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RUTH LANGRIDGE*

Changing Legal Regimes and the Allocation of Water Between Two California Rivers**

ABSTRACT

Water is the most essential and fought over resource in the western United States. Struggles over how to allocate water are framed by legal regimes that encompass the body of established laws and the institutions that administer these laws. But as values change, new regulations and new court interpretations can conflict with established law, and new legal requirements and institutional jurisdictions can encroach on one another. This tension is visible in the new doctrine, regulations, and agencies affecting water allocation decisions today as compared with a century ago. The history of the Potter Valley Hydropower Project, an inter-basin diversion facility in Northern California, provides an ideal arena to explore the struggle for control over water in the west and how changes in legal regimes affect water allocation decisions. Situated at the center of two linked rivers, the hydropower project and its diversion of Eel River water into the Russian River embody many of the tensions common to water allocation disputes throughout California. The project was generally supported at the time of its construction in 1905, but the continuation of its water diversion is highly contested today. New environmental regulations and case law are challenging established water rights, there is increased friction between expanding sets of local, state, and federal agencies; there is new case law supporting efforts by Indian Tribes to access their federal reserved rights to water; and there are restrictions on water imported from a different basin. This article highlights the water rights history of the project juxtaposed against the framework of the broader legal regime, and it discusses how today's complex legal system for allocating water operates in the present negotiations. I propose that the present legal process for allocating water disperses

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decision making among multiple federal, state, and local agencies. While this has resulted in friction and inefficiencies, agency pluralism has also provided new political opportunities for previously ignored claims, creating the potential for greater equity in future decisions.

INTRODUCTION

Struggles over how to allocate water in the West are framed by legal regimes that encompass the body of established laws and the institutions¹ that administer them. But as the political culture changes, new regulations and court interpretations can conflict with existing law, and new institutional jurisdictions can encroach on one another.² During the past century, changes in the legal system have intensified negotiations over reconciling public and private water rights, balancing economic development and in-stream values, and satisfying the needs and desires of different communities and watersheds.

The history of the Potter Valley Hydropower Project (PVP), an inter-basin diversion facility in Northern California, provides an ideal arena to explore the struggle for control over water and how changes in the legal regime affect water allocation decisions.³ The PVP and its diversion of Eel River water into the Russian River illustrate many of the changing tensions common to water disputes throughout California. The project was generally supported at the time of its construction in 1905, but its water diversion is highly contested today. New environmental regulations and case law are challenging established water interests: there is increased friction between

1. Institutions are defined narrowly in this article to consist of those visible structures of governance, such as government agencies, that are comprised of people, materials, and the shared rules and understandings used to structure patterns of interactions.

2. See generally JOSEPH L. SAX ET AL., *LEGAL CONTROL OF WATER RESOURCES* ch. 4 (3d ed. 2001); Joseph L. Sax, *Environmental Law at the Turn of the Century: A Reportorial Fragment of Contemporary History*, 88 CAL. L. REV. 2377 (2000); Jeff Romm, *Social Diversification of the Forest*, Paper to the Cultures and Biodiversity Congress (July 20, 2000) (unpublished paper, on file with author); Norman K. Johnson & Charles T. DuMars, *A Survey of the Evolution of Western Water Law in Response to Changing Economic and Public Interest Demands*, 29 NAT. RESOURCES J. 347 (1989).

3. While recognizing that the relationship between legal regimes and negotiations for control over water is mutually constitutive, this article focuses primarily on how broader structural changes can affect the negotiation process. See, e.g., ROBERT GOTTLIEB & MARGARET FITZSIMMONS, *THIRST FOR GROWTH: WATER AGENCIES AS HIDDEN GOVERNMENT IN CALIFORNIA* 2 (1991) (categorizing water issues as local issues that "have become embedded in, and given rise to, an increasingly elaborate articulation of local, state, and federal powers and organizations"); see also JOHN WALTON, *WESTERN TIMES AND WATER WARS: STATE CULTURE AND REBELLION IN CALIFORNIA* (1992) (discussing the complex relationship between human agency, institutional development, and control over water).

expanding sets of local, state, and federal agencies; there are renewed efforts by Indian Tribes to access their federal reserved rights to water and their treaty rights to fish; and there are restrictions on water imported from a different basin.

An in-depth historical study of the issues associated with the PVP demonstrates how the shifting legal and administrative processes for allocating water have increasingly dispersed decision making among multiple federal, state, and local agencies. I propose that although agency pluralism has resulted in inefficiency and friction, it has also provided new political opportunities for previously disregarded parties to enter water allocation negotiations.⁴

EARLY HISTORY OF THE POTTER VALLEY PROJECT

The Construction of Cape Horn Dam and Van Arsdale Reservoir

Since the turn of the century, Northern California and statewide interests have coveted the Eel River as a source of water and wealth.⁵ Local struggles for control of Eel River water began in 1905 with the construction of the Potter Valley Hydropower Project and its diversion of Eel River water into the Russian River. The promoters desired a more reliable and economical source of electricity⁶ during an era when the entire country

4. For a discussion of the rise of agency pluralism in hydroelectric licensing, see generally Michael C. Blumm & Viki A. Nadol, *The Decline of the Hydropower Czar and the Rise of Agency Pluralism in Hydroelectric Licensing*, 26 COLUM. J. ENVTL. L. 81 (2001). The ability of previously disenfranchised parties to enter a negotiating process is also related to other variables including organizational resources and coalition forming. See generally DOUG MCADAM, ET AL., *DYNAMICS OF CONTENTION* (2001); PAUL A. SABATIER & HANK C. JENKINS-SMITH, *THEORETICAL LENSES ON PUBLIC POLICY, POLICY CHANGE AND LEARNING: AN ADVOCACY COALITION APPROACH*, (1993) (on advocacy coalition networks); SIDNEY TARROW, *POWER IN MOVEMENT: SOCIAL MOVEMENTS AND CONTENTIOUS POLITICS* (1998).

5. See e.g., *This Should Be Blocked*, HUMBOLDT TIMES, Sept. 11, 1919, at 4 (describing protests by Humboldt County residents to an application that was filed to divert water from the Eel to be used for municipal and industrial use in the vicinity of Oakland. The water was to be diverted by a canal leading from the PVP powerhouse.); see also CAL. DEP'T OF WATER RES., BULLETIN NO. 172, *EEL RIVER DEVELOPMENT ALTERNATIVES* (1969) (discussing later plans to divert Eel River water to other parts of the state).

6. *New Electric Power Here—Ukiah Is Now Lighted by the Snow Mountain Company*, DISPATCH DEMOCRAT, Apr. 3, 1908 (stating that "[f]rom the day that this light and power was first sent over the wires Mendocino county has taken a step forward and joined the ranks of modern civilization and will now be in the front ranks of the army of progress. New industries will flourish, new enterprises will be established, electric railroads can and will be built. All this will add to our population, increase the assessed valuation of property, give work to many, and thus will untold prosperity be our lot.").

viewed electrification as a road to progress and prosperity and businessmen saw harnessing water for hydropower as a profitable opportunity.⁷

In 1905, the State of California controlled all rights to surface water.⁸ Under state law, both the riparian doctrine and the doctrine of prior appropriation governed access to water.⁹ The doctrine of prior appropriation had evolved out of the conventions of the California gold miners who had constructed elaborate methods to divert water for hydraulic mining. In 1855, the California Supreme Court adopted these conventions as law for all uses.¹⁰ No permission was required from the state to divert water but the quantity of diverted water was limited to the amount that could be applied to beneficial use, and a reasonable method of diversion was required to demonstrate beneficial use.¹¹

7. The 1890s witnessed the birth of hydroelectric power in California. See Jessica B. Teisch, *The Drowning of Big Meadows: Nature's Managers in Progressive-Era California*, ENVTL. HIST., Jan. 1999, at 32, 34. Private companies drove the shift from coal generated to water generated power and fought for the generation and sale of power to be exclusively in the private domain. *Id.* Initially, the number of rivers engineered by private corporations far exceeded waterways dammed by public agencies, and until the 1930s private corporations almost exclusively produced California's electricity. *Id.* at 43. By 1920, 80 percent of irrigation was financed completely with private funds. See also DONALD C. JACKSON, *BUILDING THE ULTIMATE DAM* (1995). In 1934, a survey of western hydroelectric plants with capacities exceeding 20,000 horsepower included only one facility constructed by the Bureau of Reclamation while there were more than 60 built by private utilities or municipalities. For a brief historical background on hydropower development, see Sarah C. Richardson, *The Changing Landscape of Hydropower Project Relicensing*, 25 WM. & MARY ENVTL. L. & POL'Y REV. 499, 501-12 (2000).

8. The Mining Act, 14 Stat. 253 (1866) (codified as amended in scattered sections of 30 U.S.C. and 43 U.S.C.), failed to define any method of acquiring water rights from the federal government, thus deferring to established local customs, state or territorial laws, or court rulings. The 1870 amendment to the act stipulated that title to public lands was subject to any prior water rights acquired by others while the land was in public ownership. The Desert Land Act of 1877, 43 U.S.C. §§ 321-329 (1994), provided that water from non-navigable sources on the public lands was available for appropriation subject to existing rights. In *Kansas v. Colorado*, the Supreme Court denied the federal government's power to allocate interstate waters for reclamation, "Congress cannot enforce either rule [riparian or prior appropriation] upon any state." 206 U.S. 46, 55 (1907). One of the few exceptions to state sovereignty during this period was the federal reserved water rights granted to Indian Reservations. See *Winters v. United States*, 207 U.S. 564 (1908) (discussed later in this article). Finally, in *California Oregon Power Co. v. Beaver Portland Cement Co.* the court held that the Desert Land Act had severed the water from the public lands and all unappropriated waters of non-navigable sources remained open to appropriation and use according to state law. 295 U.S. 142, 163-65 (1935).

9. The California Supreme Court ruling in *Lux v. Haggin* declared that both riparian and appropriation were dual doctrines for the State. 69 Cal. 255, 260-61 (1886).

10. *Irwin v. Phillips*, 5 Cal. 140 (1855). For a discussion of California gold miners and their influence on water law, see NORRIS HUNDLEY, JR., *THE GREAT THIRST* 63-118 (1992).

11. For a complete discussion of the doctrine of prior appropriation, see SAX ET AL., *supra* note 2; ARTHUR L. LITTLEWORTH & ERIC L. GARNER, *CALIFORNIA WATER* 39-47 (1995).

Under these 1905 rules, W.W. Van Arsdale, the financier who capitalized the initial Potter Valley Project construction, established his appropriative water right simply by posting a notice "on an alder tree about 20 inches in diameter in a conspicuous place at the point of diversion of the water."¹² He recorded it with the County Recorder ten days later on August 19, 1905. Van Arsdale stated that the purposes were to generate electrical power and to irrigate land in Potter Valley.¹³

Van Arsdale planned to take advantage of a natural mountain divide between the Eel and the Russian River. As the main stem of the Eel River begins its course north and passes through Humboldt County on its way to the ocean, it flows along the upper southwestern side of a mountain divide. Three hundred feet below, on the southeastern side of the mountain, the East Fork of the Russian River begins its flow to the south, passing through Mendocino and Sonoma counties on its way to the ocean. Van Arsdale's company, Snow Mountain Water and Power, constructed Cape Horn Dam on the Eel River, impounded the water, and stored it in Van Arsdale Reservoir.¹⁴ The Company then tunneled through the mountain and dropped the Eel River water into the power plant located in the small farming community of Potter Valley in the Russian River watershed.¹⁵ The four-megawatt power plant¹⁶ and its associated dam and tunnel became known as the Potter Valley Hydropower Project. The imported Eel River water was then released after use into the East Fork of the Russian River. The resulting diversion has linked the two watersheds for almost a century, with significant consequences for the entire region. (See map of Potter Valley Project and Inter-basin Diversion.)

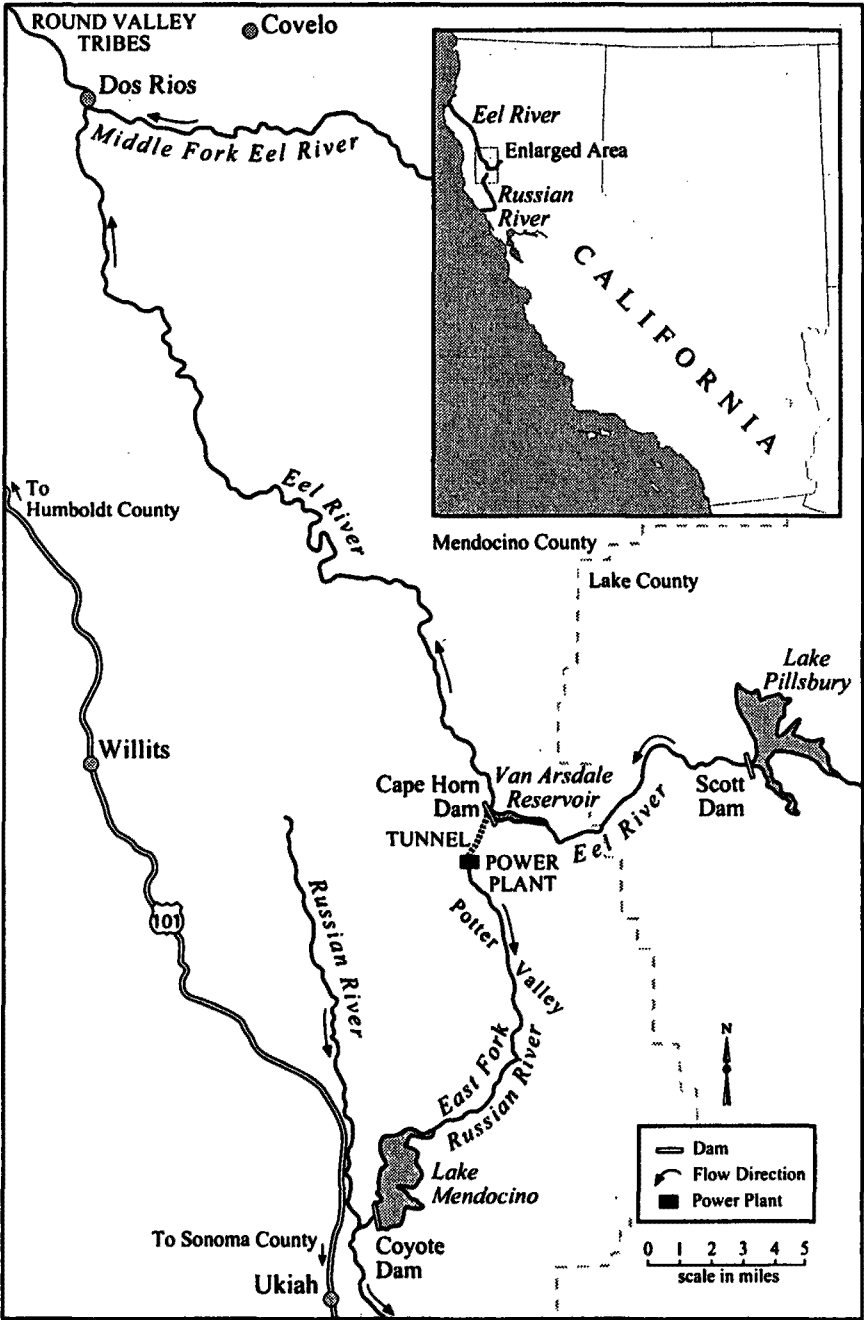
12. E.H. Smith, Sworn Statement, Mendocino County Records, Book 1 at 150, Aug. 19, 1905 (copy on file with author).

13. Applications 4788 & 5661, Decision A 4788, 5661 D 179, at 9 (Div. of Water Rights, Dep't of Public Works, Cal., Jan. 8, 1926).

14. Steiner Envtl. Consulting, Effects of Operations on Upper Eel River Anadromous Salmonids, Final Report for Pacific Gas and Electric 3.2-1 (1998). Construction began in 1905 by the Eel River Power and Irrigation Company, which was reorganized as Snow Mountain Water and Power Company in 1906. The San Francisco earthquake stopped all activity. The dam was completed and the project began operating in 1908. For a more detailed history, see JULIA L. MOUNGOVAN, THE POTTER VALLEY STORY (1972) (on file with author); LOUIS GOMES, THE STORY OF POTTER VALLEY HYDRO-ELECTRIC PROJECT #77 (Mendocino County Historical Soc'y 1972).

15. 1 FED. ENERGY REGULATORY COMM'N, DOC. NO. FERC/EIS-0119F, FINAL ENVIRONMENTAL IMPACT STATEMENT, PROPOSED CHANGES IN MINIMUM FLOW REQUIREMENTS AT THE POTTER VALLEY PROJECT, FERC PROJECT NO. 77-110, CALIFORNIA, at 2-1 (2000). At Van Arsdale, water was drawn into a tunnel and penstock system. After 450 feet of elevation loss, it reached the PVP powerhouse located at the headwaters of the East Branch of the Russian River. *Id.*

16. *Id.* Additional improvements over the years increased production to 9.4 megawatts. The final maximum diversion capacity of the tunnel-penstock system is now estimated at 320 cfs. *Id.*



Potter Valley Project and Inter-basin Diversion

Prior to 1921, the project diverted as much Eel River water into the Russian River as the original tunnel would carry. PVP operators had to leave only two cubic feet per second (cfs) in the Eel River to satisfy existing rights,¹⁷ but the small size of both Cape Horn dam and the initial tunnel created only minor changes in discharge patterns in the Eel River below the dam.¹⁸ The new supply of project water continued to be viewed as opening up great opportunities for local development in the Russian River watershed. Eel River watershed residents did complain during these early years about the dam blocking salmon access to upstream habitat.¹⁹ However, the complaints were largely ignored.

The Construction of Scott Dam and Lake Pillsbury

Between 1920 and 1922 Snow Mountain Water and Power Company expanded storage of Eel River water when it constructed a second dam upstream of Van Arsdale reservoir in the Mendocino National Forest.²⁰ Scott Dam blocked an estimated 35 to 75 miles of salmonid habitat and modified flow and temperature regimes.²¹ When the company applied to the California Division of Water Rights to store water all year round in the Lake Pillsbury reservoir, Eel River residents protested about "all the damages that would occur to the people of the Eel Valley."²² The comple-

17. CAL. DEP'T OF WATER RES., BULLETIN NO. 105-5, EEL-RUSSIAN RIVER STREAMFLOW AUGMENTATION STUDIES [hereinafter BULLETIN 105-5] 2, 5 (1976).

18. Steiner Env'tl. Consulting, *supra* note 14, at 3.2-1. Due to Van Arsdale's limited capacity of 700 acre-feet (af), the diversion was primarily run-of-the-river and changes would have been most apparent during late summer and fall. See Steiner Env'tl. Consulting, A History of the Salmonid Decline in the Russian River: A Cooperative Project Sponsored by Sonoma County Water Agency, California State Coastal Conservancy, and Steiner Environmental Consulting 3.2-1 to 3.2-2 (1996). The diversion also had little effect on Russian River flows other than to prolong spring flows in the East Fork of the Russian River. See *id.*

19. *Power Plant Thought to Menace Eel*, HUMBOLDT TIMES, Sept. 12, 1919; *Committee Named to Guard Rights to County Water*, HUMBOLDT TIMES, Dec. 4, 1919. To address these protests the first fish ladder for the project was constructed in 1909, but shortly thereafter the California Department of Fish and Game (CDFG) found that it was difficult for fish to use. Steiner Env'tl. Consulting, *supra* note 14, at 3.2-1. Initial modifications proved fruitless and CDFG required that releases of adults not used for spawning had to take place above the fish ladder. *Id.* No further modifications were made until 1962. *Id.* at 3.3-1.

20. FED. ENERGY REGULATORY COMM'N, *supra* note 15, at 2-3. Scott Dam's total reservoir capacity is 80,560 af and it provides year-round storage to regulate flows at Van Arsdale Reservoir. *Id.* at 2-5. Water storage capacity in Lake Pillsbury has decreased over time as a result of increased silt and sediment loads into the reservoir. *Id.* at 2-3.

21. Steiner Env'tl. Consulting, *supra* note 14, at 3.3-2.

22. *Hearing Held on Diversion of Eel River*, HUMBOLDT TIMES, Sept. 29, 1927, at 11 (protestors wanted the company to release water in the summer equal to the natural summer flow). For a discussion of other western communities who also protested dams that blocked fish passage, see JIM LICHATOWICH, SALMON WITHOUT RIVERS: A HISTORY OF THE PACIFIC SALMON CRISIS 77 (1999).

tion of Scott Dam also changed the Russian River and dramatically increased the river's average summer base discharges. Year round water was now diverted into the East Fork Russian River.²³ However, the opportunity to electrify the region through hydropower development and to expand irrigation in the Russian River watershed outweighed any concerns about changes in the river regime. Communities that backed the project were bolstered by state and national sentiment that strongly supported harnessing California's rivers "to utilize their powers in accelerating [man's] advancement."²⁴

The passage of the Federal Reclamation Act in 1902²⁵ and the Federal Water Power Act (FWPA) in 1920²⁶ manifested this national progressive era vision and reflected the beginning of a larger federal presence in water allocation decisions.²⁷ Prior to the Federal Water Power Act, the construction of hydropower plants needed only the approval of the Secretaries of War, the Interior, and Agriculture. In practice, no formal permits were issued and hydroelectric generating structures were routinely erected on public lands,²⁸ as was Scott Dam on Mendocino National Forest land.²⁹ But after the enactment of the Federal Water Power Act, the federal

23. Steiner Envtl. Consulting, *supra* note 14, at 3.2-2. On average 160,000 acre-feet per annum (afa) are diverted from the Eel River through the PVP to the Russian River. FED. ENERGY REGULATORY COMM'N, *supra* note 15, at xxix.

24. JACKSON, *supra* note 7, at 2 (citing CAL. DEP'T OF PUB. WORKS, FLOW IN CALIFORNIA STREAMS (1923)).

25. Reclamation Act of 1902, 43 U.S.C. §§ 372-620 (1994).

26. Public Water Power Act of 1920, Pub L. No. 66-280, 41 Stat. 1063 (1920) (now the Federal Power Act, codified as amended in 16 U.S.C. §§ 791a-825u (1994 & Supp. II 1996)).

27. The FPWA was the culmination of a 15-year effort to bring about the development of water power. The main battle was over whether there should be strong federal control to protect the public interest, an idea supported by President Roosevelt. The compromise was that licensees were given security during their license term, while the federal government retained long-term control over the terms and conditions of the license and the power of non-renewal. See Beth C. Bryant, *FERC's Dam Decommissioning Authority under the Federal Power Act*, 74 WASH. L. REV. 95, 100-01 (1999).

28. The Secretaries were authorized to issue licenses for hydroelectric projects on land under their respective supervision. See Katherine Costenbader, Comment, *Damning Dams: Bearing the Cost of Restoring America's Rivers*, 6 GEO. MASON L. REV. 635, 646 n.100 (1998). The General Dam Act, passed in 1906 (Act of June 21, 1906, ch. 3508, 34 Stat. 386) and amended in 1910 (Act of June 23, 1910, ch. 360, 36 Stat. 593) "was intended by its framers to permit the development of water power while facilitating the improvement of stream navigability by the Government through the utilization of private capital." Charles R. Sensiba, *Who's in Charge Here? The Shrinking Role of the Federal Energy Regulatory Commission in Hydropower Relicensing*, 70 U. COLO. L. REV. 603, 613 (1999) (quoting *Chemehuevi Tribe v. Fed. Power Comm'n*, 489 F.2d 1207, 1217 (1973)).

29. See Opinion & Order Denying Appeal, Approving Settlement, & Issuing New License (Major), 25 FERC 61,010, 61,060 (Oct. 4, 1983) [hereinafter Opinion & Order]. Snow Mountain Water and Power initially applied to the U.S. Forest Service to build Scott Dam on Mendocino National Forest land. During the same year, construction of the dam was begun and a request

government was required to formally license all power projects on navigable waterways and on April 15, 1922, the Federal Power Commission (FPC) issued a hydropower license for the Potter Valley Project.³⁰

Meanwhile, in 1913 the California Legislature passed the Water Commission Act³¹ and established a formal method for acquiring new appropriative rights by filing for a permit with the Water Commission.³² Prior to the completion of Scott Dam, Snow Mountain applied to the State for appropriative rights to the Eel River water stored in Lake Pillsbury. The company specified that the water would continue to be diverted through the PVP for power purposes and released into the Russian River.³³ At hearings in 1926, Eel River watershed interests again protested, citing concerns about the preservation of fish life, the "loss of their own natural resources to assist in their future development," and that the State Commission "had no jurisdiction, power or authority to...grant a permit to appropriate water which will be diverted from one watershed to another watershed."³⁴ However, the Board responded that the courts had not restricted the use of water to the watershed of origin and no one had proved "that the granting of this application will endanger fish life in the Eel River."³⁵ Thus, despite their protests, communities in the Eel River continued to lose out to the growing demand for water resource development for irrigation and hydropower and to a legal regime that generally supported this demand.³⁶ Nevertheless, the issues raised during these early

was made to transfer the application for a final power permit to the Federal Power Commission.

30. *Id.*

31. 1913 Cal. Stat. ch. 586. See also DONALD J. PISANI, FROM FAMILY FARM TO AGRIBUSINESS: THE IRRIGATION CRUSADE IN CALIFORNIA AND THE WEST, 336-80 (1984) (discussing the history of the Water Commission Act).

32. LITTLEWORTH & GARNER, *supra* note 11, at 42. In a referendum held in 1914, the people approved the Act and provisions of it are now codified in the California Water Code. See CAL. WATER CODE § 1003. In 1923, the legislature laid the statutory framework for the state system to become the sole means of establishing an appropriative right to water. See also HARRISON C. DUNNING, WATER ALLOCATION IN CALIFORNIA: LEGAL RIGHTS AND REFORM NEEDS 29 (1982); STANFORD ENVTL. L. SOC'Y, WHO RUNS THE RIVERS? DAMS AND DECISIONS IN THE NEW WEST 69 (1983) (providing additional background on the water commission).

33. Applications 4788 & 5661, Decision A 4788, 5661 D 179, at 9 (Div. of Water Rights, Dep't of Public Works, Cal., Jan. 8, 1926).

34. *Id.* at 8, 16. Protesting groups included the Chambers of Commerce from Eureka and Arcata; Humboldt Fish and Game; the cities of Eureka, Ferndale, and Fortuna; Humboldt County Farm Bureau; several lumber companies; and other businesses and individuals.

35. *Id.* at 15-16.

36. See U.S. FISH & WILDLIFE SERV., DEP'T OF INTERIOR, POPULATIONS AND TRENDS IN THE EEL RIVER BASIN 30 (1980), for a discussion of how watershed management proposals for the Eel historically expressed few concerns for streamflow needs prior to 1950 and both Cape Horn and Scott Dams were planned without consideration for their impact on anadromous fish. See also LICHATOWICH, *supra* note 22, at 76 (discussing the general lack of concern throughout the

years regarding the export of water from one basin to another, the potential decline of the fisheries, and the impact of the diversion on community development remained central to debates over the allocation of Eel River water throughout the rest of the century.

The Round Valley Tribes

Located downstream of Van Arsdale reservoir, abutting the Main Stem Eel, are the federally recognized Round Valley Tribes. In 1858, their reservation was set aside for Indian use by the Secretary of the Interior. In 1873, Congress passed an act formally establishing boundaries for the Reservation and specifically reserving fishing rights in the Eel River, stating that "the center of the Eel River shall be the western boundary of [the] Reservation, with the privilege of fishing in said stream."³⁷ The history of the Round Valley Tribes was one of violence and subjugation by white settlers,³⁸ and there was little regard for their water or fishing rights despite early case law supporting these rights.³⁹

As early as 1908, in *Winters v. United States*,⁴⁰ the U.S. Supreme Court had held that when Indian reservations were created, sufficient water was implicitly reserved for Indian tribes to accomplish the purpose of the reservation. The early creation date of most tribal reservations in the West thus established a higher priority date for Indian water rights as compared

West about the problems that dams posed for salmon despite the well known extirpation of salmon from many streams in New England where the manufacturing industry had depended heavily on hydropower and dams).

37. 17 Stat. 633 (1873). Pursuant to the Act, President Ulysses S. Grant formally created the Reservation and by Executive Order dated May 18, 1875, established the boundaries of the reservation more precisely. Petition Before the Federal Energy Regulatory Commission In the Matter of the Licensing of the Potter Valley Project, Project No. 77, Petition to Intervene of Covelo Indian Community, at 2 [hereinafter Petition to Intervene].

38. See LYNWOOD CARRANCO & ESTEL BEARD, GENOCIDE AND VENDETTA: THE ROUND VALLEY WARS OF NORTHERN CALIFORNIA 321 (1981). See also Pamela A. Connors, The Chico to Round Valley Trail of Tears (1993) (unpublished report, on file with author).

39. The establishment of the reservation created implied water rights to satisfy the purposes for which the reservation was created (including fishing). The Statute and Executive Order affirmed the Tribe's right "to the beneficial use of the waters on or contiguous to their reservation in an unimpaired quality, and...to fish on their reservation on and at all the usual and accustomed off-reservation fishing places...." Petition to Intervene, *supra* note 37, at 3.

40. 207 U.S. 564 (1908). The courts recognized at this time the principle of "reserved" rights for lands that had been withdrawn from the public domain by the federal government, including Indian Reservations. For these federal reserved lands, the government by implication reserves appurtenant water to the extent needed to accomplish the purpose of the reservation. *Gila River Pima-Maricopa Indian Cmty. v. United States*, 695 F.2d. 559, 561-62 (Fed. Cir. 1982). Where fishing is a purpose of the reservation, fishing rights are also implicitly reserved; this is the case with the Round Valley Tribal Reservation.

to other water appropriations. In 1905, just prior to the *Winters* decision, the Supreme Court, in *U.S. v. Winans*,⁴¹ construed the promise to Indians of the right to take fish as a property right that was not defeasible by time, statehood, or non-Indian denial.⁴²

In addition, because nearly all tribal reservation lands are held in trust by the United States with a particular tribe as the beneficiary, the Indian trust doctrine imposed a strict fiduciary obligation on the federal government in its dealings with Indian tribes. This required the government to assist in the protection of tribal property and resources and to provide compensation or equitable relief should the government breach its duty and harm tribal people. Historically, however, the trust doctrine was used as a source of power to control activities on tribal lands as opposed to a doctrine of government restraint to protect tribal resources.⁴³ Thus, it is not surprising that the California Water Commission's 1928 permit to Snow Mountain Water and Power did not acknowledge the Tribe's reserved water rights or the project's potential harm to the Tribe's fishing rights. Segregated and battling extreme poverty on the reservation, the Tribes remained second-class citizens throughout most of the twentieth century and their water and fishing rights continued to be overlooked.

41. *United States v. Winans*, 198 U.S. 371 (1905).

42. *Id.* at 381. See also Brian J. Perron, *When Tribal Treaty Fishing Rights Become a Mere Opportunity to Dip One's Net into the Water and Pull It Out Empty: The Case for Money Damages when Treaty-Reserved Fish Habitat Is Degraded*, 25 WM. & MARY ENVTL. L. & POL'Y REV. 783, 791-93 (2001); Michael C. Blumm & Brent M. Swift, *The Indian Treaty Piscary Profit and Habitat Protection in the Pacific Northwest: A Property Rights Approach*, 69 U. COLO. L. REV. 407, 440-45 (1988).

43. Perron, *supra* note 42, at 820-21. Although Indian tribes turned to the courts to enforce their fishing rights, between 1905 and 1942 only two other cases besides *Winans* reached the Supreme Court. See *Tulee v. Wash.*, 315 U.S. 681 (1942); *Seufert Bros. Co. v. United States*, 249 U.S. 194 (1919); LICHATOWICH, *supra* note 22, at 98-101 (discussing how the Northwest Indians were denied their fishing rights). Indian tribes began to be deprived of access to fish by the end of the nineteenth century when technological developments like the canning process led non-Indians to fish. Although in *Winans* the Supreme Court established the Yakima Indians right to fish, this right would continue to be contested until the latter part of the century. See also, David Hayes, Deputy Secretary of the Interior, Letter to FERC, in FERC, Report on Hydroelectric Licensing Policies, Procedures, and Regulations Comprehensive Review and Recommendations Pursuant to Section 603 of the Energy Act of 2000 (May 8, 2001) [hereinafter FERC, Report on Hydroelectric Licensing] at Appendix A (discussing how during the original licensing of hydropower projects located in Indian reservations, little or no effort was made to protect Indian Trust lands and assets, resulting in significant losses in tribes' natural, cultural, and economic resources).

The Formation of Russian River Water Institutions

In the meantime, to gain access to the water diverted from the Eel River, communities in the Russian River watershed began the process of forming irrigation and flood control districts and applying for appropriative rights to the imported water. The first to incorporate were farmers in the community of Potter Valley.⁴⁴ In 1924, they formed the Potter Valley Irrigation District (PVID) and contracted with Snow Mountain for water from the hydropower project to irrigate their crops.⁴⁵

Shortly after, in 1930, the Pacific Gas and Electric Company (PG&E) acquired Snow Mountain and the project's operations.⁴⁶ The state licensed PG&E to store Eel River water in Lake Pillsbury for power, for fish and wildlife protection, and for irrigation use in the Potter Valley Irrigation District.⁴⁷ The utility also continued the contract with PVID. In 1952, PVID applied to the State to appropriate water from the tailrace of the Potter Valley powerhouse to be used for irrigation and stock water year round.⁴⁸

44. Prior to the formation of the Irrigation District in the mid 1920s, Potter Valley, like most of Sonoma County, was dry farmed, yielding abundant produce. *A Few Personal Remarks about Mendocino's Interests and People—Fishing at Potter*, UKIAH REPUBLICAN PRESS (Mar. 17, 1893). "Sonoma County is the first in California in the production of dry wines and grapes...the diversity of interests is so great that no one crop failure can affect the community adversely...all this is accomplished without irrigation." M.B. LEVICK, SONOMA COUNTY CA 3 (1915). See also *Potter Valley—Its Water and Power* (1971) (program written for the Mendocino County Historical Society), for a history of the formation of the PVID.

45. Janet K.F. Pauli, Testimony in response to testimony of PG&E supporting its application before the Public Utilities Commission (Mar. 2, 2000).

46. See Opinion & Order, *supra* note 29. PG&E received authorization from the California Railroad Commission, now the California Public Utilities Commission. On August 29, 1930, the license was transferred to PG&E. *Id.*

47. Ernest Mona, State Water Resources Control Board, Presentation for FERC Workshop, Aug. 11, 1998. These were Application 1719, approved Nov. 3, 1920, with Permit 781 and License 1424 issued Apr. 11, 1934, for 102,366 af of storage in Lake Pillsbury to be rediverted at Cape Horn Dam. *Id.* at 11. The licensed purposes of use were power and fish and wildlife. Application 5661; Permit 2954; and License 1199, issued Aug. 15, 1927, authorize PG&E to first redivert at Cape Horn Dam/Lake Pillsbury storage (4500 af) and then redivert water into the Potter Valley Irrigation District's main canals. *Id.* The licensed purpose of use is irrigation in the PVID. Licensed application 6594 (1930) supplements A5661 and allows PG&E to sell additional water to PVID. *Id.*

48. *In re* Application 13557 by Potter Valley Irrigation Dist. to Appropriate Water from an Unnamed Stream, Tributary to East Fork of Russian River, in Mendocino County for Irrigation and Stockwatering Purposes, Cal. Div. of Water Res., Dep't of Pub. Works Decision 750 (July 28, 1952) [hereinafter *In re* Application 13557]. See also Mona, *supra* note 47. According to the record, PG&E determined in 1930 that the amount of water required to complete irrigation of lands within PVID was approximately 19,000 af. Because A5661 covered 4500 af, A6594 was filed to cover the balance of 14,500 af. PVID now received a 19,400 afa block of

Although the application was protested by Russian River riparians concerned with infringements on their water rights, it was approved.⁴⁹

MIDDLE YEARS OF THE PROJECT—THE STATE EYES THE EEL RIVER AS A WATER SOURCE

California Proposes to Dam the Eel and Export Its Water South

At the time of the project's initial construction in 1908, the State of California and municipal water districts had already expressed interest in transporting Eel River water to other parts of the state for agricultural and municipal use.⁵⁰ The interest became closer to reality when in 1957 the California State Water Plan identified the North Coast rivers as the primary source of water to meet future requirements in the State, and in 1960 the Burns-Porter Act launched the State Water Project.⁵¹ Both state and federal agencies significantly increased their research to determine both the efficacy of and the best location for damming the Eel River and exporting its water south. The agencies produced over 200 reports.⁵² These studies examined over sixteen potential dam sites on the Eel River, including several massive structures.⁵³

water for use in Potter Valley. The contract with PG&E was renewed in 1972 for 50 years. See also Letter from Antonio Rossman to Bruce Kaneshiro, EIR Project Manager, CPUC PG&E Hydro Divestiture Project (June 1, 2000) (on file with author). A supplemental agreement was added to the contract with PG&E in 1939 that adjusted the price PVID pays for water to \$1.20 per acre-foot. *Id.* at 8.

49. *In re* Application 13557, *supra* note 48, at 18.

50. See CAL. DEP'T OF WATER RES., *supra* note 5.

51. CAL. DEP'T OF WATER RES., BULLETIN NO. 136, NORTH COASTAL AREA INVESTIGATION 126-28 (1964) [hereinafter BULLETIN NO. 136]. In 1964, the California Department of Water Resources specifically identified the Eel River as a site for possible additional water facilities. See also CAL. DEP'T OF WATER RES., *supra* note 5. The California Water Resources Development Bond Act, or Burns-Porter Act, authorized \$1.75 billion in bonds to assist in financing the construction of state water facilities, as set forth in the California Water Code Section 12934(d). See LITTLEWORTH & GARNER, *supra* note 11 at 24.

52. See CAL. DEP'T OF WATER RES., UPPER EEL RIVER DEVELOPMENT ADVANCE PLANNING, INDEX OF DATA AND REPORTS 10-43 (1977).

53. Bureau of Power, Fed. Power Comm'n, Evaluation Report: Water Resources Appraisal for Hydroelectric Licensing, Potter Valley Development, Project No. 77 (1972) (on file with author). Compared with Lake Pillsbury's usable storage of 86,388 af, Dos Rios dam, proposed for the Middle Fork of the Eel, had a potential storage capacity of 7,600,000 af; English Ridge dam, proposed for the Upper Eel, had a potential storage capacity of 1,800,000 af; and Yellow Jacket dam, proposed for the lower Main Stem, had a proposed storage capacity of 10,000,000 af. *Id.* at 28, 44.

In addition to focusing on the best way to capture and then divert the waters of the Eel to the southern part of the state, studies also examined the environmental and economic impacts of potential projects on the Eel. Although the reports promoted the potential projects, they also pointed out the problems with hydropower and with water diversions. "Peaking flows associated with hydroelectric plants are detrimental to anadromous fishes," said the reports, and "[t]he construction and operation of dams, reservoirs, and conveyance facilities for the export of surplus water from the North Coastal area would have profound impact on the fish and wildlife resources of the area, particularly anadromous fishes."⁵⁴ Local Russian River interests were also concerned about the State's plans for the Eel, particularly the English Ridge Project, which could interfere with the Potter Valley Project and its diversion.⁵⁵

The Court Restricts Rights to Imported Water

The 1939 California Supreme Court decision in *Stevens et al. v. Oakdale Irrigation District*⁵⁶ was another threat to Russian River interests. Earlier court decisions had held that an importer of a foreign supply of water had the right to discontinue the imported supply at any time.⁵⁷ The California Supreme Court reaffirmed that "while rights may be acquired by lower proprietors in and to such portions of the foreign flow as have been abandoned by the producer and thus made available for other use, these rights are always subject to the contingency that the supply may be intermittent or may be terminated entirely at the will of the producer."⁵⁸ This ruling created more uncertainty for all the Russian River communities relying on the imported Eel River water to support the expansion of irrigated agriculture and municipal growth. In response to the threats of both new claims to Eel water by the State, and a weakening of the legal basis of their own claims, Russian River interests increased their attempts to secure legal rights to the imported water.

54. BULLETIN 136, *supra* note 51, at 126, 128.

55. Bureau of Power, Federal Power Comm'n, *supra* note 53, at 47. The Bureau of Reclamation's English Ridge project would have flooded out the Potter Valley project.

56. 90 P.2d. 58 (1939).

57. See *E. Clemons Horst Co. v. New Blue Point Mining Co.*, 177 Cal. 631, 636-37 (1918).

58. *Stevens*, 90 P.2d at 61.

Russian River Interests Join Forces with the Army Corps of Engineers

After the construction of Scott Dam and Lake Pillsbury, most of the water in the Russian River during the late summer and fall was imported from the Eel. Sonoma County grew significantly and irrigated agriculture and recreation continued to expand in the Russian River watershed, due in part to the increased seasonal water flows.⁵⁹ Periodic flooding of the Russian River became an increasing problem for both former and new riparian landowners as development in the watershed expanded.⁶⁰ In 1949, a U.S. Army Corps of Engineers (ACE) study recommended the construction of a new dam and reservoir on the East Fork of the Russian River.⁶¹ Coyote Dam would capture the imported Eel River water and release it for multiple purposes including storage; flood control; domestic, industrial, and agricultural usage; and the augmentation of summer flows.⁶²

Following the earlier example of the PVID, Sonoma County interests lobbied to form a water district.⁶³ In 1949, the California State

59. SONOMA COUNTY WATER AGENCY, FIFTY YEARS OF CARING FOR SONOMA COUNTY'S WATER RESOURCES 1 (1999). See also Robert Beach, Sonoma County Water Agency, Why We Need Legislation to Preserve the Potter Valley Project (Jan. 1995) (unpublished paper, on file with author) for a discussion of how the economic base and vitality of Mendocino, Sonoma, and Marin Counties has depended on continued Potter Valley Project diversions.

60. See BULLETIN 105-5, *supra* note 17. See also A Brief History of the Sonoma County Water Agency (article 1 of 6) (May 24, 1999) (unpublished article, on file with author).

61. Robert F. Beach, Sonoma County Water Agency, History of the Development of the Water Resources of the Russian River 12 (Feb. 2002) (unpublished paper, on file with author). See also SONOMA COUNTY WATER AGENCY, *supra* note 59, at 1.

62. *In re Applications 12919A, 12920A, 15704, 15736-15739, and 15779 to Appropriate Water from East Fork Russian River and Russian River in Mendocino and Sonoma Counties*, Decision 1030 (Cal. State Water Rights Bd. Aug. 17, 1961) [hereinafter Decision 1030]. The Flood Control Act of 1950 authorized the Russian River Project and the following year the California Legislature adopted and authorized it. CAL. WATER CODE § 12698 (West 1992). Initially the California Department of Finance filed for water rights to appropriate 200,000 cfs for storage and 550 cfs by direct diversion from the East Fork of the Russian River for use in portions of Mendocino and Sonoma Counties. Eventually the entire plan would add not only Coyote Reservoir on the East Fork of the Russian River but also the Warm Springs Dam on the West Fork of the Russian River.

63. A Brief History of the Sonoma County Water Agency, *supra* note 60, at 1. The Sonoma County Water Agency's (SCWA) share of construction costs eventually came from a bond approved by the County in 1955. Obtaining needed financing for construction from the state was not easy. Representatives of the ACE and the Board of Directors of the Sonoma County Water Agency made repeated trips to Washington, D.C., to argue for federal funds for the project and for an accelerated design and construction timeline. Although Congress was willing to approve funds for further studies, the State of California balked. In 1951, the SCWA hired its first lobbyist to help obtain state funding. Non-federal funding finally came from the California Department of Finance.

Legislature created the Sonoma County Flood Control and Water Conservation District (Sonoma District) for "controlling conservation, diversion, storage and disposition of storm, flood and other surface waters."⁶⁴ A year later, PG&E expanded the project tunnel to 345 cfs, increasing the flow of Eel River water into the Russian River.⁶⁵

The ACE completed Coyote Dam on the East Fork of the Russian River below Potter Valley in 1959. Most of the water stored in the newly created Lake Mendocino reservoir was imported from the Eel River. The ACE and the Sonoma District, which became the Sonoma County Water Agency (SCWA) in 1970, regulated the stored water.⁶⁶ In 1955, the Sonoma District was allotted most of the Lake Mendocino water,⁶⁷ enabling the District to sell the water to municipal contractors in Sonoma County and eventually in Marin County. In 1956, upstream Mendocino County created its own water district (the Mendocino District), enabling the southern part of the county to receive a small percentage of the water from Lake Mendocino.⁶⁸

The State Steps In: SWRCB Decision 1030

In 1959, the State Water Rights Board⁶⁹ (later to become the State Water Resources Control Board or SWRCB) held hearings to review the quantity of water to be allocated from Lake Mendocino. In its Decision 1030, the Board acknowledged that most of the water in Lake Mendocino was

64. Krista Rector, *Sonoma County Water Agency White Paper* (April 1996), at www.envirocentersoco.org/scwa (last visited May 15, 2002). Today the District is governed by the County Board of Supervisors as its Board of Directors, but it has special powers to enter into agreements with other federal, state, and local governments; to sue and be sued; to exercise the right of eminent domain; to construct dams, levees, and channels; to issue bonds to acquire water rights; and to produce and sell surface and ground water. *See also* SONOMA COUNTY WATER AGENCY, *supra* note 59, at 1.

65. BULLETIN 1105-5, *supra* note 17, at 2.

66. *See also* A Brief History of the Sonoma County Water Agency (article 2 of 6) (June 25, 1999) (unpublished article, on file with author). Management of the reservoir was shared by the Sonoma District, which was given exclusive control of the middle pool of water to be used for supply, and the ACE, which regulated the flood-control pool on top.

67. Decision 1030, *supra* note 62, at 29. The Sonoma District was allotted 122,500 afa with the condition that partial reassessment would be made to Mendocino County when it formed its district.

68. Pauli, *supra* note 45. Created by an election, the Mendocino County Flood Control and Water Conservation District issued \$650,000 in bonds to pay for its share of the construction of Coyote Dam and Lake Mendocino and now has a right to 8000 af of water.

69. "The Water Rights Board was established in 1956 to administer California's system of acquiring appropriative water rights." LITTLEWORTH & GARNER, *supra* note 11, at 113.

imported from the Eel.⁷⁰ Nevertheless, it approved applications by the SCWA to appropriate more water and approved minimum flows for recreational purposes in the lower Russian River (prior to the dams, the Russian River went dry in the summer).

A TURNING POINT: THE ENVIRONMENTAL ERA

Evolution of a More Complex Legal Regime

The 1960s were a turning point for dam construction in California. For the first time local groups, including the Round Valley Tribes, stopped the building of a major dam promoted by the State, Southern California water interests, and the federal government.⁷¹ The dam was to have been built by the ACE at Dos Rios on the Eel River and would have flooded land belonging to the Round Valley Tribal Reservation and the Covelo Community.⁷² Many studies had already been done by the government in support of this project and other potential dams on the Eel River, and these continued into the early 1970s.⁷³ But the halting of the Dos Rios dam through local efforts that included participation by the Round Valley Tribes⁷⁴ heralded a broader societal shift in attitude toward mega water projects and large inter basin diversions and a general reexamination of environmental priorities.⁷⁵ The battle over Dos Rios was also one of the local

70. See Decision 1030, *supra* note 62. The Board also pointed to the substantial economic benefits to Sonoma County from this recreational water. *Id.* See also Steve Hart, *Direction: Downhill Use, Abuse Have Run River Down*, PRESS DEMOCRAT, May 11, 1998, at 2.

71. The stopping of Dos Rios was preceded in 1956 by the halting of the Bureau of Reclamation's proposed Echo Park Dam on the Colorado River in Dinosaur National Monument. The tradeoff was the construction of Glen Canyon Dam. Scott K. Miller, *Undamming Glen Canyon: Lunacy, Rationality or Prophecy?* 19 STAN. ENVTL. L.J. 121, 144-49 (2000); see also Bruce Babbitt, *A River Runs Against It: America's Evolving View of Dams*, OPEN SPACES, Jan. 22, 2001.

72. See generally TED SIMON, *THE RIVER STOPS HERE: SAVING ROUND VALLEY, A PIVOTAL CHAPTER IN CALIFORNIA'S WATER WARS* (2001).

73. See CAL. DEP'T OF WATER RES., *supra* note 5. After Governor Reagan, in a letter dated May 1969, requested that the DWR investigate alternatives that would not inundate Round Valley, the Town of Covelo, and the Round Valley Indian Reservation, more studies were done on alternatives.

74. See SIMON, *supra* note 72, at 314-15.

75. See David H. Getches, *The Metamorphosis of Western Water Policy*, 20 STAN. ENVTL. L.J. 3, 16 (2001). In the 1970s, President Jimmy Carter targeted for elimination 33 federal water projects that had already been approved. While he was strongly criticized, ultimately a policy prevailed that required federal water projects to meet conservation criteria in order to proceed.

catalysts for the passage of the 1972 California Wild and Scenic Rivers Act,⁷⁶ which protected sections of the Eel River from further development.⁷⁷

This shift toward broader environmental considerations was also reflected in new legislation and case law that increasingly supported fish and wildlife values and significantly altered the legal regime affecting water allocation decisions. Four well known pieces of federal legislation had major impacts on subsequent water allocation decisions: The 1970 National Environmental Policy Act (NEPA),⁷⁸ the Endangered Species Act (ESA) (administered by the U.S. Fish and Wildlife Service (FWS) and the National Marines Fishery Service (NMFS)) initially passed in 1966⁷⁹ and significantly revised in 1973,⁸⁰ the 1972 Water Pollution Control Act Amendments (better known as the Clean Water Act (CWA)),⁸¹ and the 1968 Federal Wild and

76. CAL. PUB. RES. CODE § 5093.51 (West 2001).

77. Environmental concerns regarding development of the north coastal streams began coming to a head in the early 1970s, influenced largely by fishery problems with the Trinity River Division of the Central Valley Project. Although the Federal Wild and Scenic Rivers Act had already been passed in 1968, it would take time before the Eel could be placed under its protection, thus prompting the passage of California's Wild and Scenic Rivers Act. On January 19, 1981, the Eel was placed in the National Wild and Scenic Rivers System. The decision was challenged in court but upheld in the Ninth Circuit Court of Appeals (732 F.2d 1462 (1984)) and certiorari was denied by the U.S. Supreme Court. Letter from David N. Kennedy, California Dept. of Water Resources, to California State Senate, *Eel River Development* (Aug. 30, 1985) (on file with author).

78. Pub. L. No. 91-190, 83 Stat. 852 (codified as amended at 42 U.S.C. §§ 4321-4370d (1994 & Supp. V 1999)). NEPA required preparation of an environmental impact statement (EIS) to identify the environmental consequences of any proposal for a major federal action that could significantly affect the environment. NEPA's goal, while procedural, not only informed the public but also created a forum for public response. NEPA, combined with the 1967 Freedom of Information Act, empowered the public to both access government information and provide input into decisions that had environmental consequences.

79. Pub. L. No. 89-669, 80 Stat. 926 (1966) (codified as amended at 16 U.S.C. §§ 1531-1554 (1994)). ESA was established to protect and preserve species in danger of extinction. Section 9 prohibits all persons under the jurisdiction of the United States from "taking" any endangered or threatened species, where "take" is defined broadly as "harass, harm, pursue, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct," and where "harm" has been interpreted as an act which kills or injures fish or wildlife, including habitat modification or degradation. Section 7 of the act imposes a duty on all federal agencies to consult with either NMFS or FWS to be sure that any action they fund, authorize, or carry out will not place an endangered or threatened species in jeopardy.

80. See 16 U.S.C. §§ 1531-1544 (1994).

81. 33 U.S.C. §§ 1251-1376 (1994 & Supp. V 1999). The act's goal is to restore and maintain the integrity of the Nation's waters. It requires states to adopt water quality standards to protect and enhance existing and potential beneficial uses. Under Section 401, any applicant for a federal license that could result in a discharge into navigable waters has to provide the licensing agency with a certification from the State indicating that it has complied with the designated water quality standards.

Scenic Rivers Act (WSRA).⁸² Together, the four acts increased federal power over western rivers like the Eel and the Russian, re-focused attention toward the environmental effects of water projects, and, most importantly, opened the doors for wider public participation in water decisions.

States also enacted new legislation supporting environmental values. In 1969, the California Legislature adopted the Porter-Cologne Water Quality Control Act,⁸³ to be administered by the SWRCB.⁸⁴ The 1970 California Environmental Quality Act (CEQA),⁸⁵ the 1970 California Endangered Species Act (CESA),⁸⁶ and the 1970 California Wild and Scenic Rivers Act⁸⁷ paralleled their federal counterparts.

Since 1937, the California Fish and Game Code Section 5937 had required that the owner of a dam allow sufficient water to pass through a fishway or over a dam to keep fish below the dam in good condition. However, the law was generally ignored.⁸⁸ To strengthen it, in 1953 the Legislature enacted Section 5946 requiring full compliance with Section 5937 before the state could issue a permit or license to appropriate water. While the new law applied only to Inyo and Mono Counties in the Los Angeles watershed, it gave state regulators notice that Section 5937 had to be complied with.⁸⁹

The judiciary was also active during this period. The courts revisited and refined Indian water rights in ways that would strengthen the hand of the Eel River based Round Valley Tribes in negotiations for the

82. 16 U.S.C. §§ 1271-1287 (1994 & Supp. V 1999). The act prohibits FERC from licensing any project on or directly affecting a designated river.

83. CAL. WATER CODE §§ 13000-14075 (West 1992 & Supp. 2002).

84. In 1967, the State Water Resources Control Board (SWRCB) was formed. It assumed the water rights functions of the Water Rights Board as well as the duties of the State Water Quality Control Board. This was part of the state's desire to expand its control over water rights and the impact of water development on water quality. See STANFORD ENVTL. L. SOC'Y, *supra* note 32, at 69.

85. CAL. PUB. RES. CODE §§ 21000-21177 (West 1996).

86. CAL. FISH & GAME CODE §§ 2050-2098 (West 1998).

87. See CAL. PUB. RES. CODE § 5093.50 (West 2001).

88. In the early 1950s, the California Attorney General opined that Section 5937 did not reserve water for fish if such water was needed for domestic uses or irrigation. 18 Op. Cal. Att'y Gen. 31, 36-39 (1951). The result was that Section 5937 was initially ignored by Fish and Game staff. This still occurs today. See Tom Stienstra, *Water Battle Rages On*, SAN FRANCISCO CHRON., July 22, 2001, at C13.

89. See JOHN HART, *STORM OVER MONO* (1996), for a discussion of how these sections of the Fish and Game Code were used in the Mono Lake court battles.

diverted Eel River water. In the 1963 case *Arizona v. California*,⁹⁰ the U.S. Supreme Court confirmed that the priority of a federal reserved water right begins at the time of creation of the reservation and the court set a standard for quantifying a reservation's water right. This enabled Indian reservations to finally quantify their water rights.

In addition, in 1975, Judge Boalt, in *United States v. Washington*,⁹¹ spelled out an "equal-sharing" formula and recognized Indian tribes as regulators and fish managers of their resource, not just harvesters. This led to the formation of inter-tribal coordinating bodies in the Pacific Northwest and eventually to the formation of new "fishery coalitions" between commercial fisherman and Indian tribes. These new coalitions began to successfully lobby for improving salmon habitat.⁹² Subsequent to Judge Boalt's decision, the Supreme Court adopted a needs-based moderate living standard defining the scope of the treaty fishing right,⁹³ and in Phase II of *United States v. Washington*, the court declared that implicit in the Indian's right to take fish was the "right to have fishery habitat protected from man-made despoliation."⁹⁴ While these decisions were then modified to depend on the concrete facts of a particular dispute, during the 1980s the courts tended to provide Indian tribes relief from damages to their fisheries.⁹⁵

By the 1980s, the courts also began to interpret the scope of water reserved to support tribal fishing where this was recognized as one of the purposes of a reservation.⁹⁶ In *United States v. Adair*,⁹⁷ the court distinguished the Klamath Tribe's reserved water for fishing from the Tribe's reserved water for agriculture, ruling that the former had a priority date of

90. *Arizona v. California*, 373 U.S. 546, 600 (1963). This case affirmed the high priority date of most Indian reserved water rights. The standard specified that the quantity of the water right was the amount of water that would be sufficient to satisfy the future as well as the present needs of Indian reservations as measured by the practicably irrigable acreage (PIA) on the reservation.

91. *United States v. Washington*, 384 F. Supp. 312, 343 (W.D. Wash. 1974).

92. See Blumm & Swift, *supra* note 42, at 410.

93. *Washington v. Wash. State Commercial Passenger Fishing Vessel Ass'n*, 443 U.S. 658, 686 (1979).

94. *United States v. Washington*, 506 F. Supp. 187, 203 (W.D. Wash. 1980).

95. Perron, *supra* note 42, at 784.

96. See Michael C. Blumm, *Symposium: Seven Myths of Northwest Water Law and Associated Stories* 26 ENVTL. L. 141, 152 (1996). See also *United States v. Anderson*, 736 F.2d 1358 (9th Cir. 1984) (concluding that the Spokane Tribe had sufficient water reserved in Chamokane Creek to maintain water temperatures cold enough to promote fish spawning); *Colville Confederated Tribes v. Walton*, 647 F.2d 42 (9th Cir. 1981) (holding that the reserved water in Omak Lake was the amount necessary to maintain a replacement fishery for the Colville Tribes).

97. *United States v. Adair*, 478 F. Supp. 336, 345 (D. Or 1979), *aff'd*, 723 F.2d 1394, 1414-15 (9th Cir. 1983).

"time immemorial" and had priority over the latter. The measure of the right was an amount sufficient to maintain fishing as currently exercised, as opposed to at treaty time, and no more than would be necessary to provide the tribes with a "moderate living."⁹⁸

In the early 1970s in California, the courts also revived the Public Trust Doctrine⁹⁹ and subsequently used it in the Mono Lake litigation to establish the continuing power of the state to protect public trust uses including environmental values.¹⁰⁰ The doctrine has subsequently been expanded by the courts to include, for example, pollution free water and healthy fisheries,¹⁰¹ both issues of increasing concern on the Eel and Russian Rivers.

The new layers of regulation and case law created new mandates for an increasing array of agencies. This opened up new political opportunities for previously unrepresented groups to more effectively enter the decision-making process, and renewed and more aggressive claims were made to return the diverted water back to the Eel River. At the same time, however, established Russian River interests not only resisted these claims, they also attempted to permanently secure rights to the imported Eel River water and increase their water supply to accommodate the rapid growth in the watershed.

Russian River Interests Attempt to Secure Rights to Eel River Water in Lake Pillsbury

Although there was tension between upstream Mendocino interests and downstream Sonoma interests over specific entitlements to Russian River water, in 1968 the districts applied jointly to the SWRCB for storage rights in Lake Pillsbury. This would give them appropriative rights to Eel River water (as opposed to the appropriative rights the Districts already had to water in the Russian River that contained water imported from the

98. See Perron, *supra* note 42, at 795-817 for a detailed discussion.

99. See generally Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471 (1970). This article by Professor Sax initiated modern interest in the public trust doctrine.

100. See, e.g., *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d 709 (Cal. 1983).

101. See Melissa Kwaterski Scanlan, *The Evolution of the Public Trust Doctrine and the Degradation of Trust Resources: Courts, Trustees and Political Power in Wisconsin*, 27 ECOLOGY L.Q. 135, 174-76 (2000). See also Charles Wilkinson, *The Headwaters of the Public Trust: Some Thoughts on the Source and Scope of the Traditional Doctrine*, 19 ENVTL. L. 425 (1989) (discussing the origins of the Public Trust Doctrine); Michael C. Blumm, *Public Property and the Democratization of Western Water Law: A Modern View of the Public Trust Doctrine*, 19 ENVTL. L. 573 (1989).

Eel).¹⁰² The application was initially approved.¹⁰³ A year later, however, the CDFG petitioned for reconsideration, claiming that the Board was required to impose conditions that would protect the declining Eel River fishery.¹⁰⁴ The Board originally had stated that since they believed the Federal Power Act preempted state efforts on behalf of the fishery, there was no point in imposing terms. Upon reconsideration, however, the Board noted that if the power license was recaptured by the United States and the power facilities abandoned, it would then have the authority to determine "in the public interest, what water, if any should be provided in the Eel River for the maintenance of fish."¹⁰⁵ The Board then rescinded its original decision, leaving Russian River districts without appropriative rights to any Eel River water stored in Lake Pillsbury.¹⁰⁶ This change also alerted Russian River districts that the relicensing of the Potter Valley Hydropower Project, scheduled for 1972, and the continuation of the diversion were not a certainty.¹⁰⁷

At this time the Sonoma District also made attempts to purchase the project.¹⁰⁸ First, in 1965, the district entered into an agreement with PG&E

102. See Cal. State Water Resources Control Bd., Decision Approving Application 18785 in Part, Denying Application 18786, & Releasing the Priority of Applications 17039 Through 17044 in Favor of Application 18785, Dec. 1345 (Sept. 18, 1969).

103. *Id.* The Board reasoned that rights held by PG&E would be available for assignment to the Russian River applicants in the event that PG&E's license is not renewed and a license is issued to the Russian River applicants.

104. See CAL. WATER CODE § 1394 (1971).

105. Cal. State Water Res. Control Bd., Order Rescinding Dec. 1345 (Jan. 8, 1970). The Board stated that "if the power license is recaptured by the United States and the power facilities abandoned, district would be able to control the diversion of water from the Eel to the Russian River...without regard to fish life in the Eel River." *Id.* at 2. The Board added that it was persuaded by CDFG's contention that the FPC relicensing proceeding could alter the power project sufficiently to warrant further consideration of fishery requirements. Another factor in rescinding Dec. 1345 was the Bureau of Reclamation's recommendation to the FPC that consideration of the issuance of a new license for the PVP be delayed for five years pending further study by the Bureau of an additional reservoir on the Eel River, English Ridge, that would have inundated Cape Horn Dam. The Board deferred to the Bureau and concluded that the filing of the original applications for Eel River water was premature.

106. *Id.* See also Cal. State Water Res. Control Bd., Decision Denying Applications, Dec. 1403 (Oct. 5, 1972).

107. The Russian River District's applications were denied without prejudice, leaving open the possibility of refilling at some future date should PG&E be unsuccessful in securing renewal of the power license.

108. The discussions in the 1960s arose in response to the approaching relicensing of the project and the proposed construction of the English Ridge project that would have inundated Cape Horn Dam. SONOMA COUNTY WATER AGENCY, THE POTTER VALLEY PROJECT, AND THE IMPORTANCE OF ITS CONTINUED OPERATION TO THE RUSSIAN RIVER WATER SUPPLY OF THE WATER TRANSMISSION SYSTEM 2 (2000).

for continuation of the diversion.¹⁰⁹ In return, Sonoma agreed to assist PG&E in its effort to renew its FPC license when it expired in 1972. In addition, their agreement stated that if PG&E were unsuccessful in renewing its license, it would file again jointly with Sonoma, and if that license were not renewed, it would sell the project to the SCWA.¹¹⁰ This was the first of several subsequent efforts by the SCWA to negotiate a purchase of the project so as to retain the diversion.

Potter Valley Comes Up for Relicensing

Originally licensed in 1922 for fifty years, the PVP was due for relicensing in 1972. In determining the terms of a license, the Federal Power Commission was now required to comply with new regulations and case law. When the Federal Water Power Act was enacted in 1920, licensing authority had resided primarily in a single agency, the Federal Power Commission. The Commission's policy supported projects that would provide power to an expanding economy and that were best adapted to a comprehensive scheme of improvement and utilization for the purposes of navigation, of water-power development, and of other beneficial public uses.¹¹¹

Congress expanded the Commission's mandate in the Public Utility Act of 1935.¹¹² The FWPA was amended and renamed the Federal Power Act (FPA) and the act now required the Commission to add recreational purposes when determining whether to grant a license. In 1965, the Second Circuit established the Commission's duty to consider environmental factors in the licensing process,¹¹³ and in 1967, in *Udall v. FPA*,¹¹⁴ the Supreme Court held that the public interest included the preservation of anadromous fish for commercial and recreational purposes.¹¹⁵ "The importance of salmon and steelhead in our outdoor life as well as in

109. Agreement Between PG&E & Sonoma County Flood Control & Water Conservation Dist. (1965) (on file with author). However, the contract included stipulations that the diversion could be stopped if it would interfere with or increase the cost of PG&E's operations, result in a violation of its license, or violate the law.

110. *Id.* at 7-8.

111. FERC, Report on Hydroelectric Licensing, *supra* note 43, at 9.

112. Public Utility Act of 1935, 49 Stat. 803, 74 Pub. L. No. 333 (current version at 16 U.S.C. § 791(a) (1994)).

113. Scenic Hudson Pres. Conference v. Fed. Power Comm'n, 354 F.2d 608, 620 (2d Cir. 1965).

114. *Udall v. Fed. Power Comm'n*, 387 U.S. 428, 450 (1967).

115. *Id.*

commerce is so great that there certainly comes a time when their destruction might necessitate a halt to the so-called "improvement" or "development" of waterways. The destruction of anadromous fish in our western waters is so notorious that we cannot believe that Congress through the present Act authorized their ultimate demise."¹¹⁶

The Declining Fishery

In addition to complying with these additional mandates under the FPA, the Commission now needed to fulfill the new requirements of NEPA by preparing an Environmental Impact Statement (EIS).¹¹⁷ PG&E did an initial assessment of the PVP's environmental impacts and concluded that there would be no significant adverse effects on environmental quality resulting from the project's continued operation.¹¹⁸ However, the Eel River's once prolific runs of salmon and steelhead were now greatly reduced.¹¹⁹ Studies by the California Department of Water Resources (DWR) acknowledged that the "primary problem created by the project [was its] adverse effect on anadromous fish in the Eel River."¹²⁰

The Federal Power Commission, reinstated as the Federal Energy Regulatory Commission (FERC) in 1977,¹²¹ produced its Final EIS (FEIS) in 1978.¹²² While the report recognized the decline in the Eel River fisheries, its emphasis was on the benefits of the diversion to Russian River communities, and the population, industrial development, and agricultural production within Mendocino and Sonoma Counties that "would not have achieved their historical growth rates without the PVP."¹²³ But it noted that

116. *Id.* at 437-38.

117. 42 U.S.C. § 4432 (1994).

118. Statement by Licensee Concerning the Requirements of the National Environmental Policy Act of 1969, Filed Pursuant to Sections 2.80(a) and 2.81(b) of the Federal Power Act, Project 77 (July 29, 1971) (unpublished document, on file with author).

119. BULLETIN 105-5, *supra* note 17, at 5; *see also* Natural Resources Div. Humboldt County Dept. of Public Works, *Economic Loss to Humboldt County Due to Potter Valley Diversion of Eel River Waters* (July 1977) (detailing the economic loss to the county resulting from the Potter Valley Project's diversion of Eel River Water).

120. CAL. RES. AGENCY, DEP'T OF WATER RES., NORTH COASTAL FISHERY ENHANCEMENT STUDY (DRAFT) 52 (1974).

121. When Congress created FERC, the commission assumed the functions of the Federal Power Commission. *See* Department of Energy Organization Act, 42 U.S.C. § 7171 (1994).

122. OFFICE OF ELECTRIC POWER REGULATION, FED. ENERGY REGULATION COMM'N, FINAL ENVIRONMENTAL IMPACT STATEMENT: POTTER VALLEY PROJECT (1978).

123. *Id.* at 3-5. FERC emphasized that the diverted water enabled potentially high-yield agricultural land in the Russian River Basin to be irrigated. Recreation had also become a major

while "the recreational development of the Russian River has prospered from the water diversion of the Eel River, it appears that the minimum water releases into the Eel River from Van Arsdale Reservoir during critical periods of the year have caused a decline in the downstream fishery resources."¹²⁴

Other state and federal agencies commenting on the 1978 EIS indicated a concern with the speculative nature of projecting the long-term cumulative effects of the project. As a result, the U.S. Forest Service requested that the license be issued for only 25 years¹²⁵ and the California State Resources Agency recommended only a ten-year license period along with further study of the project's operations.¹²⁶ In addition to government agencies, environmental organizations voiced their concerns about the declining fisheries, and California Trout, the Salmon Trollers' Marketing Association, and the Pacific Coast Federation of Fishermen's Associations intervened in the relicensing process.¹²⁷ Under the public comment requirement of NEPA, letters were received on the initial draft of the EIS by local, state, and federal agencies; environmental groups; and individual citizens. Many focused on the need for further studies to assess how to adjust water flows between the two rivers so as to improve the fisheries.¹²⁸ The result was that several short-term studies were initiated while FERC issued only annual licenses to PG&E.

The Round Valley Tribes

The Round Valley Tribes were not a party to these early negotiations over relicensing. Although at its inception the FPC had sole authority to license projects, Section 4(e) of the FPA stated that prior to issuing licenses for projects on federal reserved lands, the Commission was required to determine that such licenses would not interfere or be inconsistent with the purpose for which a reservation was created, and the licenses were required to include any conditions that the land managing agency

component of the economy of the lower Russian River as warm summer water flows, resulting from the diversion, promoted the development of resort facilities.

124. *Id.*

125. *Id.* at D-1.

126. *Id.* at E-23.

127. See Opinion & Order, *supra* note 29.

128. OFFICE OF ELECTRIC POWER REGULATION, *supra* note 122, at App. E.

deems necessary for the protection and use of the reservation.¹²⁹ In particular, the Secretary of the Interior was authorized to prescribe mandatory conditions for hydropower project operations that would occur, at least in part, on Indian reservation lands.¹³⁰ The Department of the Interior (DOI) did not intervene on behalf of the Tribes at this time, and the Tribes' fishing rights and their claims to water were not acknowledged in the 1978 FEIS.

Just prior to the relicensing, the Tribes participated in the successful campaign to stop the construction of Dos Rios dam, which would have flooded their reservation.¹³¹ Along with this victory came the development of new advocacy organizations such as California Indian Legal Services¹³² and new fishery coalitions. These groups began to provide key resources and infrastructure for the Tribes. In addition, new case law and government memoranda supporting tribal water and fishing rights presented new opportunities for the Tribes to enter the negotiations.¹³³ Taking advantage of both the shifting legal structure and new resources, they increased their efforts to enforce their right to water and fishing in the Eel River.

Although the Tribes did not intervene when PG&E filed its relicensing application with the FPC in 1970, they petitioned FERC for intervention in 1982, stating that the Commission had failed to provide them with actual notice of the relicensing. Notice had been filed in the Federal Register and local newspapers, but the Tribes claimed the Notice was not sufficient constitutionally because of the significant property rights involved and the Commission's specific obligations under Section 4(e) of the Federal Power Act.¹³⁴ The Administrative Law Judge (ALJ) assigned to

129. 16 U.S.C. § 797(e) (1994) (stating that "[l]icenses] within any reservation...shall be subject to and contain such conditions as the Secretary of the department under whose supervision such reservation falls shall deem necessary for the adequate protection and utilization of such reservations").

130. *Id.* § 5.

131. SIMON, *supra* note 72, at 314. Ted Simon describes a pivotal meeting with Governor Ronald Reagan relating to stopping the dam at Dos Rios. Norman Whipple of the Round Valley Tribes spoke about "how the army had driven his ancestors into the valley at gunpoint a hundred years earlier and was now threatening to drive their descendants out....The valley was theirs by treaty...so many treaties had been broken....Would there never be an end to it?" Moving Reagan to tears, Whipple was instrumental in persuading Reagan to stop the construction of the dam.

132. This organization was founded in the late 1960s. Stephen Maganini, *Trailblazer Keeps Flame for American Indians*, SACRAMENTO BEE, Oct. 23, 2000.

133. See, e.g., *Arizona v. California*, 373 U.S. 600 (1963).

134. *Covelo Indian Cmty. v. Fed. Energy Regulatory Comm'n*, 895 F.2d 581, 587 (9th Cir. 1989).

the case stated that the Department of Interior had not even proffered any conditions to be imposed for the protection of the Tribe's interests¹³⁵ and he denied their request to intervene.¹³⁶

PG&E's License Renewal Application Is Approved by FERC

On October 4, 1983, the ALJ assigned to the case approved a contested settlement agreed to by six of the nine original intervenors,¹³⁷ and a new 50-year license was issued to PG&E, backdated to 1972.¹³⁸ The Tribes subsequently noted that the approval occurred without an evidentiary hearing, despite observations by the ALJ and participating parties that there was a lack of critical analysis of raw data and information regarding an adequate flow schedule to protect fish. The Tribes also stated that the incomplete record did not meet FERC's "affirmative duty to inquire into and consider all relevant facts" before making a determination that the

135. Certification of Contested Settlement & Record, 23 F.E.R.C. 163,050 (1983).

136. *Covelo Indian Cmty.*, 895 F.2d at 582. The ALJ stated that the Tribe had failed to specify that a specific injury had occurred and had only referred to the loss of fish resulting from the water diversion and the resulting damage to tribal lands and resources. The ALJ then issued an order inviting the Tribes to produce extensive detail including specific changes to the settlement, witnesses, and why their proposed changes should override other discrete interests. The Tribes replied that there was insufficient time to produce these details. In the Tribe's appeal of FERC's decision denying late intervention in the original proceeding, the Ninth Circuit upheld FERC's denial, concluding that the Tribes were not entitled to actual notice from FERC under the due process clause. The court did not reach the merits of the Tribe's arguments, however, leaving issues unresolved in the later proceedings. *See id.* at 588. *See also* Round Valley Indian Tribes' Response to Comments on the Second Draft Biological Opinion Issued by the National Marine Fisheries Service on Nov. 21, 2000, Project No. 77-110, FERC RIMS Doc. 2139655 (2001), available at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID> [hereinafter Indian Tribes' Response].

137. Certification of Contested Settlement & Record, *supra* note 135. On August 18, 1982, the ALJ issued an order scheduling a conference of all parties in Washington, D.C. He stated that the evidentiary position papers previously filed by intervenors examining the Eel River fishery flow regime lacked sufficient information for a decision to be made, and he conditionally granted the petition to intervene if the parties did not reach a settlement by November 30, 1982. However, on November 30, 1982, a majority of the intervenors reached a settlement. The parties that joined in the settlement were PG&E; CDFG; and Humboldt, Sonoma, and Mendocino counties. The contesting parties were Cal Trout, the Pacific Coast Federation of Fishermen's Associations, and the Salmon Troller's Marketing Association. The ALJ solicited comments from the parties opposed to the proposed settlement and then issued his decision on May 3, 1983, certifying the contested settlement to the Commission for review and approval without a hearing. *See also* Motion of the Round Valley Indian Tribes for Order Establishing Interim Flows for the Eel River, FERC Project No. 77-110 (Feb. 11, 1999).

138. Opinion & Order, *supra* note 29.

project would be in the "overall public interest,"¹³⁹ as mandated as early as 1965 by the court in *Scenic Hudson Preservation Conference v. FPC*.¹⁴⁰

At this time, Section 401 of the Clean Water Act required that hydropower projects obtain certification by the state to assure that their activities were consistent with state water quality standards.¹⁴¹ Certification requests were evaluated by the Regional Water Quality Control Boards, who were supposed to present their findings to the State Board. However, the Regional Boards routinely did not take action and certifications were usually waived. In the license issued to PG&E in 1983, the required 401 Certification by the SWRCB was waived.¹⁴²

Immediate Post License Changes in the Legal Regime

In the years immediately following the 1983 settlement agreement, additional new case law as well as procedural changes by the SWRCB altered the legal regime in ways that supported both tribal and environmental interests, but these occurred too late to affect the 1983 relicensing decision. In 1984, shortly after the license was issued, the courts held that "FERC must consider fishery issues before, not after, issuance of a license."¹⁴³ In a second significant ruling that served to reduce FERC's authority over hydropower relicensing and strengthen Tribal claims, the

139. See Indian Tribes' Response, *supra* note 136, at 3.

140. *Scenic Hudson Preservation Conference v. Fed. Power Comm'n*, 354 F.2d 608, 620 (2d Cir. 1965).

141. Pursuant to section 401 of the CWA, applicants for federal licenses must obtain certification by the state that their activities are consistent with state water quality standards and the state may impose mandatory conditions on their activities that are then included in the federal license. 33 U.S.C. § 1341(a)(1) (1994). States are also obligated under the CWA to develop water quality standards that are then subject to review and approval by the EPA prior to enforcement. 33 U.S.C. §§ 1311(b)(1), 1313 (1994). See also BLUMM & NADOL, *supra* note 4, at 97, for a detailed discussion of the 401 certification requirements under the CWA.

142. Opinion & Order, *supra* note 29. Before the SWRCB can issue a water quality certificate, an applicant has to be in compliance with CEQA, so the 1983 waiver also closed off CEQA review.

143. *Confederated Tribes & Bands of the Yakima Indian Nation v. Fed. Energy Regulatory Comm'n*, 746 F.2d 466, 471 (9th Cir.). Under the Federal Power Act, FERC is required to make the same inquiry into fishery issues in relicensing as required when initially licensing a project. In *Confederated Tribes*, the court drew on *Udall v. FPC*, 387 U.S. 428, 450 (1967), stating that a determination of whether the project is in the "public interest" can be made only after an exploration of all relevant issues, including the preservation of anadromous fish for commercial and recreational purposes. 746 F.2d at 471. The court also drew on *Scenic Hudson Preservation Conference v. Federal Power Commission*, 354 F.2d 608 (2d Cir. 1965), stating that FERC must see to it that the record is complete with regard to deciding that the licensing of a project would be in the overall public interest. *Confederated Tribes*, 746 F.2d at 471.

Supreme Court interpreted Section 4(e) of the FPA as authorizing the Secretary of the Interior to impose license conditions on FERC projects for the benefit of Indian reservations under the supervision of the DOI. These conditions are mandatory even where the Commission disagrees with them.¹⁴⁴ Two years later, in 1986, the Electric Consumers Protection Act (ECPA)¹⁴⁵ was passed, mandating that FERC give equal consideration to non-developmental values in licensing decisions and defer to fish and wildlife agency recommendations. The court interpreted these requirements as requiring "the Commission...to give environmental considerations equal weight to that accorded power and irrigation concerns."¹⁴⁶ FERC was now required to specifically "consider" fish and wildlife prior to all (re)licensing decisions; however, the FPA still had no mandatory requirements for fish and wildlife protection.

Finally, in the mid 1980s, several years after the license was issued, the SWRCB began to take an active role in specifying modifications to hydropower licenses so as to meet the requirements of 401 certification under the Clean Water Act.¹⁴⁷

The Ten-Year Fishery Study

Although a license had been issued in 1972, it contained several amendments that were to address the disagreements over how to adjust water flows to improve the declining fisheries. Article 38 specified a new flow release schedule and Article 39 required an additional study to determine the effects of this schedule on the salmonid fishery. This was to

144. *Escondido Mut. Water Co. v. La Jolla Band of Mission Indians*, 466 U.S. 765, 777 (1984) (stating that "[t]he Commission 'shall' include in the license the conditions the Secretary of the Interior deems necessary"). In addition, agencies with 4(e) authority may perform an environmental analysis independent of the Commission's analysis. See BLUMM & NADOL, *supra* note 4, at 90, for detailed background on this case.

145. The Electric Consumers Protection Act, 16 U.S.C. § 797b (1994).

146. *Platte River Whooping Crane Critical Habitat Maint. Trust v. Fed. Energy Regulatory Comm'n*, 876 F.2d 109, 114 (D.C. Cir. 1989).

147. Memorandum from Jim Canaday, Division of Water Rights, SWRCB, to Jerry Johns, (Mar. 3, 1987) (on file with author). The memorandum regarding State Water Rights and Preemption as a Result of a FERC License for a Hydroelectric Facility stated that the State had the authority under the Clean Water Act to set binding conditions prior to licensing by FERC. Shortly after Mr. Canaday brought this to the attention of the Board, James Easton, Executive Director of the SWRCB, issued a Memorandum regarding the Procedures for Processing Requests for Section 401 Certification Filed by FERC Applicants after December 31, 1986. Memorandum from James L. Easton, Executive Director, State Water Resources Control Board, to State Board Members, Regional Board Executive Officers, and Regional Board Attorneys (Nov. 20, 1987) (on file with author).

be done in cooperation with federal, state, and local agencies and to begin within six months from the date of issuance of the license.¹⁴⁸ A fisheries review group (FRG) was formed consisting of representatives from PG&E, California Department of Fish and Game (CDFG), and U.S. Fish and Wildlife Service (FWS).¹⁴⁹ The study did not begin until 1986 when Steiner Environmental Consulting (SEC) was hired by PG&E to conduct the study. For ten years, agency representatives, SEC, and PG&E met on a regular basis to monitor the Eel River fishery, and in 1996 PG&E released its draft report,¹⁵⁰ followed by a final report in 1998.¹⁵¹ By that time, fish in both rivers were candidates for listing under the federal Endangered Species Act.

THE NEGOTIATIONS BECOME HIGHLY CONTENTIOUS— THE 1990s

The environmental legislation passed between 1960 and 1990 produced new mandates for the increasing number of government agencies involved in water allocation. Both procedural and substantive, these had the potential to more fully balance environmental and economic goals and create a more participatory decision-making process. During the 1990s this trend continued. New modifications to the Federal Power Act in 1994 made explicit the obligations implied by the court rulings of the 1980s. FERC was now required to "give equal consideration to the purposes of energy conservation, the protection, mitigation of, damage to, and enhancement of fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality."¹⁵²

FERC's Decision

In 1996, because of the anticipated listing of the Eel River coho salmon under the Endangered Species Act, the NMFS was invited to

148. Opinion & Order, *supra* note 29. Article 38 established slightly higher flows in the Eel River below Cape Horn Dam. Under Article 39, PG&E was required to develop and implement a study and monitoring plan "to determine the effects of the flow release schedule provided for in Article 38 on the salmonid fishery resources of the Upper Eel River and the East Branch of the Russian River."

149. *Id.*

150. Steiner Env'tl. Consulting, Effects of Operations on Upper Eel River Anadromous Salmonids, Draft Final Report (Sept. 27, 1996) (unpublished report, on file with author).

151. See generally Steiner Env'tl. Consulting, *supra* note 14.

152. 16 U.S.C. § 797(e) (1994).

participate in the FRG study. There was still disagreement about an optimal flow regime to protect fish, so mediated sessions were held to find common ground. After 18 months, the group submitted a flow proposal to FERC. Alternative proposals were also submitted by the Round Valley Indian Tribes¹⁵³ and the Sonoma County Water Agency. In an important decision in 1990, the Supreme Court had affirmed that FERC's licensing authority under the FPA was exclusive and did not need to defer to state agency conditions.¹⁵⁴ As a result, all eyes were on FERC when the agency produced its 1999 Draft EIS (DEIS) with the FRG proposal as its preferred alternative.¹⁵⁵

By this time, however, coho and chinook salmon were listed as threatened under the ESA¹⁵⁶ and steelhead was a candidate for listing. The listings challenged FERC's authority to decide on a water flow regime. Under Section 7 of the ESA, FERC was now required to consult with the NMFS over the optimal flow regime to avoid jeopardy for the listed fish.¹⁵⁷

Shifting Coalitions—The DOI/NMFS Proposal

At this time, NMFS also withdrew its support of the FRG flow proposal and joined the DOI in recommending a flow regime more closely aligned with the proposal of the Round Valley Tribes. The two agencies stated that new scientific information had influenced their change. However, NMFS also pointed to a recent Federal Secretarial Order, issued jointly by the Department of Interior and the Department of Commerce, that outlined American Indian Tribal Rights and Federal-Tribal Trust Responsibilities with respect to the ESA. The Order led NMFS to pay

153. Representatives from NMFS and FWS were invited to a tribal council meeting and asked why the FRG was not giving more consideration to the Tribes' interests. Shortly after, the Tribes were invited to participate, but they did not stay for long. They claimed the meetings were dominated by PG&E and felt that their interests were not receiving full consideration. Citing their limited resources, they withdrew. They eventually hired their own fishery consultants and presented their own flow regime for the diversion.

154. *California v. Fed. Energy Regulatory Comm'n*, 495 U.S. 490 (1990).

155. See generally Office of Hydropower Licensing, Fed. Energy Regulatory Comm'n, Draft Environmental Impact Statement: Protection and Maintenance of Fishery Resources at the Potter Valley Project, California, FERC Project No. 77-110 (Feb. 1999) (on file with author).

156. Central California Coastal Evolutionary Significant Unit (ESU) of Coho Salmon, 61 Fed. Reg. 56,138 (Oct. 31, 1996); Southern Oregon/Northern California Coast ESU of Coho Salmon, 62 Fed. Reg. 24,588 (May 6, 1997); California Coastal ESU of Chinook Salmon, 64 Fed. Reg. 5,039 (Sept. 16, 1999); Northern California Steelhead ESU, 65 Fed. Reg. 6,960 (Feb. 11, 2000). For Eel River fish, Scott Dam was listed as a barrier to anadromy.

157. 16 U.S.C. §§ 1536 (a)(2)-(a)(3) (1994).

greater attention to the concerns of the Round Valley Tribes for recovery of the fish.¹⁵⁸ Russian River interests were furious, with one Mendocino County Supervisor calling the new NMFS/DOI proposal "asinine."¹⁵⁹ Representatives from California's Department of Fish and Game were also extremely angry, claiming they were "actively excluded from these meetings." They accused NMFS of going behind the state's back to negotiate with Eel River water interests and Indian tribal representatives.¹⁶⁰

Conflict between FERC and NMFS

Now the two key federal agencies with jurisdiction over this water allocation decision issued different recommendations. First, FERC issued its Final Environmental Impact Statement that recommended a flow alternative proposed by the Potter Valley Irrigation District.¹⁶¹ This alternative was a slightly modified version of the original FRG proposal, but it was particularly beneficial to the Potter Valley Irrigation District's interests. FERC described trade-offs between improving fisheries and improving water supply reliability. "The Tribes and DOI alternatives would be more beneficial overall (to improving the habitat for anadromous salmon and steelhead in the Upper Eel River), especially in the drought years and summer months," but "would pose more risks to the reliability of water supplies"; the PVID alternative "would improve habitat for all life stages over the no action alternative and sometimes even over the unimpaired flows,"¹⁶² but in some years, when low summer flows persisted into fall, "it could fail to provide enough water for upstream attraction, passage, and spawning[, which] could have serious adverse effects on an entire reproductive season."¹⁶³ In response to some of these drawbacks for

158. Secretary of Interior & Secretary of Commerce, Secretarial Order No. 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act (1997), available at <http://www.nwr.noaa.gov/1salmon/salmesa/pubs/tribalor.html>. See also NMFS/DOI proposal, FERC Project No. 77-110, FERC RIMS Doc. 1941185 (Apr. 27, 1999) at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>.

159. Mike Geniella, *Fed Plan to Cut Eel River Diversions Denounced State, Locals Oppose Further Reducing Flows to Russian*, PRESS DEMOCRAT, July 10, 1999, at B1.

160. *Science Fiction Disagreement Between State, Federal Agencies Leaves Public Befuddled*, PRESS DEMOCRAT, Apr. 15, 2000, at B6.

161. See generally FED. ENERGY REGULATORY COMM'N, *supra* note 15.

162. *Id.* at xxxi.

163. *Id.* The FEIS also discussed potential losses to the Russian River Valley related to reducing the amount of diverted water as per the PVID alternative, but it failed to discuss any losses to communities in the Eel River watershed related to selecting the PVID alternative over the Round Valley Tribes or DOI alternatives. *Id.*

recovery of the listed fish, in November 2000 NMFS produced its Draft Biological Opinion (DBO) on the FERC proposed license amendment for the project.¹⁶⁴ It concluded that FERC's proposed action was likely to place the listed species in jeopardy. NMFS listed a reasonable and prudent alternative designed to modify project operations to avoid jeopardy.¹⁶⁵ NMFS was roundly criticized by Sonoma and Mendocino County interests¹⁶⁶ and their supporters in both California and Washington.¹⁶⁷

Both Sides Mobilize

During the 1990s, new local groups sprang up and began to weigh in more heavily in the negotiations. In both watersheds they were concerned with the restoration of the fisheries and the rivers.¹⁶⁸ In the Russian River watershed, suburban sprawl and water quality were also key issues; in the Eel watershed, economic development that would be spurred by recovery of the fisheries. These groups were aided in part by the increased availability of government funding for watershed restoration projects.¹⁶⁹ The Friends of the Eel River (FOER), a local non-profit environmental organization, pushed for a consideration of measures to restore salmonid habitat above the Eel River dams.¹⁷⁰ The local dialogue about water

164. NMFS Draft Biological Opinion II (DBO II), FERC Project 77-110, FERC RIMS Doc. 2106360, at 9 (Nov. 21, 2000), at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>. This was the second draft biological opinion and had been expanded to include the Northern California steelhead, which was listed as threatened under the ESA on June 7, 2000.

165. NMFS concluded that FERC's proposed alternative would jeopardize the existence of the CC chinook salmon, SONCC coho salmon, and the NC steelhead. *Id.* at 65. NMFS included, as required by Section 7(b)(3)(A) of the ESA, a reasonable and prudent alternative (RPA) to avoid jeopardy. NMFS listed the NMFS/DOI proposal as the RPA, combined with a predator suppression program. 50 C.F.R. 402.14(h)(3) (2001).

166. See generally Eel-Russian River Commission Meeting Minutes (Sept. 15, 2000) (unpublished document, on file with author).

167. See Letter from Senator Diane Feinstein to William Daley, Secretary of Commerce (Feb. 22, 2000) (on file with author); See also *Davis Rips Feds on Eel Water Use. State Says Agency Reneged on Deal*, PRESS DEMOCRAT, Apr. 15, 2000; Mike Geniella, *Feinstein Steps into Eel River Debate. Federal Officials Asked to Explain*, PRESS DEMOCRAT, Mar. 3, 2000.

168. Groups included the Friends of the Russian River, Friends of the Eel River, the Russian River Environmental Forum, Upper Eel Watershed Forum, and the Russian River Watershed Council, as well as multiple small watershed organizations.

169. The burgeoning of watershed groups occurred all over the west with increasing grant dollars and state programs focused on watersheds. Russell Henly, California Dept. of Forestry and Fire Protection, Speech at University of California, Berkeley, William Main Seminar (Feb. 12, 2002).

170. See Comments of Intervenor Friends of the Eel River & Proposed Intervenor California Sportfishing Protection Alliance & Pacific Coast Federation of Fishermen's

allocation began a significant shift away from overriding concerns about maintaining supply in the Russian River to discussions that included conservation, river restoration, and the recovery of the fish in both watersheds.

The Russian River watershed communities most vulnerable to a loss of project water remained upstream Mendocino users. Many received no water from Lake Mendocino, and as agriculture in the area expanded they had become more reliant on upstream diversions from the East Fork of the Russian River, including water diverted from the Eel River. This was particularly the case during the summer and early fall. Concerned about losing this water, they also mobilized and formed the Mendocino County Inland Water and Power Commission (MCIWPC),¹⁷¹ with the goal of advocating their interests, particularly in retaining the project's water diversion.¹⁷²

The Round Valley Tribes also increased their efforts to restore water to the Eel River. They proposed a revised interim instream flow schedule for the project that would leave more water in the Eel River, but this was not accepted.¹⁷³ Working through the Department of Interior's Bureau of Indian Affairs, they hired their own biologists and produced a flow proposal that was considered as one of the alternatives in the FERC EIS. Eventually they also participated in discussions with the DOI/NMFS researchers as the latter prepared their flow proposal.

The Fish Screen Story

As early as 1971, and as part of the relicensing proceeding, PG&E indicated that it planned to construct a fish screen to protect Eel River

Associations on Draft EIS for Project No. 77-110 License Amendment; Motion to Intervene (n.d.) (on file with author).

171. Represented were the Mendocino County Water Agency, the Supervisors of the County of Mendocino, the Potter Valley Irrigation District, the Redwood Valley County Water District, Mendocino County Russian River Flood Control and Water Conservation Improvement District, and the City of Ukiah. Joint Exercise of Powers Agreement for the Formulation and Implementation of the Mendocino County Inland Water and Power Commission, Agreement #96-156 (Sept. 24, 1996).

172. Mendocino County Inland Water & Power Comm'n, Motion to Intervene in FERC Project No. 77-110, Potter Valley Project, FERC RIMS Doc. 1858915 (June 11, 1998), available at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>.

173. Motion of the Round Valley Indian Tribes for Order Establishing Interim Flows for the Eel River, FERC Project No. 77-110, FERC RIMS Doc. 1922479 (Feb. 11, 1999), available at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>.

fish.¹⁷⁴ Twelve years later, in 1983, when FERC issued the new 50-year license to PG&E, a condition of the license was the construction of a new fish screen.¹⁷⁵ But 11 more years passed, and by 1994 there was still no fish screen, while its cost had escalated to over \$15 million.¹⁷⁶ In response to suits by fishermen's associations and the Round Valley Tribes, FERC ruled that PG&E must build a working screen or lose its license for the plant.¹⁷⁷ Partly in response to the high cost of the screen, PG&E announced that it was reevaluating the project economics and would consider the sale or decommissioning of the project.¹⁷⁸ The SCWA began new negotiations to acquire the project.¹⁷⁹ However, PG&E, under time constraints from FERC, chose to construct the expensive screen rather than sell or decommission the project.

174. The screen was to block salmon and steelhead from being sucked into the powerhouse tunnel. Up to the early 1970s, water from the Eel ran unscreened through the PVP. In 1972, when PG&E applied for the renewal of its license with FERC, the State Fish and Game Commission ordered a new screen. However, the screen failed in 1982 and CDFG unsuccessfully attempted to raise money to replace it. Jentri Anders, *PG&E Ordered to Protect Eel River Fish*, REDWOOD RECORD, Sept. 13, 1994.

175. Opinion & Order, *supra* note 29.

176. In the 1980s, the Covelo Indian Community and California Trout Inc. petitioned FERC to order PG&E to make repairs and in 1989 FERC agreed. By 1994, there was still no screen and the utility proposed building a temporary model that would, however, require them to reduce the water diversion and potentially stop power generation for a year. "I think our intent is to let people know that we aren't interested in building a \$16 million fish screen unless something changes," said Green, PG&E District Manager. Mary Callahan, *North County Water Supply in Jeopardy*, PRESS DEMOCRAT, Aug. 31, 1994. PG&E then shut down the project, hoping that this would persuade Sonoma and Mendocino Counties to contribute towards the cost of building the screen. However, FERC, pressured by both state and federal agencies, ordered PG&E to begin construction immediately and have the screen operational by October 15, 1995, or be fined up to \$10,000 per day. See Mary Callahan, *PG&E Bucks Feds on Eel River Plant Fish Screen, Plan Still under Review*, PRESS DEMOCRAT (Sept. 7, 1994); Mary Callahan, *Feds Order PG&E to Build Fish Screen*, PRESS DEMOCRAT (Sept. 8, 1994).

177. Letter from Mark J. Robinson, FERC Division of Project Compliance & Administration, to Mr. Shan Bhattacharya, Manager Hydro-Generation, PG&E (July 11, 1994) (on file with author).

178. Gary Green, PG&E Regional Manager, stated that PG&E "is considering selling the dam and hydroelectric plant because proposed changes in State Public Utilities Commission rules may make it impossible to operate profitably...and the utility may not be able to recover costs of constructing a \$16 million fish screen." David Anderson, *Hauser Promises Local Say in Eel River Water Diversion*, TIMES STANDARD, Dec. 21, 1994.

179. In addition, the agency coordinated an attempt to sponsor legislation creating a Potter Valley Authority governed by representatives from Marin, Sonoma, and Mendocino counties. The Authority's "primary purpose would be to ensure the continuation of the diversion of water from the Eel River into the Russian River." Humboldt County, not included in this plan, was opposed. City of Sonoma Agenda Item, Summary Report (Dec. 20, 1994) (on file with author).

The State Takes Center Stage with Deregulation

Shortly after, however, in December 1995, the State of California took center stage in the negotiations. The California Public Utilities Commission (CPUC)¹⁸⁰ issued an electrical utility industry restructuring order requiring PG&E to file a hydropower divestiture plan by mid-March, and in August 1996, the California Legislature passed AB 1890, ratifying the PUC's plan.¹⁸¹ As a result, PG&E temporarily suspended acquisition negotiations with the SCWA and filed an application with the CPUC to auction off its hydroelectric assets, including Potter Valley. All those parties involved in the negotiations for the diverted Eel River water participated in the CEQA proceedings over the proposed auction. But in August 2000, PG&E surprised the CPUC with a settlement proposal that included an agreement with the SCWA for a right-of-first refusal to purchase the project.¹⁸² This was eventually withdrawn, and in January 2001 the California Legislature mandated that the hydro assets remain with PG&E and under California regulatory control for five more years.¹⁸³ In 2002, PG&E filed for Chapter 11 bankruptcy protection. Shortly after, it proposed a plan, similar to its earlier proposal, that would transfer its hydropower assets to an unregulated company that would be free of state supervision, claiming that its federal bankruptcy case preempted state law. On February 8, 2002, the U.S. Bankruptcy Judge rejected the plan.¹⁸⁴ The SCWA continued to promote the purchase of the project.¹⁸⁵

180. The state agency that regulates private utilities, including PG&E.

181. Governor's Office of Communications, *California's Energy Story*, at http://www.governor.ca.gov/govsite/pdf/issues/energy_chronology_5-4-01_update.pdf (updated May 4, 2001).

182. Final Sonoma Amendment to Proposed PG&E Settlement Agreement (Aug. 10, 2000) (on file with author).

183. Cal. State Assembly Bill 6X (2001).

184. Bob Egelko, *Bankruptcy Judge Rejects PG&E Plan*, S.F. CHRONICLE, Feb. 9, 2002, at A1. PG&E's primary argument, that federal bankruptcy law expressly preempts state law, was rejected by the U.S. Bankruptcy Judge, who indicated that while PG&E could potentially override some state laws that thwart bankruptcy reorganization, the state could probably enforce any laws related to the public health, safety, and welfare. This opened the way for the California Public Utility Commission to present a competing reorganization plan. PG&E's creditors are presently reviewing both reorganization plans. Creditors must support or reject them by August 2002 to help the U.S. Bankruptcy Judge determine which, if any, offers the best means by which they will be paid. See Bob Egelko, *PG&E Revises Plan to Pitch Reorganization*, S.F. CHRONICLE, July 3, 2002.

185. Sonoma County Water Agency, *supra* note 108.

Decommissioning as an Alternative

FERC had not considered decommissioning the PVP as an alternative in its 1999 DEIS despite the minimal contribution of generating capacity provided by the project.¹⁸⁶ In April of 1999, however, the Environmental Protection Agency (EPA) requested that FERC consider decommissioning the project as one of its alternatives.¹⁸⁷ Shortly after, NMFS stated that "only decommissioning of the project would eliminate [the] adverse affects [to salmonids]."¹⁸⁸ The NMFS reiterated its position in October 1999, stating that "[s]hould FERC make a decision to remove Scott Dam and reoperate the Project for fishery and water supply purposes, FERC's mandate under the FPA to ensure the best comprehensive use of the waterway would be fulfilled."¹⁸⁹ During the public hearing on the DEIS in Sonoma County in 1999, the Friends of the Eel River also presented testimony supporting the use of groundwater recharge in the Russian River watershed as a way of reducing reliance on the diverted Eel River water.¹⁹⁰ FOER also proposed that the decommissioning of the project be considered as an alternative in the FERC Final EIS. The U.S. Forest Service and the Round Valley Tribes agreed that decommissioning should be considered as an alternative.¹⁹¹

While FERC had already concluded that it had the power, in a rare case, to require removal of a project dam,¹⁹² in the case of Potter Valley the agency stated that it could not consider decommissioning because the

186. The 9.5 megawatts (MW) of installed capacity at Potter Valley is an extremely small amount of PG&E's total system available capability of about 18,000 MW. In addition, current power generation at Potter Valley is well under one percent of PG&E's total system hydroelectric generation and less than one one-hundredth of one percent of customer sales. FED. ENERGY REGULATORY COMM'N, *supra* note 15, at 3-65.

187. Letter from David Farrel, Chief, Federal Activities Office, EPA, Region IX, to John Mudre, Project Manager (Mar. 2, 2000) (on file with author).

188. Letter from Patrick Rutten, Northern California Supervisor, NMFS, to Honorable David P. Boergers, Secretary, Fed. Energy Regulatory Comm'n, FERC RIMS Doc. 1952155, at 2 (May 27, 1999), at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>.

189. Letter from Rodney McInnis, Acting Regional Administrator, NMFS, to Carol Sampson, Director, Office of Hydropower Licensing, Fed. Energy Regulatory Comm'n, FERC RIMS Doc. 2014847 (Oct. 8, 1999), at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>.

190. Declaration of Robert Curry, Ph. D., In Support of Friends of Eel River's Comments on DEIS on Proposed Reoperation of FERC Project 77-110, The Potter Valley Project, FERC RIMS Doc. 1941510 (Apr. 24, 1999), at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>.

191. Letter from Jack Gipsman, Office of the General Counsel, U.S. Dep't of Agric., to David Boergers, Secretary, Fed. Energy Regulatory Comm'n, FERC RIMS Doc. 1963437 (July 9, 1999), at <http://rimsweb1.ferc.gov/rims.q?rp2~pagereq~RIMS~docID>.

192. Federal Energy Regulatory Comm'n, Policy Statement, 69 FERC 61,336 (1994).

project had already been re-licensed.¹⁹³ However, pointing to the requirements of Article 39 that FERC address "modifications in the flow release schedule or project structures and operations necessary to protect and maintain the fishery resources,"¹⁹⁴ NMFS disagreed, stating that the full range of alternatives, including decommissioning, should be back on the table when specifying what conditions were necessary to protect and maintain the fishery resources.¹⁹⁵

Local Opposition to Sonoma County Water Agency Expansion Increases

In response to new environmental regulations, the SCWA formalized its conservation efforts during this decade.¹⁹⁶ At the same time, it also continued attempts to increase its water rights in the Russian River system to satisfy projected agricultural and municipal needs. However, it ran into opposition among its own water contractors during this period. In the fall of 2000, the city of Petaluma, one of the water contractors with the SCWA, refused to sign an amendment to its water contract that would permit the SCWA to begin an expansion of its transmission system. This refusal placed the transmission system temporarily on hold, and an angry SCWA threatened to leave Petaluma out of any new alliance with its other water contractors.¹⁹⁷ Shortly after, the Petaluma City Council hosted a forum, "Water Connects Us All." It was the first North Bay Regional Water Summit and the first time that all the SCWA contractors had met to discuss North Bay water sustainability issues.¹⁹⁸ Although the transmission system was finally approved, the SCWA was put on notice that there was opposition to its expansion within its own district.

UNRESOLVED ISSUES

The negotiations over the diverted Eel River water continue today. The present dynamics between different agencies with overlapping jurisdictions, and between multiple communities with different needs and

193. 2 FED. ENERGY REGULATORY COMM'N, *supra* note 15, at E-3-4, 23-3.

194. Opinion and Order, *supra* note 29.

195. Eel-Russian River Commission Meeting Minutes, *supra* note 166, at 2.

196. SONOMA COUNTY WATER AGENCY, *supra* note 59, at 11-12. Under section 7 of the ESA, the agency was also required to consult with the NMFS when Russian River salmon were listed.

197. Tom Chorneau, *County Gives Petaluma Ultimatum*, PRESS DEMOCRAT, Aug. 23, 2000.

198. Louis Nuyens, *North Bay Regional Water Summit*, COASTAL POST (Nov. 2000), at <http://www.coastalpost.com/00/11/10.htm>.

desires, are creating the framework for future decision making. The unresolved issues are still focused on how to protect, maintain, and recover the degraded fisheries and who has legitimate rights to the diverted Eel River water.

Proprietary Rights to Imported Water

Upstream Mendocino interests on the East Fork of the Russian River rely for their water primarily on direct diversions from the Russian River, on a limited amount of water from Lake Mendocino, and, in the case of Potter Valley, on a long standing contract with PG&E to use the Eel River water abandoned after use in the powerhouse. None of these users have contracts with the SWCA for water. Thus, any reduction in the diversion would reduce the supply of water available to these communities. Mendocino Inland Water and Power Commission has argued that these water users have acquired "common law proprietary consumptive water rights" to the imported Eel River water.¹⁹⁹ As recently as 1970, however, the Sonoma and Mendocino Districts applied jointly to the SWRCB for a license to store water in Lake Pillsbury so as to obtain more secure rights to the imported water.²⁰⁰ The Board denied that application.²⁰¹ Today, the SWRCB regularly includes Term 25 in its standard permits to appropriators of return flow. This term states that "[t]o the extent that water available for use under this permit is return flow, imported water, or waste water, this permit shall not be construed as giving any assurance that such supply will continue."²⁰² In a recent decision, the SWRCB reiterated that the down

199. Mendocino County Inland Water and Power Commission's Response to Scoping Memo and Pacific Gas and Electric Company's Environmental Assessment, Application of Pacific Gas and Electric Company to Market Value Hydroelectric Generating Plants and Related Assets Pursuant to Public Utilities Code (Sept. 30, 1999) (Cal. Pub. Util. Comm'n) (Application No. 99-09-053).

200. Cal. State Water Resources Control Bd., *supra* note 102. The Board stated that the possibility existed that the upcoming license renewal could result in the license "being recaptured by the United States and the power facilities abandoned." Cal. State Water Res. Control Bd., *supra* note 105, at 2.

201. Cal. State Water Res. Control Bd., Decision Denying Applications, Dec. 1403, (Oct. 5, 1972).

202. State of California, SWRCB, In the Matter of Treated Waste Water Change Petition WW-20 of El Dorado Irrigation District, at 21. The SWRCB cited *Stevens v. Oakdale Irrigation District*, 90 P. 2d 58 (1939), and stated that appropriative rights to foreign water that has been abandoned into a watercourse attach only to the water that has been abandoned and are always subject to the right of the importer who may cease to abandon the water at any time. *Id.* at 20. The Board also cited *Stevenson Water District v. Roduner*, 223 P.2d 209 (1950), which held that riparian right holders cannot claim foreign water that is discharged into the stream.

stream consumptive users of water imported from a foreign watershed are not legal users."²⁰³ At this time, should less water be diverted into the Russian River from the project, or the PVP be decommissioned, Sonoma and Mendocino could lose the imported water they have been relying on.²⁰⁴

The Endangered Species Act and Hydropower Relicensing

In response to the listing of coho, chinook, and steelhead in the Eel, NMFS produced its second Draft Biological Opinion (DBO II) in November 2000. It stated that FERC's flow regime would jeopardize the listed fish.²⁰⁵ In *Tennessee Valley Authority v. Hill*, the Court stated that "it is clear Congress foresaw that [section] 7 would, on occasion, require agencies to alter ongoing projects in order to fulfill the goals of the Act."²⁰⁶ Under the ESA, NMFS did not have the power to order FERC to comply with its reasonable and prudent alternative.²⁰⁷ However, NMFS had identified stream flow depletion from hydropower as a factor in the salmon's decline in both rivers. Should NMFS's final Biological Opinion find that FERC's proposal would jeopardize the fish, FERC would be required to modify the

Id. at 21. See also *Dodge v. Ellensburg Water Co.*, 729 P.2d 631, 634 (1987). This recent ruling by the Washington Court also cited *Stevens v. Oakdale Irrigation Dist.*, 90 P.2d 58, 61-62 (1939) in support of its holding that an importer of a supply of water may discontinue its flow at any time, and the court held that there can be no "water right in the return flow of foreign water based upon prescriptive use."

203. State of California, SWRCB, In the Matter of Treated Waste Water Change Petition WW-20 of El Dorado Irrigation District, at 28, 33. While reiterating that an importer of water could discontinue its flow at any time with respect to an appropriator of the foreign water, the Board however indicated that, under the reasonableness use doctrine, fish and wildlife could be considered legal beneficial users and as such could require an importer of water to maintain a flow sufficient to sustain resources that have become dependent on it. However, they disclaimed the precedential value of this order by stating that reasonable depends upon the circumstances presented. In the Russian River, Coyote Dam on the East Fork had already formed an absolute barrier to salmonid migration, see *Steiner Env'tl. Consulting, supra* note 18, at ii, so MCIWPC claims would not hold on this argument.

204. MCIWPC could litigate this issue, and because importing water from one basin to another is common in California, the outcome of the case could have an impact on water allocation issues in the state.

205. NMFS Draft Biological Opinion II, *supra* note 164. See also 50 C.F.R. § 402.14(h)(3) (2001).

206. 437 U.S. 153, 186 (1978).

207. *Nat'l Wildlife Fed'n v. Coleman*, 529 F.2d 359, 371 (5th Cir. 1976).

hydropower project's operation to avoid further jeopardy.²⁰⁸ Should FERC not comply, the agency could be liable and subject to penalties.²⁰⁹

In February 2001, NMFS staff indicated that they were reconsidering their jeopardy opinion in the light of new information. New private meetings were held between the original FRG parties and on June 14, 2001, PG&E presented a flow proposal that incorporated modifications designed to prevent a final biological opinion of jeopardy.²¹⁰ In the new proposal, PG&E proposed the establishment of a committee to design, implement, monitor, and evaluate the proposed resource management measures to recover salmonids. The committee would consist not only of representatives from private, state, and federal agencies, including PG&E, CDFG, FWS, NMFS, FS, but also representatives from the Round Valley Tribes, who had not participated in the most recent FRG meetings. This new Technical Review Management Committee would also coordinate resource agency programs related to salmon and steelhead restoration in the vicinity of the project. The parties began a new round of negotiations, potentially pointing the way to a process that could reduce future litigation.

However, on May 7, 2002, FERC announced it would not consider the new PG&E proposal but instead would continue to recommend its original alternative as analyzed in its FEIS. This was despite requests for a supplemental NEPA review to correct modeling errors and the presentation of additional alternatives. FERC stated that they believed their modeling assumptions and data sets were correct and that any differences among the different flow proposals were "less than the inherent uncertainty within them."²¹¹ This was despite the determination by NMFS that this alternative would constitute jeopardy to the threatened anadromous fish in the Eel River.²¹² Three days later, the Round Valley Tribes filed a "Notice of

208. FERC is required to obtain either an incidental take statement (ITS) permitting the action to proceed without liability under section 9 or obtain a section 10 permit if their activity may take a listed species. See 16 U.S.C. §§ 1536(b)(4), 1539(a) (1994); H.R. Rep. No. 567, at 6 (1982). See also James M. Lynch, *Effect of ESA Listings on the Operation of FERC-licensed Projects: The Hells Canyon Example and Beyond*, 10 FORDHAM ENVTL. L.J. 271 (1999).

209. 16 U.S.C. § 1540 (1994).

210. Modification of the PVID/PG&E Proposal Potter Valley Project, FERC Project No. 77-110 (June 2001).

211. Letter from J. Mark Robinson, Director, Office of Energy Projects, Fed. Energy Regulatory Comm'n, to Rebecca Lent, Regional Administrator, NMFS, FERC RIMS Doc. 2274113 (May 7, 2002), at <http://rimsweb1.ferc.fed.us/rims>.

212. NMFS Draft Biological Opinion II, *supra* note 164.

Ongoing Violations of the Endangered Species Act and Intent to Sue."²¹³ The Tribes' notice stated that further delay in protecting the fishery was a breach of both the ESA and the FPA.²¹⁴ Once again, all eyes turned to NMFS as they resumed preparation of a Final Biological Opinion.

The Clean Water Act

Although the 1983 license waived 401 certification, there is still discussion about whether certification will be required before the project's next relicensing in 2022. In 1994, in *PUD No. 1 of Jefferson County v. Washington Department of Ecology*,²¹⁵ the U.S. Supreme Court held that a state acting under the CWA could regulate not only water quality but also the amount of water released by a hydropower project if it was affecting water quality and state-designated water uses such as fishing. In *American Rivers, Inc. v. Federal Energy Regulatory Commission*,²¹⁶ the Court held that disputes concerning whether conditions submitted under Section 401 were lawful were to be resolved by the courts, not FERC. This ruling strengthened the authority of both the SWRCB and the federal EPA to propose mandatory conditions to FERC relating to water quality in hydropower licensing decisions.

Today, the SCWRB has a coordinator and additional staff who review all requests for 401 certification. They are prohibited from knowingly waiving requests by non-action (as occurred when the PVP was relicensed in 1983).²¹⁷ In the current PVP negotiations, the Board has claimed that its authority to revisit the certification process in a license amendment proceeding is unclear. However, it has left open the possibility of future review depending on the final FERC EIS.²¹⁸ In an analysis of Section 401, Debra Donahue has proposed that its certification requirement

213. Round Valley Indian Tribes' Notice of Ongoing Violations of Endangered Species Act and Intent to Sue, FERC No. 77-110, FERC RIMS Doc. 2275618 (May 10, 2002) at <http://rimsweb1.ferc.gov/rims>. The Tribes urged FERC to take immediate action to implement interim flows to avoid further jeopardy to the threatened fish in the Eel and pointed out that 18 months ago NMFS had requested an interim flow regime in its DBO II to "avoid irreversible environmental damage to salmonids." NMFS Draft Biological Opinion II, *supra* note 164, at 87.

214. FERC has a legal obligation under sections 7(a)(2) and 7(d) of the ESA and section 10(a) of the FPA to take affirmative steps to protect the listed fish.

215. 511 U.S. 700, 720-21 (1994).

216. 129 F.3d 99 (2d Cir. 1997).

217. CAL. CODE OF REG., § 3859.

218. Letter from Edward Anton, Chief, Div. of Water Rights, State Water Res. Control Bd., to Fed. Energy Regulatory Comm'n (June 11, 1998) (on file with author).

has the potential to be required for all federally permitted activities including incidental take permits (ITP) under the ESA. Under her reasoning, the 401 certification process would be required before NMFS could issue its ITP for the project.²¹⁹

The Second Circuit Court of Appeals recently ruled that polluted water artificially diverted from its natural course to a different watershed is a point source discharge under the CWA.²²⁰ Under this ruling, CWA compliance could require PG&E to apply to the state for an NPDES permit²²¹ for the Eel River water it is discharging into the East Fork of the Russian River via the PVP. If upheld, this requirement could provide another opportunity for input from those opposed to the diversion.

The Public Trust Doctrine

Over the past two centuries, the courts have expanded the public's interest in its trust resources. The courts are generally reluctant to challenge poor agency implementation of the public trust and this has hindered protection of these resources.²²² Nevertheless, the public trust doctrine provides a vehicle to protect public uses of water "whenever feasible,"²²³ and it has the potential to promote "public access both to resources customarily used by the public and to decision makers with the power to allocate those resources."²²⁴ The state could potentially utilize this doctrine as a vehicle in future negotiations to balance a wider group of interests in the decision-making process.

Indian Fishing and Water Rights

Because the priority date for Indian Reserved Water Rights predates most other appropriations in the West, Native American claims can significantly affect other appropriative rights. In attempting to reconcile Indian claims to water, recent U.S. Supreme Court cases have focused on balancing, and there is not yet a clear precedent for dividing water between

219. Debra L. Donahue, *The Untapped Power of Clean Water Act Section 401*, 23 *ECOLOGY L.Q.* 201, 300-01 (1996).

220. *Catskill Mountains Chapter of Trout Unlimited, Inc. v. City of New York*, 273 F.3d 481 (U.S. App. 2001).

221. 33 U.S.C. § 1311(a), 1342.

222. See Scanlan, *supra* note 101, at 301.

223. *Nat'l Audubon Soc'y v. Superior Court*, 658 P.2d. 709, 709 (Cal. 1983).

224. See Blumm, *supra* note 101, at 595.

Indians and non-Indians.²²⁵ What is clear, however, is that the Department of Interior and other federal agencies, as part of their trustee relationship, are required to consult with the tribes on actions that would affect their water and fishing rights. The Round Valley Tribes have increased pressure on the agencies to adhere to this requirement and it appears that this will continue to occur and to influence future negotiations.

In addition, Indian tribes have begun to push for an interpretation of their right to take fish as entitling them to protection against habitat degradation. Where it has been litigated, however, the courts have been reluctant to express the scope of Indian fishing rights in a manner that might require a restoration of conditions that existed at the time that reservations were created. Blumm and Swift²²⁶ suggest that while the purpose of the Indian treaty fishing right is to provide tribes with "a livelihood...a moderate living," an unreasonable interference with this "piscary profit" could be articulated in terms of a moderate living promise. This would avoid a general fear that implementation of the fishing right could create a "wilderness servitude" and reduce the reluctance of the courts to more fully support tribal fishing rights.

CONCLUSION

Issues of water allocation have always been nested in broader societal debates and early legal regimes reflected both the dominant ideology of development that existed in the United States at that time and the legacy of conquest that impeded tribal rights. For over 50 years, increased water supply for economic development in the more populated Russian River communities dominated the political agenda at the expense of Eel River communities and the declining fisheries.²²⁷ In addition, during these early years the Round Valley Tribes, like Indian tribes throughout the west, had limited resources to lobby for their rights to water and fish.²²⁸ As political culture evolved over the century, however, environmental protection, participation and equity in water allocation decisions, and the

225. Michael R. Moore, *Native American Water Rights: Efficiency and Fairness*, 29 NAT. RESOURCES J. 763, 769 (1989). See also Harold Shepherd, *Conflict Comes to Roost! The Bureau of Reclamation and the Federal Indian Trust Responsibility*, 31 ENVTL. L. 901 (2001).

226. See Blumm & Swift, *supra* note 42, at 411-13.

227. BULLETIN 105-5, *supra* note 17, at 38-39.

228. See, for example, WENDY NELSON ESPELAND, *THE STRUGGLE FOR WATER: POLITICS, RATIONALITY, AND IDENTITY IN THE AMERICAN SOUTHWEST* 183-222 (1998), for an account of the struggle of the Yavapai People to sustain their fishing culture through years of abuse.

legitimacy of tribal rights gained in importance. These shifts ushered in a more complex legal regime and new regulations and case law contributed to a proliferation of agencies with overlapping mandates and jurisdictions. More than the dynamic interrelationship between the states and the federal government often discussed under the heading of "federalism,"²²⁹ growing agency pluralism²³⁰ produced increasing tensions between multiple agencies within each level of government as well as between levels. Early in the century, the state had sole responsibility for deciding whether to issue a license to PG&E to appropriate water, and the FPC was the dominant federal agency establishing the conditions for PG&E's PVP hydropower license. Today a plethora of agencies with new directives contributes to these decisions. This dispersion of decision-making authority has often been cited as the cause of bureaucratic delays and tense negotiations and has resulted in calls for less bureaucracy and a repeal of environmental regulations. Most recently, in accordance with directions from the one-hundred sixth Congress,²³¹ FERC produced a report that called for streamlining the relicensing process by reducing and or eliminating independent review by other federal and state agencies.²³²

This case study demonstrates, however, that agency pluralism has also contributed to increased entry points for parties that were previously disregarded in water allocation decisions. In the negotiations over the diverted Eel River water, the Round Valley Tribes, environmental groups, and Eel River watershed communities are now achieving greater parity at the negotiating table.²³³ Agency pluralism has served to balance a wider group of interests in a more equitable decision-making process.²³⁴ In

229. See Richardson, *supra* note 7, at 499.

230. See Blumm & Nadol, *supra* note 4, at 84.

231. Energy Act of 2000, Pub. L. No. 106-469, § 603, 114 Stat. 2029, 2207.

232. FERC, Report on Hydroelectric Licensing, *supra* note 43, at 90.

233. A recent trend has been the proliferation of "outside-the-box" local concern with water issues as manifested in the numerous watershed restoration and anti-growth groups who are already affecting negotiations. There are also gaps in representation where some groups have no voice in the decision-making process. For example, agricultural laborers who make up an increasing portion of Sonoma and Mendocino Counties' population and who are affected by both agricultural and water decisions have not been represented during the last decade. So there is still no legal or institutional mechanism that serves to integrate all parties into water negotiations.

234. Blumm and Nadol have proposed that this pluralism has an additional potential to ensure that in the future FERC will re-license only those projects whose net social benefits exceed their net social costs. This new focus could produce not only more efficient hydroelectric decisions, but also improved water quality, fish and wildlife habitat, and recreation areas. Blumm & Nadol, *supra* note 4, at 85.

addition, a more diverse set of goals, including the restoration of both rivers and their fisheries and balancing the needs of all those communities affected by the diversion, is likely to remain central during future negotiations.

APPENDIX A**Abbreviations and Acronyms**

ACE	U.S. Army Corps of Engineers
af	acre-foot or acre-feet
afa	acre-foot per annum
ALJ	Administrative Law Judge
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
cfs	cubic feet per second
CPUC	California Public Utilities Commission
CWA	Clean Water Act
DBO	Draft Biological Opinion
DEIS	Draft Environmental Impact Statement
DOI	U.S. Department of the Interior
DWR	California Department of Water Resources
ECPA	The Electric Consumers Protection Act
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
FEIS	Final Environmental Impact Statement
FERC	Federal Energy Regulatory Commission
FOER	Friends of the Eel River
FPC	Federal Power Commission
FRG	Fisheries Review Group
FS	U.S. Forest Service
FWPA	Federal Water Power Act
FPA	Federal Power Act
FWS	U.S. Fish and Wildlife Service
ITP	incidental take permit
MCIWPC	Mendocino County Inland Water and Power Commis- sion
MW	megawatts
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System

PG&E	Pacific Gas and Electric Company
PIA	practicably irrigated acreage
PVID	Potter Valley Irrigation District
PVP	Potter Valley Hydropower Project
RPA	reasonable and prudent alternative
SCWA	Sonoma County Water Agency
SEC	Steiner Environmental Consulting
Sonoma District	Sonoma County Flood Control and Water Conservation District
SWRCB	California State Water Resources Control Board
USACE or ACE	U.S. Army Corps of Engineers
WSRA	Wild and Scenic Rivers Act