This is a draft of an article that will appear in a forthcoming issue of the UC Davis Law Review. Please feel free to contact the lead author, Karrigan Börk (karrigan.bork@gmail.com) with any comments or suggestions.
# The Rebirth of Cal. Fish & Game Code 5937: Water for Fish

Karrigan S. Börk, Joe F. Krovoza, Jacob V. Katz, and Peter B. Moyle

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I. INTRODUCTION

“Swarms of living creatures will live wherever the river flows. There will be large numbers of fish, because this water flows there and makes the salt water fresh; so where the river flows everything will live. Fishermen will stand along the shore; from En Gedi to En Eglaim there will be places for spreading nets.” ^1

In an average year, California receives inflows and imports totaling around 200 million-acre-feet of water, enough water to cover the entire state 23 inches deep. ^2 But California is a state of spatial and temporal water extremes. Spatially, precipitation varies wildly, from Death Valley in the Southeast, which averages less than three inches per year, ^4 to the northwestern corner of the state, which averages over 140 inches per year. ^5 On a broader scale, more than 70% of stream flow in the state comes from north of Sacramento, while more than 80% of the water is used south of Sacramento. ^6 Temporally, precipitation varies between and within years. The wet season typically runs from October or November to April or May, with little or no precipitation during the growing season, from May to September. ^7 Annual rainfalls 40% or more below average and 36% or more above average each occur, on average, once every six to seven years. ^8 To balance these extremes, over 1,300 surface water reservoirs store water across the state.

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^1 Ezekiel 47:9-10 (New International Version).


^3 Calculated with data from the CALIFORNIA DEPARTMENT OF FINANCE, CALIFORNIA STATISTICAL ABSTRACT ix (2003). The state is 163,696 square miles, or 104,765,440 acres, in area. An acre-foot is enough water to cover one acre with one foot of water, so 200,000,000 acre-feet over 104,765,440 acres gives an average of 1.91 acre-feet per acre, or 23 acre-inches per acre.

^4 Western Regional Climate Center, Monthly Climate Summaries (2010), http://www.wrcc.dri.edu/climsum.html (follow “S. California” hyperlink, then follow “Death Valley” hyperlink under “Alphabetical Station List”).

^5 DWR, supra note 2, at 3.1.

^6 Western Regional Climate Center, Climate of California (2010), http://www.wrcc.dri.edu/narratives/CALIFORNIA.htm.


^8 Orman Granger, Increasing Variability in California Precipitation, 69 ANNALS ASS’N AMER. GEOG. 533, 539 (1979). Water years at less than 60% of normal challenge California’s ability to provide sufficient water to meet demands, while water years above 145% of normal may cause flooding and increased landslides.

^9 CALIFORNIA DEPARTMENT OF WATER RESOURCES, DIVISION OF DAM SAFETY, LISTING OF DAMS (2011), http://www.water.ca.gov/damsafety/damlisting/index.cfm (A total of 1390 dams are listed in either the California Jurisdictional Dams list or the Federal Dams list. This excludes dams below the height or capacity requirements.
supplying water for urban, industrial, and agricultural uses. While these uses sustain a tremendous part of California’s economy, they come at high costs, which are often unappreciated.

Fish need water. A dam \(^{10}\) produces myriad changes in the downstream river ecology and geomorphology, \(^{11}\) and may reduce or eliminate downstream fish populations. Fish assemblages, the number and kind of fishes present in a stretch of water, change dramatically when a dam alters a river or stream’s hydrograph; \(^{12}\) nonnative fishes benefit from the lower, warmer, and more “even” flows typically found below a dam, \(^{13}\) while native fishes suffer under these conditions. \(^{14}\)

Fishing is culturally and economically significant in California. Recreational fisherman spent a combined total of 5.5 million days fishing California rivers and stream in 2006, and spent an average of roughly $90 per day of fishing, for a total of almost $500 million direct river and stream-related fishing expenditures in 2006. \(^{15}\) While commercial fishing for salmon has not been allowed in California rivers and streams since the mid 1950s, \(^{16}\) the commercial ocean fishery

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10 “Dam” includes any "artificial obstruction.” CAL. FISH & GAME CODE § 5900(a) (West 2010).


12 A hydrograph plots a rivers discharge over a period of time, generally months or years.


averaged roughly $8.4 million in landings from 1990 to 2007, when the ocean fishery was closed due to low salmon populations levels.\(^{17}\)

California legislatures and courts have recognized the inherent conflicts between dams and native fishes, \(^{18}\) and the legislature long ago struck a balance that, on its face, requires protection of below-dam fish. Under California Fish and Game Code § 5937 (5937), “The owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around, or through the dam to keep in good condition any fish that may be planted or exist below the dam.”\(^{19}\)

In spite of its clear language giving priority to below-dam fish, 5937 has not been given its due by dam owners or by the state agencies charged with its implementation. California's water rights agencies, the Fish and Game Commission (Commission) and the California Department of Fish and Game (CDFG)\(^{20}\) have not implemented 5937 in keeping with its plain language, which would guarantee the maintenance of below-dam fish in good condition.\(^{22}\)

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\(^{17}\) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), ANNUAL COMMERCIAL LANDINGS STATISTICS, http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html (Search from years 1990 to 2007; select “Salmon, Chinook” under “Species;” and “California” under “State”).


\(^{19}\) In full, CAL. FISH & GAME CODE § 5937 (West 2010) states:

The owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around, or through the dam to keep in good condition any fish that may be planted or exist below the dam. During the minimum flow of water in any river or stream, permission may be granted by the department to the owner of any dam to allow sufficient water to pass through a culvert, waste gate, or over or around the dam, to keep in good condition any fish that may be planted or exist below the dam, when, in the judgment of the department, it is impractical to detrimental to the owner to pass the water through the fishway.

\(^{20}\) See, generally, Joel C. Baiocchi, Use It or Lose It: California Fish and Game Code Section 5937 and Instream Fishery Resources, 14 U.C. DAVIS L. REV. 431, 448-49 (1980).

\(^{21}\) The Fish Commission was renamed the Fish and Game Commission in 1909, reflecting its expanded obligations. 1909 Cal. Stats. § 344 in JAMES HENRY DEERING, THE POLITICAL CODE OF THE STATE OF CALIFORNIA: ADOPTED MARCH 12, 1872, WITH AMENDMENTS UP TO AND INCLUDING THOSE OF THE THIRTY-EIGHTH SESSION OF THE LEGISLATURE 86 (1909). The Fish and Game Commission took on the powers and responsibilities of the Fish Commission; this Article will refer to both commissions by the same terms, “Fish and Game Commission” or “Commission,” in order to avoid confusion. In 1927, a Division of Fish & Game was created within the state's Department of Natural Resources, which included the Fish Commission. STATE OF CALIFORNIA, DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FISH AND GAME, THIRTIETH BIENNIAL REPORT, FOR THE YEARS 1926-1928, 9 (1928). In 1940, the Commission was added to CAL. CONST. art. IV, § 25 ½, which mandated staggered 6 year terms for commissioners and appointment of commissioners by the governor. CAL. CONST. art. IV, § 25 ½ (amended 1948, repealed 1966). In 1948, the legislature gave the Commission regulatory responsibility for sport fishing and hunting,
The reasons for the agencies’ failure to enforce 5937 are unknown. Affording section 5937 its facial meaning would prevent storage or out-of-stream use of water needed by below-dam fish, and for this reason, some have argued that section 5937 conflicts with provisions in the state’s constitution and its Water Code, which call for the consideration of all beneficial uses when water allocation decisions are made, restricting application of 5937. However, no court or water board considering 5937 has given credence to these objections. More likely, early efforts by the Fish and Game Commission that met with failure in water board hearings, coupled with the growth of politically popular and well-funded water projects, discouraged the strong enforcement that 5937 required.

Perhaps unsurprisingly, the lack of enforcement has resulted in significant impacts to California’s native fish living below dams. A 1990 study of all California native fishes found that 57% were in need of at least some special management, and 41% were either extinct or in need of immediate attention. Moreover, artificial factors had the strongest influence on the condition of these species, and “Of the artificial factors that have had an adverse effect on the fishes, the most important is water diversions.” A review of the 31 salmonid taxa living in California revealed “65% are in danger of extinction within the next century,” and reduced or altered below-dam flows factored in the declines of 23 taxa. Of all 129 California inland fish species,

CAL. CONST. art. IV, § 25 1/2 (repealed 1966) although it lost the direct delegation when the legislature again amended the Constitution in 1966. CAL. CONST. art. IV, § 20. This division became today’s Department of Fish & Game in 1951, under the Charles Brown Fish and Game Reorganization Act, and that legislation also moved the Fish Commission out of the Division of Fish and Game, making it a separate entity in the Resources Agency. 1951 Cal. Stats. 1613; CALIFORNIA DEPARTMENT OF FISH AND GAME (CDFG), FORTY-SECOND BIENNIAL REPORT OF THE DEPARTMENT OF FISH AND GAME FOR THE YEARS 1950-1952 11 (1952). The Commission and the CDFG are both still in existence and have distinct powers and responsibilities, spelled out in the Commission’s Strategic Plan. The California Fish and Game Commission, Strategic Plan 10-13 (1998), available at http://www.fgc.ca.gov/strategic_plan/overview.pdf. Generally, “The Commission sets policy for the Department, while the Department is the lead state agency charged with implementing, safeguarding and regulating the uses of wildlife.” Id. at 12. The Commission regulates taking of fish and wildlife, including setting season dates and take limits, but does not enforce the regulations. Id. at 13.

22 Id. at 448-49.

23 CAL. CONST. art. X, § 2, codified at CAL. WATER CODE § 100 (West 2010) (requiring that all water use must be reasonable and beneficial).

24 CAL. WATER CODE § 106 (West 2010) (stating highest beneficial use for water is domestic use and that second highest beneficial use is for irrigation).

25 Peter B. Moyle & Jack E. Williams, Biodiversity Loss in the Temperate Zone: Decline of the Native Fish Fauna of California, 4 CONS. BIOL. 275, 278 (1990).

26 Id.


28 See, generally, Id. (The authors reviewed the “Factors Affecting Status” section for each of the 31 extant taxa.).
56% face increased risk of extinction due to major dams.\(^{29}\) “[R]estoration of natural flow regimes, in company with other restoration measures, is necessary if the continued downward decline of native fish populations in the western United States is to be reversed.”\(^{30}\)

Thus the recovery of depleted native fish stocks in California, including commercially and socially vital species such as salmon and steelhead, requires restoration of more natural flow regimes.

By the mid early 1950s, no one was enforcing 5937. But even as 5937 floated in California’s legal backwaters, the legislature continued its efforts to protect the state’s fish resources in the face of continued water development. These continuing efforts, coupled with changing public perceptions of the value of fish and other natural resources, began to revive 5937 and led to the birth of the modern public trust doctrine in the 1970s. Key early holdings based on the public trust reinforced the State’s responsibilities in safeguarding trust resources and broadened private standing to protest violations of the public trust, and 5937 is the legislative expression of the state’s public trust obligations protecting below dam fish. Using the public trust standing, in the face of the agencies’ abdication of duty, private attorneys general have stepped forward to enforce the law and protect California’s native fish communities. An emerging consensus from the state and federal trial courts has revived 5937 and led to the rebirth of several native fish communities. These cases have shown the fruit of a dutiful reading and application of 5937: preservation of California’s below-dam fish communities.

This article analyzes the proper role of 5937 in the context of California water law. Part II discusses the long-standing efforts of the California legislature to provide a legal framework for fish protection, particularly 5937’s minimum flow requirement. Part III discusses reasons for early enforcement failures. Part IV discusses the rebirth of the minimum flow requirement, and Part V discusses the current state of the 5937.

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\(^{29}\) Peter B Moyle, Jacob V. E. Katz and Rebecca M. Quiñones, *Rapid decline of California’s native inland fishes: a Status Assessment*, BIOL. CONS. (in review 2011) (Major dams were defined as those over 50 feet, so this statistic probably underestimates the impacts of dams on California fish.).

\(^{30}\) Marchetti & Moyle, *supra* note 14, at 530.

\(^{31}\) *Id.* at 538.
II. HISTORY OF THE MINIMUM FLOW REQUIREMENT

A. 1852 to 1915 – Early History of the Minimum Flow Requirement

The minimum flow requirement’s history presents a compelling picture of a legislature trying again and again to ensure the survival of the state’s fisheries, gradually increasing protection for fish in the state’s river systems. On April 12, 1852, less than two years after its admission to the Union, California made placing instream obstructions to salmon migration a misdemeanor, reflecting longstanding English law on instream obstructions. The initial instream obstruction law was limited in scope and did not explicitly require any amount of water for downstream fish. In 1870, the legislature amended its approach. The 1870 Act

32 An Act to Prohibit Erection of Weirs, or Other Obstructions to the Run of Salmon, 1852 Cal. Comp. Laws 62 [hereinafter 1852 Salmon Act]. Section 2 stated:

"Any person who may erect, or in any manner directly or indirectly, aid in the erection of any weir or other obstruction aforesaid, to the passage of salmon, an any river of this state, shall be deemed guilty of a misdemeanor, and be fined by any court of competent jurisdiction, in a sum not less than one hundred dollars, nor exceeding one thousand dollars, and shall immediately destroy the impediment to the running of salmon aforesaid; in default of which the fine imposed by this act shall be doubled."

In 2009 dollars, the fine ranged from $2,860 to $28,600. SAMUEL H. WILLIAMSON, SEVEN WAYS TO COMPUTE THE RELATIVE VALUE OF A U.S. DOLLAR AMOUNT, 1774 TO PRESENT, MEASURING WORTH (2010), http://www.measuringworth.com/uscompare/.

33 The earliest known law referencing instream obstructions to salmon migrations is the Magna Carta, which ordered: “All fish-weirs shall be removed from the Thames, the Medway, and throughout the whole of England, except on the sea coast.” Magna Carta, Ch. 23, 1297. See also Weld v. Hornby, 103 Eng. Rep. 75 (K.B. 1806) (“The erection of weirs across rivers was reprobated in the earliest periods of our law. They were considered as public nuisances. The words of Magna Carta (1297) (chapter 23) are: ‘All weirs from henceforth shall be utterly pulled down by Thames and Medway, and through all England,’ etc. This was followed up by subsequentActs (see 12 Edw 4, c 7) treating them as public nuisances, forbidding the erection of new ones, and the enhancing, straitening or enlarging of those which had aforetime existed. I remember that the stells erected in the river Eden by the late Lord Lonsdale and the corporation of Carlisle, whereby all the fish were stopped in their passage up the river, were pronounced in this court, upon a motion for a new trial, to be illegal and a public nuisance.”). See generally Commonwealth v. Ruggles, 10 Mass. 390 (1813) (seeking enforcement of Massachusetts’s instream obstruction statute that codified English law).

34 This initial obstruction law exempted mining, milling and agricultural dams and protected only salmon. 1852 Salmon Act § 6.

35 Id.

36 An Act to Provide for the Restoration and Preservation of Fish in the Waters of this State, 1870 Cal. Stats. 663 [hereafter 1870 Fish Act]. A fishway permits fish passage around the obstruction, akin to a modern fish ladder. Section 3 reads in full:

It shall be the duty of the Commissioners to require, as far as practicable, all persons, firms and corporations who have erected mill-dams, water weirs or
created a Fish Commission to implement the fish passage law; allowed obstructions if, upon
the request of the Commission, the obstructer constructed a fishway; and, perhaps most
importantly, added the requirement that fishways be maintained such that, “at all seasons of the
year, fish may ascend above such dam.” This created a de facto year-round minimum flow
requirement for dams with fishways.

In 1872, a simplified version of the 1870 fishway requirement became section 637 of
California's first Penal Code, and the 1872 Political Code empowered and required the
Commission to enforce it. The codification of the 1870 fishway requirement failed to include
"at all seasons of the year,” an omission remedied by a new fish passage law in 1880. The 1880
other obstructions on rivers or streams within the waters of this State, within six
months after the passage of this Act, to construct and keep in repair fish ways or
fish ladders at such mill-dams, water weirs or obstructions, so that, at all seasons
of the year, fish may ascend above such dam, weir or obstruction to deposit their
spawn. Any person, firm or corporation, owning such mill-dam or obstruction,
who shall fail or refuse to construct or keep in good repair such fish way or fish
ladder, after having been notified and required by the Commission to do so,
shall be deemed guilty of a misdemeanor.

This Act extended protection beyond salmon to all fish and removed the mining, milling and agricultural
exemptions. The Act was also revised in 1854, when the legislature expanded the law to cover obstructions in bays,
straites, rivers, streams, creeks, and sloughs, but left the mining, milling and agricultural exemptions in place. See An
Act to Amend an Act entitled ‘Act to prohibit erection of Weirs, or other obstructions to the run of Salmon,’ 70 Cal. Comp. Laws, § 1 (1854).

37 1870 Fish Act § 3.
38 Id.
39 Fish are unable to pass through a dry fishway.

California's first Penal Code took effect July 1, 1872. CAL. PENAL CODE § 2 (Gelwick 1871). Among other
changes, the 1872 Penal Code section on fish passage dropped a requirement in the 1870 Act that fishways only be
required when "practicable," neglected to mention the 1870 law's fine amount (not to exceed $500.00), and left out
direction for the distribution of collected fines (which had been one-half to District Attorney and one-half to
county's Common School Fund). CAL. PENAL CODE § 637 (Gelwick 1871). In 1872, the full text of CAL. PENAL
CODE § 637 read:

Every owner of a dam or other obstruction in the waters of this state, who, after
being requested by the Fish Commissioners so to do, fails to construct and keep
in repair sufficient fishways or ladders on such dam or obstruction, is guilty of a
misdemeanor.

41 “It is the duty of the Fish Commissioners . . . to furnish plans for and direct the construction and maintenance of
fish ladders and ways upon dams and obstructions.” CAL. POL. CODE § 642 (Whitney 1881).

42 An act to provide for the construction, maintenance, and regulation of fish ways in streams naturally frequented
by salmon, shad, and other migratory fish. 1880 Cal. Stats. 121. Failure to provide the passage was deemed a
misdemeanor. Id.
Act did not directly address the Code sections, but did establish the duties of the Commission and dam owners with respect to in-stream obstructions. It required the Commission to examine all dams in the state, “naturally frequented by salmon, shad, or other migratory fish,” and then order the construction of fish passage, if no fish passage existed. The 1880 Act further required the fishways be kept, “in repair, and open, and free from obstructions to the passage of fish at all times,” reinstating de facto minimum flow requirements.

An amendment in 1903 significantly altered Section 637, generally codifying the requirements in the 1880 Act, including the requirement that passage be "open . . . to the passage of fish at all times." It also echoed the 1880 Act’s mandatory approach, requiring the Fish Commission to examine all dams in the state, "naturally frequented by salmon, shad, or other migratory fish," and then order the construction of fish passage, if no fish passage existed. The 1903 Act further required the fishways be kept, “in repair, and open, and free from obstructions to the passage of fish at all times,” reinstating de facto minimum flow requirements.

In 1872, California codified its laws into a set of codes, consisting of a Civil, Criminal, Political, and Civil Procedure Code, Lewis Grossman, *Codification and the California Mentality*, 45 HASTINGS L.J. 617, 617 & 637 (1994), although the codification was incomplete and many of the underlying statutes were never repealed, which created a bifurcated morass of conflicting law. Ralph N. Kleps, *Revision and Codification of California Statutes, 1849-1953*, 42 CAL. LAW R. 766, 780 (1954) Courts did not find an implied repeal of conflicting California statutes when the code system was passed. The system of codification as a whole quickly fell into disrepair, making subsequent changes to the law more difficult to track. For example, “the volume of statues not directed to the codes far exceeded the volume of amendments to the code from the beginning,” meaning that many portions of the code were obviated or indirectly amended via statues that never became part of the code. *Id.*

1880 Cal. Stats. 121.

*Id.*

Taylor v. Hughes, 62 Cal. 38 (1882) (Samuel P. Taylor convicted under section 637 and fined $50.00 for failure to install fishway around dam on Papermill Creek, Marin County).

An Act to Amend Sections 628, 629, 632, 635, and 637 of the Penal Code of the State of California, all Relating to the Preservation and Protection of Fish, and to Repeal all Acts and Parts of Acts in Conflict with this Act, 1903 Cal. Stats. 25 (1903). The Act cleaned up the messy legislative debris of older fishway requirements, explicitly repealing, “all acts and parts of acts in conflict with this act.” *Id.* The Fish Commission requested this amendment, calling for revision of 637 to make violations a misdemeanor and to add a fine and jail time, with fines paid into state treasury credited to fish commission fund. *STATE BOARD OF FISH COMMISSIONERS OF THE STATE OF CALIFORNIA, SEVENTEENTH BIENNIAL REPORT OF THE STATE BOARD OF FISH COMMISSIONERS OF THE STATE OF CALIFORNIA, FOR THE YEARS 1901 – 1902* (1902).

Section 637 was also amended in 1891 and 1901. *See* An Act to Amend Section Six Hundred and Thirty-Seven of the Penal Code of the State of California, Relating to the Construction and Repairing of Fish Ladders on Dams and Other Obstructions on the Running Waters of the State, 1891 Cal. Stats. 93 (adding that the Fish Commission must formally order and notify violators of section 637; reestablishing fines and the allocation thereof; setting imprisonment durations). The 1901 Amendment was part of the re-codification of all three then extant codes, and the legislature made a substantive change to restrict fishing near fish ladders. 1901 Cal. Stats. 46. The recodification as a whole was declared unconstitutional on technical grounds in *Lewis v. Dunne*, 134 Cal. 291 (1901) (Recodification violated CAL. CONSTR. art. IV, § 24, for failure to reenact and republish the entirety of the code, and for inclusion of more than one subject in a single piece of legislation.).

1903 Cal. Stats. 25. The 1870 Act stated that fishways should be kept in good repair so that at "all seasons of the
Commissioners to order construction of a fishway whenever there was no free passage around an obstruction.  

The year 1892 brought the first reports of rivers bled dry. W.H. Shelby, deputy fish commissioner, described a river diverted entirely into flumes for more than a mile and reported the streambed remained dry for 1.5 miles or more. Shelby required that the owner of the flume put fish ladders in the flumes so that “every ambitious fish can go around the break.”

The Commission again raised the problem of a lack of instream flow in 1912, noting that, in many instances, and particularly is it the case with large power companies, non-compliance [with fish passage laws] is because they do not want to allow sufficient water to pass through the ladders to make them operative, so as to support and preserve the fish life in the streams below the plants. Several companies were public spirited and made it a rule to allow sufficient water to pass through their dams to keep the fish in good condition during the period of the minimum flow of water in the streams.

This discussion of requiring additional water to keep fish in “good condition” appears to be the first by the Commission, but it quickly grew into a refrain.

The 1914 Biennial Report discussed the impacts of low flows on fish at length and, at three distinct points, called for legislatively mandated minimum below-dam flows. The

year, fish may ascend above such dam, weir or obstruction to deposit their spawn.” 1870 Fish Act § 3.

50 1903 Cal. Stats. 25 (requiring Fish Commissioners to order a fishway if there is not free passage for fish around an obstruction; prohibiting fishing close to fishways; increasing fines and imprisonment terms).

51 STATE BOARD OF FISH COMMISSIONERS OF THE STATE OF CALIFORNIA, BIENNIAL REPORT OF THE STATE BOARD OF FISH COMMISSIONERS OF THE STATE OF CALIFORNIA FOR THE YEARS 1891-1892 22 (1892).

52 Id. Shelby made no mention of any litigation associated with the order.

53 STATE OF CALIFORNIA FISH AND GAME COMMISSION, TWENTY-THIRD BIENNIAL REPORT FOR THE YEARS 1912-1914 23, 29, 30-33 (1914) (noting that San Joaquin and Kings rivers are dry for part of the fall; noting the trend toward building large reservoirs and discussing the benefits of year round water for fish; and discussing threat to trout fisheries from water diversion). A note of exasperation creeps into the Commissioners’ report: “The whole of the present and future of the fish life of the state depends upon our water resources. Without this natural element of fish life they would entirely disappear from the face of nature; for no artificial method of sustaining fish without water has yet been discovered.” Id. at 107.

54 Id. at 33 (A.D. Ferguson, Assistant Commissioner for the Fresno Division, stated, “The matter is so important that the right of the people to insist upon the preservation of the fish life in our mountain streams, must be jealously guarded, and if necessary, more firmly established by further legislative acts. The principle should be fixed by law, that there must at all times, in all trout streams, be a sufficient minimum flow of water passing any diverting dam or intake canal to insure the perpetuation of the fish life from the point of diversion to the point where the diverted water is returned to the natural channel.” (emphasis added to highlight the Commission’s knowledge that the un-amended section 637 included a minimum flow requirement, but that more explicit provisions would be useful.)); Id. at 56-57 (W.H. Shelby, Superintendent of Hatcheries, stated, “One important matter relative to fishways should be
Commission’s discussion of the proposed legislation makes clear that the legislation sought to protect minimum flows, not merely require the dam owner to bypass some portion of the streams natural flow. For example, the Commission suggested that water be stored in upstream reservoirs to allow for sufficient flows during dry seasons and proposed a minimum flow of ten percent of the average annual flow of the stream be passed through the dam at all times. This distinction is significant; if the minimum flow requirement were instead a requirement only that dam owners bypass some natural inflows, then dry seasons or years could still result in dry streambeds below dams. In contrast, a minimum flow requirement ensures water for fish, even in dry years or during dry seasons.

The 1915 legislature embraced the Commission’s request, amending section 637 to require that enough water flow through each fishway to maintain below-dam fish in good condition. The new provision provided that "the owners or occupants of any dam or artificial obstruction shall allow sufficient water at all times to pass through such fishway to keep in good condition any fish that may be planted or exist below said dam or obstruction;" the provision may be read to apply only to those dams where the Commission ordered a fishway. The 1915 Act also permitted dam owners, during times of low stream flow, to pass water through conduits other than a fishway. This exception indicated the legislature's willingness to exempt dam owners taken up by the next legislature, and an act passed to compel the owners of fish ladders to allow sufficient water to pass through their fishways at all times to allow the fish a free passage through the ladders as well as to support the fish life below the dams during the minimum flow of water. It is useless to construct fishways if there is not to be sufficient water in the streams below the dams to keep the fish alive during the minimum flow in the summer and fall.

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55 Id. at 77.

56 An Act to amend section six hundred thirty-seven of the Penal Code, providing for the construction and maintenance of fishways over or around dams and artificial obstructions, 1915 Cal. Stats. 820 [hereafter 1915 Flow Act]. In 1933, the legislature created a fish and game code from Penal Code section 637 and other statutes. 1933 Cal. Stats. 394. CAL. PENAL CODE § 637 became CAL. FISH & GAME CODE § 525 (Deerings 1954). 1933 Cal. Stats. 443 (placing fishway requirement at section 525 of new Fish & Game Code). The Code sections were renumbered in 1957. CDFG, FORTY-FIFTH BIENNIAL REPORT, 1956-1958 10 (1958). For clarity, this Article uses the modern numbering for all references to the code sections after the creation of the Fish and Game Code in 1933. In 1957, the minimum flow requirement and low flow fishway use exemption became today's section 5937. CAL. FISH & GAME CODE § 5937 (West 1958) (stating in historical note that section 5937 was derived from former section 525).

57 Id.

58 The 1915 Flow Act required the Commissioners to “inspect dams and in all rivers and streams in this state naturally frequented by salmon, shad or other fish; and if, in their opinion, there is not free passage for fish over and around any dam or artificial obstruction, to notify the owners or occupants thereof, to provide the same.” 1915 Flow Act (emphasis added). Because this order was compulsory, id., any dam in a location that naturally had fish would be ordered to have fish passage. In contrast, the minimum flow requirement requires water flows, “to keep in good condition any fish that may be planted or exist below said dam or obstruction,” Id. (emphasis added) which presumably includes locations fish do not naturally frequent, perhaps those locations where the dam creates a fishery by changing the river’s hydrology.

59 The added provision stated:
from the fish passage objective of section 637 when it became impractical, while also indicating the legislature's unwillingness to exempt dam owners from the minimum flow requirement in periods of low flow. The purpose and language of the statute anticipates that a dam owner's obligation to below-dam fish may at times exceed the quantity of water reaching the dam, in keeping with the Commission's request for a minimum flow requirement, not merely a bypass requirement.

In 1917, the legislature amended the code to allow construction of a hatchery instead of a fishway, if the Commission determined that the dam's height made fishway construction impracticable. The new fish passage law did not explicitly address the application of the minimum flow requirement to dams that were exempted from the fish passage requirement, so the code amendment might be read to excuse such dam owners from the minimum flow requirement. This reading is incorrect. The hatchery exemption was written with a focus on providing continuing fishing opportunities in spite of the lack of fish passage, so the intent of the law argues against an implicit exemption to minimum flow requirements for dams without fish passage. For example, the dam owner was required to construct a hatchery of sufficient size “to

Provided, further, that during the minimum flow of water in any river or stream permission may be granted by the state board of fish and game commissioners to allow the owners or occupants of any dam or artificial obstruction to allow sufficient water to pass through a culvert, waste gate, or over or around the dam, to keep in good condition any fish that may be planted or exist below said dam or artificial obstruction, when in the judgment of the state board of fish and game commissioners it is impractical to pass the water through the fishway to the detriment of the owner or occupant thereof . . . .

Id.

STATE OF CALIFORNIA FISH AND GAME COMMISSION, supra note 53, at 33. A.D. Ferguson, Assistant Commissioner, discussed the dam owner’s ability to store water in a reservoir such that there would be enough water to pass a minimum flow during dry periods.

The statute requires “sufficient water at all times to pass through . . . .” and goes on to spell out the method for passing water in dry conditions. 1915 Flow Act. No drought exception is included in the statute. Id. The term “pass” does not imply “bypass;” both terms were used at the time, and “pass” was used for the general movement of water through structures, while in contrast “bypass” indicated allowing the natural flow to pass by a structure. Compare DWR Decision No. D-100, Cal. Dept. of Public Works, DWR, 1926 Cal. Env. Lexis 7, *92 (1926) (discussing waters that would be stored for a period of time before the dam owner could “pass them through the lower power house”) (emphasis added) to DWR Decision No. D-298, Cal. Dept. of Public Works, DWR, 1931 Cal. Env. Lexis 4, *6 (1931) (permits for water storage conditioned on a water bypass requirement tied to the volume of natural flow in the stream at a given time). Had the legislature intended only to require dam owners to bypass a portion of the natural inflow at any given time, it could, and would, have written the law differently.

An Act to Amend Section Six Hundred Thirty-seven of the Penal Code, Relating to Fishways, 1917 Cal. Stats. 1524; The 1916 Biennial report noted some problems with the fish passage laws as then written, in light of the difficulty in building functional fish ladders over high dams. Per the Commission’s request for new legislation, the added language stated: "Whenever in the opinion of the state fish and game commission it shall be impracticable, because of the height of any dam...to construct a fishway...the fish and game commission may order in lieu of said fishway...a hatchery...[which] shall not be of a size greater than necessary to supply the said stream or river with a reasonable number of fish." STATE OF CALIFORNIA FISH AND GAME COMMISSION, TWENTY-FOURTH BIENNIAL REPORT FOR THE YEARS 1914-1916 78 (1916); 1917 Cal. Stats. 1524.

1917 Cal. Stats. 1524.
supply the said stream or river with a reasonable number of . . . fish,” and to provide the land, water, and sometimes power, for the hatchery, free of charge. In the alternative, the Commission could simply order the owner to plant fish, and then “sell, at cost to it, to such owners or occupants of such dam or other artificial obstruction, the young of fish ordered to he planted in such stream or river.” Planting hatchery fish below the dam would be, at best, an exercise in futility without minimum flow protections. Providing water for downstream fish remained an expectation of all dam owners, fishways or no.

**B. Early Enforcement of the Minimum Flow Requirement**

While this early history of the minimum flow requirement reveals a legislature increasingly concerned with ensuring minimum flows for fish, reports from the Commission reveal a lack of enforcement amidst a growing crisis. After calling for the minimum flow requirements in the 1914 Biennial Report, the Commission noted passage of the requirement in 1915 in its new quarterly magazine, California Fish and Game, so the Commission was certainly aware of its existence. However, the biennial reports from the years after the act’s passage are rife with discussion of the impact of low flows on fish, yet make no mention of successful (or even unsuccessful) enforcement of 5937. The Commission actively enforced other fish and game codes and reported on their enforcement in the Biennial Reports, so the omission is perplexing.

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64 Id.

65 Id.

66 STATE OF CALIFORNIA FISH AND GAME COMMISSION, supra note 54, at 78.

67 California Fish and Game Commission, Quarterly Report, 1 CAL. FISH & GAME 173 (1915) (noting amendment of section 637 of the California Penal Code. “It provides for a sufficient flow of water through the fishway or through or around the dam to allow for the passage of fish or to prevent the destruction of fish below the dam by cutting off the entire flow of water.”).

68 See, e.g., STATE OF CALIFORNIA FISH AND GAME COMMISSION, TWENTY-FIFTH BIENNIAL REPORT FOR THE YEARS 1916-1918 36 (1918) (noting low flows on the Eel River, in a location downstream of the Van Arsdal Dam. The dam was completed in 1907. CALIFORNIA DEPARTMENT OF WATER RESOURCES, DIVISION OF DAM SAFETY, DAMS WITHIN THE JURISDICTION OF THE STATE OF CALIFORNIA 73 (2011), http://www.water.ca.gov/damsafety/docs/Juris(T-Z)1.pdf); STATE OF CALIFORNIA FISH AND GAME COMMISSION, TWENTY-SIXTH BIENNIAL REPORT FOR THE YEARS 1918-1920 19-21 (1920) (noting the low water in the Eel river preventing fish from entering spawning ground, noting drying up due to diversions on the Sacramento River near Redding, and on the San Joaquin River at the Kerckhoff Dam); and STATE OF CALIFORNIA FISH AND GAME COMMISSION, TWENTY-SEVENTH BIENNIAL REPORT FOR THE YEARS 1920-1922 84 (1922) (report from the legal department noting continuing problems getting water appropriations for fish).

69 For example, the Fish Commission took an active enforcement role on fish passage and fish screening. It began reporting on its efforts to do so as early as 1875, in its Biennial Reports. COMMISSIONERS OF FISHERIES OF THE STATE OF CALIFORNIA, REPORT OF THE COMMISSIONERS OF FISHERIES OF THE STATE OF CALIFORNIA FOR THE YEARS 1874 AND 1875 14 (1875). The Commission reported initiating suits in 1879 and in many years thereafter to enforce the fishways requirement. See, e.g., COMMISSIONERS OF FISHERIES OF THE STATE OF CALIFORNIA, REPORT OF THE COMMISSIONERS OF FISHERIES OF THE STATE OF CALIFORNIA FOR THE YEARS 1878 AND 1879 15 (1879); COMMISSIONERS OF FISHERIES OF THE STATE OF CALIFORNIA, REPORT OF THE COMMISSIONERS OF FISHERIES OF THE
As early as 1920, the Commission was again calling for legislation requiring instream flows, seemingly ignoring the law passed a mere 5 years prior. The Legal Department in 1920 stated:

The appropriation of the river waters of the State of California for irrigation and power purposes and the erection of large dams for impounding purposes has become a serious menace to the run of fish unless laws are enacted or means can be adopted whereby the corporations taking water from these rivers can be compelled to permit sufficient water to pass down the natural channel of the rivers, in question, at all times sufficient to sustain fish life, the fun of fish will be ultimately exterminated and that shortly [sic].

The Commission reiterated this plea in 1924, requesting, “Legislation requiring sufficient flow of water in a stream to maintain fish life.”

It is difficult to understand how the Commission moved from requesting minimum flow legislation, to getting that legislation, to not enforcing the legislation, and then back to requesting new legislation. Certainly, the Commission believed that much of the enforcement of fish and game laws was the responsibility of the district attorney where the alleged infraction occurred, and the Commission noted that the district attorneys sometimes failed to pursue these cases, particularly in cases related to fish passage and fish screens. But the Commission did directly
enforce some violations of the fish and game laws and could have undertaken minimum flow litigation. Moreover, in other reports, the Commission acknowledged their lack of enforcement of the minimum flow law. For reasons unknown, the Commission failed to enforce the minimum flow requirements it had requested, even while reporting on the dire impacts of low flows on California’s fish resources.

73 The Biennial Reports each contain a list of prosecutions, generally at the end of the report, although they do not indicate who undertook the prosecutions. See, e.g. STATE OF CALIFORNIA FISH AND GAME COMMISSION, 1920 BIENNIAL REPORT, supra note 68, at 137. As early as 1879, the Commission was hiring attorneys to prosecute fishway cases. COMMISSIONERS, 1880 REPORT, supra note 69, at 67 (recording payment on Nov. 23, 1879 to “Cowdery and Preston, attys, in suits fishways, Stanislaus and Merced, $23.00.”). See also 1928 Biennial Report at 26 (noting that the Commission does undertake some litigation while generally relying on District Attorneys.). The Report of the Legal Department in 1928 discussed the Commission’s responsibility for litigation related to fishways, and its resume of cases lists several fish ladder suits. DIVISION OF FISH AND GAME, supra note 72, at 123, 124-127.

74 STATE OF CALIFORNIA FISH AND GAME COMMISSION, TWENTY-EIGHTH BIENNIAL REPORT FOR THE YEARS 1922-1924 47 (1924) (“A great many owners of water rights have refused to allow any water to pass through the fishways, closing them entirely in defiance of the law which provides that sufficient water must be allowed to pass through fishways at all times to keep in good condition any fish life that may exist below the dam, and that during the minimum flow of water in any river or stream sufficient water must be allowed to pass each dam, culvert, or waste gate to maintain fish life. This provision of the law has been disregarded by a great many persons and corporations who do not consider that the fish destroyed are equal in value to the value of the water for other purposes. Such a small amount of water is necessary to maintain fish life below these dams that this law should be enforced strictly. If the provisions of this law are not drastic enough to compel persons who are diverting water from our rivers and streams to allow sufficient water to remain in the beds of the streams to maintain fish life, the law should be amended by the next legislature so as to maintain fish life. This is only fair to people who are interested in the preservation of fish and enjoy the fishing that these streams afford.”). It is difficult to ascertain if “the provisions of this law [were] not drastic enough to compel” compliance, given that the provisions were not enforced.
III. IMPEDIMENTS TO ENFORCEMENT OF THE MINIMUM FLOW REQUIREMENT

While enforcement of 5937 may have been partially limited by budgetary constraints or a lack of personnel, the primary factors appear to have been the concurrent emergence of California’s system of water law and the growth of the federal water projects in California. The first presented roadblocks to the Fish Commission’s application of 5937, while the latter raised concerns about the applicability of 5937 to federal dams.

A. California’s Water Law

Early California water law incorporated multiple water law systems, leading to a confusing mix of water rights. Before California was admitted to the United States, its legislature adopted the common law of England, including the English rule of riparian rights. But as the legislature was importing the English approach, California miners pioneered a new approach, allocating water based on prior appropriation. The California legislature then endorsed the miners’ approach just a year after the wholesale import of English common law, without rejecting riparianism. The adoption of two systems left the development of California water law to the courts, which generally endorsed a prior appropriation doctrine based on “first in time, first in right.” However, the courts maintained riparianism as a viable doctrine as well, and the two-system approach led to uncertainty, which limited development of some water resources.

75 The Commission often discussed its lack of funds. See, e.g., TWENTY-FIRST BIENNIAL REPORT OF THE BOARD OF FISH AND GAME COMMISSIONERS OF THE STATE OF CALIFORNIA FOR THE YEARS 1909-1910 5 (1910) (the Commission lacked funds to print the 1908 report in 1908 and so included it as an appendix to the 1910 report) and STATE OF CALIFORNIA, DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FISH AND GAME, THIRTY-SECOND BIENNIAL REPORT, FOR THE YEARS 1930-1932 34 (1932) (noting long term budget and personnel challenges in the Hydraulics Department, which oversaw fishway matters).


77 Attwater & Markle, supra note 76, at 962. In prior appropriation, those perfecting their right first hold a right superior to those who secure their appropriative right at a later date. Id.

78 Id. at 962.

79 Irwin v. Shaw, 5 Cal. 140, 147 (1855) (explaining the importance of prior appropriation and endorsing the “first in time, first in right” approach, using the Latin, “qui prior est in tempore potior est in jure.” Over the next 31 years, the California courts laid the foundations of the prior appropriation doctrine, creating an appropriation based on three elements: “1) intent to apply water to a beneficial use; 2) physical diversion of water from the natural channel, or assumption of control and 3) an actual application of water to a beneficial use.” Gregory A. Thomas, Conserving Aquatic Biodiversity: A Critical Comparison of Legal Tools for Augmenting Streamflows in California, 15 STAN. ENVTL. L. J. 3, 13 (1996).

80 Although the legislature created a Civil Code provision in 1872 that offered a statutory method to establish water rights, but the provision was based on the common law and was not exclusive. The common law approach remained at the forefront of early California water rights. Attwater & Markle, supra note 76, at 966-967 & 969-970. The common law approach, centered on the prior appropriation doctrine, controlled water rights in California until 1886,
In 1911, buoyed by populist sentiment, the California legislature established a “Conservation Commission of the State of California” (Conservation Commission) to improve utilization of the state’s water resources. The Conservation Commission expressed concern about the inability of water appropriators to secure defensible water rights in the face of potential, as yet unasserted riparian rights. Seeking to dispel this uncertainty, the Conservation Commission called for a water rights permit system, and in 1913 the legislature responded with the passage of the Water Commission Act. The Act’s impacts were myriad, but two aspects of the Act in particular affected early implementation of 5937: the limits on water use and the requirements established for appropriation.

1. Riparians, Reasonableness and the Constitutional Amendment

To guarantee water would be available for appropriation, the Act's section 42 limited water use to particular quantities, varying by use. Herminghaus tested Section 42’s explicit limits on riparian rights, when Herminghaus, a riparian, asserted that she was not bound by the quantities established in the Act and was entitled to the unimpaired flood flows of the San Joaquin to irrigate a field. The California Supreme Court held for Herminghaus, concluding that a downstream riparian was constitutionally entitled to as much water as she desired, and that upstream appropriators could not store the flood flows for later use. The majority reasoned that when riparianism unexpectedly roared back onto the legal landscape. In Lux v. Haggin, Lux v. Haggin, 69 Cal. 255 (1886), the state's Supreme Court revived the riparian approach and established riparian rights as paramount. Attwater & Markle, supra note 76, at 970-71. Riparian rights took precedence over appropriative rights, were not lost by nonuse, and were not subject to the common law requirement of beneficial use. Id. This catapulted riparian rights to the front of the water-rights line: the date used to establish the priority of a riparian right was the federal patent date on their riparian lands (generally making them senior), the riparian right could not be limited by an appropriator, the amount of water each riparian could demand did not appear to be limited and courts' recognition of constitutional protection for riparian rights indicated that no legislative limitation on riparianism could survive. Lux v. Haggin, 69 Cal. 255, 368 (Owners of riparian rights "are protected by constitutional principles."). Leftover water, water not used by the riparians, was subject to appropriation via the common law or civil code approach, under the existing prior appropriation doctrine, but those appropriations were not protected against riparians who had not yet asserted their rights, creating a measure of uncertainty for all nonriparian water appropriators. Attwater & Markle, supra note 76, at 970-71.

81 Attwater & Markle, supra note 76, at 971.


83 Water Commission Act, 1913 Cal. Stats. 1012.

84 For example, it only allowed use of two and one-half acre-feet of water per acre of land not devoted to cultivated crops. Id.

85 Herminghaus, a riparian landowner, demanded the unrestrained flood flows of the San Joaquin River to irrigate livestock grazing lands. This demand required more water than the Water Commission Act's limit and prevented an upstream appropriator from storing the San Joaquin’s floodwaters for later hydroelectric power generation. She contended that the legislature could not restrict her riparian right, while the upstream appropriator argued that the legislature could place a reasonable limit on the amount of water Herminghaus could demand. Herminghaus v. Southern Cal. Edison Co., 200 Cal. 81 (1926).
California adopted riparianism at statehood and was obligated to implement the doctrine, notwithstanding the legislature's recognition of prior appropriation. The lesson was clear. The legislature could not define what constituted a reasonable use of water if the definition limited the common law's version of the riparian right, recognized in the state's constitution.

To free itself from the constraints of vested riparian rights, the legislature placed a constitutional amendment on the 1928 state ballot. The amendment imposed conditions of reasonableness and beneficial use on all water rights, and the people approved the proposed amendment, now Article X, section 2 of the California Constitution. The amendment also allows the legislature to “enact laws in the furtherance of the policy in [the] section,” implying that the legislature has the power to determine what constitutes a reasonable, beneficial use of water.

The amendment impacted 5937 in two ways. First, the use of water for minimum fish flows must adhere to the reasonable, beneficial requirements. Second, legislative determinations of reasonable and beneficial uses created some confusion around the implementation of 5937. As early as 1921, the legislature declared water for domestic use the highest beneficial use and water for irrigation the second highest beneficial use. In 1940, the State Engineer erroneously interpreted declaration to preclude other beneficial uses if any domestic use remained in need of water. However, while the policy statements guide determination of the most reasonable beneficial use of water, they do not function as exclusive directives for water use. As the Water Code notes, "The declaration of policy of the State in this chapter is not exclusive, and all other or further declarations of policy in the code shall be given their full force and effect." While a

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86 Id. See also Attwater & Markle, supra note 76, at 979.
87 CAL. CONST. art. X, § 2, codified at CAL. WATER CODE § 100 (West 2010) (requiring that all water use must be reasonable and beneficial).
88 Attwater & Markle, supra note 76, at 979.
89 CAL. CONST. art. X, § 2 (“This section shall be self-executing, and the legislature may also enact laws in the furtherance of the policy in this section contained.”).
90 1921 Cal. Stats. 443. See also CAL. WATER CODE § 106 (West 2010).
91 See National Audubon Society v. Superior Court, 33 Cal. 3d 419, 424 (1983) (stating that since a Los Angeles application proposed to put Mono Basin water to a domestic use, the Division of Water Resources believed it could not consider consequent effects on aesthetic and recreational values). The Audubon Court noted that this was inconsistent; in another situation where Los Angeles planned to use water for hydropower, the Division of Water Resources was willing to protect recreational uses. Id. at fn. 8
92 CAL. WATER CODE § 107 (West 2010). See also Code Commission Notes, CAL. WATER CODE § 107 (West 1971) (explaining that § 107 constitutes a savings clause); 13 Op. Cal. Att'y Gen. 188 (1949) (finding § 107 modifies § 106 to the extent that the policies of §106 are not exclusive and other declarations of policy are to be afforded full force and effect). The instream use of water for fish is also a beneficial use, as determined by the legislature, the executive branch, and the courts. CAL. WATER CODE § 1253 (West 2010)(stating the use of water for fish is a beneficial use of water); 13 Ops. Cal. Att'y Gen. 188, 189 (1949) (inferring from section 5937 and its predecessors, as well as other
relatively low bar, the reasonableness and beneficial determinations are a cornerstone of state water law. In 1957, under the Constitutional amendment, the legislature delegated to a new State Water Rights Board (Water Board) considerable authority to make reasonableness determinations for it by balancing the interests of beneficial uses. Courts may also conduct balancing tests and make a reasonableness determination, and for both bodies the determination is a question of fact based on the circumstances of a particular case. The legislature is able to limit Water Board and court authority to balance the needs of competing beneficial uses and has determined that water for fish is a beneficial use.

2. Acquisition of Water Rights

The Act also declared all California water the property of the state, but established that “the right to the use of water may be acquired by appropriation in the manner provided by law.” The “manner provided by law” required permitting by the Water Board, but, more fundamentally, still required three common law elements of prior appropriation, including physical diversion of the water by the user. As another commentator points out, this physical control requirement means that appropriations cannot protect instream flows, in that instream flows are not under anyone’s physical control. Thus 5937 cannot be enforced by appropriation of legislative enactments, that water for fish is a beneficial use of water); and, e.g., City of Elsinore v. Temescal Water Co., 36 Cal. Ct. App. 2d 116, 119, 129-130 (1939).

93 Only rarely do water uses fail the beneficial use test. See, e.g., Tulare Irr. Dist. v. Lindsay-Strathmore Irrigation Dist. 45 P.2d 972, 107 (1935) (water used to drown gophers and squirrels not a beneficial use).

94 Following the convention in National Audubon, “For convenience we shall refer to the state agency with authority to grant appropriative rights as the Water Board or the board, without regard to the various names which this agency has borne since it was first created in 1913.” National Audubon Society v. Superior Court, 33 Cal. 3d 419, 424, footnote 1 (1983).

95 National Audubon, 33 Cal. 3d at 433-44 (1983). See also CAL. WATER CODE § 1257 (West 2010).

96 Today, the California courts share jurisdiction with the Water Board to make reasonableness determinations. Environmental Defense Fund v. East Bay Municipal Water District, 26 Cal.3d 183, 193 (1980).


98 California Trout v. Superior Court [hereafter CalTrout II], 266 Cal. Rptr. 788, 795-796 (Ct. App. 1990) (noting that the legislature has taken the balancing power from the Board, and, implicitly, the court in its concurrent jurisdiction, through the passage of CAL. FISH & GAME CODE § 5946 (West 2010), which requires application of 5937 in certain districts.).

99 Id. See also CAL. FISH & GAME CODE § 5937 (West 2010), set forth in note 19 supra.

100 CAL. WATER CODE § 102 (West 2010).

101 Thomas, supra note 79, at 12-14.
water for instream flows. Unable to appropriate water to be left in the river, the Fish Commission seemed at a loss as to how to require instream flows within the emerging water law framework.

B. Early Water Board Hearings

The Fish Commission never explicitly stated that the developing water law formed the basis for its perceived inability “to stand firm on a legalized foundation” with 5937, but the Biennial Reports indicate this was the case. The Fish Commission seems to have been at a loss as to how to compel water appropriators to allow sufficient flows for fish, beyond the imposition of criminal penalties, and also seems to have been unable to compel the water commission to cooperate in achieving compliance with 5937. A brief review of early actions by the Commission in front of the Water Board strongly supports this interpretation.

The first Commission protest to a water appropriation application came in 1926, when the Commission protested Application 4768, an application to appropriate water from the South Eel River in Lake and Mendocino Counties. The Water Board shrugged off the protest, stating that the granting of the permit did not prevent the Commission from otherwise enforcing the law.

The Commission appeared before the water board again two years later, presenting a more forceful case and provoking a much harsher response. In 1928, appropriators sought water from Ward Creek and one of its tributaries in Placer County, California. The Division of Fish and Game protested, this time asserting (1) a claim on the water itself “based upon claimed prior rights and use of the waters of Ward Creek for fish propagation and fish passage down stream to

102 Thomas, supra note 79, at 14, citing Fullerton v. State Water Resources Control Board, 153 Cal. Rptr. 518 (Ct. App. 1979). (“The requirement of physical diversion or assumption of control is at the heart of this problem. The asymmetry [between instream uses and other water uses] is obvious because instream uses by definition do not involve diversion or control of water. They are, therefore, ineligible for legal protection against the claims of appropriative users.”)

103 Brian Curtis, Editorial, 31 CAL. FISH & GAME 73, 73 (1945) (after quoting Section 525, notes, “It has been impossible in practice to demand a fulfillment of the requirements of the law as worded, and the Fish and Game Commission, unable to stand firm on a legalized foundation, has had to fight for small releases of water to maintain at least some semblance of a fishery.”).

104 STATE OF CALIFORNIA FISH AND GAME COMMISSION, supra note 74, at 47 (Criminal fines were insufficient (or insufficiently enforced) to achieve compliance.).

105 DWR Decision No. D-179, California Dept. of Public Works, DWR, 1928 Cal. Env. Lexis 2, *20-*21 (1928). The Board stated:

The authority of the Fish and Game Commission under Section 637 of the Penal Code to protect fish life can in no way be prejudiced or restricted by any action that this office may take on the pending applications. The matter of fish protection is vented in the Fish and Game Commission as declared by the legislature.

Lake Tahoe,”\(^\text{107}\) (2) a claim based on the Commission’s authorization “to protect fish as provided in Section 642 of the Political Code,”\(^\text{108}\) and (3) a claim that the appropriation of all of a river’s water “is against public policy and constitutes a nuisance in that it will destroy the property of the people in fish.”\(^\text{109}\)

The Water Board was not impressed. On the first claim, that the Commission had a prior right to the water for hatchery operations and for minimum flows for the fish, the Board hewed to the common law requirement of control, and dismissed the claim: \(^\text{110}\)

\[
\text{[T]he facts herein go to the point whether or not a planting of fish in a stream constitutes an appropriation thereof and we can find no cases wherein any such act has been held an appropriation (a taking) of water for beneficial use. The Division of Fish and Game has not diverted or controlled the waters in question or applied them to use and said waters have continued to flow as in a course of nature they have been wont to do from time immemorial.}
\]

Based on the lack of diversion, the Board refused to allow the Commission a prior claim on the water. The Commission pressed on, arguing the State’s recognition of the importance of fish and game resources should allow the conservation of instream flows,\(^\text{111}\) but the Board rejected this second argument out of hand:

\[
\text{[N]o laws of the legislature . . . are set forth which authorize the reservation of stream from appropriation for fish protection and propagation and wherein this legislative authorization declares any such power to exist in the discretion of the Division of Fish and Game is not apparent.}
\]

The Board continued:\(^\text{113}\)

\[
\text{Whether or not the Division of Fish and Game has a legal right to the maintenance of a stream intact for fish passage as against would be}
\]

\(^{107}\) Id. at 10.

\(^{108}\) Id. at 11.

\(^{109}\) Id. at 16-17.

\(^{110}\) Id. at 15.

\(^{111}\) Id. at 15-16.

\(^{112}\) Id. at 16.

\(^{113}\) Id. at 11.
appropriators is considered very doubtful. The Water Commission Act does not provide for a dedication of waters for fish passage or in any wise indicate that waters shall be withheld from appropriation in order to supply fish with a medium of travel.

Then the Board cited to Section 637 of the Penal Code, but took the facially implausible position that the Code only allowed the Commission to respond to dams by requiring hatcheries, not minimum flows. It argued:

Certainly such provisions of law do not declare and are not tantamount to declarations that the maintenance of rights of way for fish migration shall be of paramount importance and that appropriations of water to beneficial uses shall be subject thereto and shall be denied if they interfere therewith.

Finally, on the third claim, that appropriating water in such a manner as to dry up stream was against public policy, the Board shot back a broadside:

A sufficient answer to all of these contentions is that historically the doctrine of free appropriation of unappropriated waters is not ante-dated by fish protection provisions and no statutes or constitutional provisions of this state have been pointed to or found which may be reasonably construed as even implying that water appropriations aim to be denied in favor of fish protection.

While this sentiment was patently false, it appeared enough to carry the day. The board concluded its review of the Commission’s protest as a whole by stating, “It is therefore concluded that the Division of Water Rights has not the authority to deny appropriations upon the mere basis that fish life will be imperiled.” There appears to have been no appeal from this decision.

In August 1931, in response to applications for water from Scott Creek in Santa Cruz County, the Commission again protested “on the ground that any diversion made by the applicant would materially affect, if not destroy, the run of Steelhead trout in Scott Creek.” The Water Board, after a preliminary discussion about the unreasonableness of instream flows for fish as a water use, used much of the language from the previous decision verbatim, again

114 Id. at 12.
115 Id. at 17.
116 Id. at 20.
rebuffing the Commission’s attempt to implement the minimum flow laws.\textsuperscript{118} And again, the Commission appears not to have appealed the decision. In fact, no further appearances of the Commission occur in the water board published decisions until Feb. 1948, almost 17 years later.\textsuperscript{119} The Commission appears to have received the message, loud and clear: the Water Board would not protect the state’s fish.

Even when the Commission was not appearing in front of the Board, the Board actively thwarted application of the minimum flow law. In 1941, the Board reviewed an application to appropriate water from Gerle Creek in El Dorado County.\textsuperscript{120} The United States, specifically El Dorado National Forest, sought a diversion from Gerle Creek, but Georgetown Divide Water Company claimed longstanding appropriative rights to the whole flow of Gerle Creek.\textsuperscript{121} The Company left approximately 1 cfs of water in the stream at its diversion dam, in part because it “seems necessary to sustain fish life in Gerle Creek below the dam.” The Water Board treated this assertion with nothing short of derision:\textsuperscript{122}

> Although protestant company considers it necessary to pass some water through the dam in order to support fish life, there is nothing in the record to indicate that such a demand has been placed upon it by the Division of Fish and Game. As a matter of fact there is only about a mile and a half of stream bed between the lower diversion dam and the junction of Gerle Creek with the South Fork of the Rubicon and even should the creek bed below the dam be completely dried up by the combined operations of both the applicant and protestant company we do not believe that this in itself would constitute an adequate reason for denying the appropriation.

While the application itself was only for a small portion of that water, the Board went out of its way to indicate that all of the water was there for the taking, even that portion the company chose to “waste” on the fish:

\textsuperscript{118} Id. at *13-*22.

\textsuperscript{119} DWR Decision No. D-573, California Dept. of Public Works, Div. of Water Res., 1948 Cal. Env. L. 6, *2-*3 (1948). A lexis search of Water Board decisions for “fish” between 9/1/1931 and 2/1/1948 had 17 hits, and two of those results list the Fish Commission (or its progeny) as protestors. In both cases, the protest was based on the Commission’s use of water in the stream for hatchery, domestic, or other appropriative purposes, not for instream flow protection. DWR Decision No. D-393, California Dept. of Public Works, DWR, 1936 Cal. Env. L. 8 (1936); DWR Decision No. D-534, California Dept. of Public Works, DWR, 1946 Cal. Env. L. 7 (1946).

\textsuperscript{120} DWR Decision No. D-482, California Dept. of Public Works, Div. of Water Res., 1941 Cal. Env. L. 9, *4-*6 (1941).

\textsuperscript{121} Id. at 2.

\textsuperscript{122} Id. at 5. What the Water Board would have done had the Fish Commission exercised its authority under 5937 to explicitly require these flows in Gerle Creek remains unclear.
[W]ater is passing the lower diversion dam of the protestant company which is not being applied to any useful or beneficial purpose by that company and therefore it is subject to appropriation under the Water Commission Act.

By attempting to comply with the minimum flow law, the Company lost part of its own water right, and the Board ensured that the water would not be available for the benefit of the fish.

From 1923 through 1950, the CDFG only protested 13 applications for appropriations published by the board; while they may have appeared in additional early hearings not captured in the electronic record, their appearance on only 13 of the of applications speaks to the level of enforcement from CDFG. Moreover, CDFG’s own records bear this out. CDFG clearly felt at a loss to force the Water Board’s hand, calling repeatedly for a legislative fix. In 1933, the Commission lost its legal department to the Attorney General, who also represented the Water Board, further complicating enforcement. The administrative battle between the CDFG and the Water Board finally came to a head over Friant Dam, a cornerstone of the Federal Central Valley Project (CVP), but understanding that struggle requires some background on the application of minimum flow requirements to federal dams in California.

C. Growing Federal Concerns

123 State of California Fish and Game Commission, 1920 Biennial Report, supra note 68, at 53:

“We respectfully recommend that an act be passed by the coming session of the Legislature that will arrange for the coordination and cooperation of the Water Commission with the Fish and Game Commission in regard to appropriated waters. It should be understood and agreed that the fish in certain streams of the state be allowed water enough to survive during the minimum flow of late summer and fall.

The State Water Commission should be authorized to force all applicants for water appropriations to comply with the law regarding fishways before accepting any plans for diversion of the water. The applicant for water rights should have the plan of the fishway made and approved by the Fish and Game Commission strictly in conformity with the law before granting applicants the right to appropriate water from any river or stream.”

State of California Fish and Game Commission, 1922 Biennial Report, supra note 68, at 60:

The Water Commission or the Division of Water Rights has allowed the appropriation of the entire flow of streams without any consideration being given to the fishing interests. Those interested in conservation are indifferent to these vital problems. After the water is all appropriated and the streams are dried up below the diversion points, then they complain that the Fish and Game Commission has not done their duty. We have repeatedly made recommendations that are for the best interests of all the people, but they are unheeded.”

See also State of California Fish and Game Commission, supra note 74, at 20-21, 24.

124 State of California, Department of Natural Resources, Division of Fish and Game, Thirty-Third Biennial Report, for the Years 1932-1934 15 (1934).
In the 1931 case *California v. Arizona*, the U.S. Supreme Court held that federally approved dams need not comply with state dam construction rules. In mid 1937, the Department of Fish & Game requested an opinion on the applicability of the fishway and hatchery requirements to federal dams, and the Attorney General confirmed that *California v. Arizona* precluded the state from enforcing the fishway or hatchery requirements against federal dams. Because of the relationship between the fishway requirement and the minimum flow requirement, the exemption created ambiguity for the minimum flow requirement. The issue came to a head in 1937, as the federal government undertook construction on the state-conceived, federally funded Central Valley Project (CVP), a massive new system of waterworks that would block fish passage on rivers of great importance to anadromous fish. As the Commission began its study of impacts of the CVP on fish, the California legislature moved to clarify that 5937 applied to the federal dams. In 1937, Senator Metzger introduced an

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126 *Id.* at 452. "If Congress has the power to authorize the construction of the dam and reservoir [the Secretary] is under no obligation to submit the plans and specifications to the state engineer for approval." *Id.* (emphasis added).


128 *Id.* at 2. The opinion also determined that the state had indirectly exempted federal dams from the fishway requirement two years before *California v. Arizona*, because the fishway hearing requirement referred to the Dam Supervision Law, passed in 1929 in response to Los Angeles' St. Francis Dam disaster. 1929 Cal. Stats. 1505; WILMAI L. KAHRtl, WATER AND POWER 313 (1982). The Dam Supervision Law itself explicitly exempted the United States from any dam construction oversight, which the AG determined included the fishway requirement. 1929 Cal. Stats. 1505, as amended by 1933 Cal. Stats. 2148.


130 CALIFORNIA DIVISION OF FISH AND GAME, THIRTY-SIXTH BIENNIAL REPORT, *supra* note 129, at 45-46 (describing the Central Valley Water Project Study investigations of the effect of the Central Valley Water Project).

131 Senator D. Jack Metzger stood among the state legislators most interested in requiring federal dams to allow minimum flows to keep fish in good condition. Senator Metzger, a Republican and agriculturalist, represented Tehema, Colusa and Glenn Counties, and concurrently served as the Mayor of Red Bluff, CALIFORNIA SECRETARY OF STATE, CALIFORNIA BLUE BOOK AND STATE ROSTER 33 (1938), all of which are riparian to the Sacramento River and downstream from the proposed Shasta Dam. CALIFORNIA DIVISION OF FISH AND GAME, THIRTY-SEVENTH BIENNIAL REPORT, *supra* note 129, at 8. Metzger saw the CVP as a means to establishing Red Bluff as a metropolis of the Central Valley. He saw the project as ensuring navigation of the Sacramento River to Red Bluff and as capable of supporting lumber and other industries. STEPHEN P. SAYLES, CLAIR ENGLE: THE FORMATIVE YEARS 292 (1973). The Metzger-owned tavern in Red Bluff was named the Kennett Dam, the original name for today's Shasta Dam. *Id.* at 299. As a Mayor and Senator, Metzger consistently advanced projects directly benefiting his constituents. *Id.* at 288-292, 294-295. While Metzger was a strong supporter of the CVP, if Shasta Dam was excused from the minimum flow requirement, the harm to the river-based economy that he represented would be substantial.
Amendment that severed the minimum flow requirement from the fishway requirement. Senator Metzger's amendment, passed by unanimous votes in both houses of the legislature, ended any possibility that a dam owner could be indirectly exempted from the minimum flow requirement when a fishway was not required and clearly indicated the state's intent that the federal government comply with the minimum flow requirement.

The Legislature also furthered fish protection with several additional acts in the mid 1940s. In 1943, the legislature added Water Code section 6500 and 6501, requiring notification of the Fish and Game Commission of any “application for approval of plans and specifications for a new dam, or for the enlargement of any dam, in any stream in this State,” and clarifying that “[t]he provisions for the . . . protection and preservation of fish in streams obstructed by dams are contained in . . . the Fish and Game Code.” In 1945, the legislature added the United States to Fish and Game Code section 5900(c)'s definition of dam owner but exempted the federal government from Fish and Game Code construction requirements. The 1945 Act also added Fish and Game Code section 5902, stating that the state understood the federal government would comply with state water law, and noting that, “provisions of this chapter provide a

132 Senator Metzger introduced the bill on January 22, 1937. The bill passed the State Senate on April 20, passed the State Assembly on May 24 and was signed by Governor Frank F. Merriam on June 19, 1937, S. Final Hist., 52d Reg. Sess. 269 (Cal. 1937), two weeks after publication of the Attorney General’s Opinion. 1937 Opinion at 1.

133 An Act to Amend Section 525 of the Fish and Game Code, Relating to Water Flow Through a Dam, 1937 Cal. Stats. 1400. The Senate Committee on Fish & Game revised the 1937 Act (SB 800) to clarify the low flow requirement. The amendment ensured that the "good condition" requirement applied to both dams with fishways and dams where a fishway was not required. Sen. Bill No. 800, 52d Reg. Sess. (1937). See also Sen. J., 52d Reg. Sess. (1937); Assembly J., 52d Reg. Sess. 3418 (1937).

134 CAL. WATER CODE § 6500 (West 2010):

Whenever an application for approval of plans and specifications for a new dam, or for the enlargement of any dam, in any stream in this State, is filed pursuant to Part 1 of this division, a copy of the application shall be filed with the Fish and Game Commission as required by the Fish and Game Code.

CAL. WATER CODE § 6501 (West 2010):

The provisions for the installation of fishways over or around dams and for the protection and preservation of fish in streams obstructed by dams are contained in Chapter 3 (commencing with Section 5900), Part 1, Division 6 of the Fish and Game Code.

135 1945 Cal. Stats. 2112.

136 Id. The exemption covers CAL. FISH & GAME CODE § 5931 (fishway requirement), CAL. FISH & GAME CODE § 5933 (fishway hearing requirement) and CAL. FISH & GAME CODE § 5938 (hatchery fishway exemption). The exemption also included CAL. FISH & GAME CODE § 5901 (former CAL. FISH & GAME CODE § 534 and pre-1933 CAL. PENAL CODE § 632a), a non-construction provision preventing any instream obstruction in certain Fish & Game districts. Id.
procedure for the United States to comply with the provisions and policy of state law respecting its subject matter.”

The 1945 provisions concluded 75 years of refinement to the original 1870 minimum flow requirement. The state's intent is unmistakable. The minimum flow requirement mandates below-dam flows by all dam owners, including federal entities, to the extent it is not superseded by federal law. In spite of this history of increasing legislative efforts to protect California’s fish, the Water Board’s continual refusal to enforce the law culminated in litigation over Friant Dam, on the San Joaquin River.

1. Rank v. Krug – San Joaquin River

In September 1947, 12 riparian land owners downstream of the Friant Dam site filed suit in state court, alleging the federal government’s decision to impound the full flow of the San Joaquin behind Friant Dam impinged the land owners’ water rights related to, among other claims, “the right of use for personal and public recreational purposes, such as boating and recreational fishing and the like” and “the right of use for spawning and fishing of salmon and other fish for both general commercial purposes and the general recreational purposes of the public.”

The latter position was clearly predicated on 5937, and the court held that 5937 could only be enforced by the State of California, which had not yet chosen to enforce it: “Whether or not any rights for fishing purposes are to be asserted to the flow of the river is up to the State

137 1945 Cal. Stats. 2112. CAL FISH & GAME CODE § 545 is now CAL FISH & GAME CODE § 5902 (West 2010). Section 5902 applies non-construction Fish and Game Code mandates such as the minimum flow requirement to federal dams, but in practice the applicability depends on the extent federal laws preempt state law, which varies by dam, as discussed in Part V. Section 5937 – State of the Law, below.

138 The 9th Circuit provided background material on Friant Dam:

The Friant dam unit of the CVP was built on the San Joaquin River by the Bureau in the 1940s. Prior to construction of the dam, the San Joaquin River met the Sacramento River at the Sacramento-San Joaquin Delta, where they then flowed out to the Pacific Ocean. Since the time that the dam was completed, the Friant unit has impounded the San Joaquin River water behind the Friant dam and diverted the water to surrounding irrigation districts. This impoundment and diversion leaves a dry stretch of San Joaquin riverbed.

NRDC v. Houston, 146 F.3d 1118, 1123 (9th Circ. 1998). The River supported Chinook salmon and myriad other fish species in its unaltered state. Id.


140 Rank v. Krug, 90 F. Supp. at 801 (“[T]he plaintiffs would still not be entitled, as parties in interest, to enforce maintenance of a flow for commercial or recreational fishing or spawning for the reason that the State of California, not only in the Water Code, but in the Fish and Game Code, has placed that responsibility upon public officials. The State of California has not intervened or attempted to intervene in this case, although it did file a brief, amicus curiae, in support of the plaintiffs’ position in respect to fish. However, on the date of the argument, a Deputy Attorney General of the State of California stated that the State was not yet ready to take a position and, in effect, disclaimed the brief amicus curiae previously filed.”)
of California and its appropriate officials. This opinion, while only at the federal district court level, appears to have foreclosed the option of private enforcement of 5937, at least until a later change in California standing law, discussed below.

Shortly after the court issued its April 13, 1950 opinion refusing the United States’ Motion to Dismiss, the state did take a position. Ralph W. Scott, the Deputy Attorney General who represented the interests of the Department of Fish and Game, argued the state’s motion to intervene on behalf of fish protection and sought a preliminary injunction requiring release of water for fish. Mr. Scott won his Motion to Intervene, and amended his complaint to request that an additional 250 cfs. be released for fish preservation, above any other planned releases from Friant. He put on evidence to support the proposition that too little water was then passing Friant to support the salmon runs, but the court wanted additional information. At that point, Mr. Shaw, a California Assistant Attorney General, took over management of the state’s case, and negotiated a short-term agreement for the release of 25 cfs. from the dam until July 15th, 1950, to support the spring-run of Chinook salmon. This initial application of 5937 was bittersweet. Mr. Shaw withdrew the preliminary injunction motion until 1951, to give the Attorney General time to consider the case. The state then withdrew its entire motion to

\[141\] Id.

\[142\] Memorandum from Irving Pfaffenberger to Henry Holsinger, Principal Attorney for The California Department of Water Resources (May 19,1950) (Division of Water Resources internal report on May 15-18 Rank v. Krug Hearings) [Hereafter May 19, 1950 DWR Memo] (on file with author).


\[144\] May 19, 1950 DWR Memo at 3-4. He was joined in the courtroom by Arvin B. Shaw Jr., Assistant Attorney General, whose major contribution was to caution the court that the state had not entirely decided which side to support in the case and that the appearance of Mr. Scott on behalf of fish protection did not bar the Attorney General from later appearing on behalf of the irrigation interests. Mr. Shaw noted:

that the Attorney General thought the proceeding for preliminary injunction should be brought by the State, due to the apparent requirements of water for fish below Friant and, due to the inability, of the Division of Water Resources and the Division of Fish and Game to get together on a position relative to the apparent conflict between Sec. [5937] of the Fish and Game Code and Sec. 106 of the Water Code; that he has been asked to prepare an opinion on the matter and that the present proceeding should not be considered a waiver of the right of the Attorney General to appear for irrigation interests of the State. In response to a question by the judge, Mr. Shaw stated that he was not appearing for irrigation interests of the State until a final decision is made by the Attorney General.

\[145\] May 19, 1950 DWR Memo at 5.

\[146\] May 19, 1950 DWR Memo at 7.

\[147\] Id.
intervene a few days after the hearing, and Mr. Shaw took over the handling of the water issue generally for the Attorney General. The ordered water was too little, too late for the spring run of salmon, and the victory over DWR was short lived.

D. 1951 Attorney General’s Opinion

One year later, the California Attorney General issued an opinion gutting 5937. The opinion first made the sweeping conclusion that section 5937 was a mere "rule for the operation of dams where there will be enough water below the dam to support fish life" and only regulated "water in excess of what is needed for domestic and irrigation purposes." The opinion’s “extraordinarily narrow” reading of 5937 has been criticized elsewhere, but three arguments merit brief discussion here.

First, the attorney general argued section 106 of the water code precluded all non-domestic or irrigation uses in fully allocated rivers, even though the preclusion argument had

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149 CALIFORNIA DIVISION OF FISH AND GAME, FORTY-FIRST BIENNAL REPORT OF THE DIVISION OF FISH AND GAME FOR THE YEARS 1948-1950 45 (1950). The court devised a complicated system for getting the Salmon into the upper San Joaquin, past the dry stretch of river, as part of the agreement to release the water:

The intention of the court was for a route to be prepared by which the salmon could swim up the San Joaquin River into Salt Slough, up Salt Slough to the crossing of the Delta Canal through the fish ladder to be constructed by the Division of Fish and Game and into the Delta Canal, up this canal to its junction with the larger Arroyo Canal, and up the Arroyo Canal to the point where it was diverted from the San Joaquin River, thence up the San Joaquin to the spawning grounds in the vicinity of Friant Dam.

Only 36 fish navigated the labyrinth, destroying the 1950 spring run.


151 Id. at 37-38.

152 Id. at 38.

153 Harrison C. Dunning, Confronting the Environmental Legacy of Irrigated Agriculture in the West: The Case of the Central Valley Project, 23 ENV’T L. 943, 956 (1993).


155 CAL. WATER CODE § 106 (West 2010) (“It is hereby declared to be the established policy of this State that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation.”).
been overruled in 1943, when the legislature added Water Code section 107 to correct this interpretation. \(^{157}\) Read with Section 106, Section 107 clearly indicates that 106 was not intended to eliminate all non-domestic and non-irrigation uses of water, but rather to establish precedence for water that was available for appropriation. 5937 withdraws from availability the water needed for fish.\(^{158}\)

Second, the Attorney General relied on a conclusory argument to undermine 5937. He argued that, although CDFG was arguing “Section [5937] has the effect of reserving from any other uses the water necessary to propagate fish,” such an interpretation “would contravene fundamental principles of the law of waters. The right of water users to take the whole stream under some circumstances has long been recognized.”\(^{159}\) Thus, he reasoned, 5937 must not “be a reservation of water for the preservation of fish life, but rather a rule for operation of dams where there will be enough water below dams to support fish life.”\(^{160}\) This reasoning relies on the idea that 5937 cannot be what it seems. If it were given its facial meaning, then reserving water for fish would not contravene long held principles of water law; water for fish would be just such a principle, formally enshrined in 1870.\(^{161}\)

Finally, the Attorney General argued that the statutes authorizing state water projects and Friant Dam allowed for elimination of below dam fish and an amounted to an implicit repeal of 5937 for the dam. Friant Dam was not “primarily” authorized for fisheries, and the Attorney General’s argument relied on reading this “primarily” term to mean that the dam could not also be used in any way that sustained fisheries.\(^{162}\) However, there is no inherent conflict between

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\(^{156}\) See supra notes 91-93.

\(^{157}\) CAL. WATER CODE § 107 (West 2010) (“The declaration of the policy of the State in this chapter is not exclusive, and all other or further declarations of policy in this code shall be given their full force and effect.”).


\(^{160}\) Id.

\(^{161}\) The opinion’s specious reasoning followed directly from a line of reasoning earlier advanced by Henry Holsinger, principal attorney to the Water Board, in an internal memo to A.D. Edmonston, where he argued that the impacts of the law as written created “the need to formulate unexpressed exceptions thereto in the event that other statutory provisions conflict with it.” May 22, 1950 DWR Memo at 6. The Water Board, May 22, 1950 DWR Memo at 3. and later the Attorney General, 18 Ops. Cal. Att'y Gen. 31, 37 (1951), read such conflict into the law whenever the reservation of water for minimum flows would impact domestic or irrigation water uses. The 1951 Attorney General’s opinion was written in part by Henry Holsinger. 18 Ops. Cal. Att'y Gen. 31, 31 (1951).

\(^{162}\) CAL. WATER CODE § 11226 (West 2010), authorizing Friant Dam, states:

Friant Dam shall be constructed and used primarily for improvement of navigation, flood control, and storage and stabilization of the water supply of the San Joaquin River, for irrigation and domestic use, and secondarily for the generation of electric power and other beneficial uses.
serving primary purposes by capturing a stream's abundant winter and spring flow and still maintaining the below-dam flow of a stream. Authorizing a dam for particular primary purposes differs from authorizing a dam to destroy the stream from which it obtains its water. No irreconcilable conflict existed between section 5937 and the purposes for which Friant Dam was authorized. By arguing that there was an inherent conflict, the attorney general essentially argued that unless a dam’s authorizing legislation provides otherwise, nothing prevents the state's water rights agency from granting water rights that do not maintain the below dam fishery in good condition, in direct contravention of 5937. This interpretation would render 5937 meaningless.

While the opinion's third argument was specific to the Friant Dam question, the first and second arguments applied to dams throughout the state. An Attorney General opinion does not bind courts, but in this case it ended enforcement by the executive branch of 5937, and CDFG lawyers believed that they could not seek enforcement of the law in court.


164 Joe Krovoza, Telephone Interview with Denis Smaage, Deputy Attorney General, California Attorney General’s Office, 1961-93. Mr. Smaage represented the department of Fish and Game in water rights matters from 1963 to 1993. Until 1974, Mr. Smaage believed that he could not use section 5937 because of the 1951 opinion from his office limited the statute’s mandate. See generally, Baiocchi, supra note 20, at 444-48 (discussing Department of Fish & Games failure to seek California Attorney General enforcement of section 5937 violations). The Department of Fish & Game lost its legal department in 1933, 1933 Cal. Stats. 511, and although it was empowered to hire legal counsel, CAL. FISH & GAME CODE § 13003, it was still constrained in exercising this authority. Lloyd G. Carter, Untitled United Press International Article on Gov. Edmund R. “Pat” Brown decision to prevent litigation related to the Friant Dam construction 8 (2-23-89) (on file with author).
IV. REBIRTH OF THE MINIMUM FLOW REQUIREMENT

As of 1951, 5937 was relegated to a minor role in protecting California’s fish. The Fish Commission could have directly sought enforcement, encouraged the District Attorneys or the Attorney General to prosecute cases, or brought a test case on its own. It did not. Instead, it merely documented the downfall of California’s below-dam fish. The Attorney General had rejected the primary purpose of 5937. Private enforcement seemed foreclosed by Rank, and the Water Board essentially held the same view as the Attorney General. Without an enforcement mechanism, 5937’s role in any informal negotiations was also necessarily limited, and California’s below-dam fish suffered.

In spite of these conditions, two trends would soon revive 5937: the legislature’s ongoing efforts to protect the state’s fish and the birth of the modern public trust doctrine.

A. Continued Legislative Acts to Protect Fish

Throughout the 1950s, the California Legislature continued its efforts to protect California’s native fish. First came passage of Fish & Game Code Section 5946 in 1953. While the Attorney General’s opinion limited most applications of 5937, the legislature added Section 5946 to ensure that 5937 would continue to be applied to new water right permits or licenses in Fish & Game District 4 1/2. The legislature followed with formal recognition of

166 1953 Cal. Stats. 3388.
167 CAL. FISH & GAME CODE § 5946 (West 2010):

No permit or license to appropriate water in District 4 1/2 shall be issued by the State Water Rights Board after September 9, 1953, unless conditioned upon full compliance with Section 5937. Plans and specifications for any such dam shall not be approved by the Department of Water Resources unless adequate provision is made for full compliance with section 5937.

See also 1953 Cal. Stats. 3388.

168 There are three steps required to appropriate unappropriated water. First, an application is filed, giving the applicant a procedural priority, essentially a conditional right to the future acquisition of a water right. Second, the state issues a permit, extending the right to procedural priority and adding the state’s consent for construction and the initial use of water to begin. Finally, the state issues a license when the user can prove that the water is being put to beneficial use in conformance with the permit. MARYBELLE D. ARCHIBALD, APPROPRIATIVE WATER RIGHTS IN CALIFORNIA, GOVERNOR'S COMMISSION TO REVIEW CALIFORNIA WATER RIGHTS LAW, 15-31 (1977). In 1953 a water right permit matured into a vested water right license when the water was diverted and put to a beneficial use. CalTrout I, 255 Cal. Rptr. at 196 (stating that counsel of Water Board at time of passage of section 5946 believed that even with the passage of section 5946, water right licenses based on permits issued before effective date of section 5946 need not require compliance on section 5937). See generally Temescal Water Co. v. Dep't of Public Works, 44 Cal.2d 90 (1955). In 1940 the State Engineer granted two water right permits to Los Angeles for its diversion of water from the Mono Lake tributaries. CalTrout I, 255 Cal. Rptr. at 188. The State Engineer issued permits 5555 (domestic use) and 5556 (hydroelectric power) on June 1, 1940. Id. However, because these permits
preservation of fish life as a beneficial use of water in 1957, and passed many additional dish protection statues over the next 15 years, including:

- Section 1243 to the Water Code in 1959, to require the State Water Rights Board to allow, “whenever it is in the public interest” water for “the preservation and enhancement of fish and wildlife resources;”

- Fish and Game Code Section 1600 to the in 1961 to clarify that, “The protection and conservation of the fish and wildlife resources of this State are hereby declared to be of utmost public interest;”

- Water Code Section 11900 in 1961 to declare it state policy to preserve fish when undertaking state water projects;

- Water Code section 1243.5 in 1969 to explicitly require the Board to consider water required for instream beneficial uses;

- the Porter-Cologne Water Quality Control Act in 1969; in 1970, under the California Environmental Quality Act, to require state agencies with regulatory authority to

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169 CAL. FISH & GAME CODE § 5946 (West 2010), set forth in note 167, supra. This district encompasses major portions of Inyo and Mono Counties, on the eastern side of the Sierra Nevada mountain range where, historically, the Los Angeles Department of Water & Power's (Los Angeles) diversion of water threatened fish in the Owens River and four of Mono Lake's tributaries. CalTrout I, 255 Cal. Rptr. at 184, 186-90.

170 1957 Cal. Stats. 3699. Note that the Legislature had already implicitly made the use of water for fish a beneficial use, based in part on 5937. See 13 Ops. Cal. Att'y Gen. 188, 189 (1949) (“Courts have held that the use of water for fish, wildlife or recreational purposes is a beneficial use. Moreover, that the use of water for maintenance of fish life is beneficial may inferred from section [5937] of the Fish and Game Code which requires the release of water behind dams sufficient in amount to maintain fish life which exists below. [...] Other Sections of Fish and Game Code also give rise to the inference that the use of water for wildlife is a beneficial use.”) (Internal citations omitted.).


172 Id., citing 1961 Cal. Stats. 2532.

173 Id., citing 1961 Cal. Stats. 2533.


175 Id., citing CAL. WATER CODE § 13050(f) (West 2010) (recognizing the need to preserve the state’s fishery resources).
“regulate [...] activities so that major consideration is given to preventing environmental damage;” which includes damage to fish, and
– amended Water Code Section 1243 in 1972 to require the CDFG to “recommend the amounts of water, if any, required for the preservation and enhancement of fish and wildlife resources” when any new water appropriation permit was in front of the board.

As a 1974 Attorney General opinion notes:

It is clear from subsequent legislative enactments that the people of California acting through their Legislature have expressed very strong concern over the future existence of California's fishery resources.

B. A Change of Heart by the Executive Branch

1. Improvements at the Water Board

This concern appears to have resonated with the Water Board. In spite of the Attorney General’s 1951 opinion, the Commission’s standing with the Board appears to have improved in the mid-1950s. Whether due to the Legislature’s signals in the early 1950s that it was serious about maintaining minimum flows, or whether it was advance warnings related to the Legislature’s formal recognition of fish, wildlife, and recreation as beneficial uses of water in 1957, the Board in 1956 began seriously addressing the Commission’s protests. For example, in June 1956, the Board approved Application 15434, noting, “Unappropriated water in excess of

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176 Id., citing California Environmental Quality Act of 1970, CAL. PUB. RES. CODE §§ 21000(g).
177 Id., citing 1972 Cal. Stats. 671.
178 Id. at 582.
179 When the Commission finally reappeared in the Water Board reports, in 1948, the reports were nearly uniform in nature. The California Fish and Game Commission would protest an application, set out minimum flow terms that would allow the protest to be disregarded, and then the applicant would agree to those or similar terms, there by dismissing the protest. See, e.g. DWR Decision No. D-573, 1948 Cal. Env. Lexis 6, *1-*2; DWR Decision No. D-582, California Dept. of Public Works, Div. of Water Res., 1948 Cal. Env. Lexis 13, *19-*21 (1948). Even so, the protests were few are far between. Beginning in the mid 1950s, the outlook for fish improved. The Water Board became friendlier to the concept of reserving some water for fish, but it certainly held firm to its position that water for fish was a secondary concern. “While this Division has long recognized the maintenance of fish life as a beneficial use, we do not believe that this use should take precedence over such higher uses as municipal, domestic, and irrigation purposes. We believe the water code is crystal clear in this regard. In addition, the Attorney General in an opinion involving releases past Friant Dam has indicated such to be the case.” DWR Decision No. D-858. Cal. Dept. of Public Works, Div. of Water Res., 1956 Cal. Env. Lexis 13 *80 (1956).
181 CAL. WATER CODE § 1257 (West 2010).
requirements in the public interest for the support of fish life exists in each lake from which the applicant seeks to appropriate[. . . ]. Such unappropriated water may be taken.”

The mere recognition of a public interest in water for fish was a significant departure from previous Water Board actions. As noted above, in previous hearings the Board had appeared to believe that it could not reserve water for fish and commented that any enforcement authority for 5937 lay with the Fish Commission. They believed that their approval of appropriations that did not reserve water for fish did not diminish the Fish Commission’s ability to enforce 5937, and believed that they were required to approve appropriations for any unappropriated water. The Water Board spoke to this issue in interrogatories associated with National Audubon, where it remarked that it had not believed that it could do anything other than appropriate unappropriated water, regardless of the impact on recreational values. Nevertheless, beginning in 1956, the Board took a more active role in reserving water for fish, which was perhaps reinforced in 1957 when the legislature explicitly granted them this broader authority. For example, in 1957, the Board conditioned an appropriation on Putah Creek on the requirement that, “Permittee shall at all times release, for the purpose of maintaining fish life between Monticello Dam and Putah Diversion Dam, into the natural stream bed of Putah Creek immediately below Monticello Dam a minimum flow of 10 cfs. of water.” In 1958, the Board clearly recognized that flows for fish protection were not available for appropriation when it commented on water availability in the American River:

Unappropriated water may be deemed to exist in the American River at such times as flows passing Fair Oaks exceed requirements below that point for consumptive purposes along the American River, for fish conservation in the American River, and for that portion of the requirements for consumptive purposes and salinity repulsion in the Delta that devolves upon the American River to provide.

This decision also illustrates the sudden legitimacy of the Fish and Game Commission, or at least fish flows, in the eyes of the Board. The Commission itself celebrated the change: “The

182 National Audubon Society v. Superior Court, 33 Cal. 3d 419, 428 (1983) footnote 7 (“Plaintiffs submitted an interrogatory to the present Water Board, inquiring: ‘Do you contend that the predecessor of the Water Board . . . held the view that, notwithstanding the protests based on environmental concerns, it had no alternative but to issue DWP the permits DWP sought to export water from the Mono Basin?’ The Water Board replied: ‘The [Water] Board believes that its predecessor did hold the view that, notwithstanding protests based upon loss of land values resulting from diminished recreational opportunity, if unappropriated water is available, it had no alternative but to issue DWP the permits DWP sought in order to export water from the Mono Basin . . . .’”).

183 National Audubon, 33 Cal. 3d at 443-44 (1983). See also CAL. WATER CODE § 1257 (West 2010).


department no longer sits around the negotiating table as an unwelcome guest.\textsuperscript{186} While the Commission undoubtedly enjoyed its new status, it still only protested a handful of appropriation applications. From 1950-1952, there were 1116 applications to appropriate, the CDFG filed 80 protests, with 65 protests upheld, 7 applications cancelled, 3 protests withdrawn, 4 informal hearings settled by agreement, and 1 informal hearing.\textsuperscript{187} From 1952-1954, 1,055 applications were investigated by the department; 62 protests were filed, one formal hearing was required and in all but 12 cases the department’s protest was upheld.\textsuperscript{188} Nothing was reported for the years 1954-1956.\textsuperscript{189} From 1956-1958, 822 applications for appropriations were made and CDFG protests filed against half of the applications, with 20 cases going to formal hearings.\textsuperscript{190} After 1958, the Department stopped reporting on the protests in its Biennial Reports.\textsuperscript{191} From the late 1950s to until the mid 1970s, enforcement of 5937 was largely informal and off the record,\textsuperscript{192} and the Attorney General’s opinion removed the threat of follow up litigation.

2. A new Attorney General’s opinion

As early as 1956, the Water Board observed, “It is the opinion of this Division that the time has come for a more realistic approach to the problem of insuring adequate minimum flows for fish life.”\textsuperscript{193} In 1973, the Water Board moved forward with a new approach. It proposed a regulation based on section 5937 that, in most instances, required flows to maintain below-dam

\textsuperscript{186} CDFG, FORTY-FIFTH BIENNIAL REPORT, supra note 56, at 12.

\textsuperscript{187} CDFG, FORTY-SECOND BIENNIAL REPORT, supra note 21, at 41.

\textsuperscript{188} CDFG, supra note 180, at 17-18.


\textsuperscript{190} CDFG, FORTY-FIFTH BIENNIAL REPORT, supra note 56, at 40.

\textsuperscript{191} CDFG, FORTY-SIXTH BIENNIAL REPORT 1958-1960 10 (1960). Beginning in the early 1960s, CDFG changed its Biennial Reports, making them much shorter, glossier, and filled largely with pablum.

\textsuperscript{192} A lexis search of Water Board decisions for 5937 between 1/1/1957 and 1/1/1974 had 16 hits, the majority related to Fish & Game Code section 5946. The Commission was active on the Board beyond 5937; a search for “Fish and Game” during the same period returned 156 documents.

\textsuperscript{193} DWR Decision No. D-858. Cal. Dept. of Public Works, Div. of Water Res., 1956 Cal. Env. Lexis 13 *80 (1956). The Board went on to recommend additional dams built solely for fish flows or dams “constructed with a financial contribution specifically for maintaining minimum flows.” Enforcing the law as written was not a recommended solution.
fish in good condition. In response to a contention that the regulation conflicted with the 1951 Opinion, the Water Board sought a confirmation of its authority to adopt the regulation.

The resulting Attorney General Opinion (1974 Opinion) sought to distinguish the new opinion from the 1951 opinion by limiting the older opinion “solely to the specific facts of construction of Friant Dam by the federal government,” and then arguing that changes circumstances of state law required a reexamination of 5937. The opinion noted that "Every statute should be construed with reference to the whole system of law of which it is a part so that all may be harmonized and have effect,” and then reasoned that the litany of laws protecting fish, cited above, ensured Water Board authority to condition all new water appropriations on section 5937's facial meaning. More broadly, the 1974 Opinion concluded:

Section 5937 of the Fish and Game Code read in light of existing state policy with reference to protection of fishery resources, clearly should be given a literal interpretation. [...] This office's former interpretation of this section, if applied generally, nullifies section 5937 as a fishery protection measure. Such an application can no longer stand in the light of current state policy expressing the urgency of preserving California's important fishery resources.

After receiving this confirmation, the Water Board adopted the regulation (1975 Regulation).


195 Letter from Adolph Moskovitz, Partner, Kronick, Moskovitz, Tiedemann & Girard, to SWRCB (April 25, 1973) (expressing view that proposed regulation was not in accordance with section 5937 as interpreted by the 1951 Opinion).

196 Letter from K. L. Woodward, Chief, Cal. DWR, SWRCB, to Parties Who Submitted Comments to Notice of April 4, 1973 (June 5, 1973) (informing parties that an opinion was sought to reexamine the 1951 Opinion); Letter from Bill Dendy, Executive Officer, Cal. DWR, SWRCB, to Evelle J. Younger, Attorney General, State of California (Approx. May 15, 1973).


198 Id. at 580 (1974).


200 See, generally, 57 Ops. Cal. Att’y. Gen. 577 (1974). The Opinion did not discuss why similar reasoning, based on the long history of legislative efforts to protect fish prior to 1951, would not have required the same conclusion in the 1951 opinion.

201 Id. at 582.

The regulation was a step forward for 5937. For the first time, a state agency had begun to enforce 5937, and the Water Board was in a position to apply it directly to appropriators early in the appropriation process. However, the regulation presented at least three shortcomings. First, the 1975 Regulation did not fully reflect section 5937's facial meaning, because it limited its application to future water permits, while Section 5937 has called for all dam owners to comply with the minimum flow requirement since its passage in 1915.

Second, the regulation modifies section 5937 by limiting the minimum flow requirement as applied to reservoir owners' to the unimpaired natural inflow into the reservoir, not the quantity of water needed to maintain below dam fish in good condition. In light of section 5937's mandate, the Water Board's 1975 Regulation purporting to implement section 5937 does not control the implementation of 5937, to the extent that it weakens the law. While not a faithful implementation of 5937, the 1975 Regulation at a minimum does represent the Water Board’s determination bypassing water is a reasonable use, comporting with the Constitution.

Third, the regulation limited the Attorney General’s enforcement of 5937. The Attorney General will not assist CDFG in criminal prosecutions involving section 5937 when below-dam flow requirements would likely become an issue in the prosecution. Further, the Attorney General will represent Fish & Game in civil injunctions and restraining orders only if there is no conflict, or a de minimus conflict, with past Attorney General representation of the Water Board. The Attorney General’s office suggests that the 1975 Regulation increases the odds that representing CDFG in litigation over minimum flows would conflict with prior actions by the

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203 After the language of section 5937 is stated, the last sentence of the regulation reads: "In the case of a reservoir, this provision shall not require the passage or release of water at a greater rate than is flowing into the reservoir." Id. This qualification conflicts with section 5937's facial intent to place an unqualified obligation on all dam owners, which recognizes their duty to mitigate for harm to below-dam fish irrespective of the inflow to their reservoir. The historic development of section 5937 demonstrates that in 1915 the legislature did consider what to do during period of low water flow into a dam's reservoir. The legislature adopted the low flow fishway use exception, allowing water to pass the dam by a means other than the constructed fishway. Memorandum from E.C. Fullerton, Director, CDFG, to William B. Dendy, Executive Officer, SWRCB (May 1, 1973). The Fish Commission, in requesting the minimum flow law, recognized that outflows would sometimes exceed inflows and suggested that this benefit, more consistent flows, made the fish losses due to the creation of the reservoir more bearable. STATE OF CALIFORNIA FISH AND GAME COMMISSION, supra note 53, at 29.

204 Letter from R. H. Connett, Assistant Attorney General, to Eugene V. Toffoli, Legal Advisor, CDFG (February 20, 1990).

205 Id.
Attorney General while representing the Water Board. Therefore, it appears that the Attorney General's office would not participate in an enforcement action if CDFG determines that flows required by the 1975 Regulation or by a pre-1975 permit are not maintaining fish in good condition below a dam. This amounts to a broad ban on enforcement of 5937 by the CDFG. Indeed, in the period since the Attorney General issued its 1951 Opinion, CDFG has never gone to court to enforce 5937.

C. Private Enforcement: 5937 Gets its Day in Court

Two developments, both parts of the rebirth of the public trust doctrine in California, invigorated private litigation of 5937. First, the doctrine highlighted the perpetual nature of obligations on state agencies and private parties pertaining to the use of natural resources in California. Second, the public trust doctrine broadened private standing to enforce environmental laws like 5937, which themselves lack a citizen suit provision.

In National Audubon, the California Supreme Court for the first time clearly outlined the limits on private use of public trust resources and the perpetual responsibility of the state to oversee those resources. The public trust doctrine limits private use of public trust resources in California:

The state as sovereign retains continuing supervisory control over its navigable waters and the lands beneath those waters. This principle, fundamental to the concept of the public trust, applies to rights in flowing waters as well as to rights in tidelands and lakeshores; it prevents any party from acquiring a vested right to appropriate water in a manner harmful to the interests protected by the public trust.

Thus the right to use water, a public trust resource, is bounded and balanced by the water needed for public trust uses, including in-stream uses. “The [Water] board has the power and duty to

\[\text{Id.}\]

\[\text{Id.}\]

CDFG has come close to initiating such litigation at least once. Although the details remain murky, CDFG sought to initiate some litigation ostensibly related to 5937 in 1959, but was blocked by then Gov. Edmund R. “Pat” Brown, who had authored the Attorney General Opinion in 1951. CDFG hired outside counsel to appeal the June 2, 1959 State Water Rights Board ruling allowing the Bureau of Reclamation to divert essentially the full flow of the San Joaquin at Friant Dam. The suit would have further alleged a Water Rights Board Chairman Holsinger of conflict of interest and that “Brown and Holsinger acted to circumvent Fish and Game codes protecting fish as early as 1951 when Brown was state Attorney General and he and Holsinger issued an opinion that the Bureau did not have to preserve the fishery below Friant. Carter, supra note 164, at 9. “Brown, 83, confirmed in a telephone interview earlier this week he wanted his administration, and not the courts, to settle the dispute created when the construction of Friant Dam on the San Joaquin River near Fresno destroyed the river's salmon runs and downstream fishery.” Id. at 8. Brown ordered the outside counsel not to file the case on June 30, 1959. Id.


Id. at 445.
protect such uses by withholding water from appropriation.”

This endorsed the Water Board’s post 1956 perspective on withholding waters required for fish from appropriation, but contradicted its prior position. For example, in 1928, the Water Board agreed that it did not have authority to withhold water from appropriation, and then noted, “Nor does it appear that a police power has been vested in the Division of Fish and Game which authorizes it to enjoin such diversions of water for beneficial uses as it deems inimical to fish life, but, if so, the issuance of permits to appropriate by the Division of Water Rights will not prevent the exercise of such an authority by said division.”

Nevertheless, it is now clear that the Water Board is obligated to withhold from appropriation the water required in its estimation to comply with 5937.

*National Audubon* was clear about the state’s ability to reduce prior rights to use water, even when the state has previously granted the right:

> Once the state has approved an appropriation, the public trust imposes a duty of continuing supervision over the taking and use of the appropriated water. In exercising its sovereign power to allocate water resources in the public interest, the state is not confined by past allocation decisions which may be incorrect in light of current knowledge or inconsistent with current needs. The state accordingly has the power to reconsider allocation decisions even though those decisions were made after due consideration of their effect on the public trust.

This decision comported with prior decisions of California courts and the Water Board. For example, in 1928, the Water Board noted:

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210 Id. at 444.


212 See, e.g., People v. Glenn-Colusa Irrigation Dist., 127 Cal. Ct. App. 30, 15 P.2d 549 (Cal. Ct. App. 1932). The District stood accused of creating a public nuisance by killing fish through the exercise of its water right. The district argued that since it was created by a legislative act and had both state and federal rights to divert water from the river, it could not be guilty of creating a public nuisance. Cf. CAL. CIV. CODE § 3482 (West 2011) (“Nothing which is done or maintained under the express authority of a statute can be deemed a nuisance.”). The court held that notwithstanding the district’s right to exist under the laws of the state and its water rights, the district nevertheless had a duty to protect the fish in the river, and a breach of that duty could be a nuisance.

213 DWR Decision No. D-179, California Dept. of Public Works, DWR, 1928 Cal. Env. Lexis 2, *20-*21 (1928). See also DWR Decision No. D-227, California Dept. of Public Works, Div. of Water Res., 1929 Cal. Env. Lexis 15, *20 (1928) (“Nor does it appear that a police power has been vested in the Division of Fish and Game which authorizes it to enjoin such diversions of water for beneficial uses as it deems inimical to fish life, but, if so, the issuance of permits to appropriate by the Division of Water Rights will not prevent the exercise of such an authority by said division.”).
The authority of the Fish and Game Commission under Section 637 of the Penal Code to protect fish life can in no way be prejudiced or restricted by any action that this office may take on the pending applications. The matter of fish protection is vested in the Fish and Game Commission as declared by the legislature.”

Thus, even at the height of the Water Boards’ effort to prevent the Fish Commission from enforcing 5937 via conditions in water permits, when the Water Board believed it could not withhold water from appropriation, it still never pretended that its grants of the right to use water freed the user from compliance with minimum flow laws. Regardless, National Audubon made explicit the possibility of future challenges to water rights granted by the Board whose exercise harmed the public trust. These changes – requiring the Water Board to withhold from appropriation water necessary for public trust uses, and imposing a continuing duty of supervision on the state – created a broad public trust responsibility in California.

National Audubon not only outlined the reach of the California Public Trust doctrine, but also reinforced a private right of action against other private parties for public trust violations. While the right to assert public trust violations against the state and its subdivisions was less controversial, the ability of private parties to assert public trust violations against other private individuals was less secure. For example, consider the California Court of Appeal’s opinion in the 1970 case Marks v. Whitney. Marks owned tidelands on Tomales Bay, and he claimed outright ownership of the land, with the right to fill or develop them as he saw fit. Whitney, a nearby landowner, sought to prevent the development of the tidelands on the basis that, “this would cut off his rights as a littoral owner and as a member of the public in these tidelands and the navigable waters covering them. He requested a declaration in the decree that Marks’ title was burdened with a public trust easement.” Following precedent, Both the trial court and appellate courts held that Whitney lacked standing to assert the public trust claim: “Defendant Whitney does not own the public rights and can neither express nor control them.” On appeal, The California Supreme Court addressed the public trust standing question directly in a unanimous ruling:

Does Whitney have "standing" to request the court to recognize and declare the public trust easement on Marks' tidelands? Yes.

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214 See, e.g., Gion v. City of Santa Cruz, 2 Cal.3d 29 (1970).
216 Marks v. Whitney, 6 Cal. 3d 251, 256 (1971).
217 See generally Marks v. Whitney, 90 Cal.Rptr. at 222, and citations therein.
218 Marks v. Whitney, 90 Cal. Rptr at 223.
219 Marks v. Whitney, 6 Cal. 3d at 261 (italics in the original).
The relief sought by Marks resulted in taking away from Whitney rights to which he is entitled as a member of the general public.

This appears to have been the first holding from the California Supreme Court directly on this question. The Court revisited the issue in National Audubon, where plaintiff environmental group asserted that diversions of water from creeks flowing into Mono Lake by the Department of Water and Power of the City of Los Angeles (DWP) violated the public trust. DWP argued that environmental groups lacked standing to sue DWP to protect the public trust. Citing Marks v. Whitney, the Court held that “any member of the general public has standing to raise a claim of harm to the public trust” and concluded that “plaintiffs have standing to sue to protect the public trust.” While questions remain about the ability of private parties to enforce environmental laws against other private parties in the absence of a citizen suit provision, National Audubon resolves that doubt in the subset of cases alleging violation of the public trust. This expansion in standing has allowed plaintiffs to directly enforce the public trust as embodied by 5937, and thus overruled the bar to private enforcement of 5937 erected in Rank v. Krug in 1951.

1. CalTrout I – Mono Lake Tributaries

In 1974, the Water Board granted licenses to L.A. Water and Power to take water from several tributaries to Mono Lake, which supported “good trout populations.” California Trout (CalTrout I) and other environmental groups filed suit to challenge the issuance of the new licenses in the mid 1980s, relying on 5946 and its requirement that the Water Board condition all District 4 1/2 diversions, including the diversions in question, on compliance with section


221 National Audubon, 33 Cal. 3d at 431, footnote 11 (1983) (internal citation omitted.).

222 Id.

223 Roger Beers, Administrative Law And Environmental Litigation, 1-11 CAL. ENV'T'L. & LAND USE PRAC. § 11.04. (“When a statute contains no provisions for enforcement through citizen suits, plaintiffs in private enforcement actions may face an additional hurdle even when they meet all of the other standing requirements. . . . This issue does not arise when the plaintiff seeks judicial review of an agency decision, but only when the plaintiff seeks to enforce the statute against a private party or seeks a remedy not expressly authorized by the statute. . . . The issue of implied private rights of action has not yet arisen in any California environmental cases.”)


227 Id. at 189.
5937. The plaintiffs petitioned for a writ of mandate to the Water Board to rescind water right licenses issued L.A. Water and Power in 1974, but were denied by the trial court. California's third district Court of Appeal took the case and, after rehearing, decided California Trout, Inc. v. State Water Resources Control Board (CalTrout I) on January 26, 1989, holding for the plaintiffs and issuing writs commanding the Water Board to condition the licenses on providing sufficient water to keep downstream fish in good condition.

Any attempt to understand 5937 based on CalTrout I must be informed by the court’s approach. The CalTrout I court sought to constrain its ruling to 5946 and the application of 5937 as informed by the context of 5946, explicitly avoiding the proper statutory construction of section 5937 absent section 5946. However, the court implicitly interprets 5937 throughout its decision; the court cannot interpret 5946, which requires compliance with 5937, without interpreting the underlying rule. As the court itself notes, “One does not show compliance with a rule by claiming that it is inapplicable.” Instead, one determines compliance with a rule by determining what the rule itself requires, as the court demonstrates throughout its opinion. For example, the court notes, “It apparently was assumed in some quarters [...] that the appropriation of water for "higher" domestic or irrigation uses must be approved regardless of the detriment to "lower" uses, e.g., in-stream use for fishery or recreation purposes,” and then, in a footnote, reminds readers that the Water Code must be read as a whole and that, since the water law was codified in 1945, Water Code section 6501 incorporated the Fish and Game Code provisions for protection and preservation of fish. The Court goes on to recognize that “Compulsory compliance [via 5946] with a rule requiring the release of sufficient water to keep fish alive necessarily limits the water available for appropriation for other uses.” The same reasoning implies that the underlying rule, 5937, was a legislative determination to limit water available for appropriations. Even under the narrowest possible reading, the Court necessarily held that compliance with 5937 limits water available for appropriations.

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228 Id. at 186.
229 Id. at 184.
230 Id.
231 Id. at 213.
232 Id. at 192. (“We need not reach the question of the application of section 5937 alone as a rule affecting the appropriation of water. . . . [R]egardless of the original scope of application of section 5937, the purpose of its incorporation into section 5946 is, as section 5946 says, to ‘condition,’ and therefore limit, the ‘[appropriation]’ of water by the priority given to the preservation of fish as set forth in section 5937.”).
233 Id. at 192.
234 This determination leaves open the question of when compliance is required, but the plain language of 5937 does not leave much doubt in that regard. CAL. FISH & GAME CODE § 5937 (West 2010), set forth in note 19, supra. Further, the appellate court rejected L.A. Water and Power’s argument that 5946 did not apply when an appropriator sought to take all of a stream’s water, reasoning that, under their argument, the legislative purpose of 5946 could not be achieved. The same reasoning compels the same conclusion with respect to 5937.
The appellate court also considered a facial challenge to 5946 and 5937, which alleged that the statutes, if they required minimum instream flows for preservation of fish, would violate Article X, section 2 of the California constitution. The court held that when the legislature makes a water allocation rule by balancing competing beneficial uses, it has made a permissible reasonableness determination. The court further reasoned that such determinations must receive deference from the judiciary. The CalTrout I court acknowledged the judiciary's constitutional power to override a "manifestly unreasonable" statute determining water allocation, but quickly concluded it could “find no arguable merit in the claim that section 5946 would conflict with that constitutional provision.”

Finally, the court dismissed attempts to halt the prospective application of section 5946, based on two separate lines of argument. First, the court recognized the Water Board's continuing duty to condition District 4 1/2 water rights on compliance with section 5937:

The purpose of section 5946 is to obtain the release of sufficient water in the future to sustain fish in streams in District 4 1/2 from which water is appropriated. That is to say, the purpose is to maintain fisheries in such streams on an ongoing basis. Hence, the failure to affix to the licenses language conditioning future diversion upon such releases presents a continuing violation of the statute as to which no statute of limitations prevents remediation.

Second, the court held that 5946 was “a specific rule concerning the public trust interest in fisheries in District 4 ½,” and reasoned that the state’s prior failure to protect the public trust did not amount to a forfeiture of that trust. Neither of these lines of argument is unique to

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235 CalTrout I, 255 Cal. Rptr. at 206.

236 Id. at 206-208. Notably, the court did not discuss the first test for the legitimacy of a water right, whether the use is beneficial. Presumably the court found this unnecessary because water for fish being beneficial is well settled.

237 Id. at 208. One might argue that this reasonableness determination would be a very different matter when applied to 5937 over the entire state, not merely the area under purview of 5946, but the court’s discussion of the legislature’s power in this regard suggest that it would come to the same conclusion. The Court notes that, “article X, section 2, [is] an amendment enacted to vest the "right" in the Legislature, over the judicial objection in Herminghaus, to determine the useful and beneficial purposes of water use,” id., and that “there is ‘broad legislative authority for the conservation and regulation of scarce water resources,’” id., citing In re Waters of Long Valley Creek Stream System, 25 Cal.3d 339, 351-352 (1979) (fn. omitted).

238 CalTrout I, 255 Cal. Rptr. at 208.

239 Id. at 210.

240 Id. at 212.

241 Id., citing People v. Kerber 152 Cal. 731, 734 (1908) (“The public is not to lose its rights through the negligence of its agents, nor because it has not chosen to resist an encroachment by one of its own number, whose duty it was, as much as that of every other citizen, to protect the state in its rights.”).
5946. The same reasoning necessarily applies to 5937, the underlying rule applied by 5946. First, as was the case for 5946, “the purpose is to maintain fisheries [...] on an ongoing basis,” and the failure to do so is an ongoing violation of the statute. A violation of 5946 is predicated on a violation of 5937. Second, 5946 seeks to protect the public trust by requiring compliance with 5937, so 5937 must also be a legislative decision to protect the public trust, and a failure to enforce 5937 in the past does not amount to a forfeiture of its enforcement in the future, following National Audubon.

2. CalTrout II – Mono Lake Tributaries

In 1990, the CalTrout I litigants returned to the third district Court of Appeal for CalTrout II. The petitioners sought a writ of mandate challenging the Water Board's delay in conditioning Los Angeles' District 4 1/2 permits on section 5937, as ordered by CalTrout I. The Superior Court had refused to grant petitioner CalTrout interim relief and found a delay in the release of water acceptable. The Appeal Court reversed, ordering the Water Board to immediately condition the water right licenses on compliance with section 5937. The Appellate Court also directed the Superior Court to consider interim flows pending the setting of final flows. In reaching these holdings, the CalTrout II court again ruled on two matters crucial to resolving section 5937's proper role in state water law.

First, the court reiterated that CalTrout I recognized section 5946 as the legislature's water allocation rule foreclosing the Water Board from considering out-of-stream water uses before water is reserved for below-dam fish. The court recognized that section 5946 leaves the Water Board no discretion because it "takes [water needed for below-dam fish] outside the purview of statutes that allow the Water Board to determine the priority of uses." Because no potentially

242 Id. at 210.


244 Id.

245 Id. at 791.

246 Id.

247 Id.

248 Id. The Appeal Court found its jurisdiction to direct the consideration of interim rates in its concurrent jurisdiction over compliance proceeding's involving section 5946.

249 Id. at 797, citing CalTrout I, 255 Cal. Rptr. 184, 184 (Cal. Ct. App. 1989) ("The Legislature, not the Water Board, is the superior voice in the articulation of public policy concerning the reasonableness of water allocation.").

250 Id., citing CAL. WATER CODE §§ 1243, 1253, 1254, 1256 and 1257 as delegating the authority to make reasonableness determination to the Water Board. Id. The court went on, Id. at 795-796:
competing uses remained for the Water Board to consider, the Court of Appeal rejected the Water Boards argument that it had primary jurisdiction over the enforcement of section 5946. Rather, the court clarified that it was executing *CalTrout I* by using its concurrent jurisdiction, and that under this authority the court appointed the Water Board to act as its master.

In discussing what might be the more typical situation, the court recognized that CDFG is the appropriate body to determine below-dam flows because it possesses the expertise to calculate flows that will reestablish and maintain below-dam fish. According to the *CalTrout II* court, Water Board expertise is reserved for situations involving "the intricacies of water law" or "comprehensive planning," not present in this case, where the legislative decision via 5946 and 5937 made the decision straightforward.

Second, the court commented on the “good condition” standard imposed by 5937. The court stated that 5937 requires passage of “the amount of water required to sustain the pre-diversion carrying capacity of fish of the four streams.” Thus, in the court’s eyes, 5937...
required enough water for restoration of the historic fishery. This explanation of the flow requirements under 5937 is not diluted by the surrounding discussion of 5946; 5946 only reiterates that 5937 should apply to these streams, and 5937 itself is the sole source of authority on the flow requirements themselves.

Walker provides a concise overview of the legal proceedings after National Audubon:

After the decision in National Audubon Society, the State Water Board announced that it would review comprehensively the public trust issues in the Mono Lake Basin . . . [T]he federal courts remanded all the state law issues to the state courts, and eventually dismissed the remaining federal issue. [I]n 1989, after hearing extensive testimony, the state trial court entered a preliminary injunction [and] enjoined the City of Los Angeles from any diversions from the lake's tributaries until the lake reached 6,377 feet above sea level. Given the recent dry years, the preliminary injunction has stopped entirely any diversions by the city. [T]he court consolidated the public trust case with the Fish and Game Code cases that led to the two Cal. Trout decisions. After consolidation, the trial court issued interim flow standards to comply with those two opinions. [I]n 1990, the trial court approved an interim habitat restoration agreement between the parties to the litigation. . . . Finally, the trial court stayed further proceedings on the coordinated public trust and Fish and Game Code section 5937 actions pending completion of the State Water Board's review.

The Water Board review concluded in the Mono Lake Basin Water Right Decision 1631 (“Mono Basin Decision”), discussed in the Water Board section, below.

3. NRDC v. Patterson – San Joaquin River

After the Bureau of Reclamation completed construction of Friant Dam and commenced filling the reservoir behind it, the native fish communities downstream of the dam fell into
ruin. Sixty miles of the river, upstream from the confluence with the Merced River, remained dry throughout much of the year, and the spring and fall run Chinook salmon were extirpated from the San Joaquin above that stretch. Following the construction of Friant Dam, ten of the sixteen species of native fish disappeared from the area.

Even after the 1974 Opinion reinterpreted 5937, the state took no action to re-water the San Joaquin. In 1988, the Natural Resources Defense Council (NRDC) and other environmental groups filed suit against the Bureau of Reclamation, owner of Friant Dam, alleging several violations of federal law, including violation of Section 8 of the Reclamation Act and section 5937 of the California Fish & Game Code. During initial hearings, the Plaintiffs amended their complaint to allege a violation of the Administrative Procedures Act (APA), based on a violation of Section 8 and an underlying violation of section 5937 of the California Fish & Game Code. The decisions in NRDC v. Patterson are well reviewed in other articles, but the court touched on several points related to 5937 that bear mentioning.

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259 California Division of Fish and Game, supra note 149, at 45 (“The situation on the San Joaquin River could not be worse than it is. Inadequate water releases from Friant Dam have resulted in near extinction of the salmon run.”)


261 Id. at 910.

262 Id. at 910.

263 Section 8 provides, “Nothing in this Act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with such laws.” 43 U.S.C. § 383. Thus Section 8 requires the Bureau to follow some state water laws. Plaintiffs argued that 5937 was just such a law.

264 NRDC v. Houston, 146 F.3d 1118, 1124 (9th Circ. 1998).

265 5 U.S.C. § 706(2)(A)-(D) (Courts will set aside agency action when an agency acts arbitrarily or capriciously or not in accordance with the law.).

266 NRDC v. Patterson I, 791 F. Supp. at 1428.


268 In a strange twist, Defendants in the case argued that the language “any fish that may be planted or exist below the dam” established alternative requirements for water releases – the owner could keep in good condition fish that may be planted, or, in the alternative, keep in good condition fish that exist below the dam. NRDC v. Patterson II, 333 F. Supp. 2d. 906, 917 (E.D. Cal. 2004). The court rejected this reading, settling instead on a reading proposed by counsel for amicus State Water Board, that the language, “merely ‘establishes the categories of fish that are to be protected.’ [...] Ultimately, however, the statute places a single duty on the dam owner, directing the dam owner to maintain ‘any fish’ that fall into one of two enumerated categories.” Id. at 918.
First, the trial court determined that 5937 establishes a limit on the amount of water that may be appropriated from a stream or river. By its terms, 5937 mandates that the owner of a dam allow water to pass over or through the dam for certain purposes. [...] Thus, it is a prohibition on what water the Bureau, as owner of the dam, may otherwise appropriate.

Second, when determining whether the Bureau had violated 5937, the court determined what was required by 5937. It held that, “[T]he relevant state law [5937] here directs the Bureau to release sufficient water to ‘reestablish and maintain’ the ‘historic fisheries.’” The Court reiterated the CalTrout I reading: “CalTrout holds that the statute mandates the reestablishment and maintenance of a dry stream’s ‘historic fishery.’” Like CalTrout II, the NRDC v. Patterson decision rejected any balancing test in meeting the requirements of 5937:

As Cal. Trout put it, "the Legislature has already balanced the competing claims for water . . . and determined to give priority to the preservation of their fisheries." Thus, the statute's plain meaning, legislative history, and construction by the state's court all point in a single direction.

The court went on to conclude that, because the Bureau was not releasing enough water to support the historic fishery, the “Bureau of Reclamation has violated § 5937 of the California

269 The Court sought to determine in 5937 fell within the Section 8 laws that applied to the Bureau, those laws “relating to the control, appropriation, use or distribution of water used in irrigation.” The Court reasoned that it excluded “only those statutes which exclusively regulate the operation of dams and which have no effect on the distribution of water,” and then determined that 5937 “affects the impoundment and distribution of water. Accordingly, even if § 5937 also affects the operation of Friant Dam, Section 8 mandates the Bureau's compliance with the state statute.” NRDC v. Patterson, 791 F. Supp. at 1435.


272 NRDC v. Patterson II, 333 F. Supp. 2d. at 916, citing CalTrout II, 266 Cal. Rptr. 788.

273 Id.

274 Id. at 920. While citing CalTrout II for this proposition, the Court also struggled with the CalTrout II courts efforts to limit the scope of its decision to 5946:

CalTrout does not explicitly hold that § 5937 mandates placing the preservation of fish above the irrigation purposes of a dam, but reserves the question of the statute's application alone as a rule affecting appropriation of water, separate from § 5946. The court simply interprets the statute, based on its plain meaning and context, as "requiring the release of sufficient water to keep fish alive.”

275 Id. at 918-919 (internal citation omitted).
Fish and Game Code as applied to it by virtue of § 8 of the Reclamation Act of 1902,”276 laying a path for the application of 5937 to all Bureau of Reclamation dams. The litigation settled in 2006, imposing flows recommended by Dr. Moyle, based on his good condition standard articulated in the Putah Creek Water Cases,277 discussed below. Flows returned to the dry riverbed for the first time in October 2009, and salmon will be reintroduced to the river.278

4. CLEAR v. Connor – Colorado River

One other court has construed § 8 of the Reclamation Act of 1902 relative to 5937, in Jan. 2011.279 The case concerns a section of the Colorado River near Palo Verde that the Bureau largely dewatered through the construction of a dam and the Cibola Cut in the last 1960s.280 Citizens Legal Enforcement and Restoration (CLEAR) sought enforcement of 5937 against the Bureau of Reclamation, under § 8 of the Reclamation Act of 1902, following the path laid out in NRDC v. Patterson.

The CLEAR court noted that section 8 established two requirements for applying state law – that the law relate to the control, appropriation, use, or distribution of water used in irrigation, as was litigated in NRDC v. Patterson, and that the Bureau be “‘carrying out the provisions of’ the [Reclamation] Act; that is, taking affirmative actions authorized by statute.”281 The Court reviewed the Cibola Cut project and determined that “the levees blocking the flow of the ORC are static earthen structures of dirt fill, gravel, and rip-rap; they neither impound nor release water and are therefore not dams operated as such; they have not been altered in forty years; and they are functioning as designed.”282 Because the Bureau was not operating anything on the levees and was neither actively releasing nor actively impounding water, the court determined that the project, “involves no ongoing management or operation of a Reclamation project,”283 and “[t]hus, Reclamation is not obligated to comply with the state laws upon which Plaintiff’s

276 Id. at 925 (internal citation omitted).
279 CLEAR v. Connor et al., 2011 U.S. Dist. LEXIS 2656 (S.D. Cal. 2011)
280 Id. at *3-*4, *47.
281 Id. at *48.
282 Id. at *51 (Internal citations omitted).
283 Id. at *50.
claims are based.”\textsuperscript{284} The court thus did not even interpret 5937, since it did not reach the state law issues.

5. \textit{Putah Creek Water Cases}

As the Friant litigation progressed through the courts, the Putah Creek Council, a local watershed protection organization, filed suit over operation of another Bureau dam, the Putah Diversion Dam (PDD).\textsuperscript{285} At the Putah Diversion Dam, most of the water in Putah Creek is diverted into Putah South Canal for users in Solano County.\textsuperscript{286} Together, the PDD and associated water works are known as the Solano Project.\textsuperscript{287} Even at the height of diversions, however, some water generally passed through the diversion dam to satisfy rights of riparian landowners, supporting native fish communities immediately downstream of the dam and in part of the stream farther downstream.\textsuperscript{288} In 1989, during the first year of a statewide drought, stretches of stream below the PDD began to dry up, endangering the native fish in that reach.\textsuperscript{289} The Putah Creek Council undertook litigation to ensure that enough water would be passed through the PDD for downstream fish.

In contrast to the Friant Dam cases, where the plaintiffs filed suit directly against the Bureau, the \textit{Putah Creek Case} plaintiffs filed against the Solano Irrigation District and Solano County Water Agency (SCWA).\textsuperscript{290} The SCWA contracts with the Bureau for water service from the Solano Project and separately contracts for the operation of the Solano Project. The court

\textsuperscript{284} Id. at *52.

\textsuperscript{285} Putah Creek is a small river draining the east from Napa toward the Sacramento River, Peter B. Moyle, Michael P. Marchetti, Jean Baldrige, & Thomas L. Taylor, \textit{Fish Health and Diversity: Justifying Flows for a California Stream}, 23 Fish. Mgmt. 6, 7-8 (1998), flowing through agricultural areas, and largely protected from development through a series of reserves. Reporter’s Transcript of Judge’s Ruling at 2-3, Putah Creek Water Cases, Jud. Coor. Coun. No. 2565 (Cal. Super. Ct. 1996). The Monticello Dam impounds Putah Creek at the eastern edge of Napa County, creating Lake Berryessa. U.S. BUREAU OF RECLAMATION (USBR), SOLANO PROJECT, http://www.usbr.gov/projects/Project.jsp?proj_Name=Solano%20Project. The outflow from Lake Berryessa supports a year round cold water fishery for roughly 8 miles, before it too is impounded, by the Putah Diversion Dam, which creates Lake Solano. Moyle et al., at 8.

\textsuperscript{286} Id. at 9.

\textsuperscript{287} USBR, supra note 285.

\textsuperscript{288} Moyle et al., supra note 285, at 9.

\textsuperscript{289} Moyle et al., supra note 285, at 10.

explicitly found that the SCWA and SID were “owners” of the dam, for purposes of 5937, presumably based on the definitions set forth in 5900(c).

While the case never resulted in a published opinion, in 1996 the trial judge did issue a ruling from the bench on behalf of the plaintiffs. The defendants sought an appeal, but the parties settled the litigation in 2000 through an agreement that provided water for the downstream fish. Nevertheless, the ruling from the bench gives some clues about the judge’s thinking.

First, the court engaged in exactly the kind of balancing test that the *CalTrout* and NRDC courts rejected:

> In my opinion critical to the analysis is the amount of additional water needed to satisfy these public trust values and to keep the fishery in good condition weighed against the impact that taking this water from the Solano parties will have on them.

The Court did not cite the *CalTrout* decisions in the its ruling, even though those decisions had been published years earlier. This omission, perhaps coupled with some confusion between the balancing allowed by *National Audubon* and the balancing already done by the legislature in enacting 5937, led the court to incorrectly engage in a balancing test to determine appropriate flows for Putah Creek under 5937.

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292 **CAL. FISH & GAME CODE** § 5900 (“‘Owner’ includes the United States (except that for the purpose of Sections 5901, 5931, 5933, and 5938, ‘owner’ does not include the United States as to any dam in the condition the dam existed on September 15, 1945), the State, a person, political subdivision, or district (other than a fish and game district) owning, controlling or operating a dam or pipe.”).

293 Matthews, *supra* note 267, at 1120.


296 **NRDC v. Patterson II**, 333 F. Supp. 2d. at 918-919 (“As Cal. Trout put it, ‘the Legislature has already balanced the competing claims for water . . . and determined to give priority to the preservation of their fisheries.’ Thus, the statute's plain meaning, legislative history, and construction by the state's court all point in a single direction.”) (internal citation omitted).


298 The 1996 ruling came 7 years after CalTrout I (55 Cal. Rptr. 184 (Ct. App. 1989)) and 6 years after CalTrout II (266 Cal. Rptr. 788 (Ct. App. 1990)).

Second, the court reinterpreted the good condition standard. The CalTrout II court clearly interpreted 5937’s good condition standard to require the maintenance of the historical fishery below the dam. Without discussing the historical fishery approach, the court instead adopted an approach to the good condition determination that looked at three levels: the fish community, the fishes’ populations, and the individual fish. The good condition standard adopted by the court was initially presented to the court by Dr. Peter B. Moyle and integrated some aspects of the historical view, but certainly did not reiterate that view in its entirety.

The balancing approach, coupled with a “good condition” test that did not rely on reproducing exact historic conditions, led to the explicit rejection of the flows that would have been required to maintain the historic anadromous fish populations (Chinook salmon and steelhead) in Putah Creek.

6. High Sierra Hikers v. U.S. Forest Service - Emigrant Wilderness

In 2006, the Eastern District of California issued another opinion that briefly touched on 5937. In that case, High Sierra Hikers brought suit against the U.S. Forest Service over its plans to repair, maintain and/or operate 11 of 18 dams located in the Emigrant Wilderness.
The dams were originally constructed to improve fisheries in the 1920s and drain into the Stanislaus and Tuolumne rivers after leaving the wilderness area. Congress designated Emigrant Wilderness in 1975, under the Wilderness Act, which forbids any “structure or installation within any such area.” The court concluded, “the plain and unambiguous text of the Wilderness Act speaks directly to the activity at issue in this case __ repairing, maintaining and operating dam "structures" -- and prohibits that activity.” However, prohibited activities are allowed if they are, “necessary to meet minimum requirements for the administration of the area.” The court determined, “Because it is not possible to infer from this language that establishment (much less enhancement) of opportunities for a particular form of human recreation is the purpose of the Wilderness Act, it is not possible to conclude that enhancement of fisheries is an activity that is "necessary to meet minimum requirements for the administration of the area for the purpose of this chapter." The court’s approach depended in part on the legislation creating the Emigrant Wilderness, so any similar situation would need similar analysis.

CalTrout joined the case as a defendant intervener and asserted several arguments. CalTrout pointed to the water rights savings clause in the Wilderness Act:

(6) Nothing in this chapter shall constitute and express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

(7) Nothing in this chapter shall be construed as affecting the jurisdiction or responsibilities of the several States with respect to the wildlife and fish in the national forests.

CalTrout argued that “The state may lawfully assert a right to sustain the fishery and to maintenance of the dams in issue that is unimpaired by the Wilderness Act,” and cited to 5937 to argue that water releases were required. The Court gave 5937 cursory consideration and

306 Id. at 1126.
307 Id. at 1122-23.
310 Id. at 1131.
312 Id. at 1139.
314 Id. at 1139.
remarked it unclear that 5937 would require the maintenance of a dam that was falling into disrepair. 315 The court concluded, “notwithstanding the applicability of the cited authority to the present case, the fact remains no party with standing to do so has chosen to assert state water rights. Interveners appear to recognize this and have opted to not develop this argument any further; perhaps leaving it to the state to assert rights in the regulation of stream flows at some later time.” 316

This case leaves 5937 in an ambiguous position relative to dams in wilderness areas. CalTrout cited 5937 as proof of the state’s interest in regulating the dams, but CalTrout did not try to assert 5937 directly against any dam owner. 317 To the extent that California has rights to the water in the stream, those rights cannot cover the water left in the stream; water rights require appropriation. California did not assert its own jurisdiction under the savings clause, and it is unclear how the court would have ruled if they had. If anyone were to attempt to assert 5937 against an owner of a wilderness area dam, the outcome is far from certain. If a court were to rule that the Wilderness Act precluded operation of the dam, 5937 could not be applied, and the parties would simply have to wait for the dam to fail on its own, as appears to be anticipated in this decision.

7. Reynolds v. Calistoga - Napa River

On May 3, 2010, Judge Guadagni issued the most recent state court opinion to address 5937. 318 Grant Reynolds, a pro se fly fisherman, brought suit against the City of Calistoga, alleging the City of Calistoga, as owner of the Kimball Creek Dam, failed to allow enough water to flow through that dam to keep in good condition the fish populations below the dam. 319 The trial court initially rejected the suit, in the mistaken understanding that Center for Biological Diversity, Inc. v. FPL Group, Inc. required “that a claim for a breach of the public trust must be brought against the agencies responsible for the trust property, in this case the State Water Resources Control Board.” 320

315 Id.
316 Id.
317 As defendant intervenors in the case, they would have been in a difficult position to do so.
Reynolds, with the help of an attorney, prepared a motion for reconsideration on the initial ruling and a mandamus action against the SWRCB and CDFG; he filed both on the same date. The state entered into discussions with Reynolds, and “concluded that the public interest would be best served by filing an amicus brief in support of Reynolds’ motion for reconsideration.” The amicus brief argued that National Audubon controlled in the case, not Bio Diversity, and thus that the City was a proper defendant and that Reynolds was a proper plaintiff.

On reconsideration, the trial court agreed. The court characterized the plaintiff’s claim as “generally for a violation of the public trust, as authorized by Audubon, and that public trust violation is simply alleged to be evidenced by a violation of section 5937.” The court indicated that no authority suggested that a private plaintiff could not bring suit in such a case. Although the city cited Rank for exactly that proposition, the court dismissed the suggestion: “Rank, however, was decided before Audubon, and did not address a claim for violation of the public trust, which Audubon held could be brought by private parties.” Litigation on the public trust claim is ongoing, as of Spring 2011.

D. The Water Board Revisits 5937

As indicated in the amicus filing in Reynolds, the thinking at the SWRCB has evolved significantly since the 1950s, and the Board has considered 5937 directly in several cases, including the Big Bear decision, the Santa Ynez order, the Mono Lake water rights adjudications and the East and West Fork Walker Rivers order. Several other Board decisions address instream flows for fish without invoking the authority of 5937, instead relying on the public trust doctrine

321 William McKinnon, Another Opinion on Reynolds v. City of Calistoga, Northern California River Watch, http://www.ncriverwatch.org/wordpress/2010/06/25/another-opinion-on-reynolds-v-city-of-calistoga/ (“The writer [William McKinnon] was then retained to draft a mandamus action and to assist Reynolds in preparing a motion for reconsideration of the order of dismissal.”)

322 Id.


327 Id. at 3.


or water codes requiring the consideration on beneficial instream water uses. Examples include the many decisions on the North Fork of the American River, the controversies surrounding water transfers on the Yuba and decisions surrounding the Russian River Project. The non-5937 decisions are not reviewed here.

1. East and West Fork Walker Rivers

The Board added a condition to several water permits on the East and West Fork Walker Rivers requiring compliance with 5937 in Water Rights Order 90-9, per 5946. The Walker River Irrigation District (the District) appealed the order on several grounds, and the Board’s subsequent order on the appeal, as explained in WRO 90-16, illuminates 5937 in two major respects. First, the District argued that the permits should have been conditioned on release of flows necessary to restore the only pre-project fishery, as outlined by the court in CalTrout II. This argument was significant because, in 1990, the East Walker River supported a trophy brown trout fishery, which had not existed before the project. The Board rejected that request:

In Cal-Trout II, the court had before it a record, which led it to conclude that restoration of the pre-project fishery was the correct implementation of Section 5937 on the facts of that case. Section 5937 also permits, under appropriate circumstances, an alternative implementation which would require the dam owner to keep in good condition any fish "that may be planted" below the dam. . . . [T]he goal of implementing Section 5937 therein is not restoration of a pre-project fishery but maintenance of a highly valued fishery

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333 Excellent overview at Weber, supra note 257.
336 Id. at 6-7.
337 266 Cal. Rptr. 788, 803-804 (Ct. App. 1990). (“The licensee shall release sufficient water into the streams from its dams to reestablish and maintain the fisheries which existed in them prior to its diversion.”).
339 Order No. 90-9 at *6-7.
consisting most importantly of an introduced, and periodically restocked, species.

The Board went on to suggest that the historic fishery would also be an inappropriate point of comparison if it had already been impaired by “pollution or illegal diversions.” On the Board’s reading, “a dam owner's duties under Section 5937 should not be limited to maintenance of the pre-project fishery.”

The second point pertains to the amount of water available for compliance with 5937. The District requested that the Board add a sentence to the permits declaring, “In the case of a reservoir, this condition shall not require the passage or release of water at a greater rate than the unimpaired natural inflow into the reservoir,” offering as support the Board’s own 1975 Regulation containing that provision. The Board responded that the regulation language only offered a default rule and was not a rule of general application for 5937. It clarified, “The rule cannot be understood as adopting an interpretation of Section 5937 that releases in excess of concurrent inflows to the reservoir are never required.” The Board noted the overriding rule “favoring a physical solution to promote maximum beneficial use of water,” and outlined a scenario where flows out of the reservoir would be lower than inflows during the winter but higher than inflows during the summer, and remarked that such regime would be required if it resulted in the maximum beneficial use of water, including water for instream flows.

After the Board handled the appeal to the permit modification in WR 90-16, CalTrout filed a complaint with the Board. It alleged the District’s operation of Bridgeport Dam violated the permit’s new 5937 conditions. CalTrout subsequently withdrew the complaint, but the board pursued the complaint of its own accord and then established flow requirements to keep the fishery in good condition. While much of the determination is fact specific, two lessons emerge. First, the Board considered what constituted a violation of 5937. Because the trophy brown trout fishery in the East Walker River did not have a historical analog, the Board could not compare the flows to historical levels. Instead, the Board held that any flow causing an “adverse effect” or a “detrimental condition” for the fish, in and of itself constituted a violation of 5937, without reference to a historical fishery or other comparison point. Under this standard, there is a very low bar for a violation of 5937, and flow levels where “fish health is

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340 Order No. 90-16 at 7, footnote 3.
341 Id. at 8.
342 Id.
343 Id. at 8, citing City of Lodi v. East Bay Mun.Util. Dist., 7 Cal.2d 316 (1936).
344 Order No. 90-18 at 23. Bridgeport Dam created Bridgeport Reservoir. Id.
345 Id. at 4, footnote 3.
346 Id. at 23.
jeopardized” suffice. Second, the Board considered the impact of the reservoir level during water releases on water quality parameters, particularly turbidity, dissolved oxygen, and temperature. The Board determined that release of water when the reservoir was below a minimum pool of 600 acre-feet risked exposing downstream fish to toxic conditions, and so required that the pool be kept above that level. While the Board could clearly apply such requirements under its broader public trust authority, it only invoked section 5937 in applying the requirement. Section 5937 does require dam owners to release sufficient water to keep fish in good condition, and one might well envision a scenario where release of a particular volume of water might be required to keep temperature low enough or dissolved oxygen high enough to keep fish in good condition, but it is a very broad reading of 5937 that, on its own, allows the Board to require maintenance of a reservoir above a particular water level. Nevertheless, the order was not appealed and appears to continue in effect.

2. Mono Basin Adjudication

The Mono Lake Basin Water Right Decision 1631 (“Mono Basin Decision) implements the orders from the court in CalTrout I and II. While much of the discussion in WRD 1631 serves as a mechanical implementation of the court’s requirements, the Board followed their precedent from the East and West Fork Walker River order and added ancillary requirements, beyond instream flow requirements. The Mono Basin Decision required extensive habitat restoration for the four creeks in question, including significant changes to channel morphology, addition of wood debris to the channel, restoration of riparian vegetation, installation of fish and sediment bypass systems at diversion points, and addition of spawning gravel, among other efforts. In contrast to the East and West Fork Walker River order, however, the Mono Basin Decision more clearly spells out the reasoning for the additional

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347 Id. at 24.

348 Id. at 28.

349 Id. at 23-24.

350 Id. at 30.

351 Water Right Decision D-1631.

352 Weber, supra note 257, at 1192.

353 Also as in the East and West Fork Walker River orders, the Board required that, at times, the dam owner release more water from the dam than the natural inflow to the reservoir. Water Right Decision D-1631 at 69. The Board required the release of stored water to maintain flows in dry years and in normal years, unless the reservoir dropped below roughly 25% full. Id. at 69, 85.

354 Id. at 37-38, 45-46, 52-53, 74-75, 76.

355 Id.
requirements. The order notes that California embraces the physical solution doctrine, whereby “California courts have frequently considered whether there is a ‘physical solution’ available by which competing needs can best be served.” Generally, a physical solution would be a method whereby two parties, both seeking access to a stream, can find a way to both meet their needs in a matter that requires less water in total from the watershed in question, through diversion at a different point in the stream, increased imports, or increased dam height or the like. When the Board read *CalTrout I* and *II* and found that it was required to mandate flows that would restore the historical fishery, it looked to the physical solution doctrine and surmised that the historical fishery standard was achievable with less water if it also required direct restoration actions, beyond just increased flows. As the Board notes:

> in establishing the flow requirements necessary to comply with Fish and Game Code Section 5937 in the present situation, the SWRCB has examined the relationship between flows and fishery habitat, as well as the availability of other measures which would help restore the fishery while allowing diversion of some water for municipal use.

The “other measures,” including re-vegetation of the stream, rehabilitation of the stream channel, addition of spawning gravels, and anchoring of woody debris in the stream, resulted in the broadest restoration yet required under 5937. The Decision also required long-term reductions in Los Angeles’ diversions of roughly 60%.

3. Santa Ynez

The amicus brief in Reynolds stresses the Board’s view that the plaintiffs could not bring suit against the board or CDFG directly for failure to enforce 5937, but also indicate that the

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356 Id. at 10-11.


359 Water Right Decision D-1631 at 10-11.

360 Id. at 11.


362 Memorandum of Points and Authorities in Support of Amicus Curiae at 2, Reynolds v. City of Calistoga, No.: 26-46826 (Cal. Super. Ct. 2010) (“[A]ny remedy with the SWRCB would be in a proceeding before the SWRCB, which the SWRCB has discretion to initiate or not. Because the SWRCB’s authority is discretionary, not ministerial, the Plaintiff has no remedy in court if the SWRCB chooses not to initiate administrative proceedings. As a practical matter, the Plaintiff’s remedy, if any, is against the party alleged to be diverting in violation of the public trust.”).
Board does recognize a mandatory duty for dam owners to comply with 5937.\(^{363}\) In the Board’s view, it has no mandatory duty to impose 5937 under most conditions; the exceptions are when the board is constrained by 5946 and when the permit in question is issued after 1975, \(^{364}\) when the Board promulgated its regulation requiring 5937 be added to new permits. \(^{365}\) This issue came before the Board in the Santa Ynez order.

In November 1994, the Board issued order WR 94-5 addressing Bradbury Dam, part of the Cachuma Project on the Santa Ynez River in Santa Barbara County, California. \(^{366}\) The order required the release of water for fishery studies and the preparation of environmental reports, among other things, but did not require immediate release of water to enforce 5937. The California Sportfishing Protection Alliance (CSPA) petitioned the Board for reconsideration, arguing that the Board had a duty under 5937 to immediately order that the dam owner release water in compliance with 5937. \(^{367}\) The Board disagreed. It noted that the State had supervisory control over navigable waters and non-navigable waters that support a fishery under the public trust doctrine and the reasonableness doctrine, and further noted that the State’s control was to be exercised by the Board. \(^{368}\) Nevertheless, the Board reasoned that it had no nondiscretionary duty to require compliance with 5937 by the appropriators. The Board noted that 5937 imposes the minimum flow requirement on dam owners, not on the Board. \(^{369}\) It reviewed the holding in CalTrout II, where the Court of Appeal held that the Board was required to impose 5937 on the Los Angeles Department of Water and Power, but argued that the duty stemmed from Code Section 5946, not 5937. The Board read CalTrout II to merely indicate “that Section 5937 legislatively establishes that it is reasonable to release enough water below any dam to keep any fish that exist below the dam in good condition.” \(^{370}\) Thus the Board believes that “In carrying out its duty of continuing supervision, the SWRCB must be cognizant of the legislative policy set by Section 5937,” although it has no nondiscretionary duty to do so, \(^{371}\) and it did not require immediate compliance in this case. This seems to be a regression toward the views the Water Board held before 1956, when it believed that it bore no responsibility for enforcing 5937, and

\(^{363}\) Id. at 7.

\(^{364}\) Id. at 8.,

\(^{365}\) CAL. CODE REGS. Tit. 23 § 782 (West 2010).


\(^{367}\) Id. at *2.

\(^{368}\) Id. at *8.

\(^{369}\) Id. at *6.

\(^{370}\) Id. at *7.

\(^{371}\) Id.
does not seem to comply with the standard outlined in *National Audubon* for the Board’s continuing duty of supervision.

4. **Big Bear Decision**

Finally, the Water Board made an explicit order enforcing 5937 in the Big Bear Decision, pertaining to Bear Valley Dam on Bear Creek in the San Bernardino Mountains, San Bernardino County. The dam dates from 1884, was enlarged in 1911, and was most recently reinforced in 1988. The dam impounds Bear Creek and creates Big Bear Lake, originally used for irrigation uses. Big Bear Lake is now used for recreational, environmental and fish and wildlife uses, among other uses, and for storage for downstream consumptive uses. Below Bear Valley Dam, Bear Creek enters Fish Canyon and flows 8.75 miles to Santa Ana River; CDFG designated it as a wild trout stream from the dam to the confluence with the Santa Ana. Roughly 0.6 mile downstream from the dam, a natural barrier in Fish Canyon prevents upstream migration of fish, at least under normal flow conditions, and only sculpin and crayfish have been observed upstream of the barrier. Trout planted in that reach have not survived. Another 0.6 mile downstream, East and West Cub Creek enters Bear Creek, providing additional water, and the river supports a trout fishery downstream of the confluence. The Water Board stated that the wild trout stream designation was based on the fishery downstream from the confluence with Cub Creeks, although the entire stream is designated. As of 1990, Big Bear Municipal Water District (controlling the dam) released only incidental “leakage” and seepage from the dam, which did not support a self-sustaining trout fishery in upper Bear Creek (the upper 1.2 miles, above the confluence with the Cub Creeks), although a few adult trout were found below the fish canyon barrier. Downstream of the confluence, most water (more than 70%) in Bear Creak came from non-dam sources and was generally sufficient to support the trout fishery in good condition, although in drought years inflows were “too small to maintain the trout fishery in good condition.”

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373 *Id. at* *53-*54.

374 *Id. at* *5.

375 *Id. at* *31.

376 *Id. at* *33.

377 *Id.*

378 *Id. at* *7.

379 *Id.*

380 *Id. at* *34.

381 *Id. at* *31, *33-*34.
In 1990, CalTrout filed a complaint with the SWRCB against Big Bear Municipal Water District, alleging in part that “the District's operation of Bear Valley Dam and Big Bear Lake provides insufficient releases of water into Bear Creek to keep the fishery in good condition.”

The SWRCB determined that:

The fundamental issue in this proceeding is whether all of Bear Creek or only the reach downstream of West Cub Creek should be assured instream flows adequate to maintain a trout fishery in good condition.

Faced with this central issue, the SWRCB ordered releases “likely to maintain the fish in Bear Creek below West Cub Creek in good condition.” The releases, which would “maintain an instream flow in Bear Creek below West Cub Creek of 1.2 cfs all year, with a minimum instream flow of 0.3 cfs measured at the weir below Bear Valley Dam,” would also provide improved conditions in upper Bear Creek. The Board explicitly found that:

[T]his Order will provide enough flow in upper Bear Creek to keep in good condition the fish that are present there, such as sculpin and crayfish. The flows required by this Order are not intended to support trout above Fish Canyon, because trout apparently (1) are absent from this area and (2) cannot migrate past a barrier at Fish Canyon.

The board also noted that the flows would “support” trout above the Cub Creeks but below Fish Canyon. In addressing the fundamental issue, then, the Board determined that trout below the two Cub Creeks must be kept in good condition, those above the Cub Creeks but below Fish Canyon should be “supported,” and that the “fish” already present in upper Bear Creek should be kept in good condition. Their reasoning relied in part on the Fish and Game Code definition of “fish,” which included "wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof." The District biologist explicitly argued that the fishery above Cub Creeks “should be considered to be in good condition because it supports other "fish" in good condition, such as crayfish and prickly sculpin,” while CDFG took no apparent position

382 Id. at *1.
383 Id. at *31.
384 Id. at *52.
385 Id.
386 Id. at *52.-*53.
387 Id. at *53.
388 Id. at 33, citing CAL. FISH & GAME CODE § 45.
The Board ultimately adopted the flow recommendations from CDFG, while noting that, in keeping with the District’s expert, the non-trout fish upstream of the Cub Creeks would be kept in good condition. The Board did not address what how it selected which species of fish would be maintained in good condition and did not seek to reconcile this decision with 5937’s statutory mandate “to keep in good condition any fish that may be planted or exist below the dam.”

The Board very briefly discusses the good condition standard, although it relied primarily on the determinations by CDFG, noting that CDFG “has both the primary expertise of the State in dealing with fish and wildlife issues and the primary responsibility for interpreting the Fish and Game Code,” and that the Board must give deference to their judgment. The Board noted that:

The CDFG’s fisheries biologist testified that he determines whether fish are in good condition by looking at the fish in their habitat. If the fish are abundant considering the stream size or its potential productivity, have enough food, have a low disease frequency, are in equilibrium with their environment, and have all life stages represented, he considers them to be in good condition.

In contrast, the District’s scientist assessed the condition of the fishery based on similar factors, but also the number and diversity of aquatic invertebrates, the water quality, and habitat quality. The District did not discuss the historical condition of the fishery and did not mention the good condition standard established in CalTrout I and II.

Finally, the Board reiterated that it does not believe it is required to directly enforce 5937. It notes that:

Maintaining the fish in good condition is critical to protecting the public trust uses downstream of the dam and it is a legal obligation of

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390 Id.
391 CAL. FISH & GAME CODE § 5937 (West 2010), set forth in note 19 supra.
393 Id. at *49-*50 (“[T]he SCRCB is required to give great weight to Fish and Game's judgment with respect to fish and wildlife needs. [...] This does not mean that the SWRCB must accept Fish and Game's judgment, but the weight of the evidence must overcome the weight of Fish and Game's evidence before the SWRCB will reject it.”), citing Bank of America v. SWRCB 42 Cal.App.3d 198, 212 (1974) and CAL. WATER CODE §§ 1243 and 1257.5.
394 Id. at *33.
395 Id.
396 Id. at *49-*50 (emphasis added).
the District under Fish and Game Code section 5937. [paragraph break] Although the SWRCB is not obligated to strictly enforce section 5937 in this case, it is reasonable to ensure reasonable protection for public trust uses.

In this passage, as in its amicus briefs, the Board attempts to distinguish the obligation imposed by 5937 on dam owners from its own obligations to enforce the law. It carries this theme through the footnotes:

397 The SWRCB does not need to decide whether section 5937 is a legislative determination of reasonableness in this case; nor does the SWRCB need to decide whether the reasonableness doctrine would allow the SWRCB to authorize flows under the public trust doctrine that do not fully satisfy section 5937. The flows ordered in this case are reasonable and they also fully satisfy section 5937.

The Board continues to try to walk a line between enforcing 5937 directly and merely authorizing diversions conditioned on compliance with 5937. Nevertheless, the substance of the order suggests that it is in fact enforcing the law. As the Board’s introduction to the order states, Cal-Trout filed a complaint against the District under 5937, alleging that the District provided insufficient water to Bear Creek to keep the fishery in good condition. The Board asserted its jurisdiction over all appropriators and acknowledged that 5937 should be taken into consideration in evaluating appropriations. The board noted that, “It is the SWRCB's policy to enforce section 5937.” And the Board ultimately determined the required instream flow based on the flows required to maintain the fishery in good condition. The order directly enforces 5937. Perhaps the best indication of the Board’s understanding of its role can be found in the summation the Board presented as justification for its categorical exclusion from the California Environmental Quality Act (CEQA):

This Order is adopted for the purpose of enforcing public trust protections of the fishery in Bear Creek. Under Fish and Game Code section 5937 and the public trust doctrine, the District and Mutual already are obligated to release enough water to maintain the fishery in good condition. Thus, the function of this Order is to define the amount of water that is necessary for this purpose. The above discussion explains how the SWRCB arrived at the instream flow releases required by this Order. Determination of the required releases

397 Id. at *51, footnote 13.
398 Id. at *1.
399 Id. at *22-*23.
400 Id. at *28-*29.
401 Id. at *56.
was tempered by the reasonableness doctrine in California Constitution, Article X, Section 2 and was balanced against protection of other recreational environmental, and fish and wildlife uses which exist in Bear Valley and Big Bear Lake.

The Board appears to be trying to leave itself some room to maneuver should a complaint be brought before it that required it to weigh water for fish against water for other, non-recreational uses, and it is unclear what the Board would do in such a situation. It rejects the CalTrout II teaching that no balancing test is required or even allowed under 5937,\textsuperscript{402} and this point of law remains unresolved.

The Big Bear decision does put down a marker in one other respect; the Water Board clearly believes that the District must comply with the 5937, even though the dam was constructed before the explicit minimum flow requirement became law in 1915. This seems intuitive; the Board has never held itself out as granting water appropriators the right to appropriate water free of any obligation to comply with other state laws, even if those laws limit the amount of water the appropriator may actually remove from the stream. Just as a license to drive carries with it the responsibility to obey traffic laws, a license to appropriate water carries the responsibility to comply with other state water laws. Nevertheless, Big Bear appears to be the only decision related to a dam built before 1915.

\textsuperscript{402} The Board makes this position explicit in its amicus brief in NRDC v. Houston. Brief of Amicus Curiae California SWRCB at *19, footnote 5, NRDC v. Houston, 146 F.3d 1118 (9th Circ. 1998) (“The Court noted that because its decision was grounded on the State Board's duties under Section 5946, ‘[w]e need not reach the question of section 5937 alone as a rule affecting the appropriation of water.’”) (emphasis in the original).
V. SECTION 5937 – STATE OF THE LAW

Six court decisions (CalTrout I and II, NRDC v. Patterson, CLEAR v. Connor, the Putah Creek Water Cases and Reynolds v. Calistoga) and four Water Board orders have addressed 5937. In spite of the past and ongoing litigation, no appellate court in California has spoken explicitly on the application of 5937 in the absence of section 5946's reference to water permits and licenses in District 4 1/2. There has been no judicial review of the Water Board's 1975 Regulation or the appropriateness of the Attorney General's current policy regarding the enforcement of section 5937. In spite of the uncertainty, however, the existing cases and orders provides some evidence for how courts should apply 5937. This section examines the state of the law for 5937.

A statute's plain meaning determines its proper statutory construction. The judicial interpretation of section 5937 must provide a result consistent with the legislative purpose in the context of the legislation and its apparent objective. The 1870 Act required year-round flows for fishway operation. The 1915 Act on its face created an explicit minimum flow requirement. The 1915 Act's intent is buttressed by the 1912-14 Report of the Fish and Game Commission requesting and stating the reasons for a minimum flow requirement. And the report recognized that such a requirement would affect the feasibility of dams on the state's rivers. The 1937 Amendment severed the minimum flow requirement from the fishway requirement. The 1945 Act clarified that section 5937, as a water allocation statute, would apply to federal dams even if such dams were excused from state construction requirements. This consistent pattern of increasing protection should guide interpretations of 5937.

A. Do 5946 and Other Minimum Flow Laws Repeal or Weaken 5937?

5937 has not been explicitly repealed, leaving only the possibility of implied repeal. California courts have a strong bias against implied repeal. “Presumptions are against implied

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404 Cossack v. City of Los Angeles, 11 Cal.3d 726, 732-33 (1974). See Clean Air Constituency v. California Air Resources Board, 11 Cal. 3d 801, 813 (1974), Rock Creek Water Dist. v. County of Calaveras, 29 Cal.2d 7, 9 (Cal. 1946) (“[O]bjective sought to be achieved by a statute as well as the evil to be prevented is of prime consideration in its interpretation.”).

405 The Act of 1870 requiring fishways presumably did not need a water passage requirement to protect fish because at that time riparian rights were interpreted such that dam owners would have to release water to satisfy below-dam riparians. The Water Commission Act of 1913 introduced the chance that sufficient water appropriations might affect fish. The Act of 1915 was therefore the logical step for a legislature wanting to ensure that the fishways of the Act of 1870 continued their passage of water.

406 STATE OF CALIFORNIA FISH AND GAME COMMISSION, supra note 53, at 33-34.

407 CAL. FISH & GAME CODE § 5937 (West 2010), set forth in note 19 supra.
repeal, and . . ., absent an express declaration of legislative intent, courts will find an implied repeal only when there is no rational basis for harmonizing the two potentially conflicting statutes, and the statutes are irreconcilable, clearly repugnant, and so inconsistent that the two cannot have concurrent operation.” 408 In order for the second law to repeal or supersede the first, the former must constitute a revision of the entire subject, so that the court may say that it was intended to be a substitute for the first.” 409 This places a significant burden on any party challenging section 5937’s continuing applicability based on implied repeal. Courts also look with disfavor on arguments that a more specific statute trump a more general one. While “it is well established that a specific provision prevails over a general one relating to the same subject,” 410 “the former doctrine only applies when an irreconcilable conflict exists between the general and specific provisions.” 411 These cannons of construction must constrain any attempt to reconcile 5937 with other statutes.

The enactment of 5946, explaining the application of 5937 in Inyo and Mono Counties, provides a good example. Some commentators have argued that passage of 5946 implies a weakening of the broader 5937. 412 Even at the time of its passage, Beach Vasey, the Legislative Secretary to Governor Earl Warren, remarked in a legislative memorandum concerning 5946 that, “it might be argued that there is an implication from this bill at the present time that there need not be as even release of water, or release of water to protect fish life in other parts of the state.” 413 However, reviewing 5946 based on the cannons above demonstrates that there is no conflict between the laws. Section 5937, on its face, applies to dam owners, not to the Water Board. It began as a statute in the penal code, firmly ensconcing a longstanding view of fish destruction as a nuisance. 414 The Fish Commission long noted its difficulties in enforcing the statute, and frequently requested new legislation to require the Water Board to assist in its enforcement. 415 The 1951 Attorney General’s opinion further limited the Fish Commission’s

412 Firpo, supra note 154 at 111, citing Jan Stevens, Symposium on the Public Trust and the Waters of the American West, 19 ENVTL. L. 605, 611 (1989) (suggesting that 5946 “places teeth in” 5937). Jan Stevens’ comment, however, speaks to the strength of enforcement of 5937, not to the continuing vitality of the law itself.
413 Legislative Memorandum from Beach Vasey, Legislative Secretary, to Governor Warren concerning Senate Bill No. 78 (SB 78), An Act to Add Section 525.5 to the Fish & Game Code (July 31 953) (on file at the California State Archives, Governor's Chapter Bill File, ch. 1663 (1953) (MF 3.2( 15))
414 See discussion in Section II, supra.
415 Id.
ability to enforce 5937. In 1953, Senator Charles Brown, a longtime Senator from California’s 28th District (Inyo, Mono, and Alpine Counties) and a staunch advocate for his district’s water rights, found that the Fish Commission had permitted the Los Angeles Department of Water and Power to dry up 18 miles of the Owens River, in the Owens River Gorge, as well as another 12.6 miles of trout streams entering Mono Lake. He sought to protect the remaining fisheries, and drafted legislation to that effect. The legislation he drafted, which became 5946, added another enforcement mechanism for 5937, by preventing the Water Board from issuing permits or licenses not conditioned on compliance with 5937. There is no inherent irreconcilable conflict between the broad 5937, which applies to dam owners and controls the manner in which they operate their dams, and 5946, which requires the Water Board to condition permits on that underlying law. Given its most aggressive reading, 5946 might imply that the Water Board did not always have to condition permits on compliance with 5937. Even that broad reading does not vitiate continued application 5937 to dam owners everywhere.

While some may argue that other code sections allowing appropriations or authorizing water projects cancel or diminish section 5937's facial meaning, these arguments face the same

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416 See discussion in Section III.D., supra.


418 See, e.g., Times staff correspondent, Assemblymen Hit Senate Move on Mono Basin, LOS ANGELES TIMES (May 23, 1947) at 2 (Senator Brown “rushed through a resolution” supporting efforts by the U.S. Congress to prevent Los Angeles from acquiring lands, and thus water rights, in the Mono Basin); WILLIAM L. KAHRIL, WATER AND POWER: THE CONFLICT OVER LOS ANGELES WATER SUPPLY IN THE OWENS VALLEY, 426, 530, 380-384 (1983) (discussing Senator Brown’s efforts to limit Los Angeles holdings in Mono County); TED SIMON, THE RIVER STOPS HERE: SAVING ROUND VALLEY, A PIVOTAL CHAPTER IN CALIFORNIA’S WATER WARS 138 (2001) (discussing efforts by southern California to secure additional water rights).

419 Letter concerning Senate Bill No. 78, from Senator Charles Brown, to Governor Earl Warren 2 (June 11, 1953) (on file at the California State Archives, Governor's Chapter Bill File, ch. 1663 (1953) (MF 3:2(15)).

420 Id. at 5.

421 Id. at 1.

422 Legislative Memorandum concerning Senate Bill No. 78 (SB 78), An Act to Add Section 525.5 to the Fish & Game Code, from Beach Vasey, Legislative Secretary, to Governor Earl Warren 1 (July 31 953) (on file at the California State Archives, Governor's Chapter Bill File, ch. 1663 (1953) (MF 3:2(15))

423 CAL. FISH & GAME CODE § 5946 (West 2010), set forth in note 167, supra.

424 That was certainly the Board’s position until promulgation of its own 1975 Regulation. 17 Cal. Regulatory Notice Reg. 52.2 (April 26, 1975). Today the regulation is found in CAL CODE REGS tit. 23, § 782 (1994).

425 No dilution of section 5937's facial meaning should occur from its presence in the Fish and Game Code, as opposed to the water code. The California Supreme Court has held that all laws on a specific matter need not be
challenges outlined above. For example, section 5937 survives federal statutes authorizing a project for specified out-of-stream uses because no conflict necessarily exists between the minimum flow requirement and such a statute. Section 5937 does not preclude the use of water for out-of-stream beneficial uses, but only limits the water available for such uses to that not required to maintain below-dam fish in good condition. Water not needed for below-dam fish may be permitted and licensed to appropriators by the Water Board. Section 5937 works like the relationship between riparians and appropriators -- water not needed to satisfy riparian rights is available for appropriation. Similarly, 5937 does not conflict with directives that a dam serve multiple beneficial uses, only one of which is below dam fish. When a project must serve multiple beneficial uses, a conflict could only exist if after compliance with section 5937 there were no water available for use by any other designated beneficial uses. In this way, 5937 works much like the Federal Endangered Species Act, or the water quality standards under California’s Porter Cologne Water Quality Control Act, or myriad other environmental laws. Authorization of a project alone does not exempt that project from all environmental laws.

Section 5937 fits squarely into California’s complex water law. In National Audubon, the California Supreme Court reconciled the state’s public trust and water law doctrines, and much of that decision resonates in the application of 5937. The Court cautioned, “All uses of water, including public trust uses, must now conform to the standard of reasonable use,” and went on to note that Water Code section 1243 is legislative clarification that protection of public trust resources is inherently a reasonable use of water. The Board agreed, reading CalTrout II to indicate “that Section 5937 legislatively establishes that it is reasonable to release enough water below any dam to keep any fish that exist below the dam in good condition.” Article X,

included in the same code. Enos v. Snyder, 131 Cal. 68, 72 (1900). Moreover, CAL. WATER CODE § 6501, added in 1943, clarifies that “[t]he provisions for the ... protection and preservation of fish in streams obstructed by dams are contained in [...] the Fish and Game Code.” CAL. WATER CODE § 6501 (West 2010).

NRDC v. Patterson II, 333 F. Supp. 2d 906, 918 (E.D. Cal 2004), (“The non-federal defendants . . . asserted that original federal authorization of Friant Dam indicated an intent to preempt § 5937. This court denied these motions to dismiss.”).

National Audubon, 33 Cal. 3d 419, 444 (1983) (“The [Water] board has the power and duty to protect such uses by withholding water from appropriation.”).

CAL. WATER CODE § 1243 (West 2010) (recognizing fish and wildlife as just one on many beneficial uses allowed to use state water).


CAL. WATER CODE §13000 et seq. (West 2010).

National Audubon, 33 Cal. 3d at 419.


section 2 sets out the authority of the legislature to make these reasonableness determinations.

The 1928 Constitutional Amendment guaranteed that no water right holder could avoid a legislative determination of reasonableness in the allocation of state water. Thus the 1928 Amendment ensured that the legislature would have broad powers to balance the needs of competing beneficial uses, making policy to best serve the needs of the state. Section 5937 is just such a policy.

**B. What Dams are Covered?**

On its face, 5937 applies to “[t]he owner of any dam.” Any exceptions to the general rule that includes owners of any dam under 5937 must stem from external sources, and the only exceptions identified by any court thus far are based on federal preemption, although some may argue that older water rights are not contingent on 5937. Thus privately owned dams and state or local government owned dams are covered. Moreover, federal dams under control of these entities are covered, based on the expansive definition of “owner” in the Fish and Game Code. Finally, federally owned and operated dams are covered, subject to supersedure by federal law. Of the 1,390 dams for which ownership data is publicly available, 167 are federally owned. The dams are owned by 11 federal agencies: the U.S. Forest Service (63 dams), the U.S. Bureau of Reclamation (45), the Corps of Engineers (33) the U.S. Army (7), the U.S. Air Force (6), the National Park Service and the U.S. Marine Corps (4 each), the U.S. Bureau of Indian Affairs (2), and the U.S. Fish and Wildlife Service and the Bureau of Land Management (1 each). This information reflects actual ownership of the dam, and may not reflect the broader definition of ownership used in 5937 and the Fish and Game Code.

1. Are old dams covered?

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434 CAL. CONST. art. X, § 2 (“the legislature may also enact laws in the furtherance of the policy in this section.”).


436 CALIFORNIA DEPARTMENT OF WATER RESOURCES, DIVISION OF DAM SAFETY, LISTING OF DAMS (2011), http://www.water.ca.gov/damsafety/damlisting/index.cfm (Dams listed in either the California Jurisdictional Dams list or the Federal Dams list. This excludes dams below the height or capacity requirements established for dam safety jurisdiction, CALIFORNIA DEPARTMENT OF WATER RESOURCES, DIVISION OF DAM SAFETY, JURISDICTION CHART (2011), http://www.water.ca.gov/damsafety/jurischart/index.cfm and so underestimates the number of dams in the state.).

437 CALIFORNIA DEPARTMENT OF WATER RESOURCES, DIVISION OF DAM SAFETY, LISTING OF DAMS (2011). Other major dams owners include water and irrigation districts (152 dams), California cities (149), Pacific Gas and Electric (94), and California state agencies (51). The remaining dams are held by a variety of public entities (e.g. counties, utility districts) and private owners.

438 Id.
While one might argue that 5937 should not be applied to dams built before 1870 (when the de facto minimum flow requirement was added), 1915 (when the precursor to the modern 5937 became law), 1937 (when the minimum flow requirement was officially severed from the fishway requirement) or 1945 (when the federal government was explicitly added to the definition of dam owner), a closer review confirms that 5937 applies to dams regardless of when the dam was constructed or when the dam owner first claimed the relevant water rights.

First, at least one California Court of Appeal had directly held that California Fish and Game Codes apply to the oldest category of water rights, pre-1914 appropriative rights. While it noted that a “pre-1914 appropriative right is not subject to the 1913 statutory scheme for purposes of acquisition and supervision of use,” which covers water board regulation, but goes on to caution that, “a water right, whether it predates or postdates 1914, is not exempt from reasonable regulation. Just as a real property owner does not have an unfettered right to develop property in any manner that he or she sees fit, the owner of a water right may be similarly restricted.” The court based this holding on reasoning that the code “furthers the state's substantial interest in the protection of the state's fish and wildlife. This statutory requirement is inherent in the state's sovereign power to protect its wildlife and Murrison's water rights are subject to these powers.”

More broadly, the California Supreme Court addressed a similar issue in National Audubon, under a takings analysis, reviewed below. Briefly, National Audubon held that the

439 1870 Fish Act § 3.
440 CAL. FISH & GAME CODE § 5937 (West 2010), set forth in note 19 supra.
441 An Act to Amend Section 525 of the Fish and Game Code, Relating to Water Flow Through a Dam, 1937 Cal. Stats. 1400. The Senate Committee on Fish & Game revised the 1937 Act (SB 800) to clarify the low flow requirement. The amendment ensured that the "good condition" requirement applied to both dams with fishways and dams where a fishway was not required. Sen. Bill No. 800, 52d Reg. Sess. (1937). See also Sen. J., 52d Reg. Sess. (1937); Assembly J., 52d Reg. Sess. 3418 (1937).
442 1945 Cal. Stats. 2112.
443 The CalTrout I Court applied 5946 prospectively, and the court's reasons for the prospective application of section 5946 are equally applicable to section 5937. CalTrout I, 255 Cal. Rptr. 184, 210 (Cal. Ct. App. 1989). The lack of ambiguity in section 5937 means that regardless of any agency-granted water rights claimed by dam owners, a court must apply the law and alter them. The state will not be estopped from enforcing section 5937 because it has a continuing duty to apply the statute, in part due to its role as the trustee of the state's fish.
444 People v. Murrison, 101 Cal. Ct. App. 4th 349, 359 footnote 6 (Cal. Ct. App. 2002). In Murrison, the court claimed that, “This case simply does not raise the issue of whether DFG may limit Murrison's claimed water right.” On the other hand, it upheld the trial court's injunction preventing continued diversion, based on violation of the underlying statute.
445 Id. at 361.
446 Id.
state has continuing supervisory duty over the use of trust resources, including water. Because 5937 is a legislative expression of the public trust, the Board has a continuing duty and a concomitant power to implement it on all water rights, regardless of their time of origin. The Water Board followed this line of reasoning in the Big Bear, where it applied 5937 to a pre-1914 water right.

In contrast, CalTrout I undertook an extensive retroactivity test when applying 5946 before determining that 5946 did not present a retroactivity problem under the facts of the case. Because the case lacked a retroactivity problem, the court did not reach the question of whether retroactive application of 5946 or 5937 would pose a problem, and did not apply the teachings of National Audubon. While no case has reached this exact issue, the California Supreme Court has held that even vested rights (in contrast with the rights that cannot vest, under National Audubon) can be abrogated under the state’s police power whenever reasonably necessary for the protection of the public welfare, which can include environmental protection.

On this brief analysis, 5937 probably applies to dams of all ages.

2. Does federal dam law preempt 5937?

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447 National Audubon, 33 Cal. 3d 419, 452 (1983) (“The public trust doctrine serves the function in that integrated system of preserving the continuing sovereign power of the state to protect public trust uses, a power which precludes anyone from acquiring a vested right to harm the public trust, and imposes a continuing duty on the state to take such uses into account in allocating water resources.”).

448 Id.

449 SWRCB Order No. WR 95-4, Cal. SWRCB, 1995 Cal. Env. Lexis 16, *21-22 (1995), (“Although the SWRCB does not issue a permit or license for a pre-1914 appropriation of water such as the Big Bear Lake appropriation, the SWRCB has authority to supervise the exercise of pre-1914 water rights under the public trust doctrine and under Water Code section 275, which implements California Constitution Article X, section 2. Based on these authorities, the SWRCB has continuing authority under both the reasonableness doctrine and the public trust doctrine over all appropriations or other diversions of water for use. In applying these doctrines, the requirements of section 5937 should be taken into consideration.”) (internal citations omitted).


451 In re Marriage of Bouquet, 16 Cal. 3d 583, 592 (1976) (“Retroactive legislation, though frequently disfavored, is not absolutely proscribed. The vesting of property rights, consequently, does not render them immutable: Vested rights, of course, may be impaired "with due process of law" under many circumstances. The state's inherent sovereign power includes the so-called "police power" right to interfere with vested property rights whenever reasonably necessary to the protection of the health, safety, morals, and general well being of the people. . . . The constitutional question, on principle, therefore, would seem to be, not whether a vested right is impaired by a marital property law change, but whether such a change reasonably could be believed to be sufficiently necessary to the public welfare as to justify the impairment.”) (internal citations omitted).

In considering federal preemption of state water law, the Supreme Court noted, “Where Congress has expressly addressed the question of whether federal entities must abide by state water law, it has almost invariably deferred to the state law.” Moreover, while “The history of the relationship between the Federal Government and the States in the reclamation of the arid lands of the Western States is both long and involved, . . . through it runs the consistent thread of purposeful and continued deference to state water law by Congress.” The Supreme Court has spent considerable time discussing the need to defer to state water rights, and any discussion of applying state law to federal water use must be colored by this emphasis.

Several cases provide data points on federal supersedure of 5937. First, in California v. Federal Energy Regulatory Commission (FERC), the Supreme Court held that California, through the Water Board, could not require that a dam owner maintain a higher minimum flow that that required by a FERC license. The Federal Power Act contains a savings clause for state water law, but the Court ruled that the savings clause affected only “proprietary rights,” and that “California's minimum stream flow requirements neither reflect nor establish ‘proprietary rights.’” Thus, FERC-licensed dams are exempt from state-mandated minimum flow requirements.

The Court did not address those smaller hydropower projects exempted from licensing by FERC, which fall into two general exempt categories: conduit facilities, those facilities where generation occurs on man-made water conduits, and small hydropower projects of 5 megawatts or less. Both of those categories are required to comply with the recommendations of state fish and wildlife agencies, which provides the state an opportunity to directly enforce

457 "Nothing contained in this chapter shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein." 16 U.S.C. § 821 (2010).
458 Cal. v. FERC, 495 U.S. at 498.
5937 on those dams. Moreover, the fact that these dams are exempt from the thorough FERC licensing process vitiates much of the reasoning in California v. FERC. That decision relied on FERC’s close examination of the fish life impacts on minimum required flows as a reason to determine that FERC license flow requirements superseded state minimum flow requirements. Thus, even if CDFG did not implement 5937 by recommendation, 5937 still likely applies to the dams exempt from FERC licensing and could be enforced via private litigation.

Finally, large federal dams that generate power do not require FERC licensing, and so are not exempted from 5937 under the auspices of a FERC license, although they could hypothetically be exempted by their authorizing legislation.

Second, in NRDC v. Houston, the Ninth Circuit case that began its life as NRDC v. Patterson, considered the applicability of 5937 to the Bureau of Reclamation. Section 8 of the Bureau’s authorizing legislation provides a savings clause for state water law. The Supreme Court held in California v. United States that “the ‘cooperative federalism’ of § 8 required the United States to comply with state water laws unless such a law was directly inconsistent with clear congressional directives regarding the project.” The Ninth Circuit interpreted “clear congressional directives” to mean a preemptive federal statute. Thus, in the absence of a

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462 18 C.F.R. § 4.106, art. 2 (2010) (“The construction, operation, and maintenance of the exempt project must comply with any terms and conditions that the United States Fish and Wildlife Service, the National Marine Fisheries Service, and any state fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish or wildlife resources or otherwise to carry out the purposes of the Fish and Wildlife Coordination Act”) and 16 USC 823a (c)(“[FERC] shall include in any such exemption— (1) such terms and conditions as the Fish and Wildlife Service National Marine Fisheries Service and the State agency each determine are appropriate to prevent loss of, or damage to, such resources and to otherwise carry out the purposes of such Act”).

463 Federally authorized projects do not require FERC licensing. Uncompahgre Valley Water Users Ass’n v. Fed. Ener. Reg. Comm’n, 785 F.2d 269, 274-77 (10th Cir. 1986). See also Roderick E. Walston, California v. Federal Energy Regulatory Commission: New Roadblock to State Water Rights Administration, 21 ENVTL. L. 89, 106 (1991) (“[S]tate laws may continue to apply to the hydropower component of federal reclamation projects but not to public and private hydropower projects that are regulated by FERC.”). These projects include Shasta Dam, which created Lake Shasta, the largest reservoir in the state, Trinity Dam, which created the third largest. CALIFORNIA DEPARTMENT OF WATER RESOURCES, EXECUTIVE UPDATE, HYDROLOGIC CONDITIONS IN CALIFORNIA, http://cedc.water.ca.gov/cgi-progs/reports/EXECSUM. The dams listed here can be compared to the list of FERC licensed dams in California. FERC, HYDROPOWER, http://www.ferc.gov/industries/hydropower.asp (select the hyperlink for “Complete List of Licensed Projects” under the “Licensing” heading).

464 43 U.S.C. § 383, set forth in note 263, supra. This language is very similar to the language in the Federal Power Act, and may have served as a model for that language. Cal. v. FERC, 495 U.S. at 503-504. The Supreme Court reviewed the similarities, but rejected the argument that the two sections must be given the same interpretation, based on textual differences, and the “purpose, structure, and legislative history of the entire statute before it.” Id. at 504.


467 U.S. v. Cal., 694 F.2d 1171, 1176-77 (9th Cir. 1982).
directly preemptive federal statute, all Bureau of Reclamation dams must comply with 5937. In NRDC v. Houston, the Ninth Circuit reviewed the Central Valley Project Improvement Act (CVPIA)\textsuperscript{468} which governed aspects of the execution of Friant Dam water renewal contracts, to determine if it preempted 5937. The Court specifically considered a portion of the law requiring that “Friant dam water is not to be released from the Friant dam to comply with the provisions of the CVPIA regarding the development of a plan to reestablish fish below the dam.”\textsuperscript{469} The court held that the clause did not \textit{directly preempt} the application of 5937, concluding, “There is no clear directive in the CVPIA which preempts the application of § 5937 if the state law could be implemented in a way that is consistent with Congress' plan to develop and restore fisheries below the Friant dam in a manner that is . . . in keeping with other CVPIA mandates.”\textsuperscript{470} This finding is in keeping with the high standard articulated by the U.S. Supreme Court in determining when state law is preempted. The Supreme Court recognized that under: \textsuperscript{471}

\begin{quote}
[t]he presumption against finding pre-emption of state law in areas traditionally regulated by the States . . ., courts may not find state measures pre-empted in the absence of clear evidence that Congress so intended.
\end{quote}

These two cases allow some understanding of how a Court would rule on a preemption argument for other federal dams located in California, although preemption arguments tend to be very fact-specific.

In some cases, the \textit{NRDC v. Houston} teaching can be extended to Corps of Engineers dams. As the Ninth Circuit held, “Section 8 of Flood Control Act of 1944 authorizes the Secretary of Interior to operate and maintain irrigation structures on Corps of Engineers dams under the provisions of the Federal Reclamation laws, thus making . . . the Reclamation Act of 1902 applicable to the irrigation features of Corps of Engineers projects that were not already providing irrigation storage as of the passage of the act.”\textsuperscript{472} In 1988, the Supreme Court clearly

\begin{itemize}
\item \textsuperscript{468} P.L. No. 102-575, § 3401 \textit{et seq.}, 106 Stat. 4600 \textit{et seq.} (1992).
\item \textsuperscript{469} NRDC v. Houston, 146 F.3d at 1132.
\item \textsuperscript{470} Id., \textit{citing} CVPIA, P.L. No. 102-575, §3406(c), 106 Stat. 4721 (1992).
\item \textsuperscript{472} Turner v. Kings River Cons. Dist., 360 F.2d 184, 192 (9th Cir. 1966) (internal citations omitted) (In Turner, however, plaintiffs who sought to apply state law to the acquisition of water rights appear to have been frustrated by either the non-operational aspect of water right acquisition (foreclosing application of Section 8 of the Reclamation Act) or by clear directives in the 1944 FCA contradicting state water acquisition law.).
\end{itemize}
set out the process by which water comes under the control of the Interior Secretary, and thus
irrigation law, including Sec. 8 of the Reclamation Act:

The Interior Secretary may recommend to the Army Secretary that
an Army reservoir be utilized at least in part for irrigation
purposes. If the Army Secretary determines that the reservoir may
be used for this purpose, then the Interior Secretary "is authorized
to construct, operate, and maintain, under the provisions of [the
Federal reclamation laws] . . . such additional works in connection
therewith as he may deem necessary for irrigation purposes."
Congress must grant "specific authorization" for the construction
of any such additional works. [...] By this means, Interior would be
permitted to withdraw water from Army reservoirs through these
additional works for use in irrigation, which would then bring that
water under its control, and under the federal reclamation laws the
Interior Secretary may reallocate irrigation water from irrigation
projects to other purposes when he sees fit, as long as "it will not
impair the efficiency of the project for irrigation purposes."

More broadly, in the act, "Congress declared a policy of `recogniz[ing] the interests and rights of
the States in determining the development of the watersheds within their borders and likewise
their interests and rights in water utilization and control."
This policy and the process in the
law itself provide two avenues to apply 5937, although this possibility has not been litigated.

Many California Dams are (1) on Forest Service land or (2) are owned by the Forest
Service. For the first category, the Forest Service issues a Special Use Permit (SUP), allowing
the dam owner right-of-way to install the dam and associated water works. The Forest Service
has the well-established ability to condition these permits on compliance with minimum flow
requirements, and is statutorily obligated to add terms in the SUP that “require compliance
with State standards for public health and safety, environmental protection, and siting,
construction, operation, and maintenance of or for rights-of-way for similar purposes if those
standards are more stringent than applicable Federal standards.” This provides the State an
opportunity to enforce 5937 against these dams. Moreover, as the SWRCB noted:

[T]he U.S. Forest Services' special use permit does not convey a legal
basis upon which to divert and/or appropriate water, but grants the

474 Id. at 502 (internal citation omitted).
475 Co. of Okanogan v. NMFS, 347 F.3d 1081, 1086 (9th Cir. 2003) ("[T]he FLPMA specifically authorizes the
Forest Service to restrict such rights-of-way to protect fish and wildlife and maintain water quality standards under
federal law, without any requirement that the Forest Service defer to state water law.") See also Sequoia
Forestkeeper v. USFS, 2010 U.S. Dist. LEXIS 131381, *56-57 (E.D. Cal 2010) ("the USFS had the authority to
condition the SUP on minimum passage flow restrictions.")
permittee access to and use of Forest Service land in accordance with the terms and conditions of the permit. Any diversion of water, regardless of its point of origin, must have a legal basis of right pursuant to California water law.

This provides a second rational for application of 5937 to the first category of dams associated with the Forest Service, the dams on Forest Service land but belonging to other entities, are subject to 5937.\(^{477}\)

The second category, dams owned by the Forest Service itself, are governed by federal or state law, depending on the water rights associated with the reservoir. The Forest Service holds both federal reserved water rights, in an amount necessary for the purposes of the reservation creating the national forest, and state water rights.\(^{478}\) The former are a federal water right and are not constrained by state water laws, so Section 5937 probably does not apply to these rights. In contrast, the state water rights arise under state law, and must be obtained and exercised under state water laws, including 5937. For most dams, the associated water rights are likely a mixture of both federal reserved water rights and state water rights, but the use of any state water right obligates the forest service to comply with the state laws in the use of that water.

Finally, Emigrant Wilderness suggests that in some cases the Wilderness Act may preempt application of 5937, although any analysis under the Wilderness Act is area specific and this possibility has not been directly litigated.

C. Against Whom Can 5937 Be Enforced?

Section 5937, on its face, applies to dam owners, including dam operators,\(^{481}\) and has been successfully applied against such parties. For example, in the Putah Creek Cases, plaintiffs filed against the Solano Irrigation District and Solano County Water Agency, operators of a dam actually owned by the Bureau of Reclamation.\(^{482}\) Because the SCWA contracts with the Bureau for water service from the Solano Project and separately contracts for the operation of the Solano


\(^{481}\) CAL. FISH & GAME CODE § 5900 (West 2010), set forth in note 292 *supra*.

Project, the court held that the SCWA and SID were “owners” of the dam, for purposes of 5937. Most of the cases enforcing 5937 have proceeded directly against dam owners.

Whether 5937, alone or read with other codes, would allow for enforcement via a mandamus action against the Water Board is an open question. Since the Water Code’s origin in 1945, it has incorporated the Fish and Game Code provisions for protection and preservation of by reference, under Water Code section 6501. Moreover, the National Audubon Court also recognized that the Water Board has a duty to protect such uses:

Amendments to the Water Code enacted in 1955 and subsequent years codify in part the duty of the Water Board to consider public trust uses of stream water. The requirements of the California Environmental Quality Act impose a similar obligation.

The Court was so firm on this point, it reiterated it five more times. In contrast, the water board continues to argue in both its orders and its amicus briefs that it has no mandatory duty to enforce the public trust embodied in 5937. While a court would probably agree with the Supreme Court that the Water Board has a duty to consider the public trust, the duty only requires consideration of that trust, which raises the question of whether 5937 allows for a balancing test, as argued by the water board, or whether the balancing has been done by the legislature.

D. Does 5937 Allow Balancing of Water Uses?


484 National Audubon, 33 Cal. 3d 419, 446 at footnote 27 (1983) (internal citations omitted).

485 Id. at 437 (“In the following review of the authority and obligations of the state as administrator of the public trust, the dominant theme is the state's sovereign power and duty to exercise continued supervision over the trust.”); Id. at 441 (“Thus, the public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust.”); Id. at 444 (“Although the courts have refused to allow the board to appropriate water for in-stream uses, even those decisions have declared that the board has the power and duty to protect such uses by withholding water from appropriation.”) (internal citation omitted); Id. at 452 (“The public trust doctrine serves the function in that integrated system of preserving the continuing sovereign power of the state to protect public trust uses, a power which precludes anyone from acquiring a vested right to harm the public trust, and imposes a continuing duty on the state to take such uses into account in allocating water resources.”); and Id. at 446 (“Once the state has approved an appropriation, the public trust imposes a duty of continuing supervision over the taking and use of the appropriated water.”).


Several decisions discuss the Water Board’s power to balance competing water uses. In Fullerton v. SWRCB, the court highlighted Water Code Sections that provide for a balancing approach: 1243, 1243.5 and 1257. The court did not consider the issue directly, but when it decided that instream appropriations were not allowed, it did so in part because allowing them “would eliminate piscatorial purposes from the balancing processes prescribed by the Legislature” when the board determines how to allocate water to best serve the public interest. The National Audubon Court also ascribed broad balancing power to the water board. After noting that the board originally had only ministerial duties, the Court noted that, “[m]ore recent statutory and judicial developments, however, have greatly enhanced the power of the Water Board to oversee the reasonable use of water and, in the process, made clear its authority to weigh and protect public trust values.” Even when considering Water Code section 106,


489 CAL. WATER CODE § 1243 (West 2010):

The use of water for recreation and preservation and enhancement of fish and wildlife resources is a beneficial use of water. In determining the amount of water available for appropriation for other beneficial uses, the board shall take into account, whenever it is in the public interest, the amounts of water required for recreation and the preservation and enhancement of fish and wildlife resources.

The board shall notify the Department of Fish and Game of any application for a permit to appropriate water. The Department of Fish and Game shall recommend the amounts of water, if any, required for the preservation and enhancement of fish and wildlife resources and shall report its findings to the board.

490 CAL. WATER CODE § 1243.5 (West 2010):

In determining the amount of water available for appropriation, the board shall take into account, whenever it is in the public interest, the amounts of water needed to remain in the source for protection of beneficial uses, including any uses specified to be protected in any relevant water quality control plan established pursuant to Division 7 (commencing with Section 13000) of this code.

491 CAL. WATER CODE § 1257 (West 2010) (directs the Board, in acting upon applications to appropriate water, to consider the relative benefit to be derived from all beneficial uses of the water concerned, including preservation and enhancement of fish and wildlife).

492 Fullerton v. SWRCB, 90 Cal. Ct. App. 3d at 604.

making it “the established policy of this State that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation,” the court held that:

these policy declarations must be read in conjunction with later enactments requiring consideration of in-stream uses and judicial decisions explaining the policy embodied in the public trust doctrine. Thus, neither domestic and municipal uses nor in-stream uses can claim an absolute priority.

On its face, this seems to indicate that no use can be favored to the exclusion of all others. However, a state policy giving priority to a particular type of use is fundamentally different that a law criminalizing particular behavior, and interpreting National Audubon to allow the Water Board to permit water uses that violate existing state law is a misreading of the decision.

The overall context of National Audubon must inform any attempt to draw conclusions about balancing from these excerpts. National Audubon was a case about whether the water board had the power or the duty to consider the public trust consequences of its permitting decisions. Thus the court emphasized the Board’s balancing responsibilities in order to argue that the Board was able, and even required, to consider public trust values, not to limit the legislature’s ability to direct the Board to value particular uses. A closer reading of the decision supports the view that the legislature does have the power to make direct decisions about water allocation, decisions that the Board must implement. For example, after identifying a “a legislative intent to grant the Water Board a "broad," "open-ended," "expansive" authority to undertake comprehensive planning and allocation of water resources,” the Court noted that this authority existed in order to give the board “powers adequate to carry out the legislative mandate of comprehensive protection of water resources.” The Court discussed Section 106 only to indicate that it did not believe the section allowed the Board to ignore public trust values when allocating water. Moreover, the Court explicitly endorsed the state’s ability to protect particular uses of water, recognizing "the power of the state, as administrator of the public trust, to prefer one trust use over another.” Thus, National Audubon does not bar the legislature from using a statute like 5937 to withhold water from appropriation in order to protect a public trust resource.

This reading is in keeping with the other decisions addressing balancing under 5937; the Courts in NRDC v. Patterson and CalTrout II both recognized the legislative determination inherent in 5937, and the Water Board’s inability to balance away that legislative determination. “The Legislature, not the Water Board, is the superior voice in the articulation of public policy concerning the reasonableness of water allocation.” These cases require the Water Board to condition permits on compliance with Section 5937.

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494 National Audubon, 33 Cal. 3d at 448, note 30 (internal citations omitted).

495 National Audubon, 33 Cal. 3d at 449 (citing In re Waters of Long Valley Creek Stream System, 25 Cal.3d 339, 348-349, 350, footnote 5 (1979); People v. Shirokow, 26 Cal.3d 301, 309 (1980)).

496 National Audubon, 33 Cal. 3d at 439, footnote 21.

This outcome is also mandated by the language of the statute itself. The code requires dam owners to release water for downstream fish, and the water code imports these requirements: “the protection and preservation of fish in streams obstructed by dams are contained in Chapter 3 (commencing with Section 5900), Part 1, Division 6 of the Fish and Game Code.” A reading that allows the water board to permit water use made criminal by the legislature does not comport with common sense.

Finally, CalTrout I addresses standards for judicial scrutiny of a legislative reasonableness determination. There the court held that a law conditioning the appropriation of water on maintenance of below-dam fish is not manifestly unreasonable and therefore not unconstitutional under Article X, section 2. The manifestly unreasonable standard's high threshold for judicial dismissal of a legislative reasonableness determination reflects the CalTrout I court's recognition that courts should defer to legislative water use determinations. Under this rule, the judiciary affords the legislature deference to carry out the will of the people. For example, CalTrout II recognizes that when the legislature balances the needs of competing beneficial uses in District 4 1/2, the Water Board has no authority to revise the allocation. This deference, coupled with the Court’s recognition of implicit state power to legislate to protect the public trust, establishes the constitutional power of the legislature embodied in 5937, directing both the judiciary and the water board.

Underscoring this point, the legislature often makes reasonableness determinations that limit judicial and agency discretion in the public trust context. For example, in the Water Commission Act's section 42, the legislature determined that flooding irrigated lands with more than two-and-one-half acre-feet per acre was an unreasonable use of water. While

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498 CAL WATER CODE § 6501 (West 2010).
499 CalTrout I, 255 Cal. Rptr. at 206.
500 CalTrout I, 255 Cal. Rptr. at 184.
501 This comports with the principle that legislatively created agencies may only exercise the authority delegated to them by the legislature. Since there is no reasonable basis upon which to distinguish between section 5946 and section 5937's application outside District 4 1/2, the same principle applies to section 5937. Thus by mandating the release of water for below-dam fish, section 5937 removes any Water Board discretion over water needed to maintain below-dam fish. Any Water Board action excusing a dam owner from section 5937's mandate would ultra vires because the agency has no authority to contravene a legislative mandate.
502 National Audubon Society v. Superior Court, 33 Cal. 3d 419, 452 (1983) (The public trust doctrine serves the function in that integrated system of preserving the continuing sovereign power of the state to protect public trust uses, a power which precludes anyone from acquiring a vested right to harm the public trust, and imposes a continuing duty on the state to take such uses into account in allocating water resources.”).
Hemminghaus initially struck that decision down, the Constitutional Amendment allowed it its later reenactment.

Other examples include California’s Wild and Scenic Rivers Act (a legislative determination prohibiting the Water Board from granting water rights to water flowing in certain stretches of state rivers); county of origin and watershed of origin statutes (requiring the water rights of distant users to be conditioned on the needs of future water users proximate to the water source); and laws requiring fish screens (a legislative reasonableness determination that water may not be diverted unless fish are protected when water is removed directly from a stream). All of these legislative reasonableness determinations limit the discretion of the Water Board and judiciary to consider certain water allocation options.

Under this analysis, 5937 does not permit a balancing test. Instead, it acts to withdraw the amount of water necessary for fish from the water available for appropriation.

E. What Does “Fish in Good Condition” Mean?

The language of section 5937 provides no precise definition of “good condition.” Given the early history of section 5937, however, it is reasonable to assume the 1915 California legislature wanted to make sure that popular and valuable fisheries, such as salmon or shad fisheries, would continue to exist. Only CalTrout II, NRDC v. Patterson, the Putah Creek

504 Id.
505 CAL. WATER CODE § 1004 (West 2010).
506 See CAL. PUB. RES. CODE §§ 5093.50–69 (West 2010).
507 See CAL. WATER CODE § 10505 (West 2010).
510 See CAL. FISH & GAME CODE §§ 5980–6028 (West 2010).
512 As outlined, supra section II.A, 1852 to 1915 – Early History of the Minimum Flow Requirement, the minimum flow requirement began its life as part of legislation requiring fish passage on dams. In passing the law, the legislature was responding to a request from the Fish Commission, which saw its efforts at conserving and developing California’s sport and commercial fisheries stymied by a lack of flow below dams.
513 The 1915 Flow Act extended protection beyond naturally occurring fish to include “any fish that may be planted or exist below said dam or obstruction.” 1915 Flow Act (emphasis added).
\textit{Water Cases}, the East Walker River order and Big Bear have dealt directly with the standard, and \textit{NRDC v. Patterson} and the \textit{Putah Creek Water Cases} ultimately allowed the good condition standard to be applied based on settlement agreements, not the court’s interpretation.

The \textit{CalTrout II} court offers the clearest existing guidance on the good condition standard. That court would require enough flows “to restore the historic fishery.”\textsuperscript{514} The Court also observed that 5937 requires passage of “the amount of water required to sustain the prediversion carrying capacity of fish of the four streams.”\textsuperscript{515} \textit{NRDC v. Patterson} echoed this call. “[T]he relevant state law [5937] here directs the Bureau to release sufficient water to ‘reestablish and maintain’ the ‘historic fisheries.’”\textsuperscript{516} The Board recognized that the historical approach may not always serve under its East Fork Walk River order, where the current fishery did not have a historical counterpoint. In that case, the Board held that any flow causing an “adverse effect” or a “detrimental condition” for the fish constituted a violation of 5937.\textsuperscript{517}

The restoration of water alone may not result in the restoration of a historic fishery,\textsuperscript{518} and many ecosystems can no longer support their native fisheries due to wholesale changes in ecosystem form and function and the introduction of nonnative species.\textsuperscript{519} Recognizing this, the \textit{Putah Creek Water Cases} court moved beyond the historical conditions approach to a broader definition of good condition, as outlined by Dr. Moyle. Dr. Moyle’s definition of good condition was also ultimately employed in the Friant Dam settlement,\textsuperscript{520} although it was not the view espoused by the court in that case. Dr. Moyle explained the good condition standard adopted by the \textit{Putah Creek} court in more detail in a 1998 scholarly article.

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\textsuperscript{514} Cal. Trout II, 266 Cal. Rptr. 788, 802 (Ct. App. 1990).

\textsuperscript{515} \textit{Id.} at 801 (“The same is true with respect to the question of reconciling the amount of water required to sustain the prediversion carrying capacity of fish of the four streams in issue with "the public interest," an apparent reference in the regulation to the discretion assigned to the Water Board in some cases to balance the interests served by competing claims to the use of water. Once again we say, these provisions are not applicable in this case for the balancing therein contemplated has been done by the Legislature in enacting section 5946.”) (internal citation omitted).

\textsuperscript{516} NRDC v. Patterson II, 333 F. Supp. 2d. 906, 916 (E.D. Cal. 2004), \textit{citing} CalTrout II, 266 Cal. Rptr. at 788.

\textsuperscript{517} Order No. 90-18 at 23.


\textsuperscript{519} \textit{Id.} at 44.

The definition began with a definition advanced by Mr. Wong in the CalTrout Cases, and Dr. Moyle expanded it from a single species approach, as was appropriate in those ecosystems, to include the diverse historic community of fishes living in the creek below the Putah Creek Diversion Dam. Based on his expert judgment, Dr. Moyle determined that when multiple fish species were present below a dam, maintaining fish in good condition required the three levels of fish health: individual, population, and community. This extrapolates from the generic “adverse effect” and “detrimental condition” language used by the Board.

For fish to be in good condition, at the individual level, “most fish in a healthy stream environment should have a robust body conformation; should be relatively free of diseases, parasites, and lesions; should have reasonable growth rates for the region; and should respond in an appropriate manner to stimuli.” Essentially this means that when individual fish are in good health, they are living in an environment where they are not stressed by the poor water quality (e.g., high temperatures and low dissolved oxygen content in the water), which is often a product of reduced flows.

At the population level, Dr. Moyle’s definition of good condition is very similar to that of CDFG biologist Wong’s, as he expressed it during the CalTrout litigation. However, because it is hard to determine (without extensive studies) whether or not a given fish population is viable, the definition adopted in the Putah Creek Case used two indicators: “The first was that extensive habitat should be available for all life history stages. The second was that all life history stages and their required habitats should have a broad enough distribution in the creek to sustain the species indefinitely.”

At the community level, Dr. Moyle based the criteria on his extensive studies of stream fish assemblages and stream ecology in general. The definition is technical, but the criteria can be used in a repeatable manner by fish ecologists and fisheries managers. By this definition a fish community is in good health if it:

(1) is dominated by co-evolved species,

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521 Moyle et al., supra note 285, at 10.
522 Id.
523 Order N. WR 90-18 at 23.
524 Id.
525 Id.
526 Id. at 11.
527 Id. at 10.
528 See, e.g., PETER B. MOYLE, INLAND FISHES OF CALIFORNIA. REVISED AND EXPANDED (2002).
529 Moyle et al., supra note 285, at 10.
(2) has a predictable structure as indicated by limited niche overlap among the species and by multiple trophic levels,

(3) is resilient in recovering from extreme events,

(4) is persistent in species membership through time, and

(5) is replicated geographically.

Using these criteria, Dr. Moyle developed the flow regime for Putah Creek that was largely adopted by Judge Park and by the litigants in the settlement afterwards, with some exceptions for anadromous fish. This approach was also used in the Friant Dam litigation, and it offers a scientific framework for assessing good condition when a historical approach may not be feasible or appropriate.

Finally, one water board determination of “good condition” offers a creative interpretation of “fish.”\(^5\) The Big Bear order noted that fish in upper Bear Creek would be kept in good condition, relying on a Fish and Game Code definition of “fish,” dating from 1957,\(^6\) which included ”wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof.”\(^7\) This line of reasoning followed the water district’s argument\(^8\) and ignores the context of 5937. Taken to its logical conclusion, such a reading would mean that compliance with 5937 could be achieved by releasing sufficient water to keep crayfish wet below the dam.

Fish and Game Code § 2 offers “Provisions governing construction” of the code. It states, “Unless the provisions or the context otherwise requires, the definitions in this chapter govern the construction of this code and all regulations adopted under this code.”\(^9\) The definition of fish employed by the Water Board in Big Bear falls later in this same chapter. Based on Section 2, however, the definition only applies when the provisions or context of the code do not otherwise require. Three aspects of Section 5937 suggest that this definition should not apply. First, 5937 was passed by the legislature in response to a request from the Fish Commission, which based its request on the need to protect trout and salmon, and on their futile efforts to build fishways around dams when the dam owners kept the rivers dry below the dam.\(^1\) Second, 5937 protects fish that exist or may be planted below the dam; a reading that protects only wild fish, as

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\(^6\) CAL. FISH & GAME CODE § 45 (2010).


\(^1\) STATE OF CALIFORNIA FISH AND GAME COMMISSION, supra note 53, at 33, 56-57, 77.
established by the definition above, would render this language nonsensical. Third, as the Water Board notes, 5937 is a legislative expression of the public trust, and the public trust would not be served by allowing only enough water to protect the least demanding “fish.” Indeed, no court has suggested that the definition of fish used by the board should be adopted in reading 5937.

F. What Can Compliance with 5937 Entail?

By the terms of the code, an owner must, “allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around, or through the dam to keep in good condition any fish that may be planted or exist below the dam.” Thus the statute only requires the owner to release sufficient water. When enforcing this statute, however, the Water Board has read 5937 in conjunction with the physical solution doctrine to require additional actions. The Water Board reading followed a suggestion from the California Court of Appeal in CalTrout II, which stated:  

There is no reason to suppose that cessation of diversion, i.e., a return to the natural situation, would not of itself restore the creeks and their fisheries. However, this would probably constitute a waste of water. Hence, the appropriator can be compelled as the price of continued appropriation to take reasonable steps to attain the same end in a manner that does not involve unreasonable use of water. L.A. Water and Power conceded at oral argument that it has control of the means to accomplish this.

This echoes the physical solution doctrine, stated by the Supreme Court in 1936 as:

the 1928 constitutional amendment, as applied by this court in the cases cited, compels the trial court, before issuing a decree entailing such waste of water, to ascertain whether there exists a physical solution of the problem presented that will avoid the waste, and that will at the same time not unreasonably and adversely affect the prior appropriator's vested property right.

While a full discussion of the physical solution doctrine is beyond the scope of this article, it clearly interacts with the remedies required by a court or the water board under 5937. For example, if a dam reduces summer flows in a stream to such an extent that the remaining water warms beyond the tolerance levels of the downstream fish population, the dam owner could be compelled to release additional flows to cool the downstream water. The amount of water required would depend on the depth of the water intake on the upstream reservoir, since lake

536 CAL. FISH & GAME CODE § 5937 (West 2010), set forth in note 19 supra.


waters stratify into warmer water at the top and cooler water at the bottom. A large amount of outflow would be required if the warm water near the top of the reservoir is used, as opposed to the cooler water near the bottom. Releasing larger amount of warm water from the top of the reservoir could amount to a waste of water, and thus a court or the Water Board could compel installation of a system to release water from deeper in the reservoir under the physical solution doctrine.

In the Mono Basin decision, the Water Board used the physical solution doctrine to require extensive habitat restoration. This restoration could, in some cases, have been accomplished through increase flows and the passage of time, but direct intervention probably reduced the flows necessary to support the same population of fish. This level of intervention under the physical solution doctrine appears to be rare, but has not been challenged in court, and the limits of what the doctrine may require are as yet unknown.

G. Can 5937 Effect a Taking?

Recent cases, particularly Casitas Municipal Water District v. U.S., have raised the specter of takings vis-à-vis water regulation, but these cases do not speak to the well-established principle that no taking can be found when the state is asserting its duty to protect the public trust. As the California Supreme Court noted in National Audubon, “Parties acquiring rights in trust property generally hold those rights subject to the trust, and can assert no vested right to use those rights in a manner harmful to the trust.” Thus, “we rejected the claim that establishment of the public trust constituted a taking of property for which compensation was required: ‘We do not divest anyone of title to property; the consequence of our decision will be only that some landowners . . . hold it subject to the public trust.’” Applications of the public trust, as expressed by the legislature in 5937, fall squarely within this analysis. A takings analysis is inapposite when a vested property right cannot be established.

The recent federal cases where Endangered Species Act restrictions on water use were deemed takings did not address the public trust issue. In Casitas, the Court was careful to note that its analysis, applying a physical takings analysis to the government’s requirement that Casitas Municipal Water District (Casitas) release water from a canal for endangered steelhead, was predicated on the existence of a cognizable property interest. That analysis was only appropriate because, “the government conceded for the limited purpose of summary judgment that Casitas possessed a cognizable property interest.” Indeed, Casitas recognized that the state

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541 National Audubon, 33 Cal. 3d at 436 (citing City of Berkeley v. Super. Ct, 26 Cal.3d 515, 532 (1980); People v. Cal. Fish Co. 166 Cal. 576 (1913)).

542 See, generally, Casitas, 543 F.3d 1276.

543 Id. at 1286.
could limit its property right in the water, as the Court highlighted: “Casitas recognizes that its water rights from the State of California places an upper limit on the quantity Casitas may appropriate from the Ventura River.” 544 In the Casitas opinion, the United States Court of Appeals for the Federal Circuit even discussed a case where state law limited a water right held by Hudson County Water Co, and noted that the law did not effect a taking, “Since Hudson did not hold this property right, the government's restriction did not take anything that Hudson owned. In this case, the government admits Casitas holds a valid property right to the water; hence, unlike in Hudson, the government's actions here are taking Casitas' property right.” 545 Under this analysis, application of 5937 could not result in a taking; a dam owner never actually held water rights that were incompatible with 5937. 546 Because federal takings claim require a property right, and water rights under state law are limited by the public trust, assertion of a takings claim against enforcement of 5937 is destined for failure.

544 Id. at 1297.
545 Id. at 1295.
546 Both the dissent and commentators have noted that “California subjects appropriative water rights licenses to the public trust and reasonable use doctrines, so Casitas likely has no property interest in the water, and therefore no takings claim.” (Id. at 1297 (J. Mayer, dissenting) and Brian Scaccia, “Taking” a Different Tack on Just Compensation Claims Arising Out of the Endangered Species Act, 37 ECOL. L.Q. 655, 670 (2010). They are correct; it is doubtful that the kind of rights conceded by the government in Casitas is even available under California water law. “The public trust doctrine serves the function in that integrated system of preserving the continuing sovereign power of the state to protect public trust uses, a power which precludes anyone from acquiring a vested right to harm the public trust, and imposes a continuing duty on the state to take such uses into account in allocating water resources.” National Audubon, 33 Cal. 3d at 452.
VI. CONCLUSION

The story of 5937 is a story of the state’s failure to protect the public trust. The California legislature has consistently made protection of fish a priority, passing increasingly protective laws, using exceptionally clear language, and reiterating the State’s interest in the safekeeping of its natural resources. Even as the legislature sought to protect the people’s riches, however, the state neglected enforcement of these laws. CDFG refused to enforce 5937 directly, the Attorney General disavowed the law’s primary purpose, the Water Board pretended it didn’t exist, while private litigants were prevented from asserting it. By the late 1950s, 5937 was law in name only, and California’s fish paid the price. The resurgence of the Public Trust Doctrine in California, and recognition of the private litigant’s role in enforcing it, saved 5937, and in doing so, brought new hope to California’s native fish and fisheries, although they are still in peril. Strict enforcement of 5937 in the future, either by private litigants or by the state agencies, is a prerequisite for recovery of California’s native fish. Section 5937 is a straightforward law with broad power to rehabilitate aquatic ecosystems and the habitat they depend on. Maintaining diverse and abundant fish populations in streams below dams stands as a public trust duty and a legislative mandate; under California law, these fisheries must be restored, and robust enforcement of 5937 will play a central role in their restoration.