

ANALYSIS OF CENTRAL VALLEY PROJECT IMPROVEMENT ACT

*Douglas E. Noll**

INTRODUCTION

Traditionally, agricultural users competed only with municipal and industrial users for California water. Environmental mitigation, restoration and enhancement were not recognized purposes for many projects and therefore were excluded from consideration. While California statutes have recognized environmental purposes for water,¹ Congress never made environmental values part of the purpose of the federal Central Valley Project in California. The Bureau of Reclamation therefore argued that it was precluded from considering environmental values in its actions.²

* Professor of Law; Litigation Partner, Lang, Richert & Patch, P.C., Fresno, California.

¹ Instream uses of water to preserve fish and wildlife are beneficial uses of water which must be considered when approving applications to appropriate water. CAL. WATER CODE §§ 1243, 1257.5 (West 1992 & Supp. 1993). In addition, projects must allow sufficient water to pass from dams to maintain fisheries. CAL. FISH & GAME CODE § 5937 (West 1992 & Supp. 1993). Water quality is governed by the Porter-Cologne Water Quality Control Act. CAL. WATER CODE §§ 13000-14920 (West 1992 & Supp. 1993). The State Water Resources Control Board has the dual role of fixing water quality standards and assuring that water is put to beneficial use, including environmental protection. *See* United States v. State Water Resources Control Bd., 182 Cal.App.3d 82, 112-14 (1986).

² The Bureau's limited perspective on Central Valley Project purposes has been expressed many times. *See, e.g.*, a November 10, 1988 memorandum, in which Department of Interior Solicitor Ralph Tarr concluded the Secretary of Interior was exempt from performing environmental assessments under the National Environmental Policy Act (NEPA) when approving renewals of Friant Water Contracts. Tarr argued that contract renewals were either non-discretionary (hence, not "actions" triggering NEPA), or categorically exempt as "administrative or financial" changes. Memorandum from Ralph W. Tarr, United States Department of Interior, Office of the Solicitor, to Assistant Secretary, Water and Science (November 10, 1988) (on file with the *San Joaquin College of Law Agricultural Law Review*.) *See also*, Natural Resources Defense Council v. Orange Cove Irrigation District, 791 F. Supp. 1425, 1431-32 (E.D. Cal. 1992) (Bureau of Reclamation argued that use of project water for maintenance of

In the fall of 1992, President George Bush signed the Central Valley Project Improvement Act,³ a bill that appears to reduce agricultural dominance of the Central Valley Project. Water delivered by the Central Valley Project must now be managed to protect and enhance California's environment, must be conserved, and must be paid for in full. For the first time in the fifty-five year history of the Central Valley Project, environmental water uses are equal with agricultural and municipal uses. To the agricultural industries, the Act was shocking; to the urban regions, the Act provided an opportunity for more water to the populace; to the environmental movement, the Act was not enough, but at least leveled the playing field.

The Act addresses seven subjects: the redefinition of purposes of the Central Valley Project, coordination of the Central Valley Project with federal and state environmental laws, procedures and requirements for water purchase contract renewals, guidelines for water transfers, guidelines for preparation of water conservation plans, guidelines and timetables for wildlife habitation restoration and enhancement, and funding for changes in the Project. For each subject, this article will consider the former law, the changes created by the Act, and the implications of the changes. The Act changes the rules for all Central Valley Project water users, whether urban or agricultural.

I. BACKGROUND

In most years, the Central Valley Project delivers seven to eight million acre-feet of water for agricultural, municipal, and industrial water uses.⁴ The Project, managed by the Department of the Interior's Bureau of Reclamation, is the largest single water development project in California. The Bureau of Reclamation, in constructing and operating the Project, has focused on developing water storage and transportation systems primarily for the benefit of agricultural uses. Portions of the project are, however, devoted to municipal and industrial uses.⁵

fish life was inconsistent with congressional intent as expressed in the Reclamation Act).

³ Pub. L. No. 102-575, § 3401, 1992 U.S.C.C.A.N. (106 Stat.) 4706-4731. The Central Valley Project Improvement Act is Title XXXIV of the Reclamation Projects Authorization and Adjustments Act of 1992, Pub. L. No. 102-575, § 1, 1992 U.S.C.C.A.N. (106 Stat.) 4600-4769 (October 30, 1992) [hereinafter C.V.P. Improvement Act].

⁴ William Miller, *The Management of Water in California* 39 (Nov. 30, 1992) (unpublished monograph, on file with the *San Joaquin College of Law Agricultural Law Review*).

⁵ The California State Water Resources Control Board recently stated that the Cen-

Major components of the Central Valley Project extend 500 miles from Shasta Dam on the Sacramento River south to the end of the Friant-Kern Canal. Major dams, reservoirs, and canals include Shasta Lake (Sacramento River), Whiskeytown Reservoir (Trinity River), Clair Engle Lake (Trinity River), the Corning and Tehama-Colusa Canals (Sacramento Valley), Folsom Dam and Lake (American River), Folsom South Canal (Southeast Sacramento Valley), New Melones Dam and Reservoir (Stanislaus River), Friant Dam and Millerton Lake (San Joaquin River), the Delta-Mendota Canal (West San Joaquin Valley), the Madera and Friant-Kern Canals, (Central and Southern San Joaquin Valley), the Contra Costa and San Felipe Canal (East and South San Francisco Bay Area), and co-ownership of the San Luis Reservoir and the upper reach of the California Aqueduct with the State of California (West Central San Joaquin Valley).

The Central Valley Project delivers water to the Sacramento Valley (2,840,000 acre-feet annually, ["afa"]), the Folsom area (140,000 afa), Contra Costa County (85,000 afa), Santa Clara County (150,000 afa), the west San Joaquin Valley (3,200,000 afa), and the east San Joaquin Valley (1,800,000 afa), for a total of approximately 8,000,000 acre-feet.⁶ Approximately one-half of the water developed north of the Sacramento River-San Joaquin River-San Francisco Bay Delta is exported south of the Delta. Thus, relatively unpopulated, water-rich northern California supplies water to populous and water poor southern California.⁷

In addition to the Central Valley Project, the State Water Project—owned and operated by the State of California—delivers approximately two million acre-feet of water annually, primarily to the Metropolitan Water District in Southern California and the Kern County

tral Valley Project will become more important to urban water users:

Approximately six million acre-feet of California's developed water is used to satisfy the needs of residential, commercial, and industrial water users.

On average, approximately 40 percent of this urban use is provided by exports from the Delta. Population growth and recent decreases in urban supplies from the Colorado River and Mono Basin will increase the demand for Delta exports for urban uses in the future.

State of California, State Water Resources Control Board, draft Water Right Decision 1630, Decision Establishing Terms and Conditions for Interim Protection of Public Trust Uses of the San Francisco Bay/Sacramento-San Joaquin Delta Estuary 9 (November 17, 1992) [hereinafter Draft Decision 1630].

⁶ Miller, *supra* note 4, at 39.

⁷ United States v. State Water Resources Control Board, 182 Cal.App.3d 82, 92 (1986) (over 70 percent of California's stream flow lies north of Sacramento while 80 percent of the demand originates in the southern regions of the state).

Water Agency in the Southern San Joaquin Valley. Similar to the Central Valley Project, most of the water developed by the State Water Project is developed in northern California and exported south of the Delta. Unlike the Central Valley Project, which is primarily agricultural, the State Water Project delivers water mainly to urban users.⁸

The environmental effects of removing nearly ten million acre-feet of water from the watersheds of origin have been significant. Water exports from north of the Sacramento River Delta to south of the Delta have reduced the flow of water in the Sacramento River and its tributaries, with damaging effects on a large riparian ecosystem. Dams and diversion weirs have disrupted natural channels and blocked migrating fish.⁹ Water transported around the Delta through huge pumping stations creates a reverse flow in and south of the Delta.¹⁰ Fish species are drawn from the Sacramento River into the southern and central Delta, where mortality is high. Up river migratory runs south of the Delta have been diminished because of the reverse flows.¹¹ The San Joaquin River above its confluence with the Merced River has been destroyed as a salmon run because much of its channel is now dry.¹²

The combination of these problems has nearly eliminated the salmon and striped bass from California rivers,¹³ destroyed marshes and wetlands for wildlife and bird habitat, and increased the salinity of the waters in the Delta and in San Francisco Bay, changing an entire ecosystem. The trade-off for this damage has been development of the most efficient and productive agricultural region in the world. Until population pressures focused attention on the environment, the trade-off seemed fair.¹⁴ However, as natural resources became taxed by con-

⁸ Approximately 30 percent of the water from the State Water Project is delivered to farmers; the balance goes to urban areas. STATE OF CALIFORNIA, THE CALIFORNIA STATE WATER PROJECT 2 (1989).

⁹ Draft Decision 1630, *supra* note 5, at 29-31.

¹⁰ *Id.*

¹¹ *Id.*; see also, CALIFORNIA ADVISORY COMMITTEE ON SALMON AND STEELHEAD TROUT, RESTORING THE BALANCE, 1988 ANNUAL REPORT 77-80 (1988).

¹² CALIFORNIA ADVISORY COMMITTEE ON SALMON AND STEELHEAD TROUT, *supra* note 11, at 77-78. State Water Rights Board, Decision 935, at 40 (June 2, 1959) stated: "Friant Dam has been primarily responsible for the elimination or destruction of those salmon runs in the San Joaquin River above the mouth of the Merced River which formerly commenced their migratory journey upstream during the spring months."

¹³ Draft Decision 1630, *supra* note 5, at 29-31.

¹⁴ Population growth increased the demand for water, increased the demand for open space outside the urban areas, and brought an urban perspective to natural resource management. See, e.g., Marks v. Whitney, 491 P.2d 374 (Cal. 1971), which

tinued growth, the stage was set for a major legislative confrontation over California water usage.

Environmental interests had not been able to compete for federal water against agriculture and municipalities because the enabling legislation did not recognize environmental protection as a priority. Therefore, Representative George Miller (D-Martinez, California) successfully sponsored the Central Valley Project Improvement Act to permit environmental interests to join, for the first time, the competition for scarce water resources.

Whether the Act is good or bad depends on one's perspective. Two things are clear: the Act may create significant litigation as the battle is carried from the Congress to the bureaucracy and on to the courts, and the Act foreshadows significant political and regulatory changes for agriculture.

II. STATUTORY PURPOSE

A. Former Law

From 1937 to 1954, the priorities of the Project were river regulation, improvement of navigation, and flood control, first; irrigation and domestic uses, second; and power generation, third.¹⁵

In 1954, the purpose of the Project was expanded to add fish and wildlife protection as a fourth priority.¹⁶ The amendment stated:

stated in respect to a tidelands case:

In administering the [public] trust the state is not burdened with an outmoded classification favoring one mode of utilization over another. There is growing public recognition that one of the most important public uses of tidelands—a use encompassed within the tidelands trusts—is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area.

Id. at 380 (emphasis in original).

¹⁵ Act of Aug. 26, 1937, ch. 832, 50 Stat. 844, 850, § 2 states:

[T]he entire Central Valley Project . . . is hereby reauthorized and declared to be for the purposes of improving navigation, regulating the flow of the San Joaquin River and the Sacramento River, controlling floods, providing for storage and for the delivery of the stored waters thereof . . . for the reclamation of arid and semiarid lands and the lands of Indian reservations, and other beneficial uses . . . And provided further, That the said dam and reservoirs shall be used, first, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses; and, third, for power.

¹⁶ 16 U.S.C.A. § 695d (West 1985).

“The entire Central Valley project, California . . . is hereby reauthorized and . . . declared to be for the purposes set forth in said Acts, and also for the use of the waters thereof for fish and wildlife purposes, subject to such priorities as are applicable under said Acts.”

Thus, earlier priorities of the Project were re-established and water for fish and wildlife purposes was added with the lowest priority. Within the hierarchy of Project purposes, fish and wildlife protection became the poor stepchild of the Bureau of Reclamation.

Nevertheless, the 1954 amendment authorized some resources to fish and wildlife management. Project water was authorized for delivery to state and federal wildlife management areas without cost to the government agencies.¹⁷ The Bureau of Reclamation was also authorized to construct delivery systems for this purpose.¹⁸ Finally, water was authorized for delivery to public organizations for waterfowl habitat purposes.¹⁹

The 1954 amendment made no distinction between mitigating the environmental damage caused by the Project and improving fish and wildlife habitat. During this period, sensitivity to environmental damage was nearly non-existent. The government still maintained an attitude that open lands should be converted to economically useful purposes. Consequently, the original intention of the enabling legislation to “reclaim” arid and semi-arid lands for cultivation was unchanged. As long as population pressures remained low, this purpose was not re-evaluated.

As late as 1985, a “reclamation” rather than a “restoration and preservation” attitude persisted within the federal government. The Solicitor of the Dept. of Interior issued an opinion concluding that the 1954 Act limited the fish and wildlife supply of CVP water to 47,000 acre-feet annually on a non-reimbursable basis.²⁰ In addition 50,000 acre-feet was supplied to the Grasslands Water District in the San Joaquin Valley for waterfowl uses annually.²¹ Additional water devoted to waterfowl purposes had to be purchased by contract in competition with other water contractors. Furthermore, the water had to be purchased at full cost. Consequently, environmental groups or government agencies wishing to acquire water for habitat preservation, restoration, or im-

¹⁷ *Id.* § 695i.

¹⁸ *Id.* § 695c, e.

¹⁹ *Id.* § 695i.

²⁰ Brian E. Gray et al., *Economic Incentives for Environmental Protection: Transfers of Federal Reclamation Water: A Case Study of California's San Joaquin Valley*, 21 ENVTL. L. 911, 945, n.117 (1991).

²¹ *Id.* at 945.

provement had to pay substantially more money than long term agricultural contractors.²²

B. Current law

The Act substantially revises the statement of purpose of the Central Valley Project. Section 2 of the 1937 Act was amended by the 1992 amendment as follows (italics show changes):

[T]he entire Central Valley Project . . . is hereby reauthorized and declared to be for the purposes of improving navigation, regulating the flow of the San Joaquin River and the Sacramento River, controlling floods, providing for storage and for the delivery of the stored waters thereof, . . . for the reclamation of arid and semiarid lands and the lands of Indian reservations, *and mitigation, protection, and restoration of fish and wildlife*, and other beneficial uses. . . . And provided further, That the said dam and reservoirs shall be used, first for river regulation, improvement of navigation, and flood control; second, for irrigation and *domestic uses and fish and wildlife mitigation, protection and restoration purposes*; and, third, for *power and fish and wildlife enhancement*. *The mitigation for fish and wildlife losses incurred as a result of construction, operation, or maintenance of the Central Valley Project shall be based on the replacement of ecologically equivalent habitat and shall take place in accordance with the provisions of this title and concurrent with any future actions which adversely affect fish and wildlife populations or their habitat but shall have no priority over them.*

(e) *Nothing in this title shall affect the State's authority to condition water rights permits for the Central Valley Project.*²³

In summary, Project purposes and priorities now read:

1. River regulation, improvement of navigation, and flood control.
2. Irrigation, domestic uses, and fish and wildlife mitigation, protection and restoration.
3. Power generation and fish and wildlife enhancement.

The significance of the revision is its influence on the federal courts that will construe the new law, the regulations that will issue, and the Bureau of Reclamation's operations. Courts will generally construe a

²² Water contractors entered into water purchase contracts with the Bureau of Reclamation in the 1940's and 1950's. The contracts did not provide for price increases due to inflation or increased operational or maintenance expenses. In addition, the interest rate was fixed at a very low level. As the national economy rose and fell in the 1960's, 1970's and 1980's, the price contractors paid for water fell further and further below the actual cost to the government to supply the water. In effect, a water subsidy was created. The 1985 Solicitor's opinion established that environmental users would not benefit from the de facto subsidy. Miller, *supra* note 4, at 100; Gray, *supra* note 20, at 946.

²³ C.V.P. Improvement Act § 3406(a).

statute consistent with its general purpose to effect the objectives desired by Congress.²⁴ Thus, in future litigation over ambiguous provisions of the Act, the courts will look to the statement of purpose to ascertain legislative intent. Since environmental restoration is equal with agricultural and municipal uses, environmentalists will have a strong argument supporting regulations and interpretations favoring habitat restoration.

Ironically, the former law "reclaimed" what was considered non-productive land. The new Act may apparently "reclaim" some economically productive land for restoration to its pre-development condition. Thus, the concept of land reclamation has gone the full circle from conversion of natural lands to promote economic development to restoration of natural lands at the expense of economic development.

III. NEPA EIS

A. *Background*

The National Environmental Policy Act²⁵ (NEPA) requires that an environmental impact statement (EIS) be prepared on all major federal actions significantly affecting the quality of the human environment.²⁶ Because many Bureau of Reclamation actions may have significant effects on the environment, environmental impact statements may be required of the agency. Significant actions could include contract renewals, water transfers, and construction of new water storage facilities.

The Council on Environmental Quality, which oversees federal compliance with NEPA, has recommended that federal agencies prepare a single program EIS on actions that are related geographically, including actions which have relevant similarities such as common timing, impacts, alternatives, methods of implementation, media or subject matter.²⁷ This recommendation has now been raised to a Congressional mandate regarding the Central Valley Project: section 3409 of the Act requires the Secretary of the Interior to prepare a program EIS on the Central Valley Project Improvement Act. The lead agency is logically the Bureau of Reclamation.²⁸ However, the Act states that the Secretary is to perform the environmental assessment.²⁹ Thus, the Secretary

²⁴ *In re Arizona Appetito's Stores, Inc.*, 893 F.2d 216, 219 (9th Cir. 1990).

²⁵ 42 U.S.C.A. §§ 4321-4370c (West 1977 & Supp. 1992).

²⁶ 42 U.S.C.A. § 4332(2)(C) (West 1977).

²⁷ 40 C.F.R. § 1502.4(c) (1991).

²⁸ 40 C.F.R. § 1501.5(c) (1991).

²⁹ C.V.P. Improvement Act § 3409.

could designate an agency other than the Bureau of Reclamation to perform the environmental impact statement.³⁰

The scope of the EIS is enormous. It is to:

1. Analyze the direct and indirect impacts and benefits of implementing the Act;
2. Consider fish, wildlife and habitat restoration actions;
3. Consider the benefits and impacts of contract renewals of all existing water contracts;
4. Consider the impacts and benefits of the project within the Sacramento, San Joaquin and Trinity River basins; and
5. Consider the impacts and benefits of the project on the San Francisco Bay, and the Sacramento-San Joaquin River delta estuary.³¹

In essence, the EIS will cover a geographic area approximately 500 miles in length and 150 miles in width. The EIS must assess the effects of implementing provisions of the Act on a variety of ecological zones encompassing thousands of plant and animal species. Thus, from a scientific perspective, the environmental assessment inherent in the EIS process will be enormous. The broad Congressional directives leave substantial discretion to the lead agency. Hence, issues concerning the completeness of the EIS will be among the earliest disputes. The required cost-benefit analysis of implementing the Act³² will also be divisive as current agricultural and municipal-industrial water users are challenged to justify the use of Project water against environmental degradation. Similarly, environmentalists will grapple with measuring environmental values in dollars.

The cost of the EIS, which will be expensive, is to be treated as a "capital cost" under the Reclamation Act.³³ Neither the Reclamation Act nor implementing regulations define the term "capital cost." The Reclamation Act uses the term "full cost."³⁴ Reclamation Act regulations define the term "full cost"³⁵ and how full cost pricing is calculated.³⁶ Under the regulations, "full cost" is the total project construction cost, including all direct expenditures necessary to install or implement a project, such as planning, design, land, rights-of-way,

³⁰ This issue appears to have been resolved in favor of the Bureau of Reclamation. See Notice of Intent to Prepare a Programmatic Environmental Impact Statement and Notice of Scoping Meetings, 58 Fed. Reg. 7242 (1993).

³¹ C.V.P. Improvement Act § 3409.

³² *Id.*

³³ *Id.*

³⁴ 43 U.S.C.A. § 390bb(3)(A) (West 1986).

³⁵ 43 C.F.R. § 426.4(i) (1991).

³⁶ 43 C.F.R. § 426.7(e) (1991).

water-rights acquisition, construction expenditures, interest during construction, and when appropriate, transfer costs associated with services provided from other projects.³⁷ Presumably, the EIS cost will be treated as an implementation cost, although the imprecise wording of the statute could lead a court to conclude otherwise.

If the cost of the EIS is treated as a "project construction cost," the cost of the study will be incorporated into the cost of delivering Project water to water districts on an amortized basis.

In summary, the Act requires a program EIS covering more than one-half of California. The cost of this study is to be incorporated into the full cost of delivering water to the districts.

The program EIS will not cover individual water contract renewals. Separate, site-specific environmental documents will be prepared for each unit receiving CVP water. However, the program EIS will cover cumulative impacts, and probably establish criteria for differentiating between actions that require preparation of an EIS and those that will have no significant environmental impact (a negative declaration).³⁸ In short, water contractors may be required to participate in supplemental environmental studies. The Act is silent on who is to bear the initial expense of supplemental environmental studies: the lead agency or the water contractors.

³⁷ 43 C.F.R. § 426.7(e)(ii) (1991).

³⁸ The draft programmatic EIS will focus on the impacts and benefits common to all methods of implementing provisions of the Act. It will contain a general analysis of the physical, biological, social, and economic impacts arising from the implementation of the Act. In addition, it will address the cumulative impacts of implementation of the Act as a whole and in conjunction with other relevant past, present, and reasonably foreseeable actions. . . .

The programmatic EIS is intended to serve as an analytical overview document that will precede the completion of subsequent NEPA documents (environmental impact statements or assessments) on specific activities or groups of activities addressed in the Act, including the renewal of existing CVP water service contracts. When a specific method of implementing an activity or activities specified in the Act is proposed, a subsequent NEPA document will be prepared which addresses the specific physical, biological, social, and economic impacts arising from that method of implementing the activity. . . .

Reclamation envisions the preparation of separate site-specific NEPA documents relating to the renewal of existing CVP water service contracts in each of the units of the CVP. It is expected that the preparation of these documents will be initiated prior to completion of the programmatic EIS. Notice of Intent to Prepare a Programmatic Environmental Impact Statement and Notice of Scoping Meetings, 58 Fed. Reg. 7242 (1993).

IV. CONTRACT RENEWAL

A. Background on Central Valley Project Contracts

All Central Valley Project water supplied to urban and agricultural users is governed by contracts between the Bureau of Reclamation, which holds water right permits from the State of California, and water contractors.³⁹ Water contractors purchase and distribute water to the ultimate user.⁴⁰ Water contracts generally determine: (1) how much water each contractor receives; (2) how much each contractor pays; (3) how water shortages are allocated; and (4) how water surpluses are distributed.⁴¹ The initial water contracts were for fifty year terms. Most of the contracts will expire in the next five years. Old contracts were based on a fixed price that failed to anticipate inflation of operation and maintenance costs. Furthermore, no interest was charged on money borrowed to build the project. The federal government therefore subsidized increased operational expenses and the capital costs of the Central Valley Project. The effect of the subsidy was to provide water to users at a cost far less than the expense of delivering the water.⁴²

In 1982, Congress passed the Reclamation Reform Act.⁴³ The Reclamation Reform Act expanded the acreage limitation from 160 per individual (320 acres for a husband and wife) to 960 acres so that any acreage above 960 acres paid full cost for Central Valley Project water.⁴⁴ To prevent windfalls and land speculation, a farmer selling acreage in excess of his or her 960 acres was required to sell the excess land without federal water attached.⁴⁵ The purpose of the Reclamation Reform Act was to permit smaller farms to continue to receive subsidized water and to require larger operations to pay full cost⁴⁶ for

³⁹ Water contractors include irrigation districts, drainage districts, water agencies, municipalities, and other water suppliers. These contractors distribute Project water to individual users by contract. For a history of these districts, see Albert T. Henley, *The Evolution of Forms of Water Users Organizations in California*, 45 CAL. L.REV. 665 (1957). For a listing of these districts, see Dept. Water Res. Bulletin 155-77, General Comparison of Water Districts (May, 1978); Dept. Water Res. Statewide Alpha Listing of Water Service Agencies (May, 1985).

⁴⁰ The Central Valley Project provides approximately 180 contractors with at least 1,000 acre-feet per year; another 100 contractors receive amounts less than 1,000 acre-feet per year. Miller, *supra* note 4, at 100.

⁴¹ *Id.* at 99.

⁴² See S. REP. NO. 420, 97th Cong. (1982), reprinted in 1982 U.S.C.C.A.N. 2573.

⁴³ 43 U.S.C.A. § 390aa to 390-zz-1 (West 1986 & Supp. 1992).

⁴⁴ *Id.* § 390dd.

⁴⁵ *Id.* § 390ii.

⁴⁶ See S. REP. NO. 420, 97th Cong. (1982), reprinted in 1982 U.S.C.C.A.N. 2570,

water. The Reformation Reform Act did not alter the contractual relationship between the Bureau of Reclamation and its water contractors. The Central Valley Project Improvement Act, however, significantly affects the Bureau-water contractor relationship.

B. *The New Law*

All new contracts with urban or agricultural users are subject to the terms of the Act. Thus, any contracts formed after October, 1992 must comply with all provisions of the Act. Most contracts with the Bureau of Reclamation expire between 1995 and 1997. Under the old law, the contracts could be renewed provided the balance of the full cost of construction was amortized.⁴⁷ Payment had to occur within the time required by Congress, although the contracts could be renewed for a longer period.⁴⁸

Under the Act, new short-term, temporary, or long-term contracts are prohibited until the following events have occurred:⁴⁹

1. Fish and wildlife activities specified in section 3406(b)-(d)⁵⁰ are carried out, including, among other activities, doubling the anadromous⁵¹ fish population in Central Valley rivers and streams,⁵² commencement of rehabilitation of the San Joaquin River,⁵³ and commencement of waterfowl habitat restoration.⁵⁴

2. Completion by the California Water Resources Control Board of

2570-73.

⁴⁷ 43 U.S.C.A. § 485b (West 1986).

⁴⁸ *Id.*

⁴⁹ C.V.P. Improvement Act § 3404(a).

⁵⁰ Section 3406(b) requires the Secretary to meet all obligations under the Endangered Species Act, 16 U.S.C. § 1531-1544, and all decisions of the California State Water Resources Control Board. In addition, § 3406(b)(1) requires by October, 1995, implementation of a plan to restore anadromous fish populations on all Central Valley rivers except the San Joaquin River at twice the average levels between 1967 and 1991. Finally, § 3406(b) establishes specific guidelines for implementing and reviewing this plan.

Section 3406(c) relates to restoration of the San Joaquin River.

Section 3406(d) relates to rehabilitation of wetland wildlife habitats.

⁵¹ An anadromous fish is one that hatches in a river, migrates to the ocean for maturity, then returns upriver to spawn. The primary anadromous fish in California are salmon, steelhead, striped bass, sturgeon, and American shad. See C.V.P. Improvement Act § 3403(a).

⁵² *Id.* § 3406(b)(1).

⁵³ *Id.* § 3406(c).

⁵⁴ *Id.* § 3406(d).

its review of Delta water quality standards⁵⁶ required by *United States v. State Water Resources Control Board*,⁵⁶ and the EPA approves the Board's decision.

3. 120 days elapse after the Secretary of the Interior reports to relevant Congressional committees on how the CVP will meet its Bay-Delta obligations to preserve water quality.⁵⁷

Rehabilitation of the San Joaquin River and waterfowl habitat restoration is unlikely to begin until the program EIS has identified the nature and extent of environmental damage caused by the Project during the past fifty years. Furthermore, the statute is silent on what "rehabilitation" or "restoration" means. Does Congress intend that long term contracts may be renewed once the scientific studies begin or does dirt have to be turned? Again, the ambiguity in the language will drive litigation in the federal courts.

Most contractors will not seek new contracts, but will request contract renewals. Under the Act, contract renewals for up to twenty-five years are permitted if certain conditions are met.⁵⁸

1. The program EIS required under section 3409 must be completed before any renewal is approved. Presumably, any required supplemental EIS will also have to be completed.

2. Until the program EIS is completed, renewals can only be for a term of three years, with successive two year renewals. Presumably, this allows contract modification if the EIS demonstrates that environmental mitigation measures are necessary.

3. Contract renewals after January 1, 1988 with districts receiving

⁵⁶ *Id.* § 3404(a)(2).

⁵⁶ 182 Cal.App.3d 82 (1986). This case arose out of the State Water Resources Control Board decision in 1978 concerning water quality standards in the Delta. The court essentially made four findings: (1) The Board's water quality control plan for the Delta should not be driven by its water rights allocation authority, (2) to the extent that regulation of water rights is a part of the solution to the Delta-Bay problem, water rights held by others than the state and federal projects should be examined, (3) the public trust doctrine, as articulated by the California Supreme Court in *National Audubon Society v. Superior Court*, 33 Cal. 3d 419 (1983), must be applied by the Board in balancing the competing interests in the uses of waters of the Delta-Bay estuary, and (4) no clear Congressional directives immunize the United States from compliance with the amended conditions its water right permits ordered by the Water Resources Control Board decision. William T. Attwater & James Markle, *Overview of California Water Rights and Water Quality Law*, 19 PAC. L.J. 957, 989, 990 (1988); see generally, Ronald B. Robie, *The Delta Decisions: The Quiet Revolution in California Water Rights*, 19 PAC. L.J. 1111 (1988).

⁵⁷ C.V.P. Improvement Act § 3404(a)(3).

⁵⁸ *Id.* § 3404(c).

water from Friant Dam require a special fee to be paid by the districts to the Central Valley Project Restoration Fund established by section 3407 of the Act.

4. Contract renewals after January 1, 1988 with all districts require payments into the Central Valley Project Restoration Fund.⁵⁹

To encourage early renewal, and incorporation of the Act into the contracts, the Act imposes a penalty of one and one-half the annual mitigation and restoration payment calculated in section 3407(d). The penalty begins on October 1, 1997 or on January 1 of the year following the year the program EIS is complete, and ends when the contract is renewed.⁶⁰ This penalty does not apply to contracts renewed between January 1, 1988 and October 30, 1992 (the effective date of the Act). In addition, this penalty does not apply to contractors who agree, before October 1, 1997, to renew their contracts immediately upon completion of the EIS, if the EIS has not been completed and their contract has not yet expired. The purpose apparently is to encourage contractors to renew or commit to renew their contracts early. Water contractors therefore have an economic incentive to bring their contracts under the Act.

In summary, long term water contracts of the type created mid-century are dead. Contracts will now be shorter and will be subject to environmental restraints. The cost of water will increase substantially.⁶¹ Water contractors and their constituents will have to adjust to shorter contract terms, increased delivery costs, reduced water deliveries, and required environmental mitigation measures or go out of business.

V. WATER TRANSFERS

A. *Background*

Water transfers involve selling rights to water allocated from the Central Valley Project. The issue is politically and economically sensitive because rural users are reluctant to sell water allocation rights to urban areas. Many feel that a reprise of the water wars in the Owens Valley of eastern California at the turn of the century may occur.⁶²

⁵⁹ Note that the reference in § 3404(c)(1) to 3407(b) appears incorrect. The correct reference is probably § 3407(c).

⁶⁰ C.V.P. Improvement Act § 3404(c)(3).

⁶¹ See *infra* notes 110-117, 120, 126-132 and accompanying text.

⁶² In the early 1900's the Los Angeles Department of Water and Power began buying farmland adjacent to the Owens River. The methods used by agents of the Department of Water and Power were rough and bloodshed was not unusual. Ultimately, DWP acquired most of the riparian rights and diverted the Owens River to Los Ange-

Central Valley Project water transfers raise two issues: What is the right being transferred and who has the right to make the transfer?

B. Former Law

The Reclamation Act, Reclamation Reform Act, and the Central Valley Project authorization statutes were all silent on the issue of water transfers. Section 8 of the Reclamation Act⁶³ states that the right to the use of CVP water shall be appurtenant to the land irrigated. The term "appurtenant" was not defined in the Reclamation Act, creating an issue of interpretation. If the water is severed from the land through a water transfer, the right to the water could arguably be lost. Thus, transfers of water saved through conservation could be challenged as violating the Reclamation Act.

The federal courts have generally ruled that transferability of federally-delivered water is answered by state law.⁶⁴ California law provides that conservation and reclamation of water is a beneficial use. However, federal reclamation statutes did not provide this assurance.⁶⁵ Thus, the Bureau of Reclamation, Central Valley Project water contractors, or end users could claim that surplus water "created" by conservation or reclamation was not put to a beneficial use and should therefore return to the pool of project water for general distribution. In drought years, this possibility deterred conservation of water when conservation was desperately needed.

In response to interest in water transfers, the Mid-Pacific Regional Office of the Bureau of Reclamation developed guidelines⁶⁶ restricting water transfers. The guidelines permitted water transfers under the following conditions:

1. The transferor must have excess water to transfer.
2. The agreement is effective for the current water delivery year.
3. The transferee must have a contract with the Bureau of Reclama-

les. What was once a fertile and productive agricultural region is now a high desert. See generally, WILLIAM KAHRL, *WATER AND POWER: THE CONFLICT OVER LOS ANGELES' WATER SUPPLY IN THE OWENS VALLEY* (1982); A. HOFFMAN, *VISION OR VILLANY: ORIGINS OF THE OWENS VALLEY-LOS ANGELES WATER CONTROVERSY* (1981); REMY NADEAU, *THE WATER SEEKERS* (1974).

⁶³ 43 U.S.C.A. § 372 (West 1986).

⁶⁴ *California v. United States*, 438 U.S. 645 (1978); *United States v. Alpine Land & Reservoir Co.*, 697 F.2d 851, 858 (9th Cir. 1983) (Alpine I); *United States v. Alpine Land & Reservoir Co.*, 878 F.2d 1217 (9th Cir. 1989) (Alpine II).

⁶⁵ Recall that conservation and reclamation of water are not stated purposes of the Central Valley Project. See *supra* notes 15-24 and accompanying text.

⁶⁶ Gray, *supra* note 20, at 929.

tion for a use of the water authorized by the transferor's contract.

4. The transferor may not make a profit, but may charge a reasonable service fee.

5. When the transferor and the transferee pay different water rates, the transferee pays the higher rate.⁶⁷

In 1990, the Bureau of Reclamation issued a draft policy option paper that proposed to abolish restrictions 2 and 4.⁶⁸ Thus, water transfers could be for a term longer than one year and could be sold at a profit.

2. *Current Law*

Section 3405 of the Central Valley Project Improvement Act governs water transfers. Section 3405(a) states that Central Valley Project water may be transferred for project purposes or any beneficial use of water recognized by state law. This statement of intent eliminates any argument that Central Valley Project water is non-transferable. The statement of intent leaves the terms of the transfer to mutual agreement of the parties, subject to certain requirements.

First, the Secretary of the Interior must review and approve every transfer. If the transfer involves more than twenty percent⁶⁹ of contract water, both the Secretary and water contractor must approve the transfer.⁷⁰ Furthermore, additional restrictions are imposed:

1. The water transfer cannot exceed the actual amount of water delivered during the past three years.⁷¹

This restriction apparently keeps water transfer contracts consistent with short term water availability. Thus, if another long term drought occurs, a water transfer contract formed when normal water supplies exist will have to be adjusted to account to the lesser amount of water available.

2. The water shall be repaid at the highest rates applicable to that water.⁷²

⁶⁷ *Id.*

⁶⁸ *Id.* at 932.

⁶⁹ The 20 percent restriction is undefined. Is the 20 percent calculated as an aggregate of water transferred from the project; water transferred from a contractor; or water transferred from an end-user? In addition, does the review requirement apply only to transfers that exceed the 20 percent limitation? Again, the ambiguity will have to be resolved by regulation or judicial interpretation.

⁷⁰ C.V.P. Improvement Act § 3405(a)(1).

⁷¹ *Id.* § 3405(a)(1)(A).

⁷² *Id.* § 3405(a)(1)(B).

For example, if a farmer is paying \$10 per acre-foot for CVP water and a municipality is paying \$40 per acre-foot for CVP water, the transferred water must be repaid to the Bureau at the municipal rate of \$40 per acre-foot, not \$10 per acre-foot. However, the Act apparently allows the farmer to sell his transfer right at a higher price, say \$100 per acre-foot, and retain the \$60 per acre-foot "profit."⁷³ This requirement therefore makes water potentially available to municipal users through transfers, but not less expensive.

3. The transfer must be between willing buyers and sellers on terms mutually agreed upon.⁷⁴

Presumably, a contract is required. This requirement implies that a contract could be challenged because of contract defenses such as duress and unconscionability. The requirement also seems to prevent exercise of eminent domain powers by municipalities. The requirement is probably an attempt to prevent another Owens Valley situation.

4. The transfer must comply with all state laws, including the California Environmental Quality Act.⁷⁵

This suggests that a California environmental impact report or negative declaration will be required for water transfers involving a water district formed under state law. The water district will probably become the lead agency and will have to prepare an environmental assessment of the effect of the proposed water transfer on the environment. Arguably, if a municipality is the transferee, it may have to participate in the assessment. In particular, it may have to demonstrate the environmental desirability of exporting Central Valley Project water to urban areas. If the transfer is between a farmer and a municipality, the assignment of lead agency is unclear. The municipality or the water contractor supplying water to the selling farmer could be the lead agency. The role of the water contractor is undefined in this type of transaction.

5. Transfers are also subject to other provisions.

All transfers of water outside the Central Valley Project are subject to a first right of refusal by entities within the Project. The right of refusal must be exercised within ninety days following notice of the proposed transfer. The entity that had sought the transfer must be com-

⁷³ Section 3405(a)(1)(G) seems to permit charging a higher price for the water. However, any transfer to an entity outside the CVP service area is subject to an additional charge of \$25 per acre-foot. *Id.* § 3407(d)(2)(A).

⁷⁴ C.V.P. Improvement Act § 3405(a)(1)(C).

⁷⁵ *Id.* § 3405(a)(1)(D).

pensated for monies spent in negotiating the transfer.⁷⁶

Water subject to any transfer must have been water that would have been consumptively used or irretrievably lost during the delivery year.⁷⁷ Thus, water that remained in storage behind a dam for delivery in future years presumably cannot be transferred.

The Secretary of the Interior has been given express Congressional direction on transfer approvals.⁷⁸ The approval process requires the Secretary to consider the following environmental and agricultural concerns:

1. Transfers cannot be approved if they will affect the Secretary's ability to meet other contractual or fish and wildlife obligations.⁷⁹

This provision gives agricultural and environmental interests a means of challenging water transfers on general grounds. If a water transfer could affect the Bureau's ability to provide water for environmental restoration or enhancement, for example, the Secretary must reject the transfer.

2. Transfers cannot be approved unless they will have no unreasonable impact on the water supply, operations, or financial condition of the transferor's contracting district or agency or its water users.⁸⁰

This provision gives districts and agricultural, municipal and industrial users a broad base for challenging water transfers. The statute uses particularly poor language in the double negative phrase "will have no unreasonable impact." Congress has not defined what an "unreasonable impact" might be. Apparently, if the proposed transfer would unreasonably affect the water supply, operations, or financial condition of the contracting district or agency or users, the proposal must be rejected. On the other hand, if the proposed transfer affects the water supply, operations or financial condition of the contracting district, but is reasonable in its effects, the transfer may be approved. If this appears confusing, it is. The language is poor and will require regulatory and judicial interpretation.

3. Transfers cannot be approved unless they will have no significant

⁷⁶ *Id.* § 3405(a)(1)(F).

⁷⁷ *Id.* § 3405(a)(1)(I). This provision probably requires that a user may only transfer that water which in normal operations the user would cause to become unavailable to other users in the absence of the transfer. This amount typically will be somewhat less than that amount which could be diverted. Hence, users may "create" transferable water by switching to more efficient irrigation, cultivating less water-intensive crops, or fallowing fields.

⁷⁸ *Id.* § 3405(a)(1)(H), (J)-(L).

⁷⁹ *Id.* § 3405(a)(1)(H).

⁸⁰ *Id.* § 3405(a)(1)(K).

long term effects on groundwater conditions in the transferor's service area.⁸¹

This is an important limitation. Presumably, a transferor might demonstrate that the transferred water will not be replaced by groundwater. However, if groundwater is proposed as a replacement, the transferor will have to show that the water table will not go into an overdraft condition because of the pumping. If an overdraft condition exists, the transferor will have to demonstrate that additional pumping to replace transferred water will not have significant long-term adverse effects on the groundwater overdraft in the transferor's service area. The term "significant long-term adverse impact" used in the Act is not defined and may be interpreted many ways.

The Act is silent concerning the rights of other groundwater users in the service area, but outside the water contractor's jurisdiction. Do these users have standing to challenge water transfers under section 3405(a)(1)(J)?

4. The transfer cannot be approved if the transfer would significantly reduce the quantity or quality of water used for fish and wildlife purposes.⁸²

This is the environmental lever. Obviously, if the proposed transfer would reduce water needed for environmental restoration and improvement projects, the transfer should be rejected. However, the Secretary may approve a transfer with adverse effects. First, the adverse effects must be more than offset by the benefits of the proposed transfer. Second, mitigation measures must be adopted to provide substantially equivalent fish and wildlife benefits as those lost from the transfer. The Secretary is given broad latitude to determine what constitutes "more than offset by the benefits." The phrase appears to be a grant of broad agency discretion.

The four conditions require, from a practical perspective, that all interested parties agree on a proposed water transfer before it is approved. Each Central Valley Project constituency has a basis to challenge the Secretary's action. Consequently, water transfer proposals will have to be carefully and thoughtfully prepared by parties to the transfer to avoid administrative and judicial challenge.

⁸¹ *Id.* § 3405(a)(1)(J).

⁸² *Id.* § 3405(a)(1)(L).

C. Review and Approval Procedures

The Act creates certain deadlines and presumptions to speed the water transfer approval process. All decisions on water transfers must be rendered within ninety days of receiving a written water transfer proposal.⁸³ This sounds fast. But, if the proposed water transfer requires preparation of a federal or state environmental assessment, or permits from the California State Water Resources Control Board, the process preceding submission to the Secretary could be considerably longer. Based on the Act's requirement that the proposed transfer be in compliance with all state laws and NEPA,⁸⁴ approval by the Secretary appears to be the last step of the process.

Proposals to transfer more than twenty percent of water under contract must undergo a limited public review process.⁸⁵ Thus, the Secretary must publish a notice of the proposed water transfer in newspapers in the affected areas, give reasonable notice to others, and provide an opportunity for public comment.⁸⁶

The presumption is of approval.⁸⁷ If the proposal is to be disapproved, the disapproval must be written, must explain why the transfer does not comply with the terms and conditions of the Act and what alternatives could be included so that the transfer could reasonably comply with the Act.⁸⁸ The effect of this presumption will require objecting parties to give the Secretary sufficient factual and legal grounds to justify rejection of the proposal. No pocket veto exists; if no decision

⁸³ *Id.* § 3405(a)(2)(A).

⁸⁴ *Id.* §§ 3405(c), 3406(b), and 3411.

⁸⁵ *Id.* § 3405(a)(2)(B).

⁸⁶ *Id.*; § 226 of Public Law 97-293 (43 U.S.C.A. § 485h(f) (West 1986)) states: No less than sixty days before entering into or amending any repayment contract or any contract for the delivery of irrigation water (except any contract for the delivery of surplus or interim irrigation water whose duration is for one year or less) the Secretary shall—

(1) publish notice of the proposed contract or amendment in newspapers of general circulation in the affected area and shall make reasonable efforts to otherwise notify interested parties which may be affected by such contract or amendment, together with information indicating to whom comments or inquiries concerning the proposed actions can be addressed; and

(2) provide an opportunity for submission of written data, views and arguments, and shall consider all substantive comments so received.

This process is adopted by the Act for notice of proposed water transfers.

⁸⁷ C.V.P. Improvement Act § 3405(a)(2)(C).

⁸⁸ *Id.*

is rendered within 90 days, approval is deemed granted.⁸⁹

D. *Sunset Limitations*

Sections 3405(a)(1)(D), (F), (J), and (K) will not be applicable to water transfers after 1999.⁹⁰ Subsection (D) requires compliance with all state laws, including the California Environmental Quality Act.⁹¹ Subsection (F) requires that a right of first refusal be given to contractors within the service area if a transfer is proposed outside the area. Subsection (J) requires a determination of "no significant long-term adverse impact on groundwater conditions." Subsection (K) requires a determination of "no unreasonable impact" on the water supply, operations or financial conditions of the transferor's contracting district or agency or its water users.

E. *What Lies Ahead*

The Bureau of Reclamation will be drafting water transfer regulations to implement Congressional policy. Several predictions seem reasonable. First, the next round of battle will be fought in the drafting, public comment, and hearing stages of the regulatory process. Second, water transfers will not be easy to accomplish with so many interested parties having the ability to challenge the transfers. Third, interested parties who lose an administrative determination approving or disapproving a transfer will judicially challenge the administrative action. The battles will intensify as water resources available for transfer become scarce through increased demand and continued drought.

Since the Act appears to raise environmental mitigation uses to a level equal with irrigation and municipal and industrial uses, the Bureau of Reclamation should give some thought to an administrative process that forges consensus through alternative dispute resolution, as opposed to traditional administrative and judicial litigation.

VI. WATER CONSERVATION, METERING & PRICING

A. *Former Law*

Section 210 of the Reformation Reform Act of 1982 requires those persons receiving water under the Act to develop water conservation

⁸⁹ *Id.* § 3405(a)(2)(D).

⁹⁰ *Id.* § 3405(a)(3).

⁹¹ *But see*, last phrase of § 3405(a)(3), which seems to resurrect compliance with state law as a transfer condition.

plans.⁹² However, the Reformation Reform Act does not state the purpose of the plans or whether they are to be reviewed by the Bureau. Hence the plans, if drafted, had no effect on water conservation practices. Additionally, the former law did not require water contractors or agencies to meter water delivered from the Project. Instead, the Bureau was given discretion to accept whatever measuring standards it believed appropriate.⁹³ Finally, the pricing for the water delivered by the Project did not account for interest or increased operating and maintenance costs due to inflation.⁹⁴ The Act addresses each of these issues.

B. Conservation Standards

For the first time, water conservation standards will be imposed on water contractors and agencies receiving water from the Project. The Act requires the Secretary to establish a new office on Central Valley Project water conservation best water management practices.⁹⁵ This new office will be charged with reviewing water conservation plans submitted by Project contractors.

The Act does not directly require project contractors to prepare water conservation plans. However, section 210 of the Reclamation Reform Act mandates such plans,⁹⁶ and the requirement seems inferable from language of the Act:

"The Secretary shall establish . . . an office . . . that shall . . . develop criteria for evaluating the adequacy of all water conservation plans developed by project contractors."⁹⁷

In consultation with the Secretary of Agriculture, the California Department of Water Resources, California academic institutions, and Project water users, the new office must develop review criteria for water conservation plans. This must be done within six months of enactment of the Act (October 30, 1992).⁹⁸ Once developed, the review criteria must be examined at least once every three years.⁹⁹

⁹² Pub. Law No. 97-293, § 210; 43 U.S.C.A. § 390jj(b) (West 1986).

⁹³ See 43 U.S.C.A. § 492 (West 1986); 43 C.F.R. § 426.7(e)(2) (1991). These provisions simply state that cost is to be based on a per-acre-foot basis, with no requirement as to how to measure an acre-foot. Thus, the Bureau of Reclamation had discretion to accept whatever measuring method appeared reasonable.

⁹⁴ See 43 C.F.R. § 426.7(e) (1991).

⁹⁵ C.V.P. Improvement Act § 3405(e).

⁹⁶ 43 U.S.C.A. § 390jj(b) (West 1986).

⁹⁷ C.V.P. Improvement Act § 3405(e).

⁹⁸ *Id.* § 3405(e)(1).

⁹⁹ *Id.* § 3405(e)(1).

The review criteria must promote the highest level of water use efficiency, subject to the following policies. First, the conservation standards must utilize the best available cost effective technology. Second, the conservation standards must be reasonably achievable by project contractors. Third, project contractors must use the best water management practices available. The review criteria must include agricultural water suppliers' efficient water management practices developed under California law.¹⁰⁰

The Secretary must grant "substantial deference" to the recommendations made in the *Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*.¹⁰¹ Finally, within eighteen months of enactment, the Secretary must review all contractor water conservation plans for compliance with the criteria.

This sounds good, but provides fertile ground for interpretative disputes and litigation. The Secretary must establish an office on conservation, but may make this office independent of the Bureau of Reclamation.¹⁰² An independent office could result in substantial bureaucratic conflicts with the Bureau.

As mentioned above, the Act does not specifically require project contractors to develop water conservation plans, although the requirement is easily inferable. In addition, the Act does not specifically require a contractor to implement a water conservation plan. Since contractors typically act as middlemen between the Project and end-users, implementation of conservation plans could prove cumbersome.

Congress also requires use of the best available cost effective technology, but provides no guidance on how the Secretary is to balance "best available" with "cost effective." The term "cost effective," without a standard, is completely open to interpretation. Similarly, Congress requires the standards to be "reasonably achievable," without defining the term. Finally, Congress requires project contractors to use the "best management practices," apparently without regard to cost. Again, the phrase is not defined and is therefore open to a wide spectrum of interpretations. Consequently, disputes about these terms seem inevitable

¹⁰⁰ The California Agricultural Water Management Planning Act requires all agricultural water suppliers to adopt and implement an agricultural water management plan. CAL. WATER CODE §§ 10800-10855 (West 1992).

¹⁰¹ SAN JOAQUIN VALLEY DRAINAGE PROGRAM, FINAL REPORT: A MANAGEMENT PLAN FOR AGRICULTURAL SUBSURFACE DRAINAGE AND RELATED PROBLEMS ON THE WESTSIDE SAN JOAQUIN VALLEY (September, 1990).

¹⁰² C.V.P. Improvement Act § 3405(e).

absent regulatory clarification.

C. Water Quality Standards

The Act requires that all contractors and agencies assure that drainage water complies with state and federal water quality standards.¹⁰³ Provisions must be inserted in the contracts to provide for compliance with water quality standards. This provision must be considered in context with the on-going evaluation of the Sacramento-San Joaquin-San Francisco Bay Delta water quality standards conducted by the State Water Resources Control Board.

In 1969, shortly after the State Water Resources Control Board was created, the Board began water rights hearings to provide salinity protection for the Delta and to coordinate the operations of the State Water Project and the Central Valley Project. These hearings resulted in *Decision 1379* in July, 1971.¹⁰⁴ By its terms, *Decision 1379* was an interim decision. Thus, on August 16, 1978, the Board issued *Decision 1485* and adopted a water quality control plan for the Sacramento-San Joaquin Delta and Suisun Marsh.¹⁰⁵ However, in adopting a water quality control plan, the Board did not set standards for upstream diverters whose projects were having a substantial detrimental effect on the rivers and the Delta.¹⁰⁶

Thus, the fact that Friant Dam, a major component of the Central Valley Project, had caused the complete destruction of fifty miles of the San Joaquin River, and diverted substantial water away from the Delta, was not a factor considered by the Board. As a result of this deficiency and others, multiple lawsuits were filed to challenge *Decision 1485*. Ultimately, the cases were consolidated in the San Francisco Su-

¹⁰³ *Id.* § 3405(c). Irrigation return flow is exempt from direct federal regulation. Under the federal Clean Water Act, return flow from irrigated agriculture is not a point source. 33 U.S.C.A. § 1362 (West 1990). While state law treats irrigation return flow as a waste water discharge, the State Water Resources Control Board has waived discharge permits for agricultural discharges on many rivers. Furthermore, legislative impediments have deterred the state regional water quality boards from promulgating and implementing regulations to control irrigation return flow. See CAL. WATER CODE § 13141; Attwater & Markle, *supra* note 56, at 1024, n.281. Thus, the exemptions in the water quality statutes seem to take the teeth out of § 3405(c).

¹⁰⁴ State of California, State Water Resources Control Board, *Decision 1379* (July 21, 1971).

¹⁰⁵ State of California, State Water Resources Control Board, *Decision 1485* (August 16, 1978); Robie, *supra* note 56, at 1129.

¹⁰⁶ Robie, *supra* note 56, at 1130-31, n.90; State Water Resources Control Board, *Decision 1485*, at 12.

perior Court, decided, and appealed. The appeal resulted in a lengthy opinion by Justice Racanelli, presiding justice of the California Court of Appeal, First Appellate District.¹⁰⁷ This case, sometimes referred to as the *Racanelli* decision, established guidelines for the Board's development of water quality standards.

The court noted that the State Water Resources Control Board lacked express authority to enforce water quality standards. The court stated:

Both state and federal acts require their public agency counterparts to comply with state water quality controls ([Cal. Water Code] section 13247, 33 U.S.C. § 1323.) But the Legislature has thus far denied the Board explicit authority to enforce compliance, a recognized weakness in using water quality standards to control water purity. (*EPA v. State Water Resources Control Board*, supra, 426 U.S. 200, 204, 206 [48 L.Ed.2d. 578, 583, 584].) Enforcement authority—in the form of clear and direct orders, injunctive relief and civil penalties—is provided only for unauthorized discharge of pollutants. ([Cal. Water Code] sections 13320, 13331, 13340, 13350, 13386.)¹⁰⁸

The court determined, however, that the Board could control water quality through regulation of water rights to control diversions.¹⁰⁹ The Board can therefore dictate water quality standards to the Bureau of Reclamation. Whether the Board will actually enforce water quality standards against the Bureau of Reclamation is an open question. Consequently, the Act appears to provide another enforcement mechanism: contractor compliance with water quality standards will be a covenant required in all new and renewed water supply contracts with the Bureau. Thus, if the State Water Resources Control Board establishes water quality standards, but does not or cannot enforce the standards, the standards will nevertheless be enforceable as a contract term. A contractor's failure to comply with water quality standards will therefore result in a breach of contract and the usual contractual remedies will apply.

Section 3405(c) does not, however, define a material breach of contract. Since water contractors generally provide water to numerous farmers, will noncompliance with water quality standards by one farmer in the district constitute a material breach of contract? Will project contractors be required to police their constituents to enforce state and federal water quality standards? The Act seems to imply that obli-

¹⁰⁷ *United States v. State Water Resources Control Board*, 182 Cal.App.3d 82 (1986).

¹⁰⁸ *Id.* at 125.

¹⁰⁹ *Id.*

gation. Finally, which federal agency can bring an action for breach of contract: the Bureau of Reclamation or the new office for conservation standards or some other designee of the Secretary of the Interior?

D. Required Metering

Section 3405(b) of the Act requires that five years after enactment (October 30, 1992), all contractors and agencies must have water measuring methods and devices acceptable to the Secretary of the Interior in place and operational. This requirement is apparently included because some contractors do not utilize flow meters, but merely estimate the water received through the project and delivered to district users. The Act is silent on what standards metering devices must meet.

E. Change in Pricing

Former law provided a specific pricing formula for water delivered to project contractors from the Project.¹¹⁰ The full cost rate calculation was defined as:

an annual rate as determined by the Secretary that shall amortize the expenditures for construction properly allocable to irrigation facilities in service, including all operation and maintenance deficits funded, less payments, over such periods as may be required under Federal Reclamation Law or applicable contract provisions, in interest on both accruing from October 12, 1982.¹¹¹

In addition, operation, maintenance, and replacement charges required under federal reclamation law are to be collected in addition to the full-cost payment.¹¹²

The Reclamation Act regulations give examples of how this pricing formula applies.¹¹³ For example, District B has a water service contract which establishes a rate of \$6.50 an acre-foot of water delivered to the district, which is fixed over the remaining term of the contract. Currently, \$1.00 of the rate is used to pay annual operating and maintenance charges. The remainder is applied to the repayment of irrigation construction costs, although inflation is expected to leave a \$5.00 per acre-foot payment to irrigation. The construction costs from irrigation revenues are \$24,000,000, of which \$15,500,000 has been paid, leaving a balance due of \$8,500,000. Assuming an interest rate of 7.5 percent

¹¹⁰ 43 U.S.C.A. § 390bb(3) (West 1986); 43 C.F.R. § 426.7(e) (1991).

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ 43 C.F.R. § 426.7(e)(2)(i) Example 2 (1991).

and amortizing the balance over the 10 years remaining on the contract results in an annual full cost rate of \$15.38 per acre-foot. Normal operation and maintenance costs would be collected in addition to this rate.¹¹⁴ Under reclamation laws, farmers would pay \$6.50 for water delivered to 960 acres and \$15.38 plus operation and maintenance expenses for water delivered to land in excess of 960 acres.

F. Pricing under New Formulas

The Act establishes a three-tier system of water pricing.¹¹⁵ The first tier prices eighty percent of delivered water at the contract rate. The next ten percent of water delivered will be charged at the full cost rate. The final ten percent of water delivered will be charged at a rate halfway between the contract and the full cost rate.

Using the example above, and assuming delivery to 960 acres or less, the contract rate of \$6.50 per acre-foot would apply to 80 percent of the delivered water; the full cost rate of \$15.38 plus operation and maintenance would apply to 10 percent of the delivered water, and \$10.90 would apply to the last 10 percent of the water delivered.

Under the former law, the cost of one acre-foot of water to 960 acres would be \$6,240. Under the Act, the cost will be \$7,514.88, plus 15 percent of the operation and maintenance expense.

This pricing is waived for crops providing significant and quantifiable habitat values for waterfowl.¹¹⁶ The increased revenue generated by this pricing formula goes to the Restoration Fund.¹¹⁷

VII. HABITAT RESTORATION AND ENHANCEMENT

The Act separates environmental restoration projects into two categories: (1) mitigation of environmental harm caused by the Central Valley Project; and (2) enhancement of fish and wildlife resources.

A. Mitigation

The Act establishes goals for mitigating the environmental destruction caused by the Project during the past fifty years. The primary goal is restoration by 2002 of salmon runs to twice the average levels attained during the years 1967-1991 in all rivers except the San Joaquin

¹¹⁴ *Id.*

¹¹⁵ C.V.P. Improvement Act §§ 3405(d)(1)-(3).

¹¹⁶ *Id.* § 3405(d)(4).

¹¹⁷ *Id.* § 3405(f).

River between the Mendota Pool and Friant Dam.¹¹⁸

An act of Congress is required for water releases from Friant Dam to restore flows from Gravelly Ford to the Mendota Pool sufficient to permit restored salmon runs.¹¹⁹ Nevertheless, special charges are assessed against contractors receiving water from Friant Dam.¹²⁰ The charges are not earmarked for restoration of the salmon run on the San Joaquin, but are deposited in the Restoration Fund for use in all environmental projects.

Every year, 800,000 acre-feet of Central Valley Project water is to be allocated for restoration of fish and wildlife habitat.¹²¹ This allocation represents ten percent of the total water available in the Project. The effect of this allocation reduces the total water available to agricultural, municipal, and industrial users to ninety percent of total available water.

The water will be managed by the federal Fish & Wildlife Service in consultation with the Bureau of Reclamation, the California Department of Water Resources, and the California Department of Fish & Game.¹²² The State Water Resources Control Board has stated that it intends to apply all of the 800,000 acre-feet to meet the public trust requirements of *Decision 1630*.¹²³ In the event of hydrologic circumstances, up to twenty-five percent of the allocation may be reduced whenever reductions are imposed on contract users.¹²⁴ The phrase "hydrologic circumstances" is not defined, but presumably means drought. Finally, a number of specific programs and plans to restore habitat and

¹¹⁸ *Id.* § 3406(b)(1).

¹¹⁹ *Id.* § 3406(c).

¹²⁰ *Id.* The surcharge is \$4.00 per acre foot for all water delivered before September 30, 1997, \$5.00 per acre foot for all water delivered between September 30, 1997 and September 30, 1999, and \$7.00 per acre foot delivered thereafter. Using the example above of the post-Act cost to purchase an acre-foot of CVP water for 960 acres, the cost of water to Friant users will be \$11,354.88 until 1997, then \$12,314.88 until 1999, then \$14,234.88 thereafter. The substantial price increases are apparently designed to force early compromise on the water releases necessary to sustain a salmon run on the San Joaquin River.

¹²¹ *Id.* § 3406(b)(2).

¹²² *Id.* § 3406(b)(2)(B).

¹²³ Draft Decision 1630, *supra* note 5, at 52-53. *See also, id.* at 29-30. *See generally*, National Audubon Society V. Superior Court of Alpine County, 33 Cal.3d 419 (1983), *cert. denied*, Los Angeles Dept. of Water & Power v. National Audubon Soc., 464 U.S. 977 (1983) (the State Water Resources Control Board has continuing authority under the common law public trust doctrine to protect public uses of navigable waters for navigation, commerce, fisheries, recreation, aesthetics, and water quality).

¹²⁴ C.V.P. Improvement Act § 3406(b)(2)(C).

anadromous fish runs are identified in the Act.¹²⁵

VIII. FUNDING AND APPROPRIATIONS

Recognizing that the federal budget deficit will not permit direct allocations for mitigation and enhancement of the environment, Congress has created a Restoration Fund in the Department of Treasury.¹²⁶ The Restoration Fund will be the source of money for the environmental projects mandated by the Act.

By law, the Restoration Fund receives the following payments:

1. Section 3404(c)(3) provides that penalties assessed against districts who do not enter into early contract renewals are paid to the Restoration Fund.

2. Section 3405(f) provides that revenues derived from increased repayment fees resulting from water transfers are paid to the Restoration Fund.

3. Section 3406(c)(1) provides for assessments against Friant water users.

4. Section 3407(d) provides for assessments against districts and agencies for costs of environmental mitigation and restoration.

The annual section 3407 assessments are not to exceed \$30,000,000, subject to a \$6.00 per acre-foot cap on agriculture and \$12.00 per acre-foot cap on municipal and industrial users.¹²⁷ The agricultural charge may be reduced to an amount within the probable ability of agricultural users to pay.¹²⁸

Up to \$50,000,000 per year may be appropriated from the fund for Central Valley Project fish and wildlife restoration activities.¹²⁹ When the section 3406 actions are completed, the fund will be reduced to \$35,000,000 and the Central Valley Project contracts ceiling to \$15,000,000.¹³⁰

Funds from the Restoration Fund may be diverted, at the Secretary's discretion, to non-Federal agencies, such as the State of California.¹³¹ In addition, funds may apparently be diverted to private nonprofit organizations, such as the Nature Conservancy.¹³²

¹²⁵ *Id.* § 3406(b).

¹²⁶ *Id.* § 3407(a).

¹²⁷ *Id.* § 3407(d)(2)(A).

¹²⁸ *Id.*

¹²⁹ *Id.* § 3407(b).

¹³⁰ *Id.* § 3407(d)(2)(A).

¹³¹ *Id.* § 3407(e).

¹³² *Id.*

IX. PROBLEMS AND AMBIGUITIES

A. *Conflict Between Inconsistent but Equal Priorities*

The Act makes inconsistent uses equal with one another by making environmental mitigation use equal to agricultural use. Given a finite quantity of water that is less than the aggregate demand, conflicts are inevitable. The major conflicts appear to fall into four categories: allocation of water uses between environmental and economic uses; preservation of appropriate water quality; restoration and improvement of riparian environments; and appropriated funds for projects. The conflict will emerge between the federal agencies,¹³³ the state agencies,¹³⁴ local agencies,¹³⁵ agricultural interests, municipal users, and environmental groups. Thus, decades of litigation seem inevitable as the fight over scarce water resources continues.

B. *Agency Action*

The Act authorizes the Secretary of the Interior to adopt regulations to implement its purpose.¹³⁶ The first issue will be to determine which agency will have jurisdiction over implementation of the Act. Since the Act does not delegate responsibility to the Bureau of Reclamation, but to the Secretary, an environmental Secretary could delegate power to the Fish & Wildlife Service or another environmentally sensitive agency. Consequently, while the Bureau of Reclamation would seem the obvious choice for carrying out the provisions of the Act, that choice does not appear binding on the Secretary.

If the Bureau of Reclamation is the agency, it will face an institutional challenge: to consider habitat and environmental concerns as equal to concerns of its traditional clients, the water districts. Until this Act, the Bureau of Reclamation had authority to consider the environmental effects of its actions, but chose not to do so. It did not have the

¹³³ The federal agencies have conflicting mandates and will therefore have inter-agency disputes. The principal agencies seem to be the Secretary of the Interior, the Environmental Protection Agency, the Fish and Wildlife Service, the Bureau of Reclamation, the Soil and Conservation Service, and the National Marine Fisheries Service. Just the listing of the agencies demonstrates the potential for interagency conflicts.

¹³⁴ California also has agencies with conflicting mandates. The state agencies are the State Water Resources Control Board, the Department of Water Resources, the Department of Fish and Game, and the State Lands Commission.

¹³⁵ The local agencies comprise the central and northern counties and cities, numerous water districts, irrigation districts, flood control districts, drainage districts, community service areas, conservation districts, and water agencies.

¹³⁶ C.V.P. Improvement Act § 3408(a).

authority to release water for environmental purposes unless the water was delivered under a full cost contract. Finally, the purpose of the Bureau was to "reclaim" arid or semi-arid land for productive use. Consequently, the focus of the Bureau was not on preservation, but on exploitation of resources. The Bureau's challenge will be to balance preservation and restoration with exploitation.

C. Delays in Regulations

The Bureau of Reclamation took five years to issue regulations under the Reclamation Reform Act of 1982.¹³⁷ Much of the function of this Act will depend upon regulations issued by the Bureau. Thus, implementation of the Act could be stalled by slow agency action. Even if regulations are forthcoming, implementation could be delayed by litigation and lobbying efforts to phrase the regulations most favorably towards special interests. Delays will also be encouraged by those hopeful of a change in the future political climate.

D. Standards

The Bureau will have four duties added to its existing portfolio: (1) assuring environmental compliance by its contracting districts; (2) approving water transfers; (3) establishing and enforcing water conservation standards and water metering; and (4) allocating water when demand exceeds supply. The agency will have to balance the competing priorities during the regulatory process. Any imbalance perceived by an interested group will lead to judicial challenges of agency action. Since much of the Act is left to agency discretion, the Secretary might consider establishing an alternative dispute resolution mechanism to resolve differences and avoid lengthy court battles. To the extent that the Secretary does not have statutory authority, Congress should be solicited for authority. Mediation, arbitration, mini-trials, and reference to masters are some of the techniques that could be used. Considering that the Congress is interested in civil justice reform,¹³⁸ it should welcome any reasonable authority to avoid district court intervention in the regulatory process.

¹³⁷ See 52 Fed. Reg. 11938 (April 13, 1987).

¹³⁸ 28 U.S.C.A. §§ 471-482 (West 1992).

X. CONCLUSION

Some consider the Central Valley Project Improvement Act the Central California Lawyer's Unemployment Relief Act of 1992. With its conflicting priorities, ambiguous language and ambitious environmental goals, the Act will surely create work for environmental and agricultural lawyers. However, the purpose of the Act seems sensible: to balance environmental interests against agriculture and industry. As California grows, its resources will not be sufficient to supply all wants to all people. Therefore, the time for managed conservation has arrived. Only the evolution of the Act through the regulatory and judicial process will tell whether its purpose can be fulfilled.