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February 6, 2008

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CALIFORNIA WATER LAW: HISTORICAL ORIGINS TO THE PRESENT

--Roderick E. Walston *

This paper will describe California water law from its historical origins to the present. California water law is informed not only by California laws but also by federal environmental laws that restrict their application; this amalgam of California 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. O. Holmes, *The Common Law* 1 (1881). Justice Holmes' observation is not more true than as applied to California water law.

California water law has substantially changed from the early days when miners diverted water to their mining claims—and unwittingly created the foundational principles of water law that prevail in California and the West today. In the modern age, California no longer allocates water among competing users—like the miners—based on “first in time, first in right” principles. Rather, California allocates water based on the public interest, as that public interest is defined through the state's institutional processes. The public interest takes into account the needs of those who depend on water supplies for their sustenance—the large cities and farming communities that provide the backbone of California's economy—and the competing need to preserve water in its natural state for various environmental uses, such as the preservation of fish and wildlife. Unlike most other kinds of laws 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.

The paper will discuss California water law from four different perspectives: (1) the California water rights system, tracing its historical roots to the present; (2) the federal and state water projects that develop water supplies for the people of California, and the special federal and state laws that apply to and govern the projects; (3) recently-enacted federal environmental laws, particularly the Clean Water Act and the Endangered Species Act, that have changed the shape of water law by establishing national goals that limit state and local goals; and (4) the relationship between water supply planning and land use planning in California, as affected by California's unique environmental laws and recently-enacted statutes that require local governments to coordinate such planning.

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I. 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, and this custom ripened into a formal doctrine of water law—the doctrine of prior appropriation—that prevails in California and throughout the West. Unlike most other western states, however, California also recognized the riparian right, which is based on the English common law. Thus, California, virtually unique among all other states, has a dual water rights system—one that recognizes both appropriative and riparian rights. The people of California in 1928 adopted a constitutional amendment that places riparian and appropriative rights on an equal footing, and—more importantly—established California's basic water rights law. Under this basic law, water rights exist in California—whether riparian, appropriative, or other—only to the extent that water is put to “reasonable and beneficial use” and in accordance with the “public interest.” Thus, from the early days when water disputes were settled under “first in time, first in right” principles, California water law has evolved to the point that the state significantly manages its water resources for varied interests, both for cities and farming areas that depend on their water supplies for growth and development and for protection of environmental values.

A. Nature of Water Rights: The Riparian and Appropriation Doctrines

The riparian doctrine was the original water law doctrine in California, as in other American states. Under the riparian doctrine, a landowner has the right to reasonable use of waters flowing across or contiguous to his land, subject to reasonable use by other riparian users.¹ The riparian doctrine is based on parity rather than priority of water rights; riparian users share equally, and none has priority over others.² The riparian doctrine derived from the English common law, which recognized the riparian right as one of the attributes of land ownership.³ Thus, the riparian right attaches to the land, and is one of the “bundle of sticks” that define land ownership under the common law. Since the riparian right attaches to the land, it is neither created by use nor lost by nonuse.⁴ Since 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 of most eastern states today.⁵

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

¹ *E.g.*, *Rancho Santa Margarita v. Vail*, 11 Cal.2d 501, 560-562 (1938); *People v. Shirokow*, 26 Cal.3d 301, 301, 307 (1980).

² *Id.*

³ *Id.*

⁴ *Id.*

⁵ *See generally id.*; *Lux v. Haggin*, 69 Cal. 255 (1886); *Miller & Lux v. Enterprise Canal & Land Co.*, 169 Cal. 415, 441 (1915); *United States v. California (Hallett Creek)*, 44 Cal.3d 448 (1988); Hutchins, *The California Law of Water Rights* (1956), pp. 40-41; Littleworth & Garner, *California Water* (1995) (hereinafter “Littleworth”) pp. 32-39.

States owned the lands on which their mining claims were located. 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. 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.⁶

Under the appropriation doctrine, a person has the right to divert water to “beneficial use,” even though the appropriator may not own the lands where the water is found.⁷ The appropriation doctrine, unlike the riparian doctrine, establishes priority among competing users; to be “first in time” is to be “first in right.”⁸ The 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 is lost by nonuse.⁹ 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.¹⁰ Thus, “beneficial use” is the lodestar of the appropriation doctrine. The early miners’ simple custom of diverting water to their mining claims became the dominant water law doctrine that prevails in California and the West today, and that allows the metropolitan and agricultural areas that form the backbone of the modern West’s economy to obtain necessary water supplies for their growth and development.

Most western states have adopted the appropriation doctrine as their exclusive water rights law, and thus that riparian rights do not apply in their jurisdictions. The California Supreme Court held in an early landmark decision, however, that—although California recognized appropriative rights—it also recognized riparian rights as well, since California had adopted the English common law on which riparian rights were based.¹¹ Thus, California,

⁶ See generally *United States v. Gerlach Live Stock Co.*, 339 U.S. 725, 744-752 (1950); *Jennison v. Kirk*, 98 U.S. 453, 456-461 (1878); *Joslin v. Marin Muni. Wat. Dist.*, 67 Cal.2d 132, 136-138 (1967); *Irwin v. Phillips*, 5 Cal. 140 (1855); Littleworth, at 39-47.

⁷ *Gerlach*, 339 U.S. at 744-751; *Joslin*, *supra*, 67 Cal.2d at 136-138; *Shirokow*, 26 Cal.3d at 307-308.

⁸ *Id.*

⁹ *Id.*

¹⁰ 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.’” S. Gross, *The Galloway Project and the Colorado River Projects*, 25 Nat. Resources J. 935 (1985), quoting Prof. A. Utton, *Glossary of Terms Commonly Used in Water Law* (1985). 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.” Wat. Code § 1257.

¹¹ *Lux v. Haggin*, 69 Cal. 255 (1886); see Cal. Civ. Code § 22.2 (adopting English common law as rules of decision).

unlike most other western states, has a dual water rights system, one that recognizes both appropriative and riparian rights.¹²

B. The Constitutional Standard: “Reasonable and Beneficial Use”

In *Herminghaus v. Southern California Edison Co.*,¹³ decided in 1926, the California Supreme Court held that riparian rights, which were based on the common law, were paramount to appropriative rights, which were based on custom. Under *Herminghaus*, a riparian user was entitled to full satisfaction of his right regardless of the relative importance of, or impacts on, appropriative rights.

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. The constitutional amendment is currently codified in Article X, Section 2 of the California Constitution, and also in sections 100 and 101 of the Water Code. The constitutional amendment 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 to 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.”¹⁴ 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 has 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.¹⁵ As the California Supreme Court has stated, “[t]his amendment . . . establishes state water policy. All uses of water, including public trust uses, must now conform to the standard of reasonable use.”¹⁶ The Court, summarizing the constitutional amendment, has stated that “[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”¹⁷ As a result of the constitutional amendment, riparian and appropriative rights are governed by the same “reasonable and beneficial use” standard, and neither has priority over the other.¹⁸

¹² *United States v. California (Hallett Creek)*, 44 Cal.3d 448, 454 n. 2 (1988).

¹³ 200 Cal. 81 (1926).

¹⁴ Cal. Const., Art. X, § 2.

¹⁵ *Joslin*, 67 Cal.2d at 137; *Peabody v. City of Vallejo*, 2 Cal.2d 351 (1935), 383; *Gin S. Chow v. City of Santa Barbara*, 217 Cal. 673 (1933).

¹⁶ *National Audubon Society v. Superior Court*, 33 Cal.3d 419, 443 (1983).

¹⁷ *Peabody*, 2 Cal.2d at 367.

¹⁸ Generally, a “beneficial use” is one that, viewed in isolation, is beneficial to society, such as domestic and irrigation uses. Wat. Code § 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*, 67 Cal.2d 132 (upholding

C. The Statutory Water Rights System; The “Public Interest”

In 1914, the California Legislature adopted a statutory system governing appropriative water rights in order “to provide an orderly method for the appropriation of waters.”¹⁹ This statutory system is codified in Division 1 (§§ 100-464) and Division 2 (§§ 1000-4407) of the Water Code. This statutory system 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.²⁰ Under the statutory system, the State Board “exercise[s] the adjudicatory and regulatory functions of the state in the field of water resources.”²¹

Under the statutory system, any person who proposes to appropriate water must apply to the State Board for a permit.²² The Board must consider the “public interest” in deciding whether to issue the permit and impose conditions in it. Specifically, the Board shall allow the appropriation of water for “beneficial purposes” under terms and conditions that will in its judgment “best develop, conserve, and utilize in the public interest the water sought to be appropriated.”²³ The Board must reject the application if the proposed use will not serve the “public interest.”²⁴ In considering the proposed use, 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.”²⁵ The Board may issue a license after the permittee has built the diversion works and actually put the water to beneficial use.²⁶ The Board may conduct hearings to determine whether to grant permits,²⁷ and its decisions are subject to judicial review.²⁸ The

municipal needs over gravel washing needs); *Peabody*, 2 Cal.2d 351 (upholding municipal storage needs over riparian orchards and vineyards). Thus, reasonable uses necessarily encompass all beneficial uses, but the converse is not true.

¹⁹ *Temescal Wat. Co. v. Department of Pub. Works*, 44 Cal.2d 90, 95 (1955).

²⁰ Wat. Code § 1050.

²¹ Wat. Code § 174; see *Johnson Rancho County Wat. Dist. v. State Water Resources Control Bd.*, 235 Cal.App.2d 863, 867 (1965).

²² Wat. Code § 1260.

²³ *Id.* at § 1253.

²⁴ *Id.* at § 1255.

²⁵ *Id.* at § 1257.

²⁶ *Id.* at § 1600.

²⁷ *Id.* at § 1350.

²⁸ *Id.* at § 1360. 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. State Water Comm’n*, 187 Cal. 533 (1921). After passage of the 1928 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 Wat. Co. v. Dept. of Pub. Works*, 44 Cal.2d 90, 100 (1955).

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.”²⁹ 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.

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).³⁰ 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.³¹

As stated by the California Supreme Court, 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.”³² As the California Supreme Court has stated, “the function of the Water Board has steadily evolved from the narrow role of deciding priorities between competing appropriators to the charge of comprehensive planning and allocation of waters.”³³

The Legislature has specifically spelled out the public interest as it applies in certain situations. Under the Water Code, domestic water uses have the highest priority among competing uses, followed by agricultural water uses for irrigation purposes.³⁴ The Water Code also provides that water users in watersheds or areas of origin—that is, where the water supply originates—have a priority to the use of such water, and shall not be deprived of their prior rights

²⁹ *Environmental Defense Fund v. East Bay Muni. Util. Dist.*, 26 Cal.3d 183, 196 (1980).

³⁰ *Id.* at § 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 beneficial uses,” and identifies “three foundational actions—use water efficiently, protect water quality, and support environmental stewardship—that will ensure sustainable water uses.” California Water Plan Update 2005, Bulletin 160-05, ch. 2, p. 2.1, DWR (Dec. 2005).

³¹ Wat. Code § 21000 *et seq.*

³² *People v. Shirokow*, 26 Cal.3d 301, 309 (1980).

³³ *National Audubon Society v. Superior Court*, 33 Cal.3d 419, 444 (1983). *See also United States v. State Water Resources Control Bd.*, 182 Cal.App.3d 82, 103 (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, *In re Waters of Long Valley Creek Stream System*, 25 Cal.3d 339 (1979); to commence proceedings against riparian users who cause waste and unreasonable use of water, *People ex rel. State Water Resources Control Bd. v. Forni*, 54 Cal.App.3d 743 (1976); to regulate prescriptive rights, *People v. Shirokow*, 26 Cal.3d 301 (1980); and to administer the public trust doctrine in California, *National Audubon Society v. Superior Court*, 33 Cal.3d 419 (1983).

³⁴ Wat. Code § 106.

to its use.³⁵ The Delta Protection Act provides that water uses in the Sacramento-San Joaquin Delta are entitled to special protection, although the specific nature of the protection is not clear.³⁶

The statutory water rights system authorizes the State Board to approve water appropriations for out-of-stream consumptive uses, but not for instream, environmental uses, such as protection of fish and wildlife.³⁷ Other states, such as Alaska and Colorado, allow the appropriation or reservation of water for instream flows; once the water is appropriated or reserved for this purpose, the water cannot be diverted to serve out-of-stream consumptive uses elsewhere.³⁸ Thus, some western states authorize appropriation of water for instream uses and other states, such as California, do not. In California, however, the State Board must fully consider the public interest—including the need to protect environmental interests, such as fish and wildlife—in deciding whether to issue appropriative permits, and in imposing conditions in the permits.³⁹ 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.⁴⁰ As the U. S. Supreme Court has stated, "[w]hen the Revolution took place, the people of each state became themselves sovereign; and in that character holds 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 to the general government."⁴¹ When new states join the Union, they are admitted on an equal footing with the original states; thus, new states acquire the same sovereign interest in their navigable waters and underlying beds as that enjoyed by the original thirteen states.⁴² This principle, often referred to as the equal footing doctrine, provides a constitutional basis for the states to regulate their water resources, subject to the federal government's paramount constitutional authority.⁴³

³⁵ *Id.* at § 11460.

³⁶ *Id.* at §§ 12200-12205.

³⁷ *California Trout, Inc. v. State Water Resources Control Board*, 90 Cal.App.3d 816 (1979).

³⁸ Western States Water Council, "The Doctrine of Prior Appropriation and the Changing West," at 11-20 (1987).

³⁹ Wat. Code § 1257.

⁴⁰ *Martin v. Waddell*, 41 U.S. (16 Pet.) 367, 410 (1842); *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212, 219 (1845); *Shively v. Bowlby*, 152 U.S. 1, 49-50 (1894); *United States v. Texas*, 339 U.S. 707, 716-717 (1950).

⁴¹ *Martin*, 41 U.S. at 410.

⁴² *Shively*, 152 U.S. at 49-50; *Texas*, 339 U.S. at 716-717.

⁴³ 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.*, Cal. Wat. Code § 102; Colo. Const., Art. XVI, § 5; Idaho Code § 42-101;

The states hold their sovereign interests in water in trust for the public, for the protection of certain public uses—navigation, commerce and fisheries.⁴⁴ The California Supreme Court has held that the State of California holds the waters in trust for other uses as well, principally certain environmental uses.⁴⁵ The principle that the state holds its waters in trust for the public is generally referred to as the public trust doctrine. The public trust doctrine, although most immediately traceable to the English King’s sovereign control of water, is ultimately traceable to Roman law; under Roman law, water, like air, belonged to all and therefore was incapable of private ownership.⁴⁶ Thus, the public trust doctrine is firmly rooted in the principles of western civilization.

The California Supreme Court held in 1983 that the public trust doctrine applies in the water rights context in California.⁴⁷ There, the City of Los Angeles diverted water from Mono Lake basin pursuant to appropriative permits issued by the State Board. 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. 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.

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.” 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.⁴⁸ 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.⁴⁹ Accordingly, the state must balance the economic values served by the diversions against the public trust values in determining whether to authorize such diversions.⁵⁰ 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

Wyo. Const., Art. VIII, § 1. Other laws provides that water use is a “public use” subject to state regulation and control. *See, e.g.*, Cal. Const., Art. X, § 5; Mont. Const., Art. § 5; 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*.

⁴⁴ *Illinois Central Railroad Company v. Illinois*, 146 U.S. 387, 452-461 (1892).

⁴⁵ *Marks v. Whitney*, 6 Cal.3d 251 (1971).

⁴⁶ Institutes of Justinian 2.1.1; *National Audubon Society v. Superior Court*, 33 Cal.3d 419, 434 (1983).

⁴⁷ *National Audubon Society v. Superior Court*, 33 Cal.3d 419 (1983).

⁴⁸ 33 Cal.3d at 446.

⁴⁹ *Id.*

⁵⁰ *Id.*

courts held that the public trust doctrine specifically applies to water rights granted under state law.⁵¹

The *National Audubon Society* Court did *not* decide whether the state has authority to reconsider past water rights decisions under traditional water rights laws. As noted earlier, these traditional water rights laws include the constitutional provision establishing the “reasonable and beneficial use” test as the state’s basic water rights law, and the statutory provisions requiring the State Board to consider the “public interest” in granting water rights permits. In other cases, the California courts appear to have concluded that these traditional water rights laws authorize the modification of water rights, at least under some circumstances. In *Joslin v. Marin Municipal Water Dist.*,⁵² the California Supreme Court held that a municipal agency’s right to divert water for public water drinking supplies was superior to a commercial gravel-washing operator’s right to divert the water to its gravel-washing operation, even though the commercial gravel-washing operation had initiated its diversions earlier. In *United States v. State Water Resources Control Board*,⁵³ 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. Both decisions were based, at least primarily, on the traditional water rights laws established in the constitutional provision and the statutes, and not on the public trust doctrine. Therefore, the state apparently has the right to modify water rights under traditional water rights laws at least under some circumstances, although the scope of the state’s authority to modify the rights is not clear.

Although *National Audubon Society* was decided a quarter-century ago, the decision 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 the courts of other states have modified existing water rights strictly under public trust principles. Thus, the *National Audubon Society* decision has not, at least to date, taken its place in the pantheon of California’s basic water laws that fundamentally affect and control the state’s water rights regime, in the same way, for example, that the California Supreme Court’s decision in *Lux v. Haggin*,⁵⁴ which recognized the existence of both riparian and appropriative rights in California, has taken its place in this pantheon. Whether *National Audubon Society* will produce an historic

⁵¹ The *National Audubon Society* Court relied heavily on the U. S. Supreme Court's decision in *Illinois Central Railroad Company v. Illinois*, 146 U.S. 387 (1892), which had held that the public trust doctrine authorizes the Illinois Legislature to rescind its earlier grant of a fee interest in the Chicago waterfront to a railroad company. Significantly, *Illinois Central* primarily relied on federal case authority, suggesting that the public trust doctrine may be rooted in federal law. Subsequently, the U.S. Supreme Court held that the *Illinois Central* decision was based on state law, not federal law. *Appleby v. City of New York*, 271 U.S. 364 (1926). Under *Appleby*, each state has the right to determine whether the public trust doctrine applies, and to what extent, within its jurisdiction.

⁵² 67 Cal.2d 132 (1967).

⁵³ 182 Cal.App.3d 82 (1986),

⁵⁴ 69 Cal. 255 (1886).

change in the water law of California and other states will be determined as the future of water law continues to unfold.

II. 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. The State of California has created a parallel water project—the State Water Project—that similarly redistributes much of the state’s water supply. Under the U.S. Supreme Court’s decision in *California v. United States*, 438 U.S. 645 (1978), the federal project is operated in conformity with California’s water laws, similarly to the state project. Thus, although the federal and state projects were created by different forms of government—one federal and the other state—they are operated under the same legal regime.

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. Since the United States owned the public lands, it originally owned all water flowing across the lands. Thus, the early miners and settlers who diverted water to their mining claims and settlements were regarded as trespassers on the public domain. To remove this cloud on their water rights, Congress enacted a series of statutes in the late nineteenth century that recognized their rights. The Mining Acts of 1866 and 1870 protected miners' claims that were based on “local customs, laws, and the decisions of the courts.”⁵⁵ 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.”⁵⁶

In *California Oregon Power Company v. Beaver Portland Cement Company*,⁵⁷ the U. S. Supreme Court held that the Mining Acts and Desert Land Act “severed” the waters from the public domain lands. 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. 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.⁵⁸ The decision, beyond recognizing the appropriation doctrine as the

⁵⁵ 14 Stat. 251 (1866), as amended, 16 Stat. 217 (1871).

⁵⁶ 19 Stat. 377 (1877), 43 U.S.C. §§ 321-323.

⁵⁷ 295 U.S. 142 (1935).

⁵⁸ *Id.* at 163-164.

paramount water law of the West, effectively recognized state law as the source of water rights.⁵⁹ The severance doctrine is the foundational principle on which state water rights authority rests.⁶⁰

The Supreme Court has held that the severance doctrine allows the states to determine the water laws that apply within their respective jurisdictions.⁶¹ The states are free to recognize the riparian doctrine, or the appropriation doctrine, or both; “Congress cannot enforce either rule upon any State.”⁶²

The states’ authority to regulate water rights under the severance doctrine, however, is limited by the federal government’s paramount constitutional authority.⁶³ The primary constitutional power delegated to the federal government to regulate water is based on the Commerce Clause of the Constitution, which authorizes Congress to regulate commerce among the states.⁶⁴ 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.⁶⁵ As the 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.”⁶⁶ The Commerce Clause imposes a “navigation 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.⁶⁷ The “navigation servitude” limits the states’ authority to regulate water rights, because it precludes the states from granting rights that impair or affect the navigability of navigable waters.⁶⁸

B. The Reclamation Act of 1902; *California v. United States*

⁵⁹ *California v. United States*, 438 U.S. 645, 657-658 (1978); *Ickes v. Fox*, 300 U.S. 82, 95 (1937).

⁶⁰ 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. *Martin v. Waddell*, 41 U.S. (16 Pet.) 367, 410 (1842); *Pollard’s Lessee v. Hagan*, 44 U.S. (3 How.) 212, 219 (1845); *United States v. Texas*, 339 U.S. 707, 716-717 (1950). In *Kansas v. Colorado*, 206 U.S. 46, 94 (1907), the Supreme Court stated that since the Constitution allows the states to regulate water rights, the states’ right to regulate water rights is based on the Tenth Amendment of the Constitution, which reserves to the states the powers not delegated to the federal government. U.S. Const., Amendment X; *Kansas*, 206 U.S. at 89-90.

⁶¹ *Kansas v. Colorado*, 206 U.S. 46, 94 (1907).

⁶² *Id.* at 94.

⁶³ *California Oregon Power*, 295 U.S. at 163-164.

⁶⁴ U. S. Const., art. I, § 8; *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 189-193 (1824).

⁶⁵ *United States v. Rio Grande Dam & Irrigation Company*, 174 U.S. 690, 703 (1899) (“natural highways”); *Gilman v. Philadelphia*, 70 U.S. 713, 724-725 (1866) (“public property”); see *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 426-427 (1940).

⁶⁶ *United States v. Chandler-Dunbar Water Power Co.*, 229 U.S. 53, 63 (1913).

⁶⁷ *Kaiser Aetna v. United States*, 444 U.S. 164, 178 (1979); *United States v. Twin City Power Co.*, 350 U.S. 222 (1955); *Chandler-Dunbar*, 229 U.S. 53.

⁶⁸ *Rio Grande Dam*, 174 U.S. at 703.

Early in the twentieth century, Congress considered whether to approve a national program to reclaim the arid lands of the West and make them habitable and productive. Although many—particularly congressmen from the eastern states—argued that reclamation should be undertaken by private industry rather than the federal government, Congress ultimately passed the Reclamation Act of 1902,⁶⁹ which President Theodore Roosevelt signed into law. 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 U.S. Bureau of Reclamation (BOR), an agency within the U. S. Department of the Interior.⁷⁰

Section 8 of the Reclamation Act requires the federal reclamation projects to comply with state water laws. 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 water.⁷¹ In *Ivanhoe Irrig. Dist. v. McCracken*,⁷² the Supreme Court held that section 8 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.⁷³ “We read nothing in § 8,” the Court stated, “that compels the United States to deliver water on conditions imposed by the state.”⁷⁴

In *California v. United States*,⁷⁵ the Supreme Court reversed course, holding that section 8 requires the federal government to comply with state regulatory water laws in operating federal reclamation projects. 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

⁶⁹ 32 Stat. 388-390, 43 U.S.C. §§ 371-600.

⁷⁰ In *United States v. Gerlach Live Stock Co.*, 339 U.S. 725 (1950), the 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. See also *Ivanhoe Irrig. Dist. v. McCracken*, 357 U.S. 275, 294 (1958); *Arizona v. California*, 373 U.S. 546, 587 (1963). In *California v. United States*, 438 U.S. 645 (1978), however, the Court did not mention the General Welfare Clause as the constitutional basis for the Reclamation Act.

⁷¹ 42 U.S.C. §§ 372, 383.

⁷² 357 U.S. 275 (1957).

⁷³ 357 U.S. at 291-292.

⁷⁴ *Id.*; see *City of Fresno v. California*, 372 U.S. 627 (1963); *Arizona v. California*, 373 U.S. 546, 586 (1963).

Earlier, in the so-called *Pelton Dam* decision, the Supreme Court had 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. *Federal Power Commission v. Oregon*, 349 U.S. 435 (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. The decision was widely criticized in the West because of its implication that state laws may not apply to federal water projects.

⁷⁵ 438 U.S. 645 (1978).

distributing water from the projects.⁷⁶ Congress, the Court stated, “intended to defer to the substance, as well as the form, of state water law.”⁷⁷ 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.”⁷⁸ 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 “runs the consistent thread of purposeful and continued deference to state water law by Congress.”⁷⁹

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 surplus areas to areas of need. 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.⁸⁰ Because of the Great Depression, the state was unable to finance the project and turned to the federal government for help. In response, Congress approved the CVP as a federal project.⁸¹ The CVP, similarly to other projects authorized under the Reclamation Act of 1902, is operated by the BOR. The CVP was authorized for specific purposes—improving navigation, regulating river flows, controlling floods, and storing and delivering water.⁸² 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 Joaquin—that store water upstream from the Delta; the project

⁷⁶ 438 U.S. at 665, 667.

⁷⁷ *Id.* at 675.

⁷⁸ *Id.* at 672.

⁷⁹ *Id.* at 653. See also *Nevada v. United States*, 463 U.S. 110, 122 (1983); *United States 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. The conditions affected the distribution and use of water from the project. 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. 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. *United States v. California*, 694 F.2d 1171 (9th Cir. 1982).

⁸⁰ *United States v. Gerlach Live Stock Co.*, 339 U.S. 725, 732 (1950); *United States v. State Water Resources Control Board* (hereinafter “*U.S. v. SWRCB*”), 182 Cal.App.3d 82, 98-99 (1986).

⁸¹ Rivers and Harbors Act, 50 Stat. 844, 850 (1937); Rivers and Harbors Act, 54 Stat. 1198, 1199-2000 (1940); *Gerlach*, 339 U.S. at 731.

⁸² *Id.*; *Gerlach*, 339 U.S. at 731.

exports water from the Delta through other facilities, principally the Delta Mendota Canal, to agricultural and municipal water users in the Central Valley and elsewhere.⁸³

In 1951, the California Legislature authorized construction of the state's own water project, the State Water Project (SWP).⁸⁴ The Legislature authorized bonds for the project in 1959, which the voters approved the following year.⁸⁵ 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.⁸⁶ The SWP provides water supplies for approximately two-thirds of the people of California.⁸⁷ The CVP and SWP are operated in coordination with each other, pursuant to a coordinated operating agreement between the BOR and DWR.

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.⁸⁸ The permits contain conditions—adopted pursuant to the constitutional “reasonable use” requirement and the statutory “public interest” requirements—that restrict water exports from the Delta in order to protect Delta instream needs, such as maintenance of water quality and the protection of fish and wildlife resources.⁸⁹ 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, 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.⁹⁰ The California Legislature has enacted Fish and Game Code section 5937, which requires the owner of any dam 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.⁹¹

⁸³ *U.S. v. SWRCB*, 182 Cal.App.3d at 99.

⁸⁴ Wat. Code §§ 12930 *et seq.*; *Metropolitan Water District of Southern California v. Marquardt*, 59 Cal.2d 159 (1963); *Planning & Conservation League v. Department of Water Resources*, 83 Cal.App.4th 892, 898 (2000).

⁸⁵ *Id.*

⁸⁶ *U.S. v. SWRCB*, 182 Cal.App.3d at 99.

⁸⁷ *Metropolitan Water District v. Imperial Irrig. Dist.*, 80 Cal.App.4th 1403, 1411 n. 8 (2000).

⁸⁸ 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. *U.S. v. SWRCB*, 182 Cal.App.3d at 106. The DWR in 1967 acquired its own permits from the State Board to operate the SWP. *Id.*

⁸⁹ *U.S. v. SWRCB*, 182 Cal.App.3d at 106.

⁹⁰ 106 Stat. 4600 (1992); *see O'Neill v. United States*, 50 F.3d 677 (9th Cir. 1995).

⁹¹ 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. The federal Endangered Species Act requires federal agencies to consult with

In *NRDC v. Patterson, et al.*,⁹² 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. As noted above, section 5937 requires a dam owner to allow sufficient water to pass through the dam to maintain in “good condition” any fish below the dam. 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. The court concluded 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. 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. 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. 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*. The parties reached a negotiated settlement that provided for restoration of the fishery and reduced water deliveries to the users.

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 1935,⁹³ creates a federal agency—now the Federal Energy Regulatory Commission (FERC)—that has permit authority over the construction and operation of hydropower projects. 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.⁹⁴ Section 27, which applies to hydropower projects, is virtually identical to—and indeed was patterned after—section 8 of the Reclamation Act, which applies to federal reclamation projects.

In *First Iowa Hydro-Electric Cooperative v. Federal Power Commission*,⁹⁵ decided in 1946, the Supreme Court held that section 27 of the FPA does not authorize the states to regulate

designated federal agencies before taking actions that may jeopardize endangered or threatened species. 16 U.S.C. § 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.” Wat. Code §§ 12200-12220.

⁹² 333 F.Supp.2d 906 (E.D. Cal. 2004).

⁹³ 16 U.S.C. §§ 791(a)-793.

⁹⁴ 16 U.S.C. § 821.

⁹⁵ 328 U.S. 152 (1946).

hydropower projects licensed under the federal program. The Court stated that section 27 has “primary, if not exclusive, reference to . . . proprietary rights” and therefore does not authorize state regulation of water.⁹⁶ 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.⁹⁷

In 1990, in *California v. Federal Energy Regulatory Commission*,⁹⁸ the Supreme Court reaffirmed its earlier decision in *First Iowa*. There, the State of California sought to impose conditions on a federally-licensed hydropower project, and argued that the Supreme Court should overturn *First Iowa* and construe section 27 as applicable to state regulatory water laws. The state argued that section 27 should be construed in the same way as section 8 of the Reclamation Act, since section 27 was patterned after section 8, and that—since the Supreme Court in *California v. United States* had construed section 8 as applicable to state regulatory laws—section 27 should be construed in the same way. The Supreme Court rejected the state’s argument on *stare decisis* grounds. The Court stated that it would not revisit *First Iowa* in light of “the deference this Court must accord to long-standing and well-entrenched decisions, especially those interpreting statutes that underlie complex regulatory regimes.”⁹⁹ 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.¹⁰⁰

E. Federal Reserved Water Rights

The Property Clause of the Constitution authorizes the federal government to possess, regulate and control its own property.¹⁰¹ Under the Property Clause, Congress may 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 may reserve sufficient water to accomplish the purposes of the reservations.¹⁰² 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.¹⁰³ 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

⁹⁶ 328 U.S. at 176.

⁹⁷ See *Sayles Hydro Ass’n v. Maughan*, 985 F.2d 451, 454 (9th Cir. 1993) (*First Iowa* held that section 27 is “limited to proprietary rights in water”).

⁹⁸ 495 U.S. 490, 499 (1990).

⁹⁹ 495 U.S. at 499.

¹⁰⁰ 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); *PUD No. 1 of Jefferson County v. Washington Dep’t of Ecology*, 511 U.S. 700 (1994).

¹⁰¹ U. S. Const., art. IV, § 3, cl. 2.

¹⁰² *Cappaert v. New Mexico*, 426 U.S. 128, 138-139 (1976).

¹⁰³ *Cappaert*, 426 U.S. at 138; *Arizona v. California*, 373 U.S. 546 (1963); *Winters v. United States*, 207 U.S. 564 (1908).

domain.¹⁰⁴ 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” that generally applies under state water rights laws, the reserved rights doctrine does not provide for a balancing of competing interests. Rather, the federal right must be fully served before lower-priority appropriative rights granted under state law can be served, regardless of the value or relative importance of the competing rights.¹⁰⁵

In *United States v. New Mexico*,¹⁰⁶ the Supreme Court substantially narrowed the scope of the reserved rights doctrine, holding that the doctrine applies only to *primary* reservation purposes and not *secondary* reservation purposes. 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) were to conserve water flows and furnish a continuous water supply for timber; the *secondary* reservation purposes were aesthetic, recreation or preservation of wildlife. Therefore, the Court concluded, the United States must acquire water rights for aesthetic, recreation and wildlife purposes under state law, in the same manner as private appropriators. By limiting the reserved rights doctrine to primary reservation purposes, the *New Mexico* Court partially limited the doctrine’s impact on state water rights laws.

The quantification of reserved rights for Indian reservations poses particularly difficult questions that have never been fully resolved. The Supreme Court has adopted an agricultural standard as the basic standard for quantifying Indian reserved rights; such rights exist to the extent necessary to irrigate the “practicably irrigable acreage” of the reservation.¹⁰⁷ Subsequently, in quantifying the off-reservation fishing rights of an Indian tribe in Washington State, the Supreme Court held that the tribe’s share of fish cannot exceed that necessary to enable tribal members to earn a moderate living.¹⁰⁸ Some commentators have suggested that the “moderate living” standard may replace the “practicably irrigable acreage” standard as the basis for quantifying Indian water rights. In another case, the Arizona Supreme Court adopted a “homeland” standard rather than the “practicably irrigable acreage” standard as the basis for quantifying Indian water rights, at least to the extent the rights are not based on agricultural uses; under the “homeland”

¹⁰⁴ *Id.*

¹⁰⁵ The reserved rights doctrine originated in the Supreme Court’s decision in *Winters v. United States*, 207 U.S. 564 (1908), which held that Congress impliedly reserved water for use on Indian reservations when it reserves the lands. The Supreme Court subsequently extended the reserved rights doctrine to other types of federal reservations, such as national forests and national wildlife refuges. *Arizona v. California*, 373 U.S. 546 (1963); *United States v. New Mexico*, 438 U.S. 696 (1978).

¹⁰⁶ 438 U.S. 696 (1978).

¹⁰⁷ *Arizona v. California*, 373 U.S. 546 (1963).

¹⁰⁸ *Washington v. Washington State Commercial Passenger Vessel Ass’n*, 443 U.S. 658 (1979).

standard, the Indian tribes have a right to sufficient water to maintain their reservations as a “homeland.”¹⁰⁹

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 rights laws, and on 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, further, that the Indian tribal rights have a “priority date of time immemorial” and thus are paramount to virtually all other rights.¹¹⁰ Thus, the quantification of Indian reserved water rights remains an important topic in western water law.

F. Federal Riparian Water Rights

In *State of California v. United States (Hallett Creek)*,¹¹¹ the California Supreme Court held that the United States may possess riparian water rights under California law, in cases where water flows across or contiguous to federal lands. 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. 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. The State of California had argued that the United States holds only *sovereign* interests in federal lands, which are fully defined under federal constitutional and statutory authority; therefore, the federal government does not have riparian water rights, which are an attribute of *private* land ownership. 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. 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 the right and establishing priorities of unexercised riparian rights.¹¹²

III. FEDERAL ENVIRONMENTAL LAWS

Congress has adopted various environmental laws—principally the Clean Water Act and the Endangered Species Act—that provide for federal regulation of water, either directly or indirectly. These federal environmental statutes limit the effect of state water

¹⁰⁹ *In re General Adjudication of All Rights to Use of Water in the Gila River System and Source*, 35 P.3d 68, 74 (Ariz. 2002).

¹¹⁰ *United States v. Adair*, 723 F.2d 1394, 1414 (9th Cir. 1983). See also *Klamath Water Users Protective Ass’n v. Patterson*, 191 F.3d 1115 (9th Cir. 1999).

¹¹¹ 44 Cal.3d 448 (1987).

¹¹² *Hallett Creek*, 44 Cal.3d 470-472; See *In re Waters of Long Valley Creek Stream System*, 25 Cal.3d 339 (1979) (holding that State Board may quantify and prioritize unexercised riparian rights).

rights laws, by preempting state laws that conflict with the federal goals of improving water quality and protecting endangered species. The Supreme Court has, in some instances, interpreted these federal laws as not infringing on the states' traditional water rights authority, although the Court in other instances has broadly interpreted these federal laws as overriding state water rights laws. The Court has never answered the question whether the Takings Clause of the Constitution requires the federal government and the states to compensate water rights holders when it regulates their rights, and this question remains open for the Court's review.

A. The Clean Water Act

1. General

The Clean Water Act (CWA),¹¹³ which was substantially revised in 1972, establishes a national program to eliminate water pollution. The CWA prohibits the "discharge of any pollutant" unless the discharge is authorized under specific provisions of the CWA.¹¹⁴ 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."¹¹⁵ The term "navigable waters" is defined as "waters of the United States."¹¹⁶ 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 discharges into water. First, section 402 establishes the National Pollutant Discharge Elimination System (NPDES), often described as the "heart" of the CWA regulatory program.¹¹⁷ Under the NPDES, the Environmental Protection Agency (EPA) may issue permits authorizing the discharge of pollutants from point sources into navigable waters, and establishing effluent limitations for the discharges.¹¹⁸ The EPA may authorize a state to administer its own NPDES permit program, if the state program meets specified criteria in the CWA.¹¹⁹ California was the first state to obtain EPA-approval of its permit program. To date, forty-four states have received such approval.

Second, section 404 authorizes the Army Corps of Engineers to issue permits authorizing the discharge of dredged or fill materials into navigable waters.¹²⁰ The Tenth Circuit has held that the Corps, in acting under section 404, 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, such as the potential harm

¹¹³ 33 U.S.C. § 1251 et seq.

¹¹⁴ 33 U.S.C. § 1311(a).

¹¹⁵ *Id.* at § 1362(12).

¹¹⁶ *Id.* at § 1362(7).

¹¹⁷ 33 U.S.C. § 1342.

¹¹⁸ *Id.* at § 1342(a).

¹¹⁹ *Id.* at § 1342(b).

¹²⁰ 33 U.S.C. § 1344.

to endangered species located in a downstream area.¹²¹ The Fourth Circuit has held that the EPA may veto the Corps' issuance of a section 404 permit if the EPA determines, as in that case, that the permit fails to adequately protect environmental values.¹²²

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.¹²³ 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 must be approved by the EPA, and must be reviewed by the state every three years; if the state revises its standards or adopts new ones, it must again submit the standards to the EPA for approval.¹²⁴ If a state fails to establish water quality standards, or the EPA determines that the state's standards do not meet the CWA's requirements, the EPA must adopt its own water quality standards for the state.¹²⁵ The water quality standards must establish both the "designated uses" of the waters and "water quality criteria" for such uses.¹²⁶ 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"¹²⁷

Under section 303(d), each state must adopt special measures to protect waters that fail to meet water quality standards. The state must identify and compile a list of waters that do not meet water quality standards, after the effluent limitations established for point source discharges are taken into account.¹²⁸ The state must also establish a "priority ranking" for such waters, taking into account the severity of the pollution and the uses associated with the waters.¹²⁹ The state must establish a "total maximum daily load" (TMDL) for such waters that will implement the state's water quality standards, taking into account seasonal variations and a margin of safety; the TMDL is the maximum "load" of pollutants that a water body can receive from all sources, including point sources and non-point sources, without violating water quality standards.¹³⁰ The TMDLs must be submitted to the EPA for approval, and the EPA may approve the state TMDLs or adopt its own TMDLs for the water body.¹³¹

¹²¹ *Riverside Irrig. Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985) (endangered whooping crane).

¹²² *James City County v. EPA*, 12 F.3d 1330 (4th Cir. 1993).

¹²³ 33 U.S.C. § 1313.

¹²⁴ *Id.* at § 1313(c)(1), -(2)(A).

¹²⁵ *Id.* at § 1313(b), (c)(3), -(4).

¹²⁶ *Id.* at § 1313(c)(2)(A); 40 C.F.R. § 130.2(d).

¹²⁷ 33 U.S.C. § 1313(c)(2)(A).

¹²⁸ 33 U.S.C. 1313(d).

¹²⁹ *Id.* at § 1313(d)(1)(A).

¹³⁰ *Id.* at 1313(d)(1)(C).

¹³¹ *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

The CWA also contains provisions limiting its preemptive effect by recognizing the states' authority to manage their water resources. Section 101(a) provides that the states have the "primary responsibilities and rights" to eliminate water pollution and to plan the development and use of water resources."¹³² 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.¹³³ This provision limits the effect of the CWA as applied to state regulation of water rights, although the full effect of the limitation is unclear. The provision, which was added to the CWA in 1977, is often referred to as the "Wallop Amendment," named for its principal sponsor, Senator Malcolm Wallop. Another provision, 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."¹³⁴

2. Interbasin Transfers of Water (Section 402)

The question has arisen whether the CWA's NPDES permit program applies to transfers of water from one water basin to another one, 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.¹³⁵ 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 second basin and therefore that an NPDES permit is required for the transfer.¹³⁶

The Supreme Court addressed this question in *South Florida Water Management Dist. v. Miccosukee Tribe*.¹³⁷ There, a water management district in Florida conveyed potential flood waters in the Florida Everglades to a conservation area; the water was conveyed by a pump across a levee, and included a pollutant, phosphorus. The Eleventh Circuit Court of Appeals

allow the states to proceed from the identification of water requiring 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 for the nation's waters.

Pronsolino v. Nastri, 291 F.3d 1123, 1128-1129 (9th Cir. 2002).

¹³² 33 U.S.C. § 1251(a).

¹³³ *Id.* at § 1251(g).

¹³⁴ *Id.* at § 1370.

¹³⁵ 33 U.S.C. §§ 1342(a), 1362(12).

¹³⁶ *Catskill Mountains Chapter of Trout Unlimited v. City of New York*, 273 F.3d 481 (2d Cir. 2001), *on appeal after remand*, 451 F.3d 77 (2006).

¹³⁷ 541 U.S. 95 (2004).

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 to the conservation area. The Supreme Court, after granting review, rejected several arguments raised by the Florida agency. First, the Court held that the pump that transferred the water was a point source under the CWA. 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. The Court, however, declined to decide whether the transfer of the pollutants from one water basin to another one constitutes an “addition” of pollutants under the CWA, and thus whether an NPDES permit is required for the transfer. The Court remanded this issue to the lower courts for further review. Thus, the question whether an NPDES permit is required for water transfers remains an open question.

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”¹³⁸—exempts water transfers from NPDES requirements if they are authorized by state water rights laws, and also remanded this issue for further consideration. The Court commented in passing, however, that the application of NPDES requirements to water transfers authorized under state water rights laws might violate section 101(g), because this may “raise the costs of water distribution prohibitively,” but also commented that such costs may be controlled by the adoption of federal and state general permit programs.¹³⁹ In fact, section 101(g) was based on recognition of the states’ sovereign authority to regulate water resources, not on avoidance of costs of water distribution to the states. In any event, since the Florida program transferred water for flood and conservation purposes, it is not clear that the program involved the “allocate[ion] of water” and thus fell within the scope of section 101(g) in any event.

3. Wetlands Regulation (Section 404)

Another question that has arisen is whether the Army Corps of Engineers is authorized to 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.¹⁴⁰ As noted above, the term “navigable waters” is defined in the CWA as “waters of the United States.”¹⁴¹ 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 “all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, play lakes, or natural ponds”—and also “[w]etlands adjacent to” any such waters.¹⁴² Thus, the Corps has broad authority to regulate virtually all wetlands in the nation under its regulations.

¹³⁸ 33 U.S.C. § 1251(g).

¹³⁹ 541 U.S. at 108.

¹⁴⁰ 33 U.S.C. § 1344.

¹⁴¹ *Id.* at § 1362(12).

¹⁴² 33 C.F.R. § 328.3.

The Supreme Court has issued three 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.*,¹⁴³ the Court held that the Corps has jurisdiction to regulate wetlands "adjacent" to waters of the United States. In *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* ("SWANCC"),¹⁴⁴ the Court 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. "[I]t is one thing," the Court stated, to give a word [navigable] limited effect and quite another to give it no effect whatever."¹⁴⁵ 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 uses," and that Congress presumptively would not have "significantly changed the federal-state balance" unless it "clearly" so provided.¹⁴⁶ Thus, the Corps has jurisdiction to regulate "adjacent" wetlands under *Riverside Bayview* but not "isolated" waters under SWANCC.

In *Rapanos v. United States*,¹⁴⁷ the Supreme Court considered whether the Army Corps of Engineers has jurisdiction to regulate wetlands that are neither "adjacent" to navigable waters (unlike those in *Riverside Bayview*) nor "isolated" from navigable waters (unlike the waters in SWANCC). The Court issued three opinions, none commanding a majority of the justices. The Court's plurality opinion (written by Justice Scalia, and signed by four justices) stated that the term "waters of the United States" includes only "relatively permanent, standing or continuously flowing bodies of water . . . that are described in ordinary parlance as 'streams, . . . oceans, rivers, and lakes.'"¹⁴⁸ 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.'"¹⁴⁹ A dissenting opinion (written by Justice Stevens, and also signed by four 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.¹⁵⁰ 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.¹⁵¹ 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."¹⁵²

¹⁴³ 474 U.S. 121 (1985).

¹⁴⁴ 531 U.S. 159 (2001).

¹⁴⁵ 531 U.S. at 172.

¹⁴⁶ *Id.* at 173, 174.

¹⁴⁷ 547 U.S. 715, 126 S.Ct. 2208 (2006).

¹⁴⁸ 126 S.Ct. at 2225.

¹⁴⁹ *Id.* at 2226.

¹⁵⁰ *Id.* at 2252.

¹⁵¹ *Id.* at 2236, 2248.

¹⁵² *Id.* at 2248, 2249.

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.¹⁵³ On the other hand, the First Circuit has held that the Army Corps of Engineers has jurisdiction to regulate wetlands under either the Scalia plurality opinion or the Kennedy concurring opinion—a view that the United States has also taken.¹⁵⁴ The Supreme Court recently declined to review the Seventh Circuit decision in *Gerke*, although *Gerke* argued that the Court should review the case to resolve the intercircuit conflict.

In *Northern California River Watch v. City of Healdsburg*,¹⁵⁵ 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. 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. The court observed that the 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. 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—the pond (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.

In *San Francisco Baykeeper v. Cargill*,¹⁵⁶ the Ninth Circuit held that the Corps does *not* have jurisdiction to regulate salt ponds in San Francisco Bay. 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 directly connected to the slough, however, and thus the salt waste did not reach the slough or the bay. 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. 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. The court thus distinguished between wetlands and other waters in determining whether the Corps can regulate non-navigable waters not connected to navigable waters. This distinction does not seem

¹⁵³ *Northern California River Watch v. City of Healdsburg*, 2007 U.S. App. LEXIS 18615 (9th Cir., Aug. 6, 2007), *withdrawing* 457 F.3d 1023 (2006); *San Francisco Baykeeper v. Cargill*, 481 F.3d 700 (9th Cir. 2007); *United States v. Gerke*, 464 F.3d 723 (7th Cir. 2006); *United States v. Robison*, 505 F.3d 1208 (11th Cir. 2007).

¹⁵⁴ *United States v. Johnson*, 467 F.3d 56 (1st Cir. 2006).

¹⁵⁵ 2007 U.S. App. LEXIS 18615 (9th Cir., Aug. 6, 2007), *withdrawing* 457 F.3d 1023 (2006).

¹⁵⁶ 481 F.3d 700 (9th Cir. 2007),

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.

The Army Corps of Engineers and the EPA recently adopted a Joint Guidance describing the Corps’ jurisdiction to regulate wetlands in light of *Rapanos*.¹⁵⁷ 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. Under the Guidance, whether the waters meet the “significant nexus” depends on several factors, such as the volume, duration and frequency of flows and the relative proximity of the regulated waters to traditional navigable waters. 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.”¹⁵⁸

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.¹⁵⁹ 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. 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.¹⁶⁰ 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.

In *PUD No. 1 of Jefferson County v. Washington Dep’t of Ecology*,¹⁶¹ 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

¹⁵⁷ A copy of the Guidance can be found at <http://www.epa.gov/owow/wetlands/guidance/CWAwaters.html>.

¹⁵⁸ See <http://www.epa.gov/cgi-bin/epaprintonly.cgi>.

¹⁵⁹ 33 U.S.C. § 1341(a).

¹⁶⁰ *First Iowa Hydro-Electric Cooperative v. Federal Power Commission*, 328 U.S. 152 (1946); *California v. Federal Energy Regulatory Commission*, 495 U.S. 490, 499 (1990).

¹⁶¹ 511 U.S. 700 (1994).

Washington's Department of Ecology that the discharges authorized by the FERC license comply with the state's water quality laws. 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(a). The Court also held that Washington had authority to apply both its "designated uses" and "water quality criteria" to the discharges. The Court rejected the public utility's argument that sections 101(g) and 510 require a distinction between state water *quality* laws and state water *quantity* laws, in that the CWA—including the certification requirement of section 401(a)—do not apply to the extent they interfere with the state's authority to regulate water *quantity* under its water rights laws. The Court noted that water quantity and water quality are often interrelated: "[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."¹⁶² 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 401(a).¹⁶³ More importantly, section 101(g) did not play a major role in the case, because section 101(g) requires deference to state water laws and section 401(a)—which the Court applied in the case—also requires deference to state water quality laws. Thus, the case presented no clear conflict between CWA requirements and state water regulation.

In *S.D. Warren Co. v. Maine Board of Environmental Protection*,¹⁶⁴ the Supreme Court recently held that the states' certification authority under CWA ion 401(a) applies even to discharges that do not cause water pollution. 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. The Maine agency issued the certification after imposing new water quality conditions on the projects. The projects themselves did not introduce pollutants into the water, or otherwise cause water pollution. The project operator argued that since his projects did not cause pollution, the CWA—including its certification requirement—does not apply to the projects, and therefore the Maine agency cannot impose additional water quality requirements on the projects. The Supreme Court ruled otherwise. First, the Court held that the release of the water from the hydroelectric turbines into the river constitutes a "discharge" within the meaning of the CWA. 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. 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." 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. Therefore, under the Court's decision, the NPDES program applies only to discharges that

¹⁶² 511 U.S. at 719.

¹⁶³ *Id.* at 733-734.

¹⁶⁴ 547 U.S. 370, 126 S.Ct. 1843 (2006).

include pollutants and the state certification program applies to *all* discharges, regardless of whether they involve a pollutant or not.

B. The Endangered Species Act

1. General

The Endangered Species Act (ESA),¹⁶⁵ enacted in 1973, “represented the most comprehensive legislation for the preservation of endangered species ever enacted by any nation.”¹⁶⁶ Under section 4 of the ESA, the Secretary of Interior or Commerce (hereinafter jointly “Secretary”)¹⁶⁷ is required to list species that are threatened or endangered. 16 U.S.C. § 1533.

The ESA establishes two major programs to protect listed species. First, section 9 prohibits any person from “tak[ing]”—that is, killing or harming, 16 U.S.C. § 1532(10)—a listed species.¹⁶⁸ 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.¹⁶⁹ The 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.¹⁷⁰

Second, the ESA specifically requires federal agencies to avoid taking actions that may affect listed species. Under section 7(a)(2), federal agencies must “insure” that any actions “authorized, funded, or carried out” by them is not likely to “jeopardize” a listed species or impair its critical habitat.¹⁷¹ Before taking any action that may affect a listed species, the agency must consult with either the FWS or 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.¹⁷² Generally, the action agency will comply with the alternatives recommended by the consultation agency, because the action agency is exempt

¹⁶⁵ 16 U.S.C. § 1531 *et seq.*,

¹⁶⁶ *Tennessee Valley Authority v. Hill*, 437 U.S. 153, 180 (1978).

¹⁶⁷ Generally, the Secretary of the Interior has jurisdiction over terrestrial species and the Secretary of Commerce has jurisdiction over ocean species. 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).

¹⁶⁸ *Id.* at § 1538.

¹⁶⁹ *Id.* at § 1539.

¹⁷⁰ *Babbitt v. Sweet Home Chapter*, 515 U.S. 687 (1995); 50 C.F.R. § 17.3.

¹⁷¹ 16 U.S.C. § 1536(a)(2).

¹⁷² *Id.* at § 1536(b)(3)(A).

from the section 9 prohibition against the “take” of an endangered species if it complies with the alternatives recommended in a biological opinion.¹⁷³

In *Tennessee Valley Authority v. Hill*,¹⁷⁴ the Supreme Court broadly construed the prohibitory provisions of the ESA. 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. 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’ intent was to “halt and reverse the trend towards species extinction, whatever the cost.”¹⁷⁵

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

The ESA authorizes private citizens to maintain actions to prevent a “violation” of the ESA.¹⁷⁶ In *Bennett v. Spear*,¹⁷⁷ the 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 overregulates rather than underregulates the species. 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 exclusively belong to environmental organizations that are seeking to further the ESA’s goal of protecting endangered species. The Court also held, however, that the citizen suit provision only authorizes actions alleging a “violation” of the ESA, and that a federal agency does not “violate” the ESA if it issues a biological opinion that is not supported by scientific evidence. The Court held, however, that a party may challenge a biological opinion on grounds that it is not supported by scientific evidence under the Administrative Procedure Act (APA),¹⁷⁸ which authorizes actions to challenge final agency actions that are arbitrary and capricious, or otherwise not in accordance with law. According to the Court, a biological opinion not supported by scientific evidence is necessarily arbitrary and capricious and therefore may be challenged under the APA, even though it does not “violate” the ESA and thus cannot be challenged under the ESA’s citizen suit provision.

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

The Secretary has adopted a regulation interpreting the responsibilities of federal agencies under section 7 of the ESA, which states that section 7 applies to “all actions in which

¹⁷³ *Id.* at § 1536(b)(4); *ALCOA v. Bonneville Power Administration*, 175 F.3d 1156, 1159 (9th Cir. 1999).

¹⁷⁴ 437 U.S. 153 (1978).

¹⁷⁵ 437 U.S. at 184-185.

¹⁷⁶ 16 U.S.C. § 1540(g).

¹⁷⁷ 520 U.S. 154 (1997).

¹⁷⁸ 5 U.S.C. § 701(a)(2).

there is discretionary Federal involvement or control.”¹⁷⁹ 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.¹⁸⁰

In *National Association of Home Builders v. Defenders of Wildlife*,¹⁸¹ the 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 program may jeopardize endangered species. There, the State of Arizona applied to the EPA for authority to administer its own NPDES permit program. As noted earlier, the CWA mandates the EPA to approve a state NPDES program if it meets specific criteria in the CWA.¹⁸² The EPA determined that the Arizona program met the CWA criteria and approved the program. The Ninth Circuit overturned the EPA decision, reasoning that the EPA must comply with ESA requirements before approving the Arizona program; according to the court, 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. The court 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. 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.

The Supreme Court overturned the Ninth Circuit decision in *Home Builders*.¹⁸³ The Court, relying on the Secretary’s regulation, 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) do not apply to the EPA’s approval of the Arizona program. 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. The Court distinguished its earlier 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. The Supreme Court in *Home Builders* thus interpreted the ESA more narrowly than in *TVA v. Hill*.

Since *Home Builders* holds that the ESA does not apply to non-discretionary federal action, the ESA presumably does not apply to actions that that an agency is mandated to perform pursuant to the terms of its contracts, even though the actions may affect endangered species. For example, if the U. S. Bureau of Reclamation has entered into contracts that require the

¹⁷⁹ 50 C.F.R. § 402.03.

¹⁸⁰ *Defenders of Wildlife v. Norton*, 257 F.Supp.2d 53, 69 (D.D.C. 2003).

¹⁸¹ ___ U.S. ___, 127 S.Ct. 2518 (2007).

¹⁸² 33 U.S.C. § 1342(b).

¹⁸³ ___ U.S. ___, 127 S.Ct. 2518 (2007).

Bureau to deliver water to the contractors from federal reclamation projects, and if the contracts do not authorize the Bureau to exercise discretion in deciding whether 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 supply.¹⁸⁴ The question may turn on how broadly to construe the federal agency's discretion under its contracts. Some courts have construed agency discretion very broadly, although these decisions were rendered prior to the Supreme Court's decision in *Home Builders*.¹⁸⁵ Other courts, however, have interpreted agency discretion more narrowly.¹⁸⁶ Although the Supreme Court's *Home Builders* decision holds 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—and 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.¹⁸⁷ The decision may have significant consequences concerning California's future water supplies.

The FWS' biological opinion, issued on February 16, 2005, concluded that the coordinated operation of the federal and state projects—the CVP and SWP—including their future operations, would not jeopardize the continued existence of the Delta smelt, a tiny fish located solely in the Sacramento-San Joaquin that has been listed as an endangered species by the Secretary of the Interior. The biological opinion determined that the Delta smelt population had declined over the past 20 years, as the result of the operation of the SWP and other causes. The biological opinion also determined that SWP operations would adversely affect the smelt

¹⁸⁴ In *Defenders of Wildlife v. Norton*, 257 F.Supp.2d 53 (D.D.C. 2003), 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. The court stated that “it seems unlikely that any case will present facts that more clearly make an 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.” 257 F.Supp.2d at 69.

¹⁸⁵ See, e.g., *Silvery Minnow v. Keyes*, 333 F.3d 1109 (10th Cir. 2003), *vacated as moot*, 855 F.3d 1215 (2004) (Bureau of Reclamation's contracts with water users authorize Bureau to exercise discretion to reallocate contracted-for water supplies to benefit endangered species); *NRDC v. Houston*, 146 F.3d 1118 (9th Cir. 1998) (Bureau of Reclamation has discretion to consult under ESA, and therefore is required to consult, before renewing water delivery contracts).

¹⁸⁶ See, e.g., *Sierra Club v. Babbitt*, 65 F.3d 1502 (9th Cir. 1995) (Bureau of Land Management does not have discretion in right-of-way agreement to prevent logging company from building logging road that affects endangered species).

¹⁸⁷ *Natural Resources Defense Council v. Kempthorne*, ___ F.Supp.2d ___, no. 05-CV-01207 (E.D. Cal., May 25, 2007).

through entrainment. Relying on a computer modeling program, however, the opinion concluded that SWP operations would not likely jeopardize the continued existence of the smelt, because the level of take resulting from SWP operations is at or below historic take levels. The opinion based this conclusion, in part, on the establishment of various conservation measures and a risk assessment program that would avoid or minimize adverse effects. 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 CVP and/or SWP and other measures to protect the smelt.

The district court held that the biological opinion was inadequate on various grounds. 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. 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. The court stated that the biological opinion failed to use the best available science in addressing climate change and its effect on the smelt's critical habitat. The court stated that the biological opinion failed to adequately analyze the indirect and cumulative impacts of the project operations on the smelt.¹⁸⁸

The district court subsequently issued an order requiring the CVP and SWP to reduce water exports from the Delta in order to protect the smelt, and providing that the order will remain in effect until the FWS issues a new biological opinion provide long-term protection for the smelt. The court ordered that the FWS prepare the biological opinion by no later than September 2008. 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.¹⁸⁹

5. The California Endangered Species Act

The California Endangered Species Act (CESA),¹⁹⁰ the state counterpart of the federal ESA, also protects endangered species in California. The CESA authorizes the California Fish and Game Commission to list endangered and threatened species in California.¹⁹¹ Under the CESA, no person may "take" a listed species.¹⁹² The Department of Fish and Game (DFG) may, however, authorize the "incidental" take of an endangered species, if the impacts are minimized and mitigated and the incidental take will not jeopardize the species.¹⁹³ If the DFG issues an incidental take permit, the CESA's prohibition against the "take" of an endangered species does

¹⁸⁸ *Id.*

¹⁸⁹ Another pending action challenges a biological opinion issued in 2004 by NMFS relating to the effect of CVP and SWP operations on endangered salmon species in the Delta. *Pacific Coast Federation of Fishermen's Ass'n, et al.*, no. 06-CV-0245 (E.D. Cal.).

¹⁹⁰ Fish & Game Code §§ 2050-2089.

¹⁹¹ *Id.* at § 2070.

¹⁹² *Id.* at § 2080.

¹⁹³ *Id.* at § 2081.1.

not apply.¹⁹⁴ 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.¹⁹⁵

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.¹⁹⁶ The court ordered the DWR to cease and desist further SWP operations within 60 days unless it obtained take authorization from the DFG as provided in the CESA. The DWR and several other parties appealed the decision to the California Court of Appeal, the effect of which is to stay the decision pending the outcome of the appeal, and the appeal is currently pending.¹⁹⁷

6. “Takings” of Water Rights?

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.¹⁹⁸ Under the regulatory takings doctrine, a government regulation of property may constitute an unconstitutional takings if the regulation goes “too far.”¹⁹⁹ According to the Supreme Court, government regulation goes “too far” if property owners are required to “bear public burdens which, in fairness and justice, should be borne by the public as a whole.”²⁰⁰ In *Penn Central Transportation Company v. New York City*,²⁰¹ the Supreme Court adopted a three-part balancing test to determine whether government regulation has gone “too far”; 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 government action,” including whether the regulation amounts to a “physical invasion” of his property or promotes the “health, safety, morals, or general welfare.”²⁰² In *Loretto v. Teleprompter Manhattan CATV Corp.*,²⁰³ the Supreme Court has also held that the government must categorically compensate the property owner if the regulation is viewed as a “physical invasion” of the property, and that the *Penn Central* balancing test does not apply in these circumstances.

¹⁹⁴ *Id.*

¹⁹⁵ *Id.* at § 2080.1(a).

¹⁹⁶ *Watershed Enforcers v. California Department of Water Resources, et al.*, __ Cal.App.4th __, Court of Appeal, First App. Dist., Nos. A117715, A117750 (pending).

¹⁹⁷ 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. 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.

¹⁹⁸ U. S. Const., Amendments V, XIV.

¹⁹⁹ *Pennsylvania Coal v. Mahon*, 260 U.S. 393, 415 (1922).

²⁰⁰ *Armstrong v. United States*, 364 U.S. 40, 49 (1960).

²⁰¹ 438 U.S. 110 (1978).

²⁰² 438 U.S. at 124-125.

²⁰³ 458 U.S. 419 (1982).

The 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 the police power—if the regulation is supported by a rational basis—and that the states are not required to compensate property owners when it regulates their rights under the police power.²⁰⁴ Similarly, the Court also held that the state’s regulation of water rights under the police power does not violate the Due Process Clause.²⁰⁵ Additionally, the Court has 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.²⁰⁶ The Court recently 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.²⁰⁷ The Supreme Court has not determined, however, whether the Takings Clause applies to government regulation of water, and if so the extent to which it applies, and thus this remains an open question.

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

In the California case, the Court of Federal Claims, through Judge John Wiese, upheld the takings claims.²⁰⁸ There, the DWR had entered into contracts with agricultural water users to deliver water supplies from the SWP. 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. To avoid jeopardy to the species, the DWR reduced its water deliveries to the agricultural users. The court upheld the agricultural users’ claims that the United States’ application of the ESA had unconstitutionally taken their water rights. 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 *Loretto*, which held that government must categorically pay for the “physical invasion” of property. The court stated that “the federal government is certainly free to preserve the fish; it must simply pay for the water it takes to do so.”²⁰⁹ 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.

²⁰⁴ *Mugler v. Kansas*, 23 U.S. 623 (1887).

²⁰⁵ *Hudson County Water Company v. McCarter*, 209 U.S. 349, 355-357 (1908).

²⁰⁶ *United States v. Willow River Company*, 324 U.S. 499 (1945); *United States v. Chandler-Dunbar Co.*, 229 U.S. 53, 69 (1913).

²⁰⁷ *Kaiser Aetna v. United States*, 444 U.S. 164, 170-180 (1979).

²⁰⁸ *Tulare Lake Basin, et al. v. United States*, 49 Fed.Cl. 313 (2001).

²⁰⁹ 49 Fed.Cl. at 325.

In the Oregon case, the Court of Federal Claims, through Judge Francis Allegra, reached the opposite conclusion regarding the takings claims of agricultural water users in Oregon.²¹⁰ There, the agricultural users had contracts with the Bureau of Reclamation for water deliveries from the Klamath Project, a federal reclamation project on the Klamath River in Oregon. 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, respectively. To avoid jeopardy, the Bureau of Reclamation reduced its water deliveries to the agricultural water users. The court rejected the water users' claims that the United States had unconstitutionally taken their water rights. 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. 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. 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."²¹¹

IV. 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. 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. The Legislature has enacted statutes requiring water supply agencies to 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. The effect of these judicial and legislative developments is to provide for more coordination of water supply and land use planning.

A. The California Environmental Quality Act

Under the California Environmental Quality Act (CEQA),²¹² 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 proposes mitigation measures and alternatives to avoid the effects. The California courts have held that—for projects that will depend on water supplies—the EIR must describe the project's environmental effects relating to the use of water supplies, because the EIR's analysis of the

²¹⁰ *Klamath Irrigation District v. United States*, 67 Fed.Cl. 504 (2005).

²¹¹ 67 Fed.Cl. at 538.

²¹² Pub. Res. Code § 21000 *et seq.*

project's environmental effects would otherwise be incomplete.²¹³ The courts in some cases, such as *Sierra Club v. West Side Irrig. District*,²¹⁴ 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*,²¹⁵ that the EIR failed to adequately analyze these effects.

In *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova*,²¹⁶ the California Supreme Court recently addressed whether CEQA requires that a proposed project must have an identified and certain water supply as a condition for approval. 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. 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. The County's EIR discussed the likelihood of the projects' acquisition of these water supplies, and also discussed the environmental effects of the their acquisition.

The California Supreme Court held that the County's EIR for the short-term supplies adequately discussed the environmental effects and was valid under CEQA, but that the EIR's discussion of the long-term water supplies did not adequately discuss the environmental effects and was invalid under CEQA. The Court articulated four principles for determining the adequacy of an EIR's discussion of water supplies:

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 projects, nor defer the analysis of future water sources and their impacts until later project stages (through a future "tiered" EIR). Instead, the EIR 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.
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.²¹⁷

²¹³ E.g., *Sierra Club v. West Side Irrig. Dist.*, 128 Cal.App.4th 690 (2005); *Santa Clarita Organization v. County of Los Angeles*, 106 Cal.App.4th 715, 723 (2003); *Stanislaus Natural Heritage Project v. County of Stanislaus*, 48 Cal.App.4th 182, 205 (1996); *Napa Citizens v. Napa County Board of Supervisors*, 91 Cal.App.4th 342 (2001).

²¹⁴ 128 Cal.App.4th 690 (2005).

²¹⁵ 48 Cal.App.4th 182, 205 (1996).

²¹⁶ 40 Cal.4th 412 (2007).

²¹⁷ 40 Cal.4th at 430-432.

The California Supreme Court decision in *Vineyards* requires local governments to undertake substantial water supply planning before approving land use projects, even to the point of demonstrating that there is a “likelihood” of obtaining water supplies. In *Amador County v. El Dorado County Water Agency*,²¹⁸ 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. In *Amador*, the County prepared a *draft* general plan governing the County’s future land uses, but had not finally approved the general plan. 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. 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. The court determined that the County cannot develop a water supply plan before developing a final general plan governing land use; otherwise, the County would plan for maximum land use commensurate with its planned water supply, and one of the impediments to future growth would thus be removed. In effect, *Amador* held that local agencies cannot develop water supply plans until they have completed their land use planning process, and the California Supreme Court in *Vineyards* held that local agencies cannot develop land use plans until they have developed a “likelihood” of obtaining water supplies. Thus, the *Vineyards* and *Amador* decisions create a conundrum for 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.

In *Santa Clarita Organization v. County of Los Angeles*,²¹⁹ 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. 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. 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.”²²⁰ 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. 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. 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. The court also rejected the plaintiff’s argument that the planned supplies were uncertain because the DWR must approved—but had not yet approved—

²¹⁸ 76 Cal.App.4th 931 (1999).

²¹⁹ 157 Cal.App.4th 149 (2007) (“*SCOPE II*”).

²²⁰ *Santa Clarita Organization v. County of Los Angeles*, 106 Cal.App.4th 715 (2003) (“*SCOPE I*”).

the transfer; the court stated that the DWR is not required to approve the transfer. Finally, the court stated that the proposed transfer is consistent with state policy to encourage water transfers.

B. Legislative Water Supply Planning Statutes

1. Urban Water Management Plans

In 1983, the Legislature enacted the Urban Water Management Planning Act.²²¹ Under the statute, an agency that provides water supplies for urban use must prepare an Urban Water Management Plan (UWMP) describing the availability of water supplies for future growth needs.²²² The UWMP, which must be updated every five years, must describe the agency's water supplies, and evaluate whether the supplies are sufficient to meet the agency's projected water demands over a 20-year planning horizon, taking into account the agency's existing and planned future uses. The statute provides that CEQA does not apply to the UWMP, and thus the water supply agency is not required to prepare an EIR for the UWMP.

2. SB 610: Water Supply Assessments

In 2002, the Legislature enacted two statutes, SB 610 and SB 221, that require public water supply agencies to provide information regarding the availability of water supplies for proposed projects.

SB 610 provides that public water agencies must prepare a "water supply assessment" describing the availability of water supplies for a proposed project.²²³ The assessment must describe whether sufficient water supplies are available to meet the project's needs over a 20-year period, taking into account the water supplier's "existing and planned future uses."²²⁴ The assessment must describe the availability of future water supplies under different scenarios—normal years, dry years and multiple dry years.²²⁵ In determining the sufficiency of *existing* water supplies, the assessment must describe the specific authority for the supplies—entitlements, contracts, water rights, permits and approvals, funding programs, and so forth.²²⁶ 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.²²⁷ The assessment may incorporate information from the relevant UWMP, if the UWMP provides adequate information for this purpose.²²⁸ For groundwater supplies, the assessment must determine whether the groundwater basin is "sufficient" to meet the project's future demands over a 20-year period, and must specifically consider past, present and future projected pumping

²²¹ Wat. Code § 10610 *et seq.*

²²² *Friends of the Santa Clarita River v. Castaic Lake Water Agency*, 123 Cal.App.4th 1, 8 (2004).

²²³ Wat. Code § 10910 *et seq.*

²²⁴ *Id.* at § 10910(c)(3).

²²⁵ *Id.*

²²⁶ *Id.* at § 10910(d).

²²⁷ *Id.* at § 10911.

²²⁸ *Id.* at § 10910(c).

by the water supplier.²²⁹ If the water supplier is a city or county, the city or county must prepare the assessment.²³⁰ SB 610 applies only to large projects, such as residential projects of more than 500 units and large commercial projects.²³¹

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 consider the assessment—along with other relevant information relating to environmental effects, as required by CEQA—in deciding whether to approve the project.²³² The local government must determine the sufficiency of water supplies for the project based on the “entire record,” and not strictly according to the water supply assessment.²³³ Thus, the local government is not required to accept the assessment’s conclusions regarding the availability of future water supplies, and may also consider other evidence relating to water supply availability. If the local government concludes that sufficient water supplies are not available for the project, the government must include that information in its findings for the project.²³⁴ Thus, the local government, at least in theory, can approve a project that lacks an adequate water supply.

In *O.W.L. Foundation v. City of Rohnert Park*,²³⁵ the Superior Court for Sonoma County held that the City of Rohnert Park’s water supply assessment—which described the availability of future groundwater supplies for proposed commercial and residential projects—was invalid under SB 610. Since the City itself was the water supplier, the City prepared its own assessment. The Superior Court held that although the assessment considered water supply availability in terms of the City’s own past, present and future pumpage of groundwater, the assessment improperly failed to consider the same pumpage by other groundwater users in the groundwater basin. According to the court, SB 610 requires that the groundwater supplier consider pumpage by all water users from the basin, not simply by the water supplier itself. The case is currently pending on appeal.

In *California Water Impact Network v. Newhall County Water Dist., et al.*,²³⁶ 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. According to the court, the assessment is not a “final” agency action, and therefore cannot be challenged in a mandamus action; the agency action does not become “final”—and therefore challengeable in a mandamus action—until the agency approves the EIR for the project, and approves the project itself. The court held that the issuance of the assessment does not, itself, have any legal significance, and does not affect anyone’s legal rights or interests; these rights and interests, the court held, are only affected when the EIR for the project, and the project itself, are approved. Thus, the court determined the proper time and place to challenge

²²⁹ *Id.* at § 10910(f).

²³⁰ *Id.* at § 10910(b).

²³¹ *Id.* at § 10912.

²³² *Id.* at §§ 10910(a), -(g), 10911.

²³³ *Id.* at § 10911(c).

²³⁴ *Id.* at § 10911(b).

²³⁵ Court of Appeal, First App. Dist., No. A114809 (pending).

²³⁶ Court of Appeal, Second App. Dist., No. B197570 (pending).

the assessment is as part of the challenge to the EIR, but that—until the EIR is issued—the assessment itself is not ripe for challenge. The case is currently pending on appeal.

3. SB 221: Written Verifications For Tentative Subdivision Maps

SB 221 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.²³⁷ The condition can be imposed only the water supply agency has issued a “written verification” to the local government indicating that a sufficient water supply is available for the project.²³⁸ 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.²³⁹

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 government can, at least in theory, approve a project that lacks a sufficient water supply; the government must simply include information about the sufficiency or insufficiency of water supplies in its findings.²⁴⁰ SB 221, on the other hand, requires that the local government, in approving a tentative subdivision map, must include a condition that the project has a “sufficient water supply,” and this condition cannot be included—and hence the project cannot be approved—if the water supply agency determines that sufficient water supplies are not available for the project.²⁴¹ Thus, a project can be approved under SB 610 at the initial development stage—when the local government is determining whether to approve the project in concept—even though sufficient water supplies may not be available for the project; 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.”²⁴²

CONCLUSION

California water rights law is the product of California’s historical development, from the early mining days to the present. As California’s water needs have changed, its water laws have changed in response to those needs. The early water laws, which resolved disputes among competing users based on priority principles, have evolved into a modern regulatory regime that allows the state, through its administrative water rights system, to allocate water among

²³⁷ Govt. Code § 66473.7(b).

²³⁸ *Id.*

²³⁹ *Id.*

²⁴⁰ Wat. Code § 10911(b).

²⁴¹ Govt. Code § 66473.7(b).

²⁴² *Vineyards*, 412 Cal.4th at 433-434, quoting from amicus brief of Association of California Water Agencies, *et al.*

competing users based on “public interest” principles. The public interest, as defined in California law, includes 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 supplies, California has adopted laws to accommodate its available water supplies with its regulation of the use of land. Thus, California’s modern water law involves a vortex of demographic, economic, environmental and land use factors.

In response to the growing national consensus in favor of protecting the environment, Congress has enacted several environmental laws that affect the use of water, principally by protecting water quality and endangered species. These congressional enactments have significantly expanded the federal presence in the field of water regulation, and thus concomitantly limited the authority of California and other states to allocate water based on their perceptions of the public interest. As California’s water laws have evolved in response to the growing needs of its population and the competing need to protect the environment, Congress has adopted laws at the national level that limit the effect of the balance struck by California and other states.

Thus, California water law—broadly defined—is an amalgam of federal and state laws that defines the circumstances under which California can allocate water among different uses, and under which the users themselves have the right to use water. 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 circumstances, they will continue to evolve as these needs and circumstances continue to change.