COMMENTS

Use It or Lose It: California Fish and Game Code Section 5937 and Instream Fishery Resources

This comment examines section 5937 of the California Fish and Game Code, which requires that dam owners release water to maintain downstream fisheries. After evaluating the statute's current use by the Department of Fish and Game, this comment suggests means of restoring section 5937 to its intended status as an effective instream fish-protection measure.

INTRODUCTION

California's resident[1] and anadromous[2] fisheries have suffered substantially from extensive development of the state's rivers and streams. That these resources generate significant social,[3] environmental[4] and economic[5] benefits is implicit in the numer-

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[1] Resident fish, for purposes of this comment, are those which spend their entire lives in a specific river or stream. Examples of resident fish include trout, bass and catfish.

[2] Anadromous fish are fish which migrate from the sea to freshwater rivers and streams to spawn. The young hatch, typically spend some time in the river, migrate out to sea to grow, and then return as adults to complete the cycle. Examples of anadromous fish include salmon, steelhead and shad. *See, e.g.*, C. HICKMAN SR., C. HICKMAN JR., & F. HICKMAN, INTEGRATED PRINCIPLES OF ZOOLOGY 475 (5th ed. 1974).

[3] Fisheries provide society with a self-perpetuating source of food. CAL. FISH & GAME CODE § 1600 (West Cum. Supp. 1980). Fish resources also provide recreation for millions of Californians. Over 2,385,000 people purchased sportfishing licenses in California in 1979. Telephone Interview, Licensing Section, Cal. Dep't of Fish & Game (Oct. 24, 1980). There is even evidence that the availability of sportfishing may reduce juvenile crime. GRUEN, GRUEN & ASSOCIATES, A SOCIO-ECONOMIC ANALYSIS OF CALIFORNIA'S SPORT AND COMMERCIAL FISHING INDUSTRIES 10 (1972).

[4] Diverse fisheries generate important ecological benefits, as an ecosystem

ous legislative provisions designed to protect them.[6] One such provision is section 5937 of the California Fish and Game Code.[7]

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comprised of more diverse plants and animals is a more stable ecosystem. *See, e.g.*, W. OPHULS, ECOLOGY AND THE POLITICS OF SCARCITY 27 (1977). Unfortunately, some of California's important anadromous fish resources have already been destroyed. For example, spring run salmon, once widespread throughout the Central Valley, have now disappeared from many of their ancestral homes. ANADROMOUS FISHERIES BRANCH, CAL. DEP'T OF FISH & GAME, CHINOOK (KING) SALMON SPAWNING STOCKS IN CALIFORNIA'S CENTRAL VALLEY, 1977, at 2 (D. Hoopaugh & A. Knutson, Jr. eds. 1979). *See also* note 18 *infra*.

[5] In 1970, sportfishing contributed an estimated $100 to $200 million to the California economy in primary economic benefits. GRUEN, GRUEN & ASSOCIATES, *supra* note 3, at 2. Primary economic benefits are defined as "the additions to real income or satisfaction that accrue to consumers from the use of the resource." Sometimes termed "direct" benefits, these figures attempt to answer the question, "How much would or do consumers pay for the resource above the cost of bringing it to them in the form they enjoy?" *Id.* at 53. Via secondary economic benefits, sportfishing contributed an estimated $300 to $400 million during 1970. *Id.* at 2. Secondary economic benefits, sometimes labeled "indirect" contributions, are a measure of the "maximum loss that might be sustained by the local economy if, for some reason, a particular economic activity was to 'disappear' from the area." These include income and employment generated by gross consumer expenditures and the consequent effect upon the local tax revenue. *Id.* at 66-68.

In 1970, commercial fishing in California generated roughly $45 million in primary economic benefits and $200 to $300 million in secondary economic benefits. *Id.*

[6] *See, e.g.*, CAL. PUB. RES. CODE § 21001(c) (West Cum. Supp. 1980) (state policy to ensure that fish and wildlife populations are self-perpetuating); CAL. FISH & GAME CODE § 1600 (West Cum. Supp. 1980) (protection and conservation of fish and wildlife resources is of utmost public interest); Assem. Con. Res. No. 64, Res. ch. 124, 1970 Cal. Stats. 3649 (salmon and steelhead resources of California are priceless and irreplaceable); CAL. WATER CODE § 11900 (West 1971) (state policy to provide for preservation of fish and wildlife in connection with state water projects); CAL. WATER CODE § 1243 (West Cum. Supp. 1980) (beneficial uses of water include those for fish and wildlife); CAL. WATER CODE § 1243.5 (West 1971) (in connection with appropriation of water, State Water Resources Control Board must consider amounts of water necessary for fish and wildlife when it is in the public interest to do so).

[7] CAL. FISH & GAME CODE § 5937 (West 1958):

> 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

Section 5937 was designed to protect instream fish resources by requiring the release of water from all dams in order to maintain instream flows. Although past use of this statute has been minimal, section 5937 has high potential for protecting these resources.

This comment examines section 5937 and proposes ways to implement that statute to achieve increased protection of instream fishery values. Part I discusses the legislative development of section 5937 and its predecessor statutes. Part II summarizes the impact of water development projects on fish resources and assesses the effectiveness of current government efforts to mitigate this impact. Part III examines section 5937's requirements and the California Department of Fish and Game's use of the statute. Part IV describes available mechanisms for both public and private enforcement of section 5937 and then concludes with a discussion of potential exemptions to the statute's mandates.

I. Legislative Development of Section 5937

The California Legislature early recognized the threats to anadromous fish posed by dams and other obstructions in rivers and streams. In 1852, it enacted a statute designed to protect salmon runs by outlawing obstructions in any river or stream as public nuisances.[8] In 1870, the legislature passed another law requiring, "as far as practicable," fishways[9] over obstructions in the state's rivers and streams.[10] In contrast to the earlier enactment, this act protected all fish[11] and contained no exceptions.[12]

> may be planted or exist below the dam, when, in the judgment of the department, it is impracticable or detrimental to the owner to pass the water through the fishway.

[8] An Act to prohibit erection of Weirs, or other obstructions to the run of Salmon, ch. 82, § 1, 1850-53 Cal. Comp. Laws 325 (1852). Such obstructions included weirs, dams, fences, stop nets and sets. *Id.*

[9] A "fishway" is a series of ascending pools which enable fish to travel around a dam or other obstruction.

[10] An Act to provide for the restoration and preservation of fish in the waters of this State, ch. 457, § 3, 1870 Cal. Stats. 663-64.

[11] Unlike the 1852 law, this act was not limited to those dams which obstructed the migration of salmon. *Id.*

[12] The 1852 enactment exempted dams erected for mining, milling or agricultural purposes, and permitted Indian tribes to continue to fish according to their custom. An Act to prohibit erection of Weirs, or other obstructions to the

In 1915, the legislature amended this statute to require, for the first time, continuous water releases from dams for the purposes of keeping fish below the dam "in good condition."[13] However, this requirement only applied to dams with fishways.[14] The final and by far the most significant change occurred in 1937 with the enactment of what is now section 5937. While the 1915 amendment only required water releases from dams *with fishways,* the 1937 enactment greatly increased the scope of fishery protection by requiring water bypass from *all* dams.[15]

The history of section 5937 and its predecessors has thus been one of expanding fishery protection. Nonetheless, despite these efforts to protect the state's fisheries, dams and water projects pose a more serious threat to these resources today than ever before.

II. The Impact of Water Projects on Fishery Resources and the Governmental Response

A. Impact of Water Development Projects

Water development projects designed to meet the needs of agricultural, domestic, industrial and other water users have left few of California's rivers and streams in a natural state.[16] Such

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run of Salmon, ch. 82, §§ 6-7, 1850-53 Cal. Comp. Laws 325 (1852).

[13] 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, ch. 491, § 1, 1915 Cal. Stats. 820. The amendment, Assem. Bill No. 1533, passed 53-1 on the Assembly floor. Assem. J. 41st Reg. Sess. 1179 (1915). The bill passed unanimously on the Senate floor. Sen. J., 41st Reg. Sess. 1754 (1915).

[14] 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, ch. 491, § 1, 1915 Cal. Stats. 820.

[15] An Act to amend section 525 of the Fish and Game Code, relating to water flow through a dam, ch. 456, § 1, 1937 Cal. Stats. 1400. This amendment was revised in the Senate Committee on Fish and Game to make more explicit the mandate that water be released regardless of the presence of a fishway. Sen. Bill No. 800, 52d Reg. Sess. (1937). It passed unanimously in both houses. Sen. J., 52d Reg. Sess. 1809 (1937); Assem. J., 52d Reg. Sess. 3418 (1937).

[16] II Cal. Dep't of Fish & Game, California Fish and Wildlife Plan 21-22 (1965) [hereinafter cited as Cal. Plan]; Cal. Dep't of Water Resources, Preliminary Study of Instream Enhancement Opportunities 3 (1979) [hereinafter cited as Preliminary Study]. These projects consist of water storage (dams and reservoirs) and transport (canals, aqueducts, pipes and ditches) facilities. Such development is so extensive in the Central Valley that a Department of

projects usually have substantial adverse impacts on a stream's fisheries.[17] A dam may block migration routes of migratory fish so that they are unable to reach their spawning areas. Moreover, it may alter a stream's entire ecology and eventually eliminate certain species of fish.[18] In addition, water projects and diversions reduce a river's capacity to dilute and flush pollutants, thereby increasing the pollutant load and impairing water quality.[19]

The net result of such modification of natural stream ecosystems has been to eliminate or reduce many valuable instream fisheries. For example, California's salmon spawning habitat in the Central Valley has decreased from an estimated 6,000 miles to less than 300 miles.[20] Indeed, the 1966 California Fish and Wildlife Plan estimated that by 1980, habitat for various species of anadromous fish would be reduced to between thirteen and thirty-three percent of that available in 1966.[21] It also made similar predictions regarding the impact of water development on available warmwater[22] and trout habitat.[23]

Water Resources report characterized many of the streams there as "artificial hydrological systems." PRELIMINARY STUDY, *supra* this note, at 52.

[17] For example, spring run salmon are listed as "extinct" in the Merced, Tuolomne, Stanislaus, Mokelumne, American and Yuba rivers. ANADROMOUS FISHERIES BRANCH, CAL. DEP'T OF FISH AND GAME, KING (CHINOOK) SALMON SPAWNING STOCKS IN CALIFORNIA'S CENTRAL VALLEY, 1970, at 11-17 (R. Menchen ed. 1971). *See also* text accompanying note 20 *infra*.

The Trinity River provides an apt example of specific adverse impacts. The Trinity River Project, which exports 90% of the river's annual runoff for out-of-stream uses, has caused declining populations of silver and king salmon and steelhead trout. Water remains turbid for increased periods, and altered water temperature regimes have affected anadromous fish nursery and holding areas. Reduced flood flows have decreased the river's capacity to carry silt, resulting in sediment-filled pools and compacted spawning gravels. Replenishment of downstream spawning gravels has been blocked. Recreational fishing has been reduced because of turbidity and riparian vegetation encroachment. Felix E. Smith, U.S. Fish & Wildlife Service, in II AMERICAN FISHERIES SOCIETY, PROCEEDINGS OF THE SYMPOSIUM AND SPECIALTY CONFERENCE ON INSTREAM FLOW NEEDS 98 (1976) [hereinafter cited as INSTREAM FLOW NEEDS CONFERENCE].

[18] H. HYNES, THE ECOLOGY OF RUNNING WATERS 448-49 (2d ed. 1972).

[19] PRELIMINARY STUDY, *supra* note 16, at 34.

[20] CITIZENS ADVISORY COMM. ON SALMON & STEELHEAD TROUT, AN ENVIRONMENTAL TRAGEDY 24 (1971). In addition, streamflows over the remaining areas are "frequently inadequate." PRELIMINARY STUDY, *supra* note 16, at 41-42.

[21] IIIC CAL. PLAN, *supra* note 16, at 766-67.

[22] The plan projected that 120 miles of warmwater habitat would be lost above dams. IIIC CAL. PLAN, *supra* note 16, at 767. Warmwater fish are those

While the gravity of these losses is partially offset by the benefits of water development,[24] fishery resources nevertheless constitute an important food source and generate enormous economic benefits.[25] Thus, in striking the difficult balance to allocate water between instream and out-of-stream uses, the high economic value of instream fishery resources should not be ignored.

Nor should the substantial recreational benefits of instream fisheries be ignored.[26] Even though construction of a dam may create additional fishing opportunities which replace some of those destroyed,[27] reservoir fishing lacks the diversity and quality of stream fishing.[28] Paradoxically, then, running waters are highest in demand, smallest in supply, yet threatened the most.[29]

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that live in water temperatures above 70 degrees Farenheit. Examples include largemouth bass, sunfish and crappie. Interview with Chuck Fisher, associate fisheries biologist, Environmental Services Branch, Cal. Dep't of Fish & Game, in Sacramento, California (Aug. 5, 1980).

[23] According to the plan, trout would lose 400 miles of habitat above dams. It predicted the loss of another 500 miles of stream habitat for trout and warmwater species, depending on the extent of downstream releases of water. IIIC CAL. PLAN, *supra* note 16, at 767. Flow reduction was listed as a "major problem" for trout. *Id.* at 69.

[24] California is foremost among the states in agricultural productivity, in part due to the state's massive water diversion and conveyance systems. *See, e.g.*, THE CALIFORNIA WATER ATLAS 58 (B. Press & R. Robie eds. 1978).

[25] *See* note 5 *supra.*

[26] *See* note 3 *supra.*

[27] *See, e.g.*, W. ROSENBAUM, THE POLITICS OF ENVIRONMENTAL CONCERN 184-85 (2d ed. 1977).

For example, while the primary objective of the California State Water Project is to transport water from water-rich parts of the state to water-deficient areas, it also supported 16,744,900 "recreation days," *i.e.*, a visit by one person to a recreation area for any part of one day, between 1962 and 1974. CAL. DEP'T OF WATER RESOURCES, BULL. No. 132-75, THE CALIFORNIA STATE WATER PROJECT SUMMARY: 1974, at 13 (1975).

[28] IIIC CAL. PLAN, *supra* note 16, at 767. A reservoir is a relatively static recreational setting when compared with the challenging array of varied fish habitat in a river or stream. Thus, it is not surprising that sport anglers prefer running waters to reservoirs for recreational fishing. *Id.*

[29] *Id.*

B. Current Instream Protection Measures

The California courts,[30] legislature[31] and responsible administrative agencies,[32] as well as the federal government,[33] have all established measures designed to protect instream fishery values.[34] However, despite the diversity of these measures they have failed to meet their common objective.[35] As one recent study observed, even where instream flows are established and maintained, major problems may remain.[36]

Recognizing the insufficiency of existing measures to protect

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[30] *See* text accompanying notes 117-133 *infra*.

[31] *See, e.g.*, CAL. FISH & GAME CODE § 5937 (West 1958), set forth in note 7 *supra;* CAL. WATER CODE § 1243 (West Cum. Supp. 1980) (beneficial uses of water include those uses for fish and wildlife).

[32] *See, e.g.*, Cal. Admin. Code, tit. 23, § 762.5, Cal. Admin. Register 75, No. 17 (1975) (incorporates § 5937 into permits to divert water, absent a more specific fish-protection measure); note 115 *infra*. *See also* CAL. FISH & GAME COMM'N, POLICY BOOK 31 (adopted July 27, 1959, amended Feb. 2, 1968).

[33] *See, e.g.*, Fish and Wildlife Coordination Act, 16 U.S.C. § 661 (1976); Federal Power Act, 16 U.S.C. § 791 (1976); note 127 *infra*.

[34] For a detailed discussion of the current arsenal of instream protection measures, see A. SCHNEIDER, GOVERNOR'S COMM'N TO REVIEW CALIFORNIA WATER RIGHTS LAW, LEGAL ASPECTS OF INSTREAM WATER USES IN CALIFORNIA (1978).

[35] The Final Report of the Governor's Commission to Review California Water Rights Law stated:

> The law contains a long list of tools for the protection of instream values. Yet, the impairment and loss of instream values continue to grow. As one panel member asked rhetorically at the Commission's instream workshop, "If things are so good, why are they so bad?"
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> The reason is that, despite their numbers and variety, the existing means for protecting instream values are largely fragmentary and reactive. . . . Existing provisions may compel consideration of instream values in the decision-making process of various public entities, but they do not compel the substantive protection itself. Thus, one finds mostly statutes in which agencies only "must consider" or "must take into account" the public interest in the aesthetic, recreational, and fishery uses of the state's waters.

GOVERNOR'S COMM'N TO REVIEW CALIFORNIA WATER RIGHTS LAW, FINAL REP. 112 (1978) [hereinafter cited as FINAL REP.] (footnotes omitted).

[36] C. Hazel, Assessment of Effects of Altered Streamflow Characteristics on Fish and Wildlife, Part B: California 18 (1976), *reviewed in* FINAL REP., *supra* note 35, at 100. Of 20 streams studied, over half had prescribed and maintained instream flow standards. Yet the study classified 20 of the streams as "degraded" (some species of fish were eliminated and others were present but at severely reduced levels). The main reason cited for the "degraded" status was an inadequate instream flow during a critical time of the year. *Id.*

instream values, the Governor's Commission to Review California Water Rights Law recommended in 1978 that the Secretary for Resources be given authority to purchase water rights for instream purposes.[37] The legislature, however, took no action on this proposal.[38] Another Commission recommendation proposed that instream standards be quantitatively expressed and maintained on a stream-by-stream basis through investigations, studies and recommendations from both the private and public sectors.[39] The State Water Resources Control Board (SWRCB) responded by proposing regulations designed to protect instream beneficial uses.[40] However, an opinion prepared by the California Attorney General concluded that the proposed regulations were invalid under the Water Code,[41] so the regulations were rescinded.[42]

Other attempts to increase the level of instream fishery protection have proved equally fruitless. For example, California Trout, an organization dedicated to the protection of the state's trout and steelhead resources, applied to the SWRCB for an instream appropriation of water for the preservation and enhancement of fish and wildlife.[43] The SWRCB, however, refused to consider the application, and California Trout sued for declaratory relief and eventually lost on appeal.[44] A similar effort to appropriate water for fish and wildlife purposes by the California Department of Fish and Game (Department) also failed.[45] In ad-

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[37] FINAL REP., *supra* note 35, at 117.

[38] Letter from James W. Burns, assistant secretary for resources, Resources Agency of California (July 17, 1980) (on file at U.C. Davis Law Review office).

[39] FINAL REP., *supra* note 35, at 113-14.

[40] Cal. St. Water Resources Control Bd., Subchapter 2.1. Beneficial Instream Flow Requirements (Dec. 20, 1979) (rescinded Nov. 20, 1980).

[41] 63 Ops. Cal. Att'y Gen. 95 (1980).

[42] Cal. St. Water Resources Control Bd., Resolution No. 80-86 (Nov. 20, 1980). The Board, however, has adopted new regulations. Cal. St. Water Resources Control Bd., Subchapter 4.5. Procedures for Protecting Instream Beneficial Uses (Nov. 20, 1980).

[43] Under the California water appropriation process, prospective water users must apply to the SWRCB. The SWRCB considers the application, and may issue a permit to the applicant for the right to appropriate water. *See* CAL. WATER CODE §§ 1250-1360 (West 1971).

[44] California Trout v. State Water Resources Control Bd., 90 Cal. App. 3d 816, 153 Cal. Rptr. 672 (3d Dist. 1979).

[45] Fullerton v. State Water Resources Control Bd., 90 Cal. App. 3d 590, 153 Cal. Rptr. 518 (1st Dist. 1979).

dition, the legislature failed to adopt a 1966 recommendation to permit appropriation of water for instream uses contained in the California Fish and Wildlife Plan.[46] Three other bills that would have allowed a state agency to "reserve" water for instream uses have also failed to gain legislative approval.[47] Finally, a recent proposal[48] to require the Department to select streams in need of instream protection and recommend instream flows to the SWRCB, which would balance the recommendation against future out-of-stream uses, was defeated in the Assembly.[49]

Since efforts to establish new measures to protect instream water uses have been unsuccessful, section 5937 remains the premiere method to protect instream fishery values. Of particular significance is the fact that section 5937 is an *existing statute.* And because of its flexible "good condition" standard,[50] coupled with its mandatory application to all dams,[51] section 5937 potentially applies to a wide range of rivers and streams.

III. Application of Section 5937

A. Section 5937's Mandates

Section 5937's scope of application and essential mandate are unequivocally stated. It applies to the "*owner* of *any* dam,"[52] and the word "dam" is elsewhere defined to include all artificial obstructions.[53] The statute states that water is to be released "at all times."[54] In addition, section 5937 protects "any fish" below a dam.[55] Furthermore, the statute requires that all dam owners "shall" release water,[56] and the Fish and Game Code defines

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[46] *See* I Cal. Plan, *supra* note 16, at 73.

[47] *See* legislation cited and discussed in A. Schneider, *supra* note 34, at 72.

[48] Assem. Bill No. 442, 1979-80 Reg. Sess. (as amended June 28, 1979).

[49] Assem. Semifinal Hist., 1979-80 Reg. Sess. 225 (Jan. 30, 1980).

[50] *See* text accompanying notes 62-66 *infra.*

[51] *See* notes 52-53 and accompanying text *infra.*

[52] Cal. Fish & Game Code § 5937 (West 1958), set forth in note 7 *supra* (emphasis added).

[53] Cal. Fish & Game Code § 5900(a) (West Cum. Supp. 1980). Section 5937 does not apply to all water diversions in California rivers and streams. For example, pumps and gravity-fed conduits which do not involve the use of a dam would probably not be classified as "obstructions."

[54] Cal. Fish & Game Code § 5937 (West 1958), set forth in note 7 *supra.*

[55] *Id.*

[56] *Id.*

"shall" as mandatory.[57] Thus, whenever a dam owner fails to bypass water around a dam or merely bypasses an insufficient amount, section 5937 is violated and the Department should take action.[58]

As to the method of water bypass, section 5937's requirements are less strict. The statute states that during minimum streamflows,[59] "permission may be granted by the department"[60] to dam owners to bypass water via the most practicable method,[61] so long as the fish downstream are kept in good condition. The Department thus has discretion as to the *method* of bypass during certain periods of the year. However, this does not mean that the Department may ignore section 5937's clear mandate that sufficient water shall be released at all times.

As the agency responsible for enforcing section 5937,[62] the Department has the authority to determine what constitutes "sufficient water"[63] to satisfy the statute's water bypass requirement. However, the statute supplies an objective standard which limits the Department's discretion in exercising that authority, namely, that "sufficient water" be released to keep "in *good con-*

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[57] CAL. FISH & GAME CODE § 79 (West 1958). The code also provides that "[u]nless the provisions or the context otherwise requires, *these definitions* . . . shall govern the construction of this code . . . ." CAL. FISH & GAME CODE § 2 (West Cum. Supp. 1980) (emphasis added). However, neither § 5937's "provisions" nor "context" suggest that resort to definitions outside the code is appropriate.

[58] Nevertheless, the Department has repeatedly refused to invoke the statute when specific violations are brought to its attention. For example, the Department has not enforced § 5937 despite complaints of dewatered streams and failure to comply with the statute concerning the West Branch and North Fork of the Feather River and certain of their tributaries. Interview with Bob Baiocchi, fish and wildlife consultant, in Paradise, California (Aug. 2, 1980).

[59] Such minimum flows typically occur during the dry months in late summer and autumn. *See, e.g.*, THE CALIFORNIA WATER ATLAS, *supra* note 24, at 4-14.

[60] CAL. FISH & GAME CODE § 5937 (West 1958), set forth in note 7 *supra*. Such permission is granted only if it would be "impracticable or detrimental" for the dam owner to pass water through a fishway. *Id.*

[61] During minimum streamflows, water levels in reservoirs are normally correspondingly low. Since fishways usually traverse the crest of a dam, they are inoperative during such periods, so it is much easier to release the water downstream through a valve at the base of the dam. This thus becomes the most practicable method for the dam owner to meet his statutory duty.

[62] *See* note 85 *infra*.

[63] CAL. FISH & GAME CODE § 5937 (West 1958), set forth in note 7 *supra*.

dition any fish . . . below the dam . . . ."[64] The Department thus can resort to its specific knowledge of the environmental requirements of most of California's stream-dwelling fish,[65] in conjunction with monitoring riverine conditions,[66] to determine whether dam owners are releasing "sufficient water" from upstream dams.

Of course, establishing specific stream-by-stream flow standards may present practical difficulties. Nevertheless, water users demand sound reasons for why they are forced to relinquish some water which they have been using or have requested to use. And while commentators are unanimous in recommending that responsible government organizations collect more precise data before setting instream flow standards,[67] it would be

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[64] *Id.* (emphasis added). The phrase "good condition" should be construed to require releases of water necessary for fish spawning purposes, above and beyond mere "survival" or "maintenance" flows. Since 1915, § 5937's and its predecessors' "good condition" standard has encompassed fish that "may exist" below the dam. *Compare* 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, ch. 491, § 1, 1915 Cal. Stats. 820, *with* CAL. FISH & GAME CODE § 5937 (West 1958), set forth in note 7 *supra*. If § 5937 is to mean anything as a fish-protection measure, it must protect and maintain naturally propagating fisheries as well as stocked fish. This interpretation is also mandated by the code's definition of the word "fish," which includes "wild fish . . . spawn, or ova." CAL. FISH & GAME CODE § 45 (West Cum. Supp. 1980). The "good condition" standard should also require releases of water to flush silt, if necessary, to keep the streambed gravel clear of sediment for spawning and food-production purposes.

[65] *See, e.g.*, CAL. DEP'T OF FISH & GAME, INLAND FISHERIES MANAGEMENT (A. Calhoun ed. 1966).

[66] *See, e.g.*, IV U.S. GEOLOGICAL SURVEY, WATER RESOURCES DATA FOR CALIFORNIA, NORTHERN CENTRAL VALLEY BASINS AND THE GREAT BASIN FROM THE HONEY LAKE BASIN TO THE OREGON STATE LINE, U.S.G.S. WATER DATA REPORT CA—78—4 (1979). Public-interest organizations may aid the Department in this regard. *See also* Letter from Charles Fullerton, director, Cal. Dep't of Fish & Game, to Bob Baiocchi, former vice-president and conservation chairman, Northern Cal. Council of Fly Fishing Clubs (Nov. 29, 1979) (on file at U.C. Davis Law Review office). The director expressed his thanks to Mr. Baiocchi for keeping the Department informed of Pacific Gas & Electric Co.'s "lack of maintenance of certain minimum flows for fishlife" on the North Fork of the Feather River.

[67] *See, e.g.*, FINAL REP., *supra* note 35, at 106; PRELIMINARY STUDY, *supra* note 16, at 2; Felix Smith, U.S. Fish & Wildlife Service, in CAL. DEP'T OF WATER RESOURCES, CAL. DEP'T OF FISH & GAME & CAL. ST. WATER RESOURCES CONTROL BD., PROCEEDINGS—INSTREAM USE SEMINAR 26 (1978); Walter Burkhard, Colorado Division of Wildlife, in I INSTREAM FLOW NEEDS CONFERENCE,

impracticable for the Department to amass and effectively use such information on a stream-by-stream basis.[68]

A feasible alternative to accumulating such data would be to utilize information presently available to the Department. For example, the Department could rely on methods such as those developed by the United States Fish and Wildlife Service, which predict the biological impact of a reduced streamflow according

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supra note 17, at 389; IIIC CAL. PLAN, *supra* note 16, at 766. *See also* Bob Hayden, U.S. Fish & Wildlife Service, in PROCEEDINGS—INSTREAM USE SEMINAR, *supra* this note, at 33, 37.

The Department generally assumes that it must support its instream flow recommendations with substantial data. Although it does not invariably conduct exhaustive studies, it generally collects at least some supporting data. Interview with Chuck Fisher, associate fisheries biologist, Environmental Services Branch, Cal. Dep't of Fish & Game, in Sacramento, California (July 7, 1980).

In one instance the Department refused to invoke § 5937 on the grounds that it possessed neither adequate data to sustain an instream recommendation, nor the resources to conduct such studies in the near future. The stream involved was a section of the North Fork of the Feather River, where current flows are 25 to 50 cubic feet per second (c.f.s.), while historical flows averaged 2,680 c.f.s.; the historical minimum flow recorded was 235 c.f.s. Letter from Bob Baiocchi, fish and wildlife consultant (Oct. 31, 1980) (on file at U.C. Davis Law Review office).

[68] It is the Department's position that no resource is of more concern to it than another: "[I]t's all valuable to fish and wildlife." Jack Beer, Cal. Dep't of Fish & Game, in PROCEEDINGS—INSTREAM USE SEMINAR, *supra* note 67, at 61. Consequently, the Department cannot allocate a disproportionate amount of funds to finance instream flow studies. The Department thus presently lacks the capacity to investigate thoroughly all rivers and streams in its jurisdiction and to propose accurate instream standards for each. Interview with Chuck Fisher, *supra* note 67. This is underscored by the fact that the plaint for more data was sounded by the Fish and Game Commission well over 65 years ago, yet the Department finds itself in the same position today. *Compare* 1912-14 FISH & GAME COMM'N REP. 109, *reprinted in* I APPEN. TO SEN. & ASSEM. J., 41st REG. SESS. (1915), *with* IIIC CAL. PLAN, *supra* note 16, at 766. For a statutory finding of the Department's financial plight and an attempted legislative remedy, see CAL. FISH & GAME CODE § 710 (West Cum. Supp. 1980).

In sum, conducting detailed and exhaustive biological studies to resolve disputes over instream and out-of-stream uses is not feasible. But where water demands are critical or where fishery requirements and out-of-stream demands exceed the entire natural unimpaired flow of the stream, in-depth studies should be conducted before setting *permanent* instream flow standards. In the interim, however, and in those instances where the Department simply lacks the resources to study a stream, some type of interim protection must be established. For a suggested interim solution, see notes 69-71 and accompanying text *infra*.

to the percentage of the mean annual flow available to a specific stream.[69] This would obviate the need for the Department to conduct expensive and time-consuming studies on each stream section subject to section 5937. Concededly, dam owners could criticize such a method as overgeneralized when applied to specific streams. To meet such objections, the instream standard calculated by this "shorthand" method should be deemed presumptively valid.[70] Then, if dam owners claim that the stan-

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[69] U.S. FISH & WILDLIFE SERVICE, INSTREAM FLOW REGIMENS FOR FISH, WILDLIFE, RECREATION AND RELATED ENVIRONMENTAL RESOURCES (1975). For example:

> Ten percent of the average flow . . .: This is a *minimum* instantaneous flow recommended to sustain short-term survival habitat for most aquatic life forms.
>
> . . . .
>
> Thirty percent of the average flow . . .: This is a base flow recommended to sustain *good* survival habitat for most aquatic species.
>
> . . . .
>
> Sixty percent of the average flow . . .: This is a base flow recommended to provide *excellent to outstanding* habitat for most aquatic species during their primary periods of growth and for the majority of recreational uses.

Id. at 19-23 (emphasis in original). The author states that in addition to being quick and easy to use, this method is easily adaptable to the needs of different states. *Id.* at 13. The Department could thus modify this method to suit its own needs.

Fixing streamflows at a percentage of the average flow once was recommended by the Fish and Game Commission. For mountain streams, the Commission thought that 10% might be adequate. 1912-14 FISH & GAME COMM'N REP., *supra* note 68, at 32-33. The legislature, however, did not adopt this proposal. Instead, it has consistently opted to use the "sufficient water . . . to keep in good condition" provision. *See* text accompanying notes 13 & 64 *supra*. One can now only speculate as to why this language was preferred over the more specific standard sought by the Commission when the legislature first adopted the water bypass provision in 1915. Perhaps the "legislative intent" was that 10% was too much or too little, or alternatively, that a flexible approach was preferable.

[70] Deference to the Department's recommendations already occurs to a limited and undefined extent when the Department appears before the SWRCB in protest and negotiation procedures. The SWRCB recognizes the Department's authority as the guardian of fish and wildlife resources, as well as the Department's time, financial and personnel constraints. Consequently, in practice the SWRCB does not demand full-fledged studies every time the Department requests an instream flow. Interview with Lead Program Manager Lawrence Spencer, Program Manager Applications Section John Page, and Ray Dunham, manager, Instream Use Protection Project, Cal. St. Water Resources Control Bd., in Sacramento, California (July 10, 1980); Interview with Chuck Fisher,

dards are in excess of those needed to keep fish in "good condition," they could conduct streamflow studies at their own time and expense, pursuant to a Department-approved method.[71] Given the undeniable fact that the Department lacks the resources to propose site-specific instream flow standards for every stream and river in its jurisdiction, a presumptively valid, generalized method such as the above is a necessity.

In short, section 5937 mandates that all dam owners release water from their dams at all times in order to maintain downstream fisheries. Moreover, given the legislature's repeated recognition of the importance of fishery resources,[72] section 5937 must be actively enforced to ensure adequate fishery protection. Unfortunately, the agency responsible for securing compliance with section 5937 has failed to do so.

B. Department of Fish and Game's Use of Section 5937

The Department's use of section 5937 is unsettled because it lacks uniform policies and guidelines for enforcing the statute.[73]

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supra note 67.

[71] Such methods should be carefully screened, since it is in the water user's self-interest to secure as low a flow as possible.

[72] *See* note 6 *supra*.

[73] *Compare* Letter from author to E.C. Fullerton, director, Cal. Dep't of Fish & Game (June 20, 1980) *with* Letter from H.R. Mefford (for Ned Dollahite, Chief, Wildlife Protection Branch), Cal. Dep't of Fish & Game (June 27, 1980) (on file at U.C. Davis Law Review office). The Department was asked if it had an enforcement policy regarding § 5937. In reply, the Department merely stated that instream flows for fish and water projects could be compatible and that where there were inadequate flows, "remedial action" should be initiated. *See also* Letter from Harold C. Cribbs, executive secretary, Fish & Game Comm'n (July 10, 1980) (on file at U.C. Davis Law Review office), wherein Mr. Cribbs stated: "The [Fish and Game] Commission has not adopted any policy with respect to section 5937." This is despite the Commission's authority to formulate policies for the "general conduct" of the Department. CAL. FISH & GAME CODE § 703 (West 1958).

The Commission has, however, established a fairly specific "water policy," which states:

> 2. Quantity
>
> . . . .
>
> b. To provide maximum protection and enhancement of fish and wildlife and their habitat, the Department *shall:*
>
> . . . .
>
> (3) *Oppose* the issuance of permits or licenses, or the authorization or appropriation of funds for water use projects

Consequently, section 5937's enforcement varies with the particular administrative official dealing with the statute. For example, in one well documented instance, a retired game warden reported that he used section 5937 to obtain frequent water releases from a dam owner.[74] Yet the Department now refuses to apply section 5937 to the same dam owner with respect to the same dam on the same stream.[75] At the same time, the Department has not sought to clarify any doubts it has regarding section 5937's meaning by bringing a test case, despite requests that it do so.[76]

Today the Department rarely if ever invokes section 5937 to punish a dam owner for noncompliance or to secure compliance through injunctive relief.[77] Instead, it employs section 5937 pri-

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> which have not prevented or adequately minimized damage to fish and wildlife resources.
>
> . . . .
>
> (5) Monitor and maintain surveillance over existing water use projects to prevent avoidable damage to aquatic habitat and to *insure compliance with fish and wildlife protection or enhancement requirements.*

CAL. FISH & GAME COMM'N, POLICY BOOK 31 (adopted July 27, 1959, amended Feb. 2, 1968) (emphasis added).

[74] Letter from Gene Mercer, retired Cal. Dep't of Fish & Game game warden (June 30, 1980) (on file at U.C. Davis Law Review office). Mr. Mercer did have problems in securing compliance with some water diverters, though most voluntarily cooperated. For those few who refused after Mr. Mercer informed them of the law, a threat of criminal prosecution often secured compliance. *Id.*

[75] Letter from E.C. Fullerton, director, Cal. Dep't of Fish & Game, to Bob Baiocchi, vice president, Northern California Fly Fishers for Conservation (Jan. 4, 1979) (on file at U.C. Davis Law Review office). The director cited an informal memorandum from the Attorney General's office as justification. *See* Memorandum from Raymond H. Williamson, Office of the Att'y Gen., Cal. Dep't of Justice, to E.C. Fullerton, director, Cal. Dep't of Fish & Game (Jan. 2, 1979) (on file at U.C. Davis Law Review office) (dam owner possessed a vested water right antedating § 5937 and its predecessor statutes; benefits to fish below dam deemed too marginal); text accompanying notes 108-33 *infra.*

[76] *See* note 152 *infra.* However, a recent Attorney General's opinion analyzed § 5937 and urged that it be given a "literal interpretation" in light of existing policy. 57 Ops. Cal. Att'y Gen. 577, 582 (1974). The opinion also concluded that § 5937 "was and is . . . an enactment by the state in carrying out its trust responsibility to preserve fishery resources leaving the beneficial use to the people." *Id.* at 582-83.

[77] In one instance the Attorney General's office was prepared to institute criminal proceedings on behalf of the Department against a dam owner violating § 5937. The suit was never filed, however, because the dam owner agreed to release water upon learning of the impending action. Interview with Denis

marily as a negotiating tool when protesting water appropriation applications before the SWRCB.[78]

Utilizing section 5937 solely in negotiations with water users, however, is not warranted. The statute is primarily mandatory, and the discretion granted to the Department is strictly limited.[79] Moreover, subjecting the statute to "bargaining sessions" with water users ultimately results in the erosion of its mandates. Responding to demands by water users that the Department support its instream flow standards with documented facts, the Department has often been compelled to conduct detailed studies to support its position. Yet even after conducting such studies, water users may challenge these results.[80] Instead of establishing an appropriate instream flow standard, the parties may end up arguing over the validity of the studies.[81] Using

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Smaage, Deputy Att'y Gen., Office of the Att'y Gen., Cal. Dep't of Justice, in Sacramento, California (Aug. 12, 1980).

It is impossible to determine if the Department has ever issued citations to dam owners for violations of § 5937, since the Department indexes citations by alphabetical order of those cited rather than by code section. Interview with H.R. Mefford, Wildlife Protection Branch, Cal. Dep't of Fish & Game, in Sacramento, California (July 7, 1980).

This is not to suggest that an absence of citations indicates that the Department totally ignores § 5937. For example, Mr. Gene Mercer, a game warden in the Department for over 34 years (now retired), frequently used § 5937 successfully. *See* note 74 *supra*. Although no definite Department policies or guidelines regarding § 5937 existed at that time, Mr. Mercer states that his superior officer authorized him to take a violator into court if necessary. Mr. Mercer further states, however, that he did not attempt to enforce § 5937 against all dam owners, but only where it would be "reasonable." Letter from Gene Mercer, *supra* note 74.

[78] Interview with Chuck Fisher, *supra* note 67; *see* A. SCHNEIDER, *supra* note 34, at 55. The Department believes that this is the most effective use of § 5937. Interview with Chuck Fisher, *supra* note 67. Apparently, the Department is unsure of success if it were directly to confront a dam owner with enforcement of the statute's remedial provisions. For a discussion of these remedies, see text accompanying notes 84-94 *infra*. While it may be prudent for an administrative agency to proceed cautiously when applying a law of which it is unsure, the Department's uncertainty regarding § 5937 primarily stems from its own inaction. *See* note 152 and accompanying text *infra*.

[79] *See* text accompanying notes 52-64 *supra*.

[80] Interview with Bob Baiocchi, *supra* note 58.

[81] *Id.* For example, under Federal Energy Regulatory Commission relicensing proceedings for Pacific Gas & Electric Co.'s hydroelectric power operations on the North Fork of the Feather River, the Department, the company and environmental organizations recently spent 30 months negotiating water re-

section 5937 in negotiations thus subjects section 5937's unequivocal requirements, at least in part, to the caprice and bias of the particular water user with whom the Department must deal.[82]

The Department offers several reasons in defense of its limited enforcement of section 5937. Primary among these is insufficient funding and personnel for vigorous enforcement of the statute.[83] Another reason proffered by the Department is its con-

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leases for the *studies*—not the actual instream flows under the new license. *Id.* The entire negotiation process, if one includes the studies, can last for several years. Letter from Jerry Mensch, environmental services supervisor, Region II, Cal. Dep't of Fish & Game (July 7, 1980) (on file at U.C. Davis Law Review office).

[82] Strictly speaking, the Department need not "negotiate" at all, since the language of § 5937 is mandatory and only requires the Department to compute the objective instream flow standard and determine the method of bypass. *See* text accompanying notes 52-64 *supra*.

At least one region of the Department is now using its experience in instream negotiations in an attempt to remedy some of these problems. The Department's Region II will now set up definite time schedules for each segment of the process leading to the instream flow agreement. The actual negotiations will be a series of meetings one or two months apart. Prior to every meeting each party's respective recommendations will be examined by the other(s). The recommendations are then discussed at the meetings. If an agreement is not reached by a set date, then the Department will cease negotiations and instead submit recommendations to the appropriate authority. Letter from Jerry Mensch, *supra* note 81.

If this new procedure by the Department's Region II is carried out faithfully, it should encourage water users to negotiate more earnestly. For example, under the Federal Energy Regulatory Commission's relicensing procedures, it is to the licensee's advantage to delay negotiations. This is because even after the original license expires, its terms and conditions for instream flows continue in force until a new license is issued. The problem is that most original license provisions for instream flows are probably inadequate. *See* Forrest L. Hauck, Special Assistant to Regional Engineer, Federal Power Comm'n [now the Federal Energy Regulatory Comm'n], in II INSTREAM FLOW NEEDS CONFERENCE, *supra* note 17, at 430 (Mr. Hauck's comments were not intended to be representative of the Commission).

[83] Interview with H.R. Mefford, *supra* note 77; Interview with Chuck Fisher, *supra* note 67. Over 26,000 miles of streams, 862,000 surface acres of lakes, as well as the entire California coast are within the Department's jurisdiction. *See, e.g.*, 1912-14 FISH & GAME COMM'N REP., *supra* note 68, at 109. The Department's budget for 1980-81 totals $51 million. GOVERNOR, STATE OF CAL., 1980-81 GOVERNOR'S BUDGET R-71. The Department employs 1,400 employees. GOVERNOR, STATE OF CAL., 1980-81 GOVERNOR'S BUDGET, SALARIES AND WAGES SUPP. R-30.

cern that water rights may be superior to the statute.[84] Although these concerns do raise difficult issues, they do not excuse the Department for consistently ignoring section 5937's mandates.

IV. Enforcement of Section 5937

A. Means of Enforcement

1. Public Enforcement

As the agency responsible for enforcing section 5937,[85] the Department has two means at its disposal to carry out this responsibility. First, the Department may resort to criminal prosecution of a dam owner who has refused to comply with section 5937's provisions.[86] The Fish and Game Code provides that a violation of section 5937 constitutes a misdemeanor,[87] with a maximum penalty of a $500 fine and/or six months incarceration.[88] Second, the Department may sue to enjoin a dam owner from violating or continuing to violate section 5937. Although the Fish and Game Code does not specifically authorize injunctive relief,[89] California courts have permitted such relief when criminal penalties were inadequate to remedy a particular violation.[90]

Another available means for public enforcement of section 5937 is by way of a *parens patriae* suit for injunctive relief instituted by the Attorney General.[91] Such suits have been brought

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[84] Interview with H.R. Mefford, *supra* note 77.

[85] The Department's authority derives from § 702 of the Fish and Game Code, which provides: "The provisions of this code shall be administered and enforced by the department." Cal. Fish & Game Code § 702 (West 1958). The Department is not authorized to formulate policies for its own general conduct; that power has been delegated to the Fish and Game Commission. *Id.* § 703.

[86] Cal. Fish & Game Code § 12000 (West Cum. Supp. 1980).

[87] *Id.*

[88] *Id.* § 12002.

[89] Nevertheless, as early as 1914, deputies who enforced fish and game laws were instructed that a criminal action was not the sole recourse for violations of such laws. Cal. Fish & Game Comm'n, Manual for Deputies 44 (1914).

[90] *See* People v. Monterey Fish Products Co., 195 Cal. 548, 565-66, 234 P. 398, 405 (1925) (enjoining reduction of food fish suitable for human consumption); People v. Stafford Packing Co., 193 Cal. 719, 728-29, 227 P. 485, 489 (1924) (enjoining processing of fish without permit); People v. Truckee Lumber Co., 116 Cal. 397, 402, 48 P. 374, 375 (1897) (enjoining discharge of pollutants into stream).

[91] *Parens patriae* suits are derived from the state's sovereign power of guardianship over persons under disability. Black's Law Dictionary 1003 (5th

by the Attorney General to enjoin a power company from fluctuating water flows below its hydroelectric power works,[92] to stop a lumber company from polluting a stream,[93] and to force an irrigation district to construct a fish screen on its diversion canal to prevent the destruction of young bass, salmon and shad.[94]

2. Private Causes of Action

An injured party may be able to enforce section 5937 through an implied private cause of action against a noncomplying dam owner.[95] While courts are reluctant to imply a private cause of action under a statute whose enforcement the legislature has expressly delegated to an administrative agency,[96] in certain cir-

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ed. 1979). In California, such suits brought for the protection of fish and wildlife are usually based upon public nuisance and "trust ownership" theories. *See* cases cited in note 120 *infra*.

[92] California Oregon Power Co. v. Superior Court, 45 Cal. 2d 858, 291 P.2d 455 (1955).

[93] People v. Truckee Lumber Co., 116 Cal. 397, 48 P. 374 (1897).

[94] People v. Glenn-Colusa Irrigation Dist., 127 Cal. App. 30, 15 P.2d 549 (3d Dist. 1932). The irrigation 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. *Id.* at 36, 15 P.2d at 552. Section 3482 of the Civil Code provides: "Nothing which is done or maintained under the express authority of a statute can be deemed a nuisance." CAL. CIV. CODE § 3482 (West 1970). 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. *Id.*

[95] In Marks v. Whitney, 6 Cal. 3d 251, 491 P.2d 374, 98 Cal. Rptr. 790 (1971), the California Supreme Court held that a private party has a standing "as a member of the general public" to assert his rights under the public trust easement. *Id.* at 261, 491 P.2d at 381, 98 Cal. Rptr. at 797. Thus, consistent with the state's trust in fish as developed by California courts, *see* notes 117-33 and accompanying text *infra*, any member of the public should be able to proceed against dam owners who are interfering with that trust.

[96] The rationale for this is that such actions might interfere with both the agency's discretion to prosecute and the agency's effective administration of a larger comprehensive scheme. *See generally* Note, *Implied Causes of Action in State Courts*, 30 STAN. L. REV. 1243 (1978). Indeed, this reasoning persuaded one federal district court to hold that private parties lacked standing to enforce § 525 of the Fish and Game Code (§ 5937's predecessor) against the federal government in its capacity as a dam owner. Rank v. Krug, 90 F. Supp. 773, 801 (S.D. Cal. 1950). The court, however, did leave the possibility of a mandamus proceeding open. *Id.*

The prosecutorial discretion objection is not applicable to § 5937. Despite

cumstances they have held that a private cause of action is appropriate.[97] Among those factors which weigh in favor of implying a cause of action are an administrative agency's resources insufficient to carry out its enforcement duties,[98] and total inaction by the responsible agency in the face of a statutory violation.[99] Consideration of these factors in connection with section 5937 indicates that an implied cause of action under that section is particularly appropriate. The Department of Fish and Game is both understaffed and inadequately funded,[100] and its track record for enforcement of section 5937 is virtually nonexistent.[101]

Private enforcement of section 5937 might also be secured via a mandamus proceeding against the Department by persons dissatisfied with its inaction. Since the Department is under a mandatory duty to enforce the Fish and Game Code,[102] such a

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dwindling instream habitat, *see generally* text accompanying notes 16-29 *supra*, the Department rarely, if ever, prosecutes anyone under the statute. Thus, private suits can hardly "interfere" with the Department's "prosecution." *See* text accompanying notes 73-84 *supra*. And while § 5937 is a part of the Fish and Game Code, which as a whole provides for the protection and enhancement of fish and wildlife resources, it is not part of a larger, comprehensive scheme such as the worker's compensation laws. *See* Christy v. Petrus, 365 Mo. 1187, 295 S.W.2d 122 (1956), *discussed in* 30 STAN. L. REV., *supra* this note.

Possible erosion of an agency's consistent enforcement policy also militates against implication of a private cause of action. W. RODGERS, ENVIRONMENTAL LAW 76 (1977). Because the Department's treatment of § 5937 has been inconsistent, *see* notes 75-76 and accompanying text *supra*, that objection is also inapplicable.

[97] *See, e.g.*, J.I. Case Co. v. Borak, 377 U.S. 426 (1964); Fitzgerald v. Pan Am. World Airways, Inc., 229 F.2d 499 (2d Cir. 1956).

[98] *See* J.I. Case Co. v. Borak, 377 U.S. 426 (1964). In holding that private parties could bring actions against those who violated § 14(a) of the Securities Exchange Act of 1934, 15 U.S.C. § 78n(a) (1976), the Court noted that the Securities and Exchange Commission had acknowledged that it did not have the resources to examine independently each proxy statement that it received. 377 U.S. at 432.

[99] *See* Fitzgerald v. Pan Am. World Airways, Inc., 229 F.2d 499 (2d Cir. 1956). The Civil Aeronautics Board had authority to take at least limited action for the statutory violation involving the plaintiff's complaint, but the board did nothing about it. *Id.* at 502. This weighed in favor of the court's decision to imply a civil cause of action under the statute. *Id.*

[100] *See* notes 68 & 83 and accompanying text *supra*.

[101] *See* text accompanying notes 77-78 *supra*.

[102] CAL. FISH & GAME CODE § 702 (West 1958), set forth in note 85 *supra*.

proceeding could be brought to compel the Department to enforce section 5937 against a particular dam owner. Section 5937's essential command to release water is absolute.[103] Similarly, although instream flow standards may vary from stream to stream, section 5937 requires the release of sufficient water to keep fish below a dam in good condition.[104] Thus, since the Department lacks discretion to exempt dam owners from section 5937's provisions and may only determine whether fish downstream from a dam are in good condition, section 5937 is essentially ministerial in nature. Ordinary mandamus, used to enforce ministerial duties of an administrative agency, is therefore an appropriate remedy for private parties.[105] Administrative mandamus,[106] used to correct an administrative agency's abuse of discretion, might also be sought with respect to disputes concerning the proper instream flow, but this is a remote possibility.[107]

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[103] *See* text accompanying notes 52-58 *supra*.

[104] *See* text accompanying notes 64-66 *supra*.

[105] *See, e.g.*, Rich v. State Bd. of Optometry, 235 Cal. App. 2d 591, 602, 45 Cal. Rptr. 512, 518 (1st Dist. 1965); Munns v. Stenman, 152 Cal. App. 2d 543, 557, 314 P.2d 67, 76 (2d Dist. 1957). However, ordinary mandamus is not available to review adjudicatory administrative action pursuant to discretion vested in the agency. State v. Superior Court, 12 Cal. 3d 237, 247, 524 P.2d 1281, 1287, 115 Cal. Rptr. 497, 503 (1974).

Any party "beneficially interested" may petition for mandamus. CAL. CODE CIV. PROC. § 1086 (West 1980). Some courts have required the petitioner to allege "substantial damage" or interference with a "substantial right" to have standing. *See, e.g.*, Silva v. City of Cypress, 204 Cal. App. 2d 374, 376-77, 22 Cal. Rptr. 453, 455 (4th Dist. 1962). However, when a public right is at issue and enforcement of a public duty is sought, the standing requirement is less strict; the petitioner need only show that he is interested, as a citizen, in having the laws enforced. American Friends Serv. Comm. v. Procunier, 33 Cal. App. 3d 252, 256, 109 Cal. Rptr. 22, 24-25 (3d Dist. 1973). Given that fishery resources are held by the state in public trust, *see* notes 117-33 and accompanying text *infra*, any member of the public should be able to seek mandamus against the Department. *See* note 95 *supra*.

[106] Administrative mandamus is permitted under § 1094.5 of the California Code of Civil Procedure

> for the purpose of inquiring into the validity of any final administrative order or decision made as the result of a proceeding in which by law a hearing is required to be given, evidence is required to be taken and discretion in the determination of facts is vested in the inferior tribunal, . . . board or officer . . . .

CAL. CODE CIV. PROC. § 1094.5 (West 1980).

[107] Administrative mandamus may only be used to review an agency's *adju-*

B. Potential Exemptions to Section 5937

1. Water Rights

One unresolved question under section 5937 is whether or not its water-release requirements interfere with vested water rights.[108] The SWRCB has already indicated that at least in some cases section 5937 is not subordinate to such rights. In one instance where permits to appropriate water were sought,[109] the SWRCB approved the applications in part[110] but added section 5937's requirements as a proposed special term.[111] The applicants then petitioned for reconsideration, contending that section 5937 could not require the release of water which they had purchased, conveyed downstream and diverted via a dam.[112]

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dicatory actions, where the agency determines facts in relation to private rights and interests. CALIFORNIA ADMINISTRATIVE MANDAMUS 10 (Cal. Cont. Ed. Bar 1966). Arguably, a determination of the amount of water that a dam owner must relinquish for instream fishery protection under § 5937 is "adjudicatory" in this sense. The Department must make a factual determination as to how much water must remain in the stream, and this will incidentally determine the quantity of water that a dam owner can divert. However, the Department has no real *discretion* with respect to determining the quantity of water which must be released. It may only ascertain whether fish resources meet the legislative standard of "good condition." *See* text accompanying notes 62-66 *supra*.

In addition, administrative mandamus is only applicable where the agency's action follows a hearing and receipt of evidence. *See, e.g.*, Keeler v. Superior Court, 46 Cal. 2d 596, 599, 297 P.2d 967, 969 (1956). Section 5937 does not expressly require a hearing, and the courts have not had occasion to decide whether or not it impliedly requires one. Interestingly, however, a sister statute of § 5937 relating to dam owners' responsibilities does provide for a hearing and receipt of evidence. CAL. FISH & GAME CODE § 5933 (West Cum. Supp. 1980) (relating to installation of fishways on dams). As noted above, since a dam owner's right to divert water may incidentally be affected, a hearing may be in order. Nevertheless, despite ample opportunity to do so, *see* notes 13-15 and accompanying text *supra*, the legislature has not imposed a hearing requirement under § 5937.

[108] Of course, a dam owner's voluntary compliance with § 5937 will not create a conflict with water rights. *See* note 74 *supra*. When the Fish and Game Commission first proposed a water bypass requirement in 1914, it assumed that engineers would design dams accordingly. Presumably this would have precluded any conflict between the two uses. *See* 1912-14 FISH & GAME COMM'N REP., *supra* note 68, at 33.

[109] Cal. St. Water Resources Control Bd. Decision No. 1476 at 1 (Dec. 17, 1977).

[110] *Id.* at 4-6.

[111] *Id.* at 6.

[112] Applicant's Petition for Reconsideration and Amendment of Order at 3,

While the SWRCB agreed that the dam owner should not be required to bypass water in amounts greater than the unimpaired natural inflow,[113] it added:

> We do not, however, agree with the applicant's interpretation of section 5937 . . . that one who diverts directly by means of a dam is entitled under all circumstances to full satisfaction of all beneficial uses, under claim of riparian or appropriative right, from the natural inflow in the source before the duty to bypass water for fish arises.[114]

With the adoption of section 5937 into the California Administrative Code in 1975,[115] subsequent appropriative rights are made specifically subject to section 5937, in the absence of more specific fish-protection measures.[116] Consequently, a court would have to address the issue of whether section 5937 may impair water rights if confronted with a case involving pre-1975 appropriate rights.

Public trust law provides a basis for upholding section 5937 against a challenge that it unlawfully impairs vested water rights. Under the public trust doctrine, the state must manage a

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id.

[113] Cal. St. Water Resources Control Bd. Decision No. 1476 at 2, 3 (as modified Jan. 5, 1978).

[114] *Id.* at 4.

[115] Cal. Admin. Code, tit. 23, § 762.5, Cal. Admin. Register 75, No. 17 (1975). This regulation in effect provides that if a permit for diversion of water by means of a dam does not contain a more specific fish-protection measure, compliance with § 5937 becomes a condition of the permit. *Id.*

Section 762.5 contains a significant qualification not found in § 5937. If the dam will create a reservoir, the bypass of water is not to exceed the unimpaired natural inflow of the stream. *Id.* This was probably added to ensure that a water rights holder would not be required to create a fishery where none existed before, to the total deprivation of a right to divert and use water. For an example of how the SWRCB applies this regulation in practice, *see, e.g.,* Cal. St. Water Resources Control Bd. Decision No. 1476 (as modified Jan. 5, 1978), *discussed in* notes 109-114 and accompanying text *supra.*

The practical effect of this regulation is that the requirements of § 5937 are brought to the attention of potential water appropriators while they are in the application process and before any rights are granted by the SWRCB. Interview with Lawrence Spencer, John Page and Ray Dunham, *supra* note 70. The water allocation process is thereby made more efficient. Absent the regulation, § 5937 could escape the applicant's attention, since the Department of Fish and Game does not protest every application to appropriate water. FINAL REP., *supra* note 35, at 107.

[116] Cal. Admin. Code, tit. 23, § 762.5, Cal. Admin. Register 75, No. 17 (1975).

variety of natural resources[117] for the benefit of its people. If designated a public trust resource, the state, as trustee, may limit private rights in managing that resource.[118] In addition, given the public nature of the trust, such resources are not easily alienable into private hands.[119]

Among those resources held in public trust by the state of California are the fish in its waters.[120] However, while courts have held that use and enjoyment of private property may be limited where such use adversely affects instream fishery values,[121] they have not decided the extent to which the trust in fish may limit consumptive water rights.[122] Nevertheless, there is a strong argument that the trust in fish may limit the private use of water, since water is a fundamental necessity for fish.[123]

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[117] Traditionally public trust easements have been recognized for navigation, commerce and fishery purposes. Marks v. Whitney, 6 Cal. 3d 251, 259, 491 P.2d 374, 380, 98 Cal. Rptr. 790, 796 (1971). Uses protected by such easements, however, are not limited to those above; permissible uses will vary with the public need. *Id.* (in considering the tidelands trust).

[118] *See, e.g.*, Colberg, Inc. v. State, 67 Cal. 2d 408, 420, 425, 432 P.2d 3, 11, 14, 62 Cal. Rptr. 401, 409, 412 (1967), *cert. denied*, 390 U.S. 949 (1968). *See also* Dunning, *The Significance of California's Public Trust Easement for California Water Rights Law*, this issue at 357.

[119] *See, e.g.*, City of Berkeley v. Superior Court, 26 Cal. 3d 515, 528, 606 P.2d 362, 369, 162 Cal. Rptr. 327, 334, *cert. denied*, 101 S. Ct. 119 (1980), *discussed in* Note, *Increased Public Trust Protection for California's Tidelands—City of Berkeley v. Superior Court*, this issue at 399; *see also* Dunning, *supra* note 118, at 365.

[120] People v. K. Hovden Co., 215 Cal. 54, 56, 8 P.2d 481, 482 (1932); People v. Monterey Fish Products Co., 195 Cal. 548, 563, 234 P. 398, 404 (1925); People v. Stafford Packing Co., 193 Cal. 719, 728, 227 P. 485, 488 (1924); *In re* Phoedovius, 177 Cal. 238, 242, 170 P. 412, 413 (1918); People v. Truckee Lumber Co., 116 Cal. 397, 399-400, 48 P. 374, 375 (1897); Bohn v. Albertson, 107 Cal. App. 2d 738, 755, 238 P.2d 128, 139 (1st Dist. 1951); *In re* Parra, 24 Cal. App. 339, 343, 141 P. 393, 394 (3d Dist. 1914).

[121] *See* cases cited in notes 92-94 *supra*.

[122] Consumptive water rights are those uses of water, under claim of right, where water withdrawn from a source is evaporated, transpired, incorporated into products and crops, consumed by humans or livestock, or otherwise removed from the immediate water supply. I U.S. WATER RESOURCES COUNCIL, THE NATION'S WATER RESOURCES 1975-2000, at 2 (1978).

[123] Water use by private right holders which depletes the flow of a stream or decreases the quality of the water so as to make it unsuitable for fish life, navigation, recreation, or scenic and ecological uses, is as inconsistent with public trust protection as fencing a stream off from the public, filling tidelands, or depositing debris in a river.

There are, however, limits on the extent to which section 5937 could impair private water rights under the trust. In a related context,[124] Professor Dunning has identified three instances in which the public trust easement may not prevail over private property rights:

> [P]ublic use rights should be regarded as modified or extinguished where the state legislature has properly modified or terminated the easement so as to further trust purposes; where equitable estoppel or fair public policy dictate that the easement should be no longer recognized; or where properly authorized federal activity is the source of the interference with public trust uses.[125]

Under this analysis, section 5937 may not apply to specific state water projects if the legislature, in authorizing them, has considered the impact of such projects on fish.[126] On the other hand, this limitation would not apply to the numerous private dams and diversions not specifically authorized by the legislature.[127] With respect to the estoppel and public policy issues,

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A. SCHNEIDER, *supra* note 34, at 27 (footnotes omitted).

[124] *See generally* Dunning, *supra* note 118.

[125] *Id.* at 389.

[126] *Id.* at 391. Professor Dunning contrasts legislative authorization of specific water projects with statutory authorization for administrative disposition of trust resources. When the legislature explicitly authorizes specific projects, it may further some trust uses but eliminate others. Administrative disposition of water in California, through the SWRCB, does not include any express authority to terminate or modify the public trust easement. In addition, although water rights permits and licenses may be specific as to the location and use of water, they are not specific as to the impact of the diversion on public trust uses. *Id.* at 392-93. Thus, since the administrative allocation of water is not a true legislative modification or termination of the trust, the public trust easement remains.

[127] Even where the legislature has expressly authorized a specific modification of the trust, there may be other controlling instream protection measures. Construction of water projects in California is subject to an express public policy that such projects are to provide for the preservation of fish and wildlife. CAL. WATER CODE § 11900 (West 1971). The Federal Energy Regulatory Commission (FERC) regularly imposes instream fishery flow requirements as a condition to licenses that it issues pursuant to the Federal Power Act, 16 U.S.C. § 791 (1976). Provisions for instream flows can be imposed even though the license is for a legislatively authorized state water project which has modified the trust. For example, the Oroville Reservoir complex on the Feather River includes a power generation facility which is subject to numerous specific fish protection measures under FERC License No. 2100. Under the Fish and Wildlife Coordination Act, 16 U.S.C. § 661 (1976), wherever a stream is modified by any federal agency or private agency under a federal permit or license, state

Professor Dunning suggests that where a public nonconsumptive use is no longer practical and the private activity is based upon government approval of termination of the easement, the public trust easement should be deemed extinguished.[128] But if the public use remains feasible, there is no reason to terminate it.[129] Since a fishery is capable of rebuilding diminished populations under careful management, it may be restored by re-establishment of sufficient instream flows. Thus, if a dam has already eliminated a fishery, this should not be a public policy impediment to the application of section 5937.[130] Even if restoration is feasible, however, a crucial question with respect to section 5937 is how to allocate the water between private and public use. In such instances, public policy would best be served by comparing the economic[131] and other[132] values of the competing uses. The third limitation on public trust uses, interference by federal activities, is discussed below.[133]

2. Federal Water Projects

Section 5937's applicability to federally authorized water projects presents a question of fact, the resolution of which is dependent upon the congressional intent of the particular pro-

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and federal agencies which administer fish and wildlife resources must first be consulted for the purposes of preventing damage to such resources. The Fish and Wildlfe Cooodination Act can be used not only where the state legislature has modified the trust, but where paramount federal activity has modified the trust. *Id.* § 662.

[128] Dunning, *supra* note 118, at 395-96.

[129] *Id.*

[130] Contrast this with submerged lands which have been filled and developed. In such instances, it is far from practical to reassert the public trust easement, since the lands are physically developed. *See* Dunning, *supra* note 118, at 376-77.

[131] For comparisons of out-of-stream and instream economic values, see F. Bollman, A Simple Comparison of Values: Salmon and Low Value Irrigation Crops (1979); F. Bollman, General Discussion of Instream Values (n.d.); N. WOLLMAN, R. EDGEL, M. FARRIS, H. STUCKY & A. THOMPSON, THE VALUE OF WATER IN ALTERNATIVE USES (1962).

[132] It is appropriate to consider, aside from pure economic values, whether it is wise to subordinate the particular instream value at stake to the particular out-of-stream use. Where a quantitatively small but irreplaceable fishery is at stake, it is preferable to err on the side of caution and give the instream value priority. While a spring run salmon population is scarce, *see* note 17 *supra*, another parcel of irrigated land is not so scarce.

[133] *See* notes 134-48 and accompanying text *infra*.

ject. In *California v. United States,*[134] the Bureau of Reclamation had applied to the SWRCB for a permit to appropriate water from the Stanislaus River impounded behind the New Melones Dam,[135] which had been constructed pursuant to the Reclamation Act of 1902.[136] The SWRCB held hearings and found that during certain periods of the year unappropriated water was available.[137] The SWRCB granted the permit but made it subject to a number of conditions.[138] As a consequence, the United States sought declaratory relief to permit it to impound all unappropriated water necessary for a federal reclamation project.[139]

The United States District Court held that as a matter of comity the federal government must apply for a permit to appropriate water.[140] However, it also held that the state must issue the permit without imposing conditions if unappropriated water is available.[141] The Ninth Circuit affirmed,[142] but on the ground that section 8 of the Reclamation Act, rather than comity, required the federal government to comply with the permit

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[134] 438 U.S. 645 (1978).

[135] *Id.* at 652.

[136] The Act provides:

> Nothing in this Act shall be construed as affecting or intended to affect or 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, . . . and the Secretary of the Interior in carrying out the provisions of this Act, shall proceed in conformity of such laws . . . .

Reclamation Act of 1902, § 8, 43 U.S.C. § 383 (1976).

[137] California v. United States, 438 U.S. 645, 652 (1978).

[138] The most important conditions were those deferring full impoundment of all water sought by the Bureau until it could demonstrate a plan or firm commitment for use of the water. Other conditions reserved Board jurisdiction to impose further conditions to protect beneficial uses of water involved. Several conditions imposed requirements for further or continuing study or the filing of certain reports. United States v. California, 403 F. Supp. 874, 882 (E.D. Cal. 1975), *aff'd on other grounds,* 558 F.2d 1347 (9th Cir. 1977), *rev'd and remanded,* 438 U.S. 645 (1978). One of the subjects of further study was the project's effect on the Stanislaus River salmon fishery, at that time worth $300,000 annually. *Id.* at 881.

[139] *Id.* at 877.

[140] *Id.* at 902.

[141] *Id.*

[142] United States v. California, 558 F.2d 1347 (9th Cir. 1977), *rev'd and remanded,* 438 U.S. 645 (1978).

application procedures.[143]

The Supreme Court reversed and held that the state could impose conditions on permits issued to the federal government if such conditions were consistent with the congressional directives authorizing the project.[144] The Court therefore remanded the case for a determination of whether or not the permit conditions were consistent.[145] On remand, the district court held that the condition relating to the preservation and enhancement of downstream fisheries was "consistent with congressional objectives, and [is] binding on, and enforceable against the United States and its agencies."[146]

Whether section 5937 may be applied to a federal reclamation project therefore depends on whether its application is consistent with congressional legislation authorizing the project. For example, while the New Melones Project was constructed for flood control, irrigation and power generation purposes, the legislation authorizing the project explicitly requires the preservation of fish and wildlife.[147] Accordingly, section 5937 could be

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[143] *Id.* at 1351.

[144] California v. United States, 438 U.S. 645, 674 (1978). Even where no such congressional directives exist, under recent executive policy federal agencies must regulate their activities consistent with federal policy regarding instream protection. In 1978 President Carter directed federal agencies, in cooperation with the states, to improve wherever possible the operation and management of existing water resources to protect instream uses. Memorandum from President Jimmy Carter to Selected Federal Agencies (July 12, 1978), *reprinted in* U.S. SEC'Y OF THE INTERIOR, FINAL REPORT ON PHASE I, WATER POLICY IMPLEMENTATION B-9 (1980). In project planning stages, federal agencies must establish and provide for instream flows necessary to maintain instream needs below project facilities. *Id.*

[145] *Id.* at 679.

[146] United States v. California, No. 80-27 at 38 (E.D. Cal., filed Feb. 27, 1981). The amount of water ultimately required for downstream fisheries may well be several times that which the United States was willing to release. While the U.S. Bureau of Reclamation allocated 98,000 acre-feet per year for downstream fish releases, Cal. St. Water Resources Control Bd. Decision No. 1422, at 11 (Apr. 4, 1973), the California Department of Fish and Game recommended that a total of 312,000 acre-feet annually be released for such purposes. *Id.* at 20. The SWRCB settled the dispute by reserving jurisdiction and leaving the issue for further study. *Id.* at 32.

[147] Flood Control Act of October 23, 1962, Pub. L. No. 87-874, § 203, 76 Stat. 1180, 1191 (1963) (reauthorizing Flood Control Act of December 22, 1944, Pub. L. No. 78-534, § 10, 58 Stat. 887 (1945)). The act states (emphasis added):

> [B]efore initiating any diversions of water from the Stanislaus River Basin in connection with the operation of the Central Valley

applied to the federal government in this instance.

CONCLUSION

Because of its extensive water projects and diversions, California risks destruction of a vital natural resource—instream fisheries.[148] To remedy this problem, it is imperative that the Department of Fish and Game rigorously enforce section 5937 to ensure adequate fishery flows.

Enforcement of the statute is not free from difficulties. Its effect on water rights is unsettled,[149] and it may not apply in all instances to the federal government in its capacity as a dam owner.[150] In addition, logistical problems prevent the Department from meticulously determining instream flow requirements on a stream-by-stream basis.[151] Nevertheless, section 5937 remains valuable and necessary for securing instream flows to restore and maintain California's fishery resources.

Section 5937 will only be efficacious, however, if the Department of Fish and Game departs from its timid posture regarding enforcement of the statute. Section 5937's utility as a fish-protection measure has been apparent to environmental activists for over twenty years.[152] The Department must cease relying on

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> project, the Secretary of the Interior shall determine the quantity of water required to satisfy all existing and anticipated future needs within that basin and the diversions shall at all times be subordinate to the quantities so determined: Provided further, That the Secretary of the Army *adopt appropriate measures to insure the preservation and propagation of fish and wildlife* in the New Melones project and shall allocate to the preservation and propagation of fish and wildlife . . . an appropriate share of the cost of constructing the Stanislaus River diversion and of operating and maintaining the same . . . .

[148] *See* notes 16-29 and accompanying text *supra*.

[149] *See* notes 108-133 and accompanying text *supra*.

[150] *See* notes 134-147 and accompanying text *supra*.

[151] *See* notes 67-71 and accompanying text *supra*.

[152] *See, e.g.*, C.H. Bohrmann, chairman, Associated Sportsmen of California, Committee on Water Projects and Engineering, Report on Water Projects and Engineering for 1959-60 (on file at U.C. Davis Law Review office) (emphasis in original):

> Sec. 5937 of our F & G Code is supposed to protect our streams against such an act [referring to a large water diversion]. For the past several years your chairman has asked our former Directors of the Dept. of Fish & Game to take this law to the test of the courts, but this has never been done.

"voluntary" compliance with section 5937 and take active steps to enforce it.

In 1966, the California Fish and Wildlife Plan observed that fish had been "shortchanged" by water development;[153] indeed, past practices have seemingly amounted to an embezzlement. It is time for an accounting, and section 5937 is one tool the trustee can use for recompense.

Joel C. Baiocchi

. . . .

Upon this law [§ 5937] hinges the amount of water to which our fisheries are entitled below all dams and diversions—it is our fishery survival . . . .

[153] II CAL. PLAN, *supra* note 16, at 21.