319 (citing *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015 (1992); *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982)).

361. *Lucas*, 505 U.S. at 1015.

362. *Tulare Lake Basin Water Storage Dist.*, 49 Fed. Cl. at 324.

363. *Tulare Lake Basin Water Storage Dist. v. U.S.*, 2004 WL 3728318 (Fed. Cl. 2004) (Settlement Agreement of the Parties).

364. *Klamath Irrigation Dist. v. U.S.*, 67 Fed. Cl. 504 (2005).

365. *Id.* at 540.

366. *Id.* at 507.

respectively.[367] To avoid jeopardy to the species, the Bureau of Reclamation reduced its water deliveries to the agricultural water users.[368] The court rejected the water users' claims that the United States had unconstitutionally taken their water rights.[369] The court stated that the water users do not have property rights, because the water belongs to the public rather than to the users; instead, the users have contract rights that can only be enforced, if at all, through actions for breach of contract.[370] The court rejected the water users' argument that the *Reclamation Act of 1902* created property rights for the users, stating that the statute did not create property rights but instead required that the water rights must be acquired under state law.[371] The court rejected much of the analysis of the *Tulare Lake Basin* decision, stating that the decision "appears to be wrong on some counts, incomplete in others and distinguishable, at all events."[372]

V. RELATIONSHIP BETWEEN WATER SUPPLY PLANNING AND LAND USE PLANNING

As California's population has dramatically grown while its water supplies have remained relatively static, the California courts and the Legislature have required water supply agencies and local land use agencies to better coordinate their planning functions.[373] The courts, interpreting the *California Environmental Quality Act*, have required development projects to demonstrate a reasonable likelihood of obtaining necessary water supplies as a condition for their approval.[374] The Legislature has enacted statutes requiring water supply agencies to

367. *Id.* at 513.
368. *Id.*
369. *Id.* at 540.
370. *Id.* at 515, 534.
371. *Id.* at 516.
372. *Id.* at 538.
373. *E.g. Napa Citizens for Honest Govt. v. Napa Co. Bd. of Supervisors*, 110 Cal. Rptr. 2d 579 (Cal. App. 1st Dist. 2001); *Santa Clarita Org. for Planning the Env. v. Co. of L.A.*, 131 Cal. Rptr. 2d 186 (Cal. App. 2d Dist. 2003); *Sierra Club v. West Side Irrigation Dist.*, 27 Cal. Rptr. 3d 223 (Cal. App. 3d Dist. 2005); *Stanislaus Nat. Heritage Project v. Co. of Stanislaus*, 55 Cal. Rptr. 2d 625 (Cal. App. 5th Dist. 1996).
374. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 150 P.3d 709, 718 (Cal. 2007); *Santa Clarita Org. for Plan. the Env. v. Co. of L.A.*, 68 Cal. Rptr. 3d 449, 456-57 (Cal. App. 2d Dist. 2007); *Co. of Amador v. El Dorado Co. Water Agency*, 91 Cal. Rptr. 2d 66, 77 (Cal. App. 3d Dist. 1999).

engage in long-term water supply planning, and requiring them to identify specific water supplies for proposed development projects that will depend on such supplies.[375] The effect of these judicial and legislative developments is to provide for enhanced coordination of local planning efforts relating to water supplies and land use.

A. *THE* CALIFORNIA ENVIRONMENTAL QUALITY ACT

Under the *California Environmental Quality Act (CEQA)*,[376] a public agency responsible for approving or carrying out a project that may have a "significant effect" on the environment must prepare an environmental impact report (EIR) that describes these effects, and the EIR must describe possible alternatives and mitigation measures to avoid the effects.[377] The California courts have held that—for projects that will depend on water supplies—the EIR must describe and analyze the project's ability to acquire water supplies and the project's effect on the supplies, because the EIR's analysis of the project's environmental effects would otherwise be incomplete.[378] The courts in some cases, such as *Sierra Club v. West Side Irrigation District*,[379] have held that the EIR adequately analyzed the project's effect on water supplies, and in other cases, such as *Stanislaus Natural Heritage Project v. County of Stanislaus*,[380] that the EIR failed to adequately analyze these effects.[381]

In *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova*,[382] the California Supreme Court recently considered whether *CEQA* requires that a proposed project must have an identified

375. Cal. Water Code Ann. § 10610 *et seq* (Westlaw current through Ch. 3 of 2008 Reg. Sess. and Ch. 6 of 2007-2008 Third Ex. Sess. urgency legislation); Cal. Water Code Ann. § 10631.

376. Cal. Pub. Res. Code Ann. § 21000 *et seq.* (Westlaw current through Ch. 3 of 2008 Reg. Sess. and Ch. 6 of 2007-2008 Third Ex. Sess. urgency legislation).

377. *Id.* at § 21002.

378. *E.g. Napa Citizens for Honest Govt. v. Napa Co. Bd. of Supervisors*, 110 Cal. Rptr. 2d 579, 591 (Cal. App. 1st Dist. 2001); *Santa Clarita Org. for Plan. the Env. v. Co. of L.A.*, 131 Cal. Rptr. 2d 186, 190-91 (Cal. App. 2d Dist. 2003); *Sierra Club v. West Side Irrigation Dist.*, 27 Cal. Rptr. 3d 223 (Cal. App. 3d Dist. 2005); *Stanislaus Nat. Heritage Project v. Co. of Stanislaus*, 55 Cal. Rptr. 2d 625, 632-33 (Cal. App. 5th Dist. 1996).

379. *Sierra Club*, 27 Cal. Rptr. 3d. 223.

380. *Stanislaus*, 55 Cal. Rptr. 2d. 625.

381. *Id.* at 640.

382. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 150 P.3d 709 (Cal. 2007).

and certain water supply as a condition for approval.[383] There, Sacramento County had approved two major development projects, consisting of both a community plan and a specific plan for a project within the community plan.[384] The projects contemplated two sources of water supply: (1) short-term supplies, consisting of groundwater supplies from an uncompleted well field; and (2) long-term supplies, consisting of diversions of surface water from the American River, pursuant to contracts that the Sacramento County Water Agency had entered into with the U. S. Bureau of Reclamation.[385] The County's EIR discussed the likelihood of the projects' acquisition of these water supplies, and also discussed the environmental effects of their acquisition.[386] The California Supreme Court held that the County's EIR adequately discussed the environmental effects of the *short-term* supplies and was valid under *CEQA*, but that the EIR failed to adequately discuss the environmental effects of the *long-term* supplies and was invalid under *CEQA*.[387]

The Court articulated four principles for determining the adequacy of an EIR's discussion of water supplies under *CEQA*: (1) an EIR cannot ignore or assume a solution to the problem of supplying water to a land use project, but instead must provide sufficient information so that the benefits and effects of supplying water for the project can be evaluated; (2) an EIR for a large project cannot limit its analysis to water supplies for the initial stages of the project, nor defer the analysis of future water sources and their impacts until later project stages (through a future "tiered" EIR), but instead, must assume that the project will be fully built; (3) there must be a reasonable "likelihood" that water supplies analyzed in the EIR will actually prove available, and the EIR cannot rely on unrealistic allocations or assumptions ("paper water") in determining the likelihood; and (4) if future water sources are uncertain, the EIR must discuss possible replacement sources or alternatives to use of the water, and analyze the impacts of those strategies.[388]

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383. *Id.* at 713.
384. *Id.*
385. *Id.* at 714.
386. *Id.* at 715.
387. *Id.* at 723-24, 731.
388. *Id.* at 720.

Although the California Supreme Court in *Vineyards* answered many questions relating to the balance between water supply planning and land use planning under *CEQA*, the Court left unanswered many other questions. For example, the Court failed to indicate whether local agencies must plan for water supplies before planning for land use, or *vice versa*, or, under the more likely scenario, how local agencies can undertake both planning functions at the same time. The *Vineyards* Court held that *CEQA* requires local governments to undertake significant water supply planning before approving development projects, even to the point of demonstrating the projects must have a "likelihood" of obtaining water supplies.[389] In *County of Amador v. El Dorado County Water Agency*,[390] on the other hand, the California Court of Appeal held that local governments cannot approve water supply projects unless they have substantially completed their land use planning.[391] In *Amador*, the County prepared a *draft* general plan governing the County's future land uses, but had not finally approved the general plan.[392] The County also developed a water project that would develop future water supplies by diverting water from various lakes in the Sierra Nevada range, and the County prepared an EIR for the water development project.[393] The Court of Appeal held that the County's EIR for the water project was invalid because the County had not adopted a final general land use plan.[394] The court determined that the County cannot properly develop a water supply plan before developing a final general plan governing land use, because otherwise the County might plan for maximum land use commensurate with its planned water supply, thus removing one of the impediments to future growth.[395]

In effect, *Amador* held that local agencies cannot develop water supply plans until they have completed their land use planning process, and *Vineyards* held that local agencies cannot develop land use plans until they have developed a "likelihood" of obtaining water supplies.

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389. *Id.*

390. *Co. of Amador v. El Dorado Co. Water Agency*, 91 Cal. Rptr. 2d 66 (Cal. App. 3d Dist. 1999).

391. *Id.* at 72.

392. *Id.* at 71.

393. *Id.*

394. *Id.* at 72.

395. *Id.* at 77-78.

Thus, the *Vineyards* and *Amador* decisions create a conundrum for local planning agencies, because, read together, they prevent local agencies from fully planning for either water supplies or land use until they have fully planned for the other. Presumably the courts will resolve this conundrum in a future case, when the issue is squarely presented.[396]

B. *LEGISLATIVE WATER SUPPLY PLANNING STATUTES*

1. *Urban Water Management Plans*

The Legislature has recently enacted several statutes that require enhanced coordination of water supply planning and land use planning by local agencies. In 1983, the Legislature enacted the *Urban Water Management Planning Act*,[397] which requires water supply agencies to

396. In *Santa Clarita Organization for Planning the Environment v. County of Los Angeles*, the California Court of Appeal recently applied the *Vineyards* standards in upholding an EIR issued by Los Angeles County for a commercial and residential development project. *Santa Clarita Org. for Planning the Env. v. Co. of L.A.*, 68 Cal. Rptr. 3d 449, 452 (Cal. App. 2d. Dist. 2007). There, the County planned to obtain water supplies for the project from a local water agency, the Castaic Lake Water Agency, which had entered into an agreement to obtain water supplies from Kern County Water Agency, which in turn had contractual "entitlements" to SWP water. *Id.* In an earlier case, the Court of Appeal had invalidated the County's EIR for the development project, reasoning that the project had relied on "entitlements" to SWP water even though the SWP had not been completed, and was unlikely ever to be completed; thus, the SWP "entitlements" were "paper water" and could not form the basis for the EIR's judgments. *Santa Clarita Org. for Plan. the Env. v. Co. of L.A.*, 131 Cal. Rptr. 2d 186, 190, 192 (Cal. App. 2d Dist. 2003). The County then substantially revised the EIR, and provided a fuller discussion of the proposed transfer of water supplies from Kern County Water Agency to Castaic Lake Water Agency. *Santa Clarita Org.*, 68 Cal. Rptr. 3d at 453-54. In the recent case, the Court of Appeal held that the revised EIR adequately discussed the likelihood of the County's acquiring water supplies as a result of the Kern County-Castaic Lake water transfer, and that the EIR adequately discussed the environmental effects of the transfer. *Id.* at 457. The court rejected the plaintiff's argument that the planned water supplies were uncertain because of the continuing litigation over the Kern County-Castaic Lake transfer, stating that the project's water supplies were not contingent on the transfer. *Id.* at 458. The court also rejected the plaintiff's argument that the planned supplies were uncertain because the DWR must approve—but had not yet approved—the transfer, and stated that the DWR is not required to approve the transfer. *Id.* Finally, the court stated that the proposed transfer is consistent with state policy to encourage water transfers. *Id.*

397. Cal. Water Code Ann. §§ 10610-10615 (Westlaw current through Ch. 3 of 2008 Reg. Sess. and Ch. 6 of 2007-2008 Third Ex. Sess. urgency legislation).

prepare an Urban Water Management Plan describing the availability of the agency's water supplies for future urban growth.[398] The management plan, which must be updated every five years, must describe the agency's existing and planned future water supplies, and evaluate whether the supplies are sufficient to meet the agency's projected water demands over a twenty-year planning horizon, taking into account the agency's existing and planned future uses.[399] The statute exempts the management plan from *CEQA*, and thus the water supply agency is not required to prepare an EIR for the management plan.[400]

2. SB 610*: Water Supply Assessments*

In 2002, the Legislature passed a bill, *SB 610*, that requires public water supply agencies to provide information regarding the availability of water supplies for proposed projects.[401] Under the statute, public water agencies must prepare a "water supply assessment" describing the availability of water supplies for a proposed project.[402] The water supply agency must provide the assessment to the local government—that is, the city or county—that is considering whether to approve the project, and the local government must then consider the assessment in the EIR for the project and in deciding whether to approve the project.[403] Thus, the assessment provides information about the availability of water supplies that must be considered in evaluating the environmental effects of the project under *CEQA*.

The water supply assessment must describe whether sufficient water supplies are available to meet the proposed project's needs over a twenty-year period, taking into account the water supplier's "existing and planned future uses."[404] The assessment must describe the availability of future water supplies under different scenarios—normal years, dry years and multiple dry years.[405] In determining the

398. *Friends of the Santa Clara River v. Castaic Lake Water Agency*, 19 Cal. Rptr. 3d 625, 629 (Cal. App. 5th Dist. 2004).
399. Cal. Water Code Ann. §§ 10621(a), 10631(a).
400. *Id.* at § 10652.
401. *Id.* at § 10910.
402. *Id.*
403. *Id.* at §§ 10910(a)-(g), 10911.
404. *Id.* at § 10910(c)(3).
405. *Id.*

sufficiency of *existing* water supplies, the assessment must describe the specific legal and funding authority for the supplies—entitlements, contracts, water rights, permits and approvals, funding programs, and so forth.[406] In determining the sufficiency of *future* water supplies, the assessment must describe the plans for acquiring the supplies, including estimated costs and how they will be financed.[407] The assessment may incorporate information from the relevant Urban Water Management Plan, if the management plan provides adequate information for this purpose.[408] For groundwater supplies, the assessment must determine whether the groundwater basin is "sufficient" to meet the project's future demands over a twenty-year period, and must specifically consider past, present and future projected pumping by the water supplier.[409] If a city or county provides its own water supplies, the city or county must prepare the assessment.[410] *SB 610* applies only to large projects, such as residential projects of more than 500 units and large commercial projects.[411]

Although the local agency must consider the water supply assessment in deciding whether sufficient water supplies are available for the project, the agency must determine the sufficiency of water supplies based on the "entire record" and not strictly according to the water supply assessment.[412] Thus, although the agency must consider the assessment, the agency is not required to accept the assessment's conclusion regarding the availability of water supplies; instead, the agency may also consider other information relating to water supply availability. If the agency concludes that sufficient water supplies are not available for the project, the agency must include that information in its findings for the project.[413] Thus, the agency can, at least in theory, approve a project that lacks an adequate water supply, as long as it makes findings concerning the inadequacy of supplies.[414]

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406. *Id.* at § 10910(d).
407. *Id.* at § 10911(a).
408. *Id.* at § 10910(c).
409. *Id.* at § 10910(f).
410. *Id.* at § 10910(b).
411. *Id.* at § 10912(a).
412. *Id.* at § 10911(c).
413. *Id.* at § 10911(b).
414. In *O.W.L. Found. v. City of Rohnert Park*, the Superior Court for Sonoma County held that the City of Rohnert Park's water supply assessment—which described

3. SB 221*: Written Verifications for Tentative Subdivision Maps*

In 2002, the Legislature passed another bill, *SB 221*, which provides that the local government—before approving a tentative subdivision map for a proposed project—must impose a condition requiring that a "sufficient water supply" is available for the project.[415] The condition can be imposed only if the water supply agency has provided a "written verification" to the local government indicating that a sufficient water supply is available for the project.[416] The sufficiency of the water supply under *SB 221* is determined by the same factors that apply to water supply assessments under *SB 610*, such as entitlements, water rights, contracts, and so forth.[417]

These two statutes—*SB 610* and *SB 221*—are fundamentally different in terms of whether a project can be approved if it lacks a "sufficient" water supply. *SB 610* provides that the local agency can, at least in theory, approve a project that lacks a sufficient water supply; the agency is required only to include information about water supply availability in its findings for the project.[418] *SB 221*, on the other hand, requires that the agency, in approving a tentative subdivision map, must include a condition that the project has a "sufficient water supply," and this condition can only be included—and hence the project can only be approved—if the agency determines that sufficient water supplies are available for the project.[419] Thus, a project can be approved under *SB 610* at the initial planning stage—when the local

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the availability of future groundwater supplies for proposed projects—was invalid under SB 610 because the assessment considered only groundwater pumping by the City—which was the water supplier—and did not consider pumping by all other users in the groundwater basin, or subbasin. Br. of Petr. at 1-2, *O.W.L. Found. v. City of Rohnert Park*, No. A114809 (Cal. App. 1st. Dist. No. filed Nov. 22, 2006) (appeal pending). In *California Water Impact Network v. Newhall County Water District*, the Superior Court for Los Angeles County held that a water supply assessment cannot be challenged in a mandamus action brought under California Code of Civil Procedure sections 1085 or 1094.5, because it is not "final" agency action; instead, the assessment can only be challenged as part of the challenge to the EIR under CEQA itself. Respt. Br. at 10, No. B197570 (Cal. App. 2d Dist. filed Nov. 8, 2007) (appeal pending). Both cases are currently pending on appeal.

415. Cal. Govt. Code Ann. § 66473.7(b)(1) (Westlaw current through Ch. 3 of 2008 Reg. Sess. and Ch. 6 of 2007-2008 Third Ex. Sess. urgency legislation).

416. *Id.* at § 66473.7(b)(3).

417. *Id.* at § 66473.7(b); Cal. Water Code Ann. § 10911(c).

418. Cal. Water Code Ann. § 10911(b).

419. Cal. Govt. Code Ann. § 66473.7(b)(1).

agency is deciding whether to approve the project in concept—even though sufficient water supplies may not be available; but the project cannot be approved under *SB 221* at the subsequent, tentative map stage unless sufficient supplies are actually available. The California Supreme Court in *Vineyards*, describing the effect of these water supply statutes, stated that " 'water supplies must be identified with more specificity at each step as land use planning and water supply planning move forward from general phases to more specific phases.' "[420]

One major unresolved question is whether the water supply statutes, *SB 610* and *SB 221*, provide most or all relevant information about water supply availability that, according to the California Supreme Court's decision in *Vineyards*, local land use agencies must consider in evaluating the environmental effects of a project under *CEQA*. In other words, if a water supply assessment under *SB 610* concludes that sufficient water supplies are available for a project, to what extent can the local land use agency properly rely on the assessment in meeting its obligations under *CEQA*? Clearly the agency is required to consider the "entire record" and not just the assessment, as *SB 610* expressly provides.[421] On the other hand, since the Legislature has directed water supply agencies to provide an assessment of water supply availability for the project, the Legislature obviously contemplated that the assessment would provide much of the information that the local land use agency needs to reach its conclusion, and that the agency is entitled to substantially rely on the assessment for this purpose. More broadly, the question is whether the Legislature has provided an answer to the question of water supply availability that the courts in prior *CEQA* cases have sought to answer, or instead, whether the principles concerning water supply availability established in the prior *CEQA* cases remain valid notwithstanding the water supply statutes. In the *Vineyards* case, the Association of California Water Agencies argued as an *amicus* that the water supply statutes provide information about water supply availability that local agencies are entitled to rely on in assessing water supply availability, but the California Supreme Court declined to decide the issue because

420. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova*, 150 P.3d 709, 722 (Cal. 2007) (quoting Amicus Br. at 28-29, *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (Nov. 30, 2005)).

421. Cal. Water Code Ann. § 10911(c).

it had not been raised by the parties. Thus, this issue remains open for future resolution.

VI. CONCLUSION

California water rights law is the product of California's historical development, from the early mining days to the present. As California's economy and water needs have changed, its water laws have also changed. The early water laws, which resolved disputes among competing users based on priority principles, have evolved into a modern regime that allows the state, through an administrative process, to allocate water among competing needs based on the "public interest." The public interest, as defined in California law, recognizes not only the imperatives of demographic and economic growth, but also the need to protect the environment. And, as California's demographic and economic growth has created increased demands for water, California has adopted laws to accommodate its available water supplies with its regulation of land use. Thus, California water law in the modern age involves a vortex of demographic, economic, environmental, and land use factors.

In response to the growing national awareness of the need for environmental protection, Congress has enacted environmental laws that regulate water use, principally by protecting water quality and endangered species. These congressional enactments have expanded the federal presence in the field of water regulation and thereby reduced the authority of California and other states to allocate water under their own laws. Thus, as California's water laws have evolved in response to its growing population needs and environmental awareness, Congress has enacted laws at the national level that limit the balance struck by California and other states among these various needs.

Therefore, California water law, broadly defined, is an amalgam of federal and state laws that define the circumstances under which California can allocate its water supplies and the holders of water rights can exercise their rights. This amalgam of federal and state laws is the product of the nation's, and California's, unique development and growth, and can only be understood when viewed in that context. As California's water laws—and the national laws that affect them—have evolved in response to past needs and conditions, they will continue to evolve as these needs and conditions continue to change.