SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

COORDINATED SPECIAL PROCEEDING SPECIAL TITLE (Rule 1550(b))

STATE WATER RESOURCES CONTROL BOARD CASES

COORDINATED ACTIONS:

Anderson et al. v. SWRCB et al.
(Fresno County Super Court, No. 645385-6)
Central Delta Water Agency et al. v. SWRCB et al.
(San Francisco County Superior Court, No. 309539)
Glenn-Colusa Irrigation District et al. v. SWRCB
(Sacramento Superior Court, No. 00CS00201)
San Luis Water District v. SWRCB
(Merced County Superior Court, No. 143845)
Central Delta Water Agency et al. v. SWRCB et al.
(San Francisco County Superior Court, No. 311502)
County of San Joaquin et al. v. SWRCB et al.
(San Francisco County Superior Court, No. 311499)
Golden Gate Audubon Society et al. v. SWRCB et al.
(Alameda County Superior Court, No. 825585-9)
Pacific Coast Federation of Fishermen's Associations et al. v. SWRCB et al.
(San Francisco County Superior Court, No. 311507)
Santa Clara Valley Water District v. SWRCB
(San Francisco County Superior Court, No. 311549)
State Water Contractors et al. v. SWRCB
(Sacramento Superior Court, No. 00CS00602)
Westlands Water District v. SWRCB et al.
(Sacramento Superior Court, No. 00CS00603)

Case No. JC 4118

STATEMENT OF DECISION
Honorable Roland L. Candee
Coordination Trial Judge

May 5, 2003

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I. INTRODUCTION

A. General

As a young child, the Court recalls visiting an obscure warehouse off Sausalito's main thoroughfare where the U.S. Army Corps of Engineers maintains one of the largest hydrologic models in the world. This is not some computer-based model hosted in a desk-sized computer. Rather, the model is a miniature of much of the subject matter of this proceeding: the 1600 square mile San Francisco Bay-Delta region. *See* Figure 1 (from AR/2367/1). Now extending over a 1.5 acre floor, the Bay-Delta model is complete with land and water, the ebb and flow of tides, and the variable flows of the Sacramento and San Joaquin rivers which, through their combined action, form the fragile ecological area known as the Sacramento River-San Joaquin River Delta.

The Bay-Delta region is a victim of its own abundance. Because the flows were so deep and consistent, Forty-Niners navigated upstream as far as Sacramento, as do ocean-faring vessels today aided by dredged waterways. Because the rivers' deposits were so nutritious, thousands of acres of farmland were dredged into islands within the Delta. Because the ecology of this estuary was so diverse and bountiful, commercial and recreational fisheries grew up and depend on a healthy Delta for their continuation. Because the flows of the river systems were so abundant, they were tapped to provide water for America's most productive farmland and some of the nation's largest and fastest growing urban areas.

In this Court's view, the health of the estuary is, in a word, poor; but this is a condition that long-preceded the current litigation and will take years more to satisfactorily address. What is at stake in this proceeding is the latest effort by the State Water Resources Control Board (SWRCB) to, among other tasks, assign responsibility for meeting water quality standards in the Delta. It has been an arduous task. The most recent chapter starts with the Board's adoption, in 1995, of the Bay-Delta Water Quality Control Plan ("Water Quality Control Plan," "1995 Plan," or "Bay-Delta Plan"), in response to the requirements of the state Porter-Cologne Act, CAL. WATER CODE §§ 13000-14958 (West 2003). *See* Ronald Robie, *Water Pollution: An Affirmative Response by the California Legislature,* 1 PAC. L.J. 2 (1970). Adoption of the plan was followed by a Board-initiated water right proceedings to assign to water users responsibility for the flow-dependent objectives specified by the 1995 document. The Board's proceedings extended from 1998 to 1999, concluding in an original decision issued on December 29, 1999, and reissued in revised form on March 15, 2000. The hearings before the Board involved many dozen parties and accumulated an administrative record

totaling some 129,000 pages. The result of all this work is Decision 1641 or D-1641, a 206-page administrative decision, comprised of narrative and technical information, ruling on water right issues and water quality responsibilities for the Delta region.[1] Complex, D-1641 is also controversial. Petitioners in eleven separate cases challenged the decision. These various proceedings were eventually coordinated in 2000 under the authority of the California Judicial Council and assigned to this Court.

Figure 1: Bay-Delta Region

B. Cases Being Coordinated

Eleven cases challenging D-1641 were filed in various counties of the State, all eventually coordinated here. These cases are the following:

1. *Anderson v. State Water Resources Control Board*, No. 645385-6 (Fresno County) (coordinated July 29, 2000).
2. *Central Delta Water Agency v. State Water Resources Control Board*, No. 309539 (San Francisco County) (coordinated July 29, 2000).

[1] The proceedings and decision are formally titled *In re Implementation of Water Quality Objectives for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, Petition to Change Points of Diversion of the Central Valley Project and the State Water Project in the Southern Delta, and Petition to Change Places of Use and Purposes of Use of the Central Valley Project, State Water Resources Control Board No. D-1641* (Dec. 29, 1999), revised in accordance with Order WR 2000-02 (Mar. 15, 2000) (AR/0770).

3. *Glenn-Colusa Irr. Dist. v. State Water Resources Control Board,* No. 00CS00201 (Sacramento County) (coordinated July 29, 2000).
4. *San Luis Water Dist. v. State Water Resources Control Board,* No. 143845 (Merced County) (coordinated July 29, 2000).
5. *Central Delta Water Agency v. State Water Resources Control Board,* No. 311502 (San Francisco County) (coordinated Nov. 3, 2000).
6. *County of San Joaquin v. State Water Resources Control Board,* No. 311499 (San Francisco County) (coordinated Nov. 3, 2000).
7. *Golden Gate Audubon Soc. v. State Water Resources Control Board,* No. 825585-9 (Alameda County) (coordinated Nov. 3, 2000).
8. *Pacific Coast Federation of Fishermen's Ass'ns v. State Water Resources Control Board,* No. 311507 (San Francisco County) (coordinated Nov. 3, 2000).
9. *Santa Clara Valley Water Dist. v. State Water Resources Control Board,* No. 311549 (San Francisco County) (coordinated Nov. 3, 2000).
10. *State Water Contractors v. State Water Resources Control Board,* No. 00CS00602 (Sacramento County) (coordinated Nov. 3, 2000).
11. *Westlands Water Dist. v. State Water Resources Control Board,* No. 00CS00603 (Sacramento County) (coordinated Nov. 3, 2000).

Of these cases, *Glenn-Colusa Irr. Dist.*, No. 00CS002-01; *San Luis Water Dist.*, No. 143845; and *State Water Contractors*, No. 00CS00602, were dismissed before trial.

C. Proceedings before the SWRCB

The SWRCB gave two notices of the lengthy public hearings that resulted in D-1641. The first notice was issued on December 2, 1997. The second notice followed on May 6, 1998, with some revisions thereafter. Eighty days of hearings began on July 1, 1998, and ended on July 6, 1999.

As part of the proceedings, the SWRCB required the completion of certain environmental documents to fulfill its responsibilities under the California Environmental Quality Act (CEQA). CAL. PUB. RES. CODE §§ 21000-21177 (West 2003). On January 30, 1999, the Board issued a draft Environmental Impact Report (EIR) concerning the Bureau of Reclamation's petition for a change of place in use, followed, on November 11, 1999, by the final EIR on the issues raised by the Bureau's petition. The Board also prepared an EIR concerning the steps being considered for implementing the 1995 Plan. On December 29, 1999, the Board passed Resolution No. 99-117 certifying (a) the Final Environmental Impact Report for Implementation of the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary ("Plan EIR" or

"Implementation EIR"); and (b) the Final Environmental Impact Report for the Consolidated and Conformed Place and Purpose of Bureau of Reclamation's CVP water right permits ("Place of Use EIR").

The Board's draft D-1641 decision was issued in November 1999, and was followed by the final decision on December 29, 1999. Several petitions for reconsideration were filed and considered by the Board early in 2000. Several water right orders were issued addressing these petitions, and a revised D-1641 was issued on March 15, 2000.

D. Coordinated Proceedings

In the wake of D-1641, the many challenges to the decision identified above were filed throughout California. Upon the petition of the SWRCB to coordinate three of these cases, the California Judicial Council issued an order assigning Sacramento County Superior Court as the court authorized to address the coordination petitions. Order (April 26, 2000). On May 8, 2000, the Presiding Judge appointed Judge Brian Van Camp as the coordination motion judge. On July 26, 2000, Judge Van Camp granted the SWRCB's petition for coordination; and on August 29, 2000, Judge Roland Candee was appointed by the Presiding Judge as the coordination trial judge. This Court granted the SWRCB's petition to coordinate eight additional individual cases pending in courts throughout California. The Court also denied a motion for the assignment of a CEQA-designated judge, ruling that the assignments made in the coordination process took precedence. Order (Dec. 15, 2000).

E. Administrative Record

The administrative record before the SWRCB includes approximately 4000 documents and totals 128,970 pages. Because of its size and complexity, the Court ordered the record filed on computer disks (CDs), along with software facilitating the search and display of these documents. The documents were scanned into the portable document format (pdf). In addition to the convenience afforded the Court and parties, the electronic format of the administrative record should facilitate the preparation of the record for any appeal and similarly assist the appellate court.[2]

[2] The parties were ordered to use this form for citations to the administrative record: "AR/CD Number/pdf number/document page number." However, the Court and most parties loaded the CDs onto computer hard drives and the "CD" reference became superfluous. It also became easier to use the pdf page number rather than the document page number. In this decision, citations to the record eliminate the "CD" number and use the pdf page number. Thus, the citation form is "AR/pdf document number/pdf page number." As an example, the citation to the cover page of the State Water Resources Control Board's decision, D-1641, is "AR/0770/1."

California Public Resources Code section 21167.6(b)(1) requires the parties petitioning for a writ of mandate to arrange and pay for the preparation of the administrative record. The total cost of preparing the record was almost $200,000, and the parties asked the Court to allocate the costs among them. The Court's order on cost-allocation (in which the Court accepted a share of the financial responsibility due to the convenience afforded the Court by the electronic preparation of the record) was issued on February 26, 2001.

The court has undertaken an extensive review of the administrative record documents cited in the parties' briefs or referred to in oral arguments. Additionally, the court has independently searched the record for other relevant documents on especially contested issues.

F. Present Posture of Coordinated Proceedings

Collectively, the petitions in the coordinated cases seek review of D-1641 by writ of mandate, writ of administrative mandate, and declaratory relief. Status conferences have been held frequently since coordination, and numerous preliminary motions have been raised and decided. *See* "www.saccourt.com/CoordCases/swrcb/swrcb_orders.asp" for all minute entries and orders. Opening, opposition, and reply briefs were filed during the period of August 2001 to May 2002.

The trial extended sixteen days and was based on the administrative record, the parties' briefs, and extensive oral argument. The matter was submitted on November 15, 2002. This opinion resolves the issues properly raised by the petitions and the administrative record.

G. Rulings on Motions for Leave to Intervene

Six motions for leave to intervene were taken under submission by the Court on July 27, 2001. One, Santa Clara Valley Water District's motion to intervene in the *San Luis Water District* action, No. 143845, is now moot with the dismissal of that action. The other five motions for leave to intervene are hereby DENIED. The Court is satisfied that whatever the potential intervener's interest in the particular action, no potential intervener at this point will gain or lose by the direct legal operation and effect of the entry of judgment in any of the suits in which they are not a named petitioner or respondent.

II. STANDARD OF REVIEW

The applicable standard of review under CEQA is the substantial evidence standard set out in the governing statutes. CAL. PUB. RES. CODE § 21168.5 ("whether there was a prejudicial abuse of discretion . . . [which is] established if the agency has not proceeded in a manner required by law or if the determination or decision is not supported by substantial evidence"). In almost all CEQA actions, either proceeding under traditional or administrative mandamus, "the reviewing court will determine whether the respondent agency prejudicially abused its discretion (a) by failing to proceed in the manner required by law or (b) because its determination or decision is not supported by substantial evidence." MICHAEL H. REMY *ET AL.*, GUIDE TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT 590 (10th ed. 1999).

The standard of review of purely legal SWRCB determinations, where the evidence and inferences therefrom are undisputed, is the *de novo* standard. The standard of review for other SWRCB determinations is the substantial evidence standard, *United States v. State Water Resources Control Bd.,* 182 Cal. App. 3d 82, 114-15(1986), unless a fundamental vested right is affected. If the decision affects a fundamental vested right of the petitioner, then the standard of review is the independent judgment standard.

III. BAY-DELTA PHYSICAL SETTING AND ECOLOGY

Decision 1641 is only superficially understood if studied apart from an appreciation of Delta geography and ecology, as well as the historical and legal events preceding the Board's decision. Accordingly, this portion of this decision describes the Delta region and the early chapters of water quality regulation ultimately leading to the SWRCB's decision.

A. Physical Setting

The Delta is legally defined as the large, triangular area extending from Sacramento on the North, to Vernalis on the San Joaquin River (south of Stockton) on the South, and to Pittsburg on the West. CAL. WATER CODE § 12220. Legal definitions aside, the Delta, formed by the convergence of the Sacramento, San Joaquin, and other rivers, is actually the largest estuary on the west coast of North America. The Sacramento River provides between 78 and 80 percent of the flows, the San Joaquin River between 10 and 15 percent, and the remainder from the Mokelumne, Cosumnes, and Calaveras rivers. This is a region of rivers, sloughs, and islands. In its natural state, much of the area was marshland covered with tules (bulrush). Winter rains and snow produced high flows

overflowing into low-lying basins that then drained during the summer. With the decline in freshwater flows, tidal salinity increased during late summer and into the fall. Forty percent of California's freshwater originally drained into this 1600 square mile region. These supplies now provide drinking water for two-thirds of California's population. SWRCB, WATER QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY/SACRAMENTO-SAN JOAQUIN ESTUARY 1 (May 1995) (AR/2367/10) (WATER QUALITY CONTROL PLAN).

The ebb and flow of the tides, accentuated by human activities, has always been an important dimension of the Bay-Delta region. The entrapment zone is where freshwater from the rivers meets ocean water. During floods in the 1860s, freshwater extended far into San Francisco Bay; but during the 1930s drought, salt water intruded all the way to Sacramento.

The range of movement of the entrapment zone has enormous implications for water quality, the estuary's ecology, and beneficial uses of the area's water. A technical term, "X2," is often used to describe an important, changing location of a salt-freshwater mix that is beneficial to many species. As D-1641 indicates, "X2 is the location of the 2 parts per thousand salinity contour (isohaline), one meter off the bottom of the estuary, as measured in kilometers from the Golden Gate Bridge. The abundance of several estuarine species has been correlated with X2. In the 1995 Bay-Delta Plan, an electrical conductivity value of 2.64 micromhos (mmhos)/cm is used to represent the X2 location." D-1641 at 10 n.11 (AR/0770/22).

B. Ecology

The Delta is one of the largest ecosystems for fish and wildlife in the United States. Of fish alone, ninety species have been identified including several runs of salmon, bass, and shad. The salmon, a species of particular importance, is an anadromous fish with the juveniles (smolt) being born in freshwater gravels, migrating downstream to the ocean where they spend several years as adults, and returning to their streams of origin to mate, deposit eggs, and die. WATER QUALITY CONTROL PLAN, APP. 1, at V-74-77 (AR/12367B/206-09).

Five fish species or runs are presently listed as threatened or endangered under state and federal law. They include the Sacramento River winter-run Chinook salmon (endangered), Central Valley spring-run Chinook salmon (threatened), Delta smelt (threatened), Sacramento splittail (threatened), and Central Valley steelhead (threatened). *See* 50 C.F.R. § 17.11 (2001). The Delta is not an especially "fish-friendly" place these days; and the viability of listed and other fish species is affected by many factors including habitat modification,

water temperature, water quality, entrainment in pumps and in diversion structures, channel obstructions, and the sufficiency of flows. The timing and sufficiency of stream flows influence the successful migration of salmon to and from the ocean.

C. Human Development

In a series of articles during 1976, the *Los Angeles Times* noted, "The delta, as it is called, is the work of man, not nature." As nature's basic architecture is still apparent, this is an overstatement; but human development is responsible for the Delta as we know it today. The Gold Rush certainly had an initial impact. A USGS geologist reported that thirty years of mining during the 1800s resulted in over 1.5 billion cubic yards of sediment being deposited into the Sacramento River system (approximately eight times the volume removed for construction of the Panama Canal). Grove Karl Gilbert, *Hydraulic Mining Debris in the Sierra Nevada,* USGS Prof. Paper No. 105 (1919), *reported in* GRAY BRECHIN, IMPERIAL SAN FRANCISCO at 60 (1999).

In the late 1880s, agricultural development began with the construction of levees and channels. As settlement increased, comprehensive flood control projects were undertaken along the rivers to move flood waters more quickly out to sea and to protect with levees the municipalities and Delta islands valuable for their rich agricultural soils. By 1930, more than 1000 miles of levees had been constructed allowing the cultivation of 500,000 acres of farmland in the Delta. Still, agricultural development in the Central Valley, even with the assistance of early state and federal reclamation efforts, had been disappointing. Cycles of floods and droughts produced an increasing number of calls for a comprehensive water plan to move water from the water abundant North to the farms and cities south of the Delta. *See* NORRIS HUNDLEY, JR. [SIC], THE GREAT THIRST 232-57 (1992).

IV. HISTORICAL AND LEGAL CONTEXT

A. General

Californians have undertaken a range of physical and legal measures to address the tensions among the various constituencies who rely on the water of the Sacramento-San Joaquin River systems. These interests include the users along the rivers and their tributaries, the users within the lower Delta itself, the users of water diverted from the Delta for agriculture, and urban users in Southern California and elsewhere. Much of this conflict has its origins in the competition for primacy between different water law regimes: the riparian law,

adopted from the humid circumstances of Great Britain and the East Coast, and the prior appropriation doctrine, native to the mining camps of the American West. While riparian law was protective of instream and adjoining water users, the appropriation doctrine facilitated the long distance, out-of-channel movement of water and established a temporal hierarchy of uses. Thus, the historical and legal context of Bay-Delta issues starts with a brief review of the riparian-appropriative conflict.

B. Struggle Between Riparian and Appropriative Law

The prior appropriation doctrine developed among customs and practices of the Forty-Niners as they sought practical methods to use water in their mining operations. However, with the adoption of the common law in the new state's 1850 constitution, California appeared to formally embrace the riparian doctrine. From 1850, prior appropriation competed with the riparian doctrine for acceptance in California; and the tensions between the two doctrines resulted in great uncertainty along the state's rivers. In 1872, the legislature amended the Civil Code to codify many of the appropriative customs. Then, between 1879 and 1886, several large landowners in the Central Valley engaged in a titanic legal struggle[3] resulting in the state supreme court's monumental decision in *Lux v. Haggin*, 69 Cal. 255 (1886), affirming that California had really adopted a hybrid water rights system based on an uneasy coexistence of both doctrines.

In the ensuing decades, California and other western states discussed ways to reform their water right systems. This need was accelerated by the passage of the National Reclamation Act in 1902 and the new Reclamation Service's insistence on settled water right records as a condition for approving reclamation projects. *See* HUNDLEY, *supra* at 91-118; ROBERT G. DUNBAR, FORGING NEW RIGHTS IN WESTERN WATERS 113-32 (1983); ARTHUR L. LITTLEWORTH & ERIC L. GARNER, CALIFORNIA WATER 29-32 (1995). At the request of Governor Hiram Johnson, the legislature in 1911 created the three-person California State Conservation Commission, chaired by former Governor George Pardee, to undertake a sweeping review of the state's natural resource policies. 1911 Stat. ch. 408 (April 8, 1911). The commission's report, transmitted to the governor and legislature one year later, spent considerable time addressing waste and under-utilization of water. REPORT OF THE CONSERVATION COMMISSION OF THE STATE OF CALIFORNIA (1912).[4] The report was critical of wasteful riparian uses and suggested that the state condemn and reacquire riparian rights. *Id.* at 28-31. The

[3] One of the plaintiffs, Henry Miller, reported that he had spent $25 million in legal fees, much of this amount on water right litigation. NORRIS HUNDLEY, JR., THE GREAT THIRST 97 (1992).

[4] Pursuant to CAL. EVID. CODE § 452(c) (West 2003), the Court takes judicial notice of this report. See the comment to section 452 indicating that the courts have taken judicial notice of a wide variety of administrative and executive acts, including the reports of committees and agencies.

report was equally critical of "cold-storaged" appropriative rights—large, unperfected paper filings that tied up large amounts of water. *Id.* at 21 ("In these ways it was formerly possible, and still is on old appropriations, for the appropriator of the use of water for power and other purposes to monopolize and cold-storage the most valuable, and constantly becoming more necessary, natural resources of this State.").

Looking to Oregon as a model, the commission recommended comprehensive reform legislation creating a State Water Commission with authority to determine existing appropriative rights (thereby eliminating speculative appropriations), issue new water right permits, and regulate changes in water rights. In keeping with the anti-riparian sentiment of the time, the Commission also recommended the conversion of riparian into appropriative rights. *See A.E. Chandler, The "Water Bill" Proposed by the Conservation Commission of California,* 1 CAL. L. REV. 148 (1912).

The Commission's water law recommendations were enacted by the legislature in 1913 and approved by the voters in 1914. 1913 Stat. 1012 ch. 586 (June 16, 1913). The legislation addressed wasteful water practices in numerous provisions. The legislature also faced several transitional problems in making a major shift from a laissez faire water law to an administrative permitting system, a problem discussed in more detail in the Court's later discussion of the "legal user" concept under California water law. *See* V(D)(1), *infra.*

C. Constitutional Requirements of Reasonable Use

Drought in 1920 caused reduced flows and increased salinity in the Delta. The City of Antioch sued upstream irrigators to reduce diversions that were harming Delta regions but the city lost before the California Supreme Court. *Antioch v. Williams Irr. Dist.,* 188 Cal. 451 (1922). The decision was based on prior appropriation principles and did not address Antioch's more substantial riparian right claims. The case did foretell the ongoing saga between riparians and appropriators in the extended Sacramento River-San Joaquin River system and Delta.

Elsewhere in the Central Valley, a conflict between an upstream power company on the San Joaquin River and a downstream, riparian ranch produced another conflict that also went to the California Supreme Court and set the stage for public ratification of a constitutional amendment in 1928. The rancher flood irrigated his fields for grass production and claimed flows at a level that prevented Southern California Edison Co. from constructing a reservoir on the river. While the supreme court had earlier in *Lux v. Hagan* acknowledged the

requirement for reasonableness, depending "on all the circumstances," 69 Cal. at 408, the court in *Herminghaus v. Southern California Edison Co.*, 200 Cal. 81 (1926), held that, in a dispute with an appropriator, the riparian user was not bound by the reasonableness requirement. As one historian has written, "The decision effectively prevented appropriators from building dams on rivers claimed by riparians and trapping the flood waters absolutely necessary for new development at some distance from the streams, or for recharging distant and declining underground aquifers." HUNDLEY, *supra* at 241. The Court notes that the instant case, involving the competing claims of lower river and Delta riparians versus appropriators and exporters (reliant on diversions made possible by upstream storage), is simply the most recent iteration of the conflicts first addressed by *Antioch* and *Herminghaus* eighty years ago.

The immediate consequence of *Herminghaus* was public ratification of a 1928 state constitutional amendment barring the unreasonable use of water, as well as unreasonable diversions or methods of use. CAL. CONST. art 10, § 2. However, "reasonableness" is not a bright-line standard and, as *Lux v. Hagan* wisely observed, its meaning "depends . . . on all the circumstances." 69 Cal. at 408. Whether certain water uses allowed by D-1641 are constitutionally reasonable is among the issues before the Court in this case.

The 1920s and 1930s brought additional periods of drought leading to an alliance between Delta farmers and Suisun Bay industrial users against upstream irrigators. To avoid the prospect of a massive system-wide adjudication, state leaders began exploring physical solutions such as salt-water barriers or upstream reservoirs. Indeed, a dam across San Pablo Bay was proposed at one time as a solution to this problem. While this particular idea never progressed beyond the drafting table, other equally massive projects were proposed and constructed—the Central Valley Project (CVP) and the State Water Project (SWP).

D. Development of Large Projects

This period "found California grappling with an old problem—the relentless cycle of flood and drought which had long marred the state's aspirations." Gary D. Weatherford, *Legal Aspects of Interregional Water Diversion*, 15 UCLA L. REV. 1299, 1306 (1968). As a result, Californians decided that their future depended on water storage and the diversion and movement of water great distances from the source. Los Angeles led the way with the construction of the Owens Valley aqueduct that began delivering water to the metropolitan area in 1913. San Francisco followed with the construction of O'Shaughnessy Dam (Hetch Hetchy) on the Tuolumne River, a tributary of the San Joaquin River, to provide water for its growing needs, soon after President Wilson finally authorized access through Yosemite National Park. The East Bay Municipal

Water District (EBMUD) constructed its own aqueduct from the Mokelumne River in 1929. *See* SARAH S. ELKIND, BAY CITIES AND WATER POLITICS 128-45 (1998). In the early 1940s, southern California became even more dependent on imported supplies with diversions from the Colorado River through the All-American Canal and the Colorado River Aqueduct. Norris Hundley, jr. [sic], *The West Against Itself: The Colorado River—An Institutional History, in* NEW COURSES FOR THE COLORADO RIVER 11-28 (Gary D. Weatherford & F. Lee Brown eds. 1986).

The movement of water westward from California's mountainous spine, however, would not be enough to quench the state's growing thirst. State decisionmakers also envisioned moving water from north to south.

1. Central Valley Project (CVP)

The Central Valley Project was originally conceived in the late 1920s as a state project to transfer water from the Sacramento and San Joaquin River systems, but California could not sell its $170 million construction bond issue during the Depression. The project was assumed by the federal government in 1935. Rivers and Harbors Act of 1935, 49 Stat. 1028, 1038 (reauthorized as a Bureau of Reclamation Project by Act of Aug. 26, 1937). Along with the nascent project, the State transferred its water right filings to the Bureau of Reclamation. Construction work began in 1937 with water deliveries starting in 1951. *See generally Ivanhoe Irr. Dist. v. McCraken*, 357 U.S. 275, 280-82 (1958); HUNDLEY, *supra* at 248-55; LITTLEWORTH & GARNER, *supra* at 19-21.

The overall CVP plan contemplated a stepwise process to move water southward. Water from the upper San Joaquin River would be captured behind Friant Dam (Millerton Reservoir) and diverted south to the Bakersfield area through the 152-mile Friant-Kern Canal. Water from the Sacramento and American rivers, along with water from tributaries to the lower San Joaquin, would be pooled in the Delta to improve water supply there as well as to serve as a source of supply augmenting the now depleted lower San Joaquin. Water from the Trinity River, originally flowing northwesterly into the Pacific, would be diverted into the upper Sacramento River. Finally, more localized projects would be developed to replace the water being moved from these headwaters regions to other parts of the state.

The main facility of the CVP is Shasta Dam on the Sacramento River north of Redding, completed in 1944. Other reservoirs in the projects include Keswick on the Sacramento River, Folsom Dam on the American River, and New Melones Dam on the Stanislaus (which features prominently in several of the disputes addressed in this proceeding). The CVP includes eighteen reservoirs plus four additional reservoirs jointly owned with the state (including San Luis Reservoir).

The reservoirs have total capacity of 12 million acre-feet (ac-ft), or 30 percent of the total surface storage in California.

The CVP also has four canal systems among its major features. The Tehama-Colusa Canal diverts water from the northern Sacramento River for use on the west side of the Sacramento River Valley. The Delta Cross Channel Canal augments Delta water supplies and moves water more directly through the Delta. At the Tracy Pumping Plant in the south Delta (with a pumping capacity of 4600 cubic feet per second or "cfs"), this mix of Sacramento River and San Joaquin River water is pumped into the 117-mile Delta-Mendota Canal to the Mendota Pool serving San Joaquin Valley farmers. In addition to the Friant-Kern Canal, water is also diverted north from Millerton Reservoir by the 36-mile Madera Canal. *See Dugan v. Rank,* 372 U.S. 609 (1963) (claims against United States for diminishment of upper San Joaquin River due to construction of Friant Dam).

In all, the CVP area covers half of the state's 58 counties and provides water in Sacramento and San Joaquin counties and municipal/industrial water in Contra Costa County and the South Bay. Although construction and water deliveries were begun many years before, the Bureau of Reclamation's water rights for the CVP were finally issued in 1961 by the SWRCB in Water Right Decision 990. Modifications in those water rights are some of the issues before the Court in this case.

2. State Water Project (SWP)

Although the Feather River is the most important tributary of the Sacramento River, it was not part of the CVP package turned over to the federal government in the 1930s. The California Legislature adopted a plan in 1941 to construct Oroville Dam on the Feather River, but the project was postponed due to World War II. After the war, the legislature authorized the Statewide Water Resources Investigation and the development of an overall California water plan. The Feather River Project emerged as a main component of that plan and, in addition to Oroville Dam, proposed a cross-channel through the Delta, an aqueduct from the Delta to the San Joaquin Valley and southern California, and other features. The legislature authorized additional studies, eventually leading to the proposed Feather River Project or, more commonly, the State Water Project (SWP). *See generally* HUNDLEY, *supra* at 272-98; LITTLEWORTH & GARNER, *supra* at 21-26.

The State Water Project was authorized by the California Legislature in 1959 (Burns-Porter Act) and approved by voters at a $1.75 billion bond referendum in 1960. Construction started in that year. The largest facility in the

SWP is Oroville Dam on the Feather River. When completed in 1968, Oroville was the largest earth-filled dam in the world.

Water is released from Oroville downstream through the Sacramento River into the Delta. Along the way, some water is diverted into the North Bay aqueduct for use in Napa and Solano counties. The remaining water moves southward through the Delta in natural channels and sloughs to a location known as the Clifton Court Forebay, fifteen miles southwest of Stockton, where it is pumped from the Harvey O. Banks Pumping Plant (with a capacity of 10,350 cfs), two miles west of the federal Tracy facility. Water then moves for 444 miles southward through the California (Edmond G. Brown) Aqueduct located on the west side of the San Joaquin Valley. When it reaches the Tehachapi Mountains, the Edmonston Pumping Plant lifts water 1926 feet through eleven miles of tunnels. The canal then splits into the main branch that skirts the San Gabriel Mountains ending in Perris Reservoir in Riverside County and the West Branch that moves water to Los Angeles' Pyramid and Castaic reservoirs.

The State Water Project's yield is 2.4 million acre-feet per year (ac-ft/yr), providing water for urban purposes throughout southern California and water for agriculture in Kern and Tulare counties. The biggest SWP contractor is the Metropolitan Water District (MWD) with a contract for almost half of the project's capacity. Metropolitan itself serves twenty-seven local agencies.

The SWP's water rights were issued by the SWRCB in Water Right Decision 1275 (1967). The SWRCB's recent modification of these project water rights is also before the Court.

3. Project Externalities

Both the CVP and the SWP were originally conceived and developed as comprehensive, multi-purpose projects. Water supplies would be improved for urban areas in northern and southern California. Water would also be provided for agriculture in the Central Valley. Flooding would be reduced through the damming and regulation of the major rivers. Hydroelectric power would be generated at many of these facilities. Substitute water supplies would also be provided to those headwaters areas giving up their natural sources to these major projects. *See, e.g.*, Rivers and Harbors Act of 1935, 49 Stat. 1028.

While attempting to meet every need, the CVP and SWP planners did not sufficiently appreciate many of the adverse externalities that would result from these projects. A recent observation about the SWP certainly applies to the CVP as well: "None of the disadvantages to fish and wildlife were discussed, if indeed they were then known." LITTLEWORTH & GARNER, *supra* at 23. Agricultural

drainage from newly developed farmland would degrade the water quality of surface water and, perhaps, groundwater supplies. Diversions changed the flow regime, water levels, and water quality in the Delta itself. Because these consequences were not adequately addressed in project authorizations and operations, it fell to state and federal environmental regulation to do so. These unresolved environmental problems are a major reason for D-1641, now before the Court for review.

E. Advent of Environmental Regulation

The modern environmental law movement usually is dated from passage in 1969 of the National Environmental Policy Act (NEPA), now found at 42 U.S.C. §§ 4331-4344 (2003), a statute requiring federal agencies to identify the significant environmental effects of proposed projects that constitute "major Federal actions significantly affecting the quality of the human environment." This monumental, largely procedural legislation was accompanied by media-specific, substantive legislation, some of which actually preceded NEPA, including the Air Quality Act of 1967, significantly strengthened in 1970 as the Clean Air Act, now found at 42 U.S.C. § 7400 (2003), and the Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. §§ 1251-1387 (2003), originally passed in 1948 with comprehensive amendments in 1965 and 1972.

Similar state legislation was passed as well, and in California included the Porter-Cologne Act, CAL. WATER CODE §§ 13000-14958 (West 2003), originally enacted in 1969 to regulate water quality. In 1970, one year after NEPA, the California Environmental Quality Act (CEQA), CAL. PUB RES. CODE § 21000-21177, was also passed.

The SWRCB's proceedings resulting in D-1641 were in response to the requirements of these federal and state water quality laws. In adopting D-1641, the Board and several of the permittees were required to prepare environmental impact reports (EIRs) under CEQA. Other legislation, such as the Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1543 (2003), the California Endangered Species Act, CAL. FISH & GAME CODE 2050 *et seq.* (West 2002), and the Central Valley Project Improvement Act (CVPIA) of 1992, Pub. L. No. 102-575, 106 Stat. 4706, all discussed below, also have implications for the CVP and SWP. Many of the challenges now before the Court in this proceeding arise under these various statutes.

1. Federal Water Quality Regulation

The 1965 Federal Water Pollution Control Act required states to draft water quality criteria for interstate and coastal waters. The Delta is considered

coastal. Under section 303, 33 U.S.C. § 1313 (2003), states like California with designated water quality control programs must have water quality control plans with specific water quality standards. The "standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, ..." *Id.* These water quality control plans must be submitted to EPA for approval. If they are not approved, EPA may eventually promulgate its own standards for the waterway. States must review and update the standards every three years.

2. State Water Quality Regulation

In 1967, the previously separate functions of the State Water Rights Board and the State Water Quality Control Board were merged into the State Water Resources Control Board. California's existing water quality program was established by the Porter-Cologne Act of 1969. Regional water quality boards were established as part the water quality program; they have no role in water right permitting.

The SWRCB and the regional boards develop water quality control plans. CAL. WATER CODE § 13241. The contents of these plans include a listing of beneficial uses, water quality objectives protective of beneficial uses, and an implementation program. *Id.* §§ 13050(f), 13241, 13242; *see* discussion at IV(G), *infra*.

3. Endangered Species Act (Federal and State)

In 1973, Congress enacted the Endangered Species Act (ESA) in a comprehensive effort to address the complex problems of species extinction. *See generally* DONALD C. BAUR & WM. ROBERT IRVIN, ENDANGERED SPECIES ACT: LAW, POLICY, AND PERSPECTIVE (ABA 2002). An endangered species is one that "is in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). The U.S. Fish and Wildlife Service, National Marine Fisheries Service, or private parties may institute a technical review of a species that may result in it being listed as threatened or endangered based on five criteria including over-use for human purposes, deterioration of habitat, or other human factors affecting the species continued existence. *Id.* at 1553(a)(1). Critical habitat, those physical and biological features essential to the species' survival, must be designated within one year of listing. Federal agencies may not authorize, fund, or implement any action likely to jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat. Additionally, governmental entities and private persons may not violate the section 9 "take" prohibitions of ESA, defined generally as killing or adversely

affecting the species. *Id.* at § 1538(a)(1)(B) & (C). *See also Babbitt v. Sweet Home Chapter of Communities for a Great Oregon*, 515 U.S. 687 (1995) (upholding regulations defining "harm" under section 9 as including habitat modification).

While California enacted its own endangered species act in 1970, before its federal counterpart, significant amendments in 1984 resulted in provisions quite similar to the federal ESA. However, under California law, an endangered species is one "in serious danger of becoming extinct throughout all, or a significant portion, of its range," CAL. FISH & GAME CODE § 2062, suggesting that a higher standard than under federal law must be met for listing. *See* LITTLEWORTH & GARNER, *supra* 162.

As earlier mentioned, five fish species or runs have been listed as threatened or endangered under these federal and state laws. *See* III(B), *supra*. These listings factor importantly in these proceedings as they lead to certain overriding federal restraints on water use in the Delta and its contributing waters, all of which are discussed in more detail in later parts of this decision.

4. Other Measures

Other statutory provisions and case decisions affect water right and quality issues in the Delta. As some of them are construed in more detail in this decision, they are briefly mentioned at this point. They include a series of state-law "area-of-origin" provisions designed to provide certain protections to those slow-developing areas providing water for the CVP and SWP. Those measures included assurances that the future water needs of these areas would be addressed. These statutes are the County of Origin Act, CAL WATER CODE §§ 10505 & 10505.5; the Watershed Protection Act, *id.* §§ 11460-11465; the Delta Protection Act, *id.* §§ 12200-12205; and the San Joaquin River Protection Act, *id.* §§ 12230-12333.

At the federal level, the Central Valley Project was reformulated in 1992 with passage of the Central Valley Project Improvement Act (CVPIA), Pub. L. No. 102-575, 106 Stat. 4706. Among its many features, the CVPIA allows water transfers outside the CVP service area so long as numerous conditions are satisfied. *Id.* § 3405. The act also required the Bureau of Reclamation to dedicate and manage 800,000 ac-ft of CVP water "for the primary purpose of implementing . . . fish, wildlife, and habitat restoration purposes." *Id.* § 3406(b)(2). Additionally, the CVPIA requires the Bureau of Reclamation to comply "with all obligations under State and Federal law, including but not limited to the Federal Endangered Species Act . . . and all the decisions of the California State Water Resources Control Board establishing conditions on applicable licenses and permits for the project." 106 Stat. 4706, 4714.

5. Public Trust Doctrine

Finally, the California Supreme Court has recognized the applicability of the public trust doctrine to water right decisions made by the SWRCB and state courts. The most definitive statement of the doctrine is set forth in *National Audubon Society v. Superior Court,* 33 Cal. 3d 419 (1983) (*Mono Lake*). According to the court, "the public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust." *Id.* at 441. *See* C. Koehler, *Water Rights and the Public Trust Doctrine: Resolution of the Mono Lake Controversy*, 22 ECOLOGY L. Q. 541 (1995). Several parties invoke the public trust doctrine and argue its requirements necessitate the court to modify the SWRCB's D-1641 decision.

F. SWRCB's Prior Efforts to Improve Bay-Delta Water Quality

One of the petitioners in these proceedings has succinctly stated the essence of the Bay-Delta water quality dilemma: "This case begins with the intersection of water right permits on the Sacramento-San Joaquin River system and the legal requirements of federal and state clean water protection statutes, and it includes a long and tortuous history of false starts and delays by the [SWRC] Board in developing and implementing water quality standards to protect fish and wildlife beneficial uses for waters of the Bay Delta and Sacramento River and San Joaquin River basins." Pacific Coast Federation of Fishermen's Ass'n, Opening Brief at 15. This is, indeed, the short version of a very long story.

Over the years, the SWRCB has repeatedly struggled with this water quality issue. Physical solutions have also been considered including proposals for a Peripheral Canal to carry fresh water around the Delta to the export pumps, with releases at various points for in-Delta needs, and even, at one time, a proposed dam across San Pablo Bay to prevent salt water intrusion. *See* Alan M. Paterson, *The Great Fresh Water Panacea: Salt Water Barrier Proposals for San Francisco,* ARIZONA AND THE WEST (Winter 1980). Salinity tidal barriers on the lower San Joaquin River have been built on a temporary basis, and permanent replacements are part of the measures approved by D-1641.

1. D-990 (1961)

Planning for the state's CVP started in earnest in 1931 using state appropriative filings made in 1927. After the project was turned over to the

federal government in the Depression, construction commenced under the original state filings, which had been assigned to the Bureau of Reclamation. The SWRCB finally issued nine permits for the project in D-990, on February 9, 1961. This was the Board's first effort to address the water quality aspects of Delta-related water rights. Failing to reach an agreement on the approach to be followed, the Board adopted interim standards and reserved jurisdiction with the hope that Delta water users would come to agreement. *See* D-990 (Feb. 9, 1961) (AR/1516).

2. D-1275 (1967)

Permits for the SWP were issued on May 31, 1967, in D-1275 (AR/1580). These permits were based on the applications, later assigned to the SWP, previously filed by the Department of Finance under Water Code section 10500. These were the first water quality standards for the Bay-Delta and included conditions preventing DWR from diverting water from the Delta between April 1 and June 30 if chloride levels were high. The Board did not impose specific salinity standards, again with the hope that water users would come to agreement. The Board reserved jurisdiction to impose such standards if necessary.

3. D-1379 (1971)

With water users failing to reach agreement on salinity measures, the Board commenced hearings in 1969 to promulgate interim standards, as well as to better coordinate CVP and SWP operations. The proceedings were limited to CVP and SWP water rights.

In D-1379, the Board ruled that permit holders could both be required to prevent interference with natural flows and required to store reasonable amounts of water for salinity control and fish and wildlife purposes. D-1379 at 26 (July 1971). Increased salinity protection was provided for irrigated agriculture, municipal/industrial uses, the spawning and nursery habitat of striped bass, and salmon. The Board placed the burden of protecting these uses on the state and federal projects, without regard to water right priorities, even though other users were contributing to the problem.

With project contractors fearful of reduced water deliveries, the implementation of D-1379 was stayed as a result of litigation brought by the Central Valley East Side Project Ass'n and Kern County Water Agency. *See* D-1485 at 4 (Aug. 1978) (AR/1521/7). In any event, D-1379 was intended as an interim decision with the Board expecting to reopen hearings on permanent measures by July 1, 1978. D-1379 at 63.

4. D-1422 (1973) & *California v. United States*

As part of the CVP, the Bureau of Reclamation proposed to build New Melones Dam on the Stanislaus River and applied to the SWRCB for a permit to appropriate the water. The Board approved the Bureau's application in D-1422 (AR/1520), issued on April 14, 1973. The Board, however, imposed twenty-five conditions on the permit including a prohibition on filling the 2.4 million ac-ft reservoir until the Bureau had contracts or a specific plan for using the water, a preference for water users in the basin, and releases for water quality and fish and wildlife purposes, among others.

The United States challenged these conditions based on the argument they were preempted by specific congressional project authorizations. The federal government interpreted section 8 of the Reclamation Act, requiring the Secretary of the Interior to proceed in conformity with state law, as referring to state procedural law—not the state's substantive law. The controversy was decided by the U.S. Supreme Court in *California v. United States,* 438 U.S. 645 (1978).

The Court refused to accept the federal government's narrow reading of section 8. Upholding the state's authority to impose "conditions on the permits granted to the United States which are not inconsistent with congressional provisions authorizing the project in question," 438 U.S. at 675, the matter was returned to the lower courts to allow the United States to challenge the Board's conditions against this standard. On remand, the federal district court upheld state conditions concerning the water contracts and requiring a plan before the reservoir could be filled; but the court voided conditions that prevented hydroelectric generation to save a portion of the Stanislaus River for rafting. *United States v. California,* 509 F. Supp. 867 (E.D. Cal. 1981). The court of appeals, however, ruled that the hydropower condition would be upheld only if the federal government could demonstrate a clear need for the water to meet project purposes. *United States v. California,* 694 F.2d 1171 (9th Cir. 1982). *See* BARBARA T. ANDREWS & MARIE SANSONE, WHO RUNS THE RIVERS? DAMS AND DECISIONS IN THE NEW WEST (1983).

5. Water Quality Control Plan & D-1485 (1978)

Returning to its incomplete water quality task, the Board commenced hearings in 1976 that culminated in both the Water Quality Control Plan for Sacramento-San Joaquin Delta and Suisun Marsh (Delta Plan) and D-1485—both adopted in August 1978. The hearings addressed two sets of issues: (1) in-Delta needs for agriculture and the environment; and (2) the needs of users along the rivers and tributaries contributing to the Delta and users served by CVP and SWP exports.

Once again, all the burden of these measures were imposed on the projects. The Board indicated that only the CVP and SWP rights were before it in those proceedings. The Board adopted "without project" water quality protections: CVP and SWP would have to provide the same level of protection as if they had never been constructed, ignoring the pollution contributions of other post-project water users. Additionally, the projects were ordered to operate so as to prevent material deterioration of water quality for senior right holders. D-1485 at 9-10 (AR/1521/12-13). The Board indicated it would reopen hearings in eight years to address future project operations.

6. *Racanelli* Decision

The Board's actions in the 1978 Water Quality Control Plan and D-1485 were challenged in eight separate petitions for writs of mandate. After coordinated proceedings in San Francisco Superior Court, the controversy was addressed by the court of appeals in *United States v. State Water Resources Control Board*, 182 Cal. App. 3d 82 (1986) (*Racanelli*). The trial court decision was upheld and D-1485 was invalidated. However, since the SWRCB had already announced hearings to modify D-1485, the case was not remanded to the Board; and the appellate court actually vacated the trial court 's writ. The D-1485 permit terms remained in effect on project diversions from the Delta.

The court gave three principal reasons for its decision:

1. The "without project" condition, as the measure of needed flows to protect existing water, was "fundamentally defective." *Id.* at 116. The Board's role in setting water quality objectives is to protect beneficial uses rather than water rights. The Board must establish objectives to reasonably protect beneficial uses and must look beyond only the SWP and CVP water rights.

2. The "without project" condition was not the appropriate maximum regulatory condition. The Board had used this goal as the rationale for making the projects solely responsible for adverse conditions. This resulted in upstream nonproject water users obtaining unlimited access to upstream waters. The Board must consider all competing demands to arrive at a reasonable level of protection. *Id.* at 118-19.

3. Combining in one hearing both the water quality and water rights functions was "unwise" because the Board ended up not

> adequately protecting water quality. This resulted in the board defining its task too narrowly. *Id.* at 119.

Thus, the appropriate methodology for addressing water quality protections for the Delta requires a two-step process: (1) determining the protection required for all beneficial uses including environmental uses; and (2) allocating responsibilities to all users of water tributary to the Delta. The court confirmed the Board's broad power to balance water quality interests and the effects of water diversions so as to determine what uses are reasonable. *Id.* at 118. A "global perspective is essential to fulfill the Board's water quality planning obligations." *Id.* at 119.

Additionally, the court indicated that water quality conditions can be imposed without adhering to traditional water right characteristics or priorities. Thus, the court rejected the Bureau of Reclamation's argument that SWP rights should be limited before those of the CVP:

> The scope and priority of appropriative rights are properly defined by the Board acting within its powers to consider the relative benefits of competing interests and to impose such conditions as are necessary to protect the public interest. Here, the projects' permits were issued subject to the continuing jurisdiction of the Board to coordinate project operations. D 1485 was an exercise of that continuing jurisdiction. Accordingly, when the Board imposed Term 2—requiring equal responsibility for maintaining the water quality standards—it acted well within its authority and did not infringe upon or otherwise unlawfully impair the "vested" appropriative rights of the U.S. Bureau, which held its permits subject to the exercise of such authority.

Id. at 133.

The court also rejected the state and federal contractors' arguments of contract impairment, holding that a mandated reduction of export water to achieve water quality standards did not result in the unconstitutional taking of their contractual rights. *Id.* at 145-48.

7. In the Aftermath of *Racanelli*: D-1630 (Draft)

As one commentator noted, "*Racanelli* brought the Delta problem full circle. The Central Valley Project, and later the State Water Project, had intentionally insulated upstream diverters from the salinity issue, but irrigation districts, cities, power companies, and even individual farmers and ranchers

using water from hundreds of streams in the Delta watershed were once again enmeshed in the problem of Delta water quality." Alan M. Paterson, *Water Quality, Water Rights, and History in the Sacramento—San Joaquin Delta; A Public Historian's Perspective,* 9 WESTERN LEGAL HISTORY 75, 84 (Winter/Spring 1996).

Following *Racanelli,* the SWRCB in 1987 began new water quality proceedings. These proceedings were planned in three phases: (a) an evidentiary hearing to establish the water protection needs of all users, resulting in a draft plan; (b) comments on the draft plan leading to adoption of the plan; and (c) a water rights hearing to address responsibility for meeting the plan's objectives. After fifty days of hearings, the first phase culminated in a Draft Water Quality Control Plan for Salinity (Nov. 1988) providing flow and salinity objectives for the estuary as well as an implementation program to reasonably protect beneficial uses. The plan called for a "California water ethic" based on conservation, reclamation, conjunctive use, physical facilities, pollution control, and shared responsibility. This plan was abruptly withdrawn in 1989 because of controversy over its impacts and legal basis, including criticism that the Board again was mixing its water planning and water right determination functions. *See* LITTLEWORTH & GARNER, *supra* at 134.

The Board then adopted the Water Quality Control Plan for Salinity for the San Francisco Bay and Sacramento-San Joaquin Delta Estuary (May 1, 1991), but this plan was doomed as well. Strictly separating certain water quality standards from flow-only requirements, the plan included salinity, dissolved oxygen, and temperature objectives but did not have any flow or export objectives, postponing these until the future. SWRCB, 1 FINAL ENVIRONMENTAL IMPACT REPORT FOR IMPLEMENTATION OF THE 1995 BAY/DELTA WATER QUALITY CONTROL PLAN at I-5 (Nov. 1999) (AR/1486/I-5). On May 31, 1991, the Sierra Club Legal Defense Fund and fifteen other groups sued alleging that the Board should have included fresh-water flow standards. *Golden Gate Audubon Society et al. v. State Water Resources Control Board,* No. 366984 (Sacramento County Super. Ct.). Then on September 3, 1991, the EPA informed the Board that its salinity plan was inadequate to protect fish and wildlife in the estuary. The federal agency gave the state ninety days to revise the plan. The Board declined to do so.

In April 1992, then-Governor Pete Wilson declared, "The Delta is broken." Pete Wilson, *California's Water War* 4-5 (April 6, 1992). Expressing frustration that five years of hearings had not produced final water quality objectives, Wilson asked the SWRCB to adopt interim standards by the end of the year. In May, the Board issued a notice of public hearings commencing in June to establish interim standards; and these hearings were held over fourteen days extending into August. In December 1992, the Board issued draft D-1630 recognizing that "all

major water users of water from the Bay/Delta watershed share a measure of responsibility for the biological decline of the Bay/Delta Estuary; therefore, they share responsibility for mitigating the impacts of their water diversion and storage." Draft D-1630 at 53.

Decision 1630 was also ill-fated. The Environmental Protection Agency informed the state that it would reject the proposed standards if they remained unchanged from the draft. In the interim, the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) had issued biological opinions under the Endangered Species Act for the winter-run salmon and Delta smelt, largely supplanting the Board's authority to impose water right conditions. The coordination of CVP and SWP units results in their operations being considered a federal action under section 7 of the ESA. State's Opposition Brief at 9 n.6. In early 1993, Governor Wilson asked the Board to abandon the D-1630 process since the ESA listings had made completion of the Board's process impossible.

Faced with a regulatory vacuum, environmental organizations sued the EPA to compel federal issuance of water quality standards. *Golden Gate Audubon Soc. v. Browner,* Civ. No. 93-646 LKK PAN (E.D. Cal. 1993). This litigation concluded in a consent decree requiring the agency to propose new standards which it did on January 6, 1994. 59 Fed. Reg. 810 (1994). In 1995, pursuant to 33 U.S.C. § 1313(c)(3) (2003), the EPA proposed specific revisions to draft D-1631, but the Board did not respond. 60 Fed. Reg. 4664, 4666-68 (1995).

8. CALFED Program

State and federal efforts to avoid the finalization of the EPA's proposed standards led to development of the Bay-Delta Accord, starting a process to address the standoff between California and the federal government. Later, eighteen state and federal agencies adopted the more detailed CALFED program, setting forth a thirty-year plan for environmental restoration, levee improvements, water quality protections, and water supply security. Among many provisions, the Bay-Delta Accord, formally known as the Principles for Agreement on Bay-Delta Standards Between the State of California and the Federal Government (Dec. 15, 1994) (AR/2540), established an agreed-upon narrative salmon-doubling standard and numerical flow standards at Vernalis, to be formally adopted by the SWRCB in a new water quality plan. For the state, this agreement was signed by the Secretaries of the Resources Agency and the Environmental Protection Agency. *See generally* Elizabeth A. Rieke, *The Bay-Delta Accord: A Stride Toward Sustainability,* 67 UNIV. COLO. L. REV. 341 (1996); Robert J. Glennon & John E. Thorson, *Federal Environmental Restoration Initiatives: An Analysis of Agency Performance and the Capacity for Change,* 42 ARIZ. L. REV. 483,

516-21 (2000). The state record of decision and environmental review concerning the CALFED program are being challenged in parallel proceedings before another judge of the Superior Court. *See Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings,* No. JC 4152 (Sacramento Super. Ct.)

G. Bay-Delta Water Quality Control Plan (1995)

1. Applicable Law

The Porter-Cologne Act defines the content of a water quality control plan. Under section 13050(j), the plan consists of a "designation or establishment for the waters within a specified area of all of the following: (1) [b]eneficial uses to be protected[;] (2) [w]ater quality objectives[; and] (3) [a] program of implementation needed for achieving water quality objectives." Water quality objectives are defined as "the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specified area." CAL. WATER CODE §13050(h). The program of implementation must include, at a minimum, "(a) [a] description of the nature of actions which are necessary to achieve the objectives, including recommendations for appropriate action by any entity, public or private[;] (b) [a] time schedule for the actions to be taken[; and] (c) [a] description of surveillance to be undertaken to determine compliance with objectives." *Id.* at 13242.

2. Promulgation of Plan

In the context of the Bay-Delta Accord, the State Water Resources Control Board attempted again to promulgate a water quality control plan. The Board issued a draft plan in December 1994, followed by public hearings in February 1995. The Board adopted the final plan on May 22, 1995. WATER QUALITY CONTROL PLAN (AR/2367). The plan was approved by the EPA on September 26, 1995. 63 Fed. Reg. 53911 (1998). The Bay-Delta Accord provided that once the Board had adopted new water quality standards, the EPA would withdraw the proposed federal standards but the agency has apparently not done so. Bay-Delta Accord at 4 (AR/2540/4).

The Board did order the temporary imposition of some of the water quality objectives pending the completion of water right hearings. Order WR 95-6, extended by Order WR 98-09 (expiring Dec. 31, 1999). The only action brought challenging the 1995 Plan was settled.[5]

[5]*San Joaquin Tributaries Association et al. v. SWRCB,* Sacramento Superior Court, 95CS01432.

As part of the plan, the Board recognized seventeen beneficial uses needing water quality protection. The uses relevant to this proceeding included water for agriculture, municipal/industrial purposes, aquatic ecosystem maintenance, aquatic habitats necessary for migration or other temporary activities by aquatic organisms such as anadromous fish, aquatic habitats for reproduction and early development of fish, and habitats necessary in part for the survival and maintenance of plants and animals under the state and federal endangered species acts. WATER QUALITY CONTROL PLAN at 13 (AR/2367/22).

3. Water Quality Standards

The water quality objectives in the 1995 Plan apply to the waters of the San Francisco Bay and the Sacramento-San Joaquin Delta, as legally defined in Water Code section 12200. Objectives are adopted for three main categories of beneficial uses including municipal and industrial (M&I), agriculture, and fish and wildlife. In each of these categories, more detailed standards are adopted using a mix of numeric and narrative objectives. For M&I uses, a numeric limit on chloride concentrations is specified. For agricultural uses, a numeric limit on the electrical conductivity (EC) of water is set forth (as a proxy for salinity concentrations). For fish and wildlife uses, narrative criteria are set forth for dissolved oxygen concentrations (DO), EC, river flows (cubic feet per second), and CVP-SWP exports (percentage of Delta inflows). Many of these criteria vary depending on the physical location for measurement. WATER QUALITY CONTROL PLAN at 088131 (Bates no.; page no. illegible) (AR/2367/28). One location often referred to in this opinion is Vernalis, a location on the San Joaquin River south of Stockton where salinity is measured.

As part of the fish and wildlife objective, a narrative "doubling" objective is stated for the enhancement of salmon, reminiscent of the Central Valley Project Improvement Act objective: "[w]ater quality conditions shall be maintained, together with other measures in the watershed, sufficient to achieve a doubling of natural production of Chinook salmon from the average production of 1967-1991, consistent with the provisions of State and Federal law." *Id.* at 18 (AR/2367/27).

4. Implementation Program

As required by California Water Code section 13050, the water quality plan includes an implementation program. Implementing measures are set forth in four categories. These include measures over which the SWRCB has direct

authority, such as its ability to deny or condition water right diversions and use, measures requiring joint action by the Board and other agencies, recommendations to improve habitat conditions, and a monitoring and special studies program. *Id.* at 27 (AR/2367/39).

The Board accomplished the first major implementation effort by conducting the water rights proceeding producing D-1641. One important implementation measure requiring the joint action of the Board and other agencies is the salmon-doubling objective discussed above. The Board observed:

> It is uncertain whether implementation of the numeric objectives in this plan alone will result in achieving the narrative objective for salmon protection. Therefore, in addition to the timely completion of a water rights proceeding to implement river flow and operational requirements which will help protect salmon migration through the Bay-Delta Estuary, other measures may be necessary to achieve the objective of doubling the natural production of salmon from average 1967-1991 levels.

WATER QUALITY CONTROL PLAN at 28-29 (AR/2367/37-38).

No explicit schedule was provided for implementation although the plan does include the language, "if no time schedule is included, implementation should be immediate." *Id.* at 27 (AR/2367/36).

H. SWRCB's D-1641 Decision

1. Background

The Board's Order WR 95-6, temporarily imposing some of the water quality objectives, indicated that water right hearings would start in 1995. Hearings actually did not start until July 1, 1998 (AR/1/6005), and they were preceded by ten days of informational workshops. The formal hearings themselves, conducted under 23 California Code of Regulations section 648, lasted eighty-two days producing an almost 129,000-page record. The D-1641 proceedings actually combined three different although related matters:

1. In light of the *Racanelli* decision and the more recent Bay-Delta Accord, the Board was obligated to implement the flow-dependent water quality standards by allocating responsibility among all water right holders. Flow-dependent objectives were defined to "include all objectives that could be met by the flow of water or by changes in the operations of facilities,

notwithstanding that such objectives also could be met entirely or partially through other means, such as management measures and waste discharge requirements." SWRCB, Revised Notice of Public Hearing 2 n.1 (May 6, 1998) (AR/1/365/2).

2. The CVP and SWP had long desired to better coordinate export pumping and be able to utilize each other's Delta pumping facility in order to improve operational flexibility and provide back-up pumping ability if one of the pumps went off-line. The Bureau had initially petitioned the Board to do so in 1981 and renewed its request in 1985. On February 28, 1995, both DWR and the Bureau petitioned the Board for a change in their points of diversion, as stated in their permits, to allow such combined or joint use.

3. The Bureau also sought to change the place and purposes of use in its various CVP permits. Because the CVP had developed incrementally, obtaining separate permits on Trinity, Sacramento, American, Stanislaus Rivers, and other sources, the result was a patchwork of different authorized places and purposes of use. Project operation is designed to be integrated, which has resulted in the actual application of water on lands outside the nominal place of use terms in some permits. The Bureau sought a uniform statement of places and purposes of use in sixteen of its CVP permits. The Bureau's petition for this change was filed with the Board on September 24, 1985.

These change petitions require the consideration of various provisions of the Water Code including section 1260(c) & (f) (place and purpose of use), section 1301(h) & (i) (use and location), section 1701 (change petitions), and section 1702 (criteria for change petitions).

The Board's original notice for these proceedings, issued on December 2, 1997, and revised on May 6, 1998, indicated that these three topics, plus whether Order WR 95-6 should be extended, would be taken up. SWRCB, Revised Notice of Public Hearing (AR/0365).

2. Organization of Proceedings

The D-1641 proceedings were divided into eight phases although the last phase was stayed at the request of certain users to allow the development of cooperative management strategies that may reduce or eliminate disputes over relative responsibilities. The hearings commenced July 1, 1998, and concluded

July 6, 1999. As part of the proceeding, the Board encouraged the parties to settle many of the issues. D-1641 at 12 (AR/0770/24). The proceeding phases were these:

1. Extension of Order WR 95-6 or equivalent temporary compliance with the 1995 Bay-Delta Plan. (The order was extended by Order WR 98-09.)

2. Responsibilities of the parties proposing the San Joaquin River Agreement (SJRA).
   2A. San Joaquin River Agreement.
   2B. Permit changes proposed by some of the parties to the SJRA.

3. Suisun Marsh Preservation Agreement and other alternatives for meeting Suisun Marsh objectives.

4. Responsibilities of the parties proposing agreements in the Sacramento, Mokelumne, Calaveras & Cosumnes river watersheds, along with the California Department of Water Resources (DWR) and the Bureau of Reclamation, to meet flow-dependent objectives.

5. Responsibilities for meeting dissolved oxygen and southern Delta Salinity objectives.

6. Petition of the DWR and the Bureau for joint points of diversion in the southern Delta.

7. Bureau of Reclamation's petition to change and consolidate specified places of use and purposes of use for integrated parts of the CVP.

8. Responsibilities of specified water right holders who are (a) in the San Joaquin, Sacramento, Mokelumne, Cosumnes and Calaveras river watersheds; but (b) not parties to the agreements reviewed in Phases 2 and 4 (stayed).

3. Environmental Review

As part of the D-1641 proceedings, the SWRCB required the preparation of Environmental Impact Reports (EIRs) on two main components of the proceeding: (1) an EIR analyzing the impacts of implementing the 1995 Plan; and

(2) an EIR examining the effects of the Bureau's petition to change the place of use in the CVP permits. These EIRs were finalized in conjunction with the release of D-1641. *See* SWRCB, FINAL ENVIRONMENTAL IMPACT REPORT FOR IMPLEMENTATION OF THE 1995 BAY-DELTA WATER QUALITY CONTROL PLAN (Nov. 15, 1999) (AR/1486) (IMPLEMENTATION EIR); U.S. DEP'T OF INTERIOR, BUR. OF RECLAMATION, FINAL ENVIRONMENTAL IMPACT REPORT FOR THE CONSOLIDATED AND CONFORMED PLACE OF USE (Nov. 1999) (AR/1490) (PLACE OF USE EIR). On December 30, 1999, the Board filed its notice of determination with the state clearinghouse. CAL. PUB. RES. CODE § 21161. Some of the permit applicants, as governmental entities, performed their own environmental reviews.

4. Summary of Decision

The Board issued a draft of D-1641 in fall 1999. The final decision was released on December 29, 1999. In D-1641, the Board:

1. Accepted the contributions of certain parties to meet the flow objectives but continued the interim responsibilities of the CVP and SWP to meet the remainder of the flow objectives.

2. Approved the CVP/SWP joint points of diversion petition with conditions.

3. Approved the Bureau's place and purposes of use petition with conditions, including mitigation requirements.

4. "Recognized" the San Joaquin River Agreement and approved, for a period of twelve years, the conduct of the Vernalis Adaptive Management Plan (VAMP) under the SJRA instead of meeting the objectives in the 1995 Bay-Delta Plan. The decision approved, subject to terms and conditions, the petitioned water right changes needed to conduct the VAMP.

5. "Recognized" the 1996 Memorandum of Understanding between the East Bay Municipal Utility District (EBMUD) and the California Urban Water Agencies/Agricultural Exporters (CUWA/AG) with Respect to Bay-Delta Obligations from the Lower Mokelumne River (1996 MOU). The decision approved the schedule of flows attached to the 1996 MOU as the limit of the responsibility of EBMUD, Woodbridge Irrigation District, and North San Joaquin Water Conservation District to meet the objectives in the 1995 Bay-Delta Plan.

6. Addressed the Suisun Marsh Preservation Agreement, thereby relieving the DWR and the Bureau from meeting objectives at two stations.

7. "Recognized" the North Delta Water Agency (NDWA)-DWR memoranda of understanding. DWR remains responsible for any NDWA flow obligations so long as these agreements are honored (North Delta Agreement, 1981 & 1998).

8. "Recognized" the DWR-State Water Contractors-Yolo County Flood Control & Water District memorandum of understanding regarding Cache Creek (Cache Creek Agreement). Yolo has no responsibility so long as it is operating in accordance with existing permits.

9. "Recognized" the DWR-SWC-Solano County Water Agency memorandum of understanding concerning Putah Creek so long as Solano County operates in accordance with existing water rights on Putah Creek (Putah Creek Agreement).

In all, D-1641 assigns responsibility among water users in these watersheds: San Joaquin River upstream of Vernalis: Mokelumne River; Putah Creek; and Cache Creek. Additionally, the North Delta Water Agency's obligations are determined. The decision does not address the responsibilities of water users in the Sacramento River Valley. The Board's decision requires the SWP and CVP to meet flows for an interim period, thus allowing for the negotiation of Sacramento River Valley responsibilities. The Bureau or DWR can request reinstatement of SWRCB proceedings in the event these negotiations fail.

In the present proceedings, no one challenges the North Delta Agreement, Cache Creek Agreement, or Putah Creek Agreement. Also unchallenged is an order providing an eighteen-month stay in the Phase 8 proceeding. Order WR 2001-05, Order Staying and Dismissing Phase 8 of the Bay-Delta Water Rights hearing and Amending Revised Decision 1641 (April 26, 2001).

After the issuance of D-1641, twenty-one parties filed motions for reconsideration. On March 15, 2000, the Board denied these motions but made certain changes in the decision pursuant to Order WR 2000-02. The Board republished a complete version of D-1641 as amended.

In this context of the ever-increasing demand for water, a supply literally dependent on the weather, and a complicated morass of regulatory and legal precedent, the SWRCB and now this Court have faced difficult issues vital to

California's well-being and requiring Solomonic wisdom for their proper resolution.

V. PETITIONERS' CHALLENGES TO D-1641

A. Background

The petitioners in this proceeding have advanced a wide array of legal challenges to D-1641, and the Court attempts to afford each argument its appropriate consideration and review. The Court, however, wishes to acknowledge the very difficult challenge undertaken by the State Water Resources Control Board. The Court's extended discussion of the geography, ecology, water project histories, established economies, environmental degradation, legal framework, previous water quality regulatory efforts, increasing water demands, and legacy of antagonistic decisionmaking all was presented to underscore the multifaceted and textured dilemma faced by the Board. In the proceedings leading up to D-1641, the Board addressed the difficulty of responding to the many competing claims to Bay-Delta waters, as well as the uncertainties of science.[6] In these many crosscurrents, the Board attempted to fashion an outcome that makes overall sense and is in the public interest.

The Board may not have made the optimum decision or one the Court itself would have endorsed, but such a judgment is difficult for any party or even this Court to render since the Board, unique among all the players, has the constitutional and statutory obligation, as well as the practical knowledge and expertise, to take a statewide perspective. *See* CAL. CONST. art. X, § 2; CAL. WATER CODE § 105 ("the protection of the public interest in the development of the water resources of the State is of vital concern to the people . . . and that the State shall determine in what way the water of the State, both surface and underground, should be developed for the greatest public benefit"); *id.* § 174 ("to provide for the orderly and efficient administration of the water resources of the state").

[6] In some portions of D-1641, such as the consideration of the Vernalis Adaptive Management Plan (VAMP), the Board recognized scientific uncertainties about the Bay-Delta ecosystem and endorsed actions to gain more knowledge that, in turn, can inform regulation. This approach is known as "adaptive management" and is increasingly used in the management of complex ecosystems. Adaptive management posits "learning by doing" and involves "'a systematic process for continually improving management policies and practices by learning from the outcomes of operational programs.'" J.B. Nyberg, *Statistics and the Practice of Adaptive Management, quoted in* NATIONAL RESEARCH COUNCIL, DOWNSTREAM: ADAPTIVE MANAGEMENT OF GLEN CANYON DAM AND THE COLORADO RIVER ECOSYSTEM 52-53 (1999).

In the following, the Court examines the many challenges to D-1641 while keeping in mind that, on many issues, considerable deference is to be afforded to the insights and decisions of the administrative agency where the expertise is supposed to reside—the SWRCB.

B. Due Process Allegations

The Central Delta Petitioners assert a violation of due process in that the SWRCB allegedly deprived them of a fair hearing. The specific allegations are that Board staff met privately with certain water users and other persons to discuss water allocations to meet Delta standards; Board members received communications concerning these private meetings; the Board failed to allow petitioners to inspect all board and staff communications (including a confidential memo to the Governor) concerning the Principles for Agreement, now commonly known as the Bay-Delta Accord; and Board members failed to recuse themselves because of these alleged actions. Additionally, Central Delta alleges it has been denied an opportunity to confront and examine witnesses concerning these communications. Central Delta's Petition for Writ of Mandate ¶¶ 132-149 (April 14, 2000).

Before the commencement of the D-1641 hearings, Central Delta's attorney filed a request with the Board asking for the recusal of those Board members and staff who had communicated "with the Water Policy Council staff or . . . members regarding Delta Water Right matters . . . ." Letter (June 25, 1998) (AR/426). In response, on the first day of the hearing, the Board conducted an evidentiary hearing on Central Delta's motion. This hearing began with an opening statement by Central Delta's attorney, a review of the applicable conflict-of-interest laws by one of the Board's attorneys, and an opportunity for each Board member to recuse himself or herself in light of the described legal principles. Transcript (July 1, 1998) (AR/3298/63) ("So . . . what I would suggest is that each Board Member think about whether during the pendency of this current proceeding, in other words, since the original hearing notice was released in December of 1997, the Board Member has received any ex parte communication from the Water Policy Council regarding any matter of substance or in controversy."). No Board member indicated recusal. *Id.* at AR/3298/70.

Central Delta was also allowed to raise these issues during its case-in-chief before the Board. At Central Delta's request, the Board subpoenaed two of its own staff members: Walt Pettit, Executive Director, and Jerry Johns, Assistant Division Chief, Division of Water Rights. Both these witnesses were sworn, examined by Central Delta's attorney, cross-examined by the Board's attorney, and on occasion questioned by Board members.

Subsequently, on March 9, 1999, Central Delta filed a motion asking the Board to establish rules to ensure its impartiality in the D-1641 proceedings. Letter from Dante John Nomellini to SWRCB Division of Water Right (Jan. 25, 1999) (AR/1570). The motion was denied, with the Board indicating that the proposed rules exceeded "the applicable statutory requirements, are unsupported by your pleadings, are overbroad, and are unnecessary for the purpose of maintaining impartiality." Letter from James Stubchaer to Dante John Nomellini (Mar. 9, 1999) (AR/0606/4).

This Court's review of the record discloses that Central Delta had a fair opportunity before the SWRCB to raise and pursue the bias and conflict of interest issues it had raised. Petitioners do not allege personal interest (such as a financial gain or loss) by any Board or staff member that would have been favored by the outcome of the D-1641 proceeding. What is alleged is that (a) some Board and staff members may have received advance knowledge of facts to be adjudicated later before the Board; and (b) that the Board may have been bound or predisposed to rule in a certain way as the result of commitments made before the commencement of the D-1641 proceedings.

Absent a more troublesome set of facts than here presented, any statement by or communication to the SWRCB staff is legally irrelevant, for due process purposes, absent a showing of that staff person's direct involvement in the decisionmaking process resulting in D-1641. In *Kenneally v. Lungren*, 967 F.2d 329 (9th Cir. 1992), *cert. denied*, 506 U.S. 1054 (1993), the court considered the situation where legislators and other public officials communicated with the Medical Board of California concerning the board's proceeding to suspend a physician's license. The court rejected a bias claim since these staff communications could not be attributed to the persons who would actually decide the license suspension issue. *Id.* at 334; *see also Milgard Tempering, Inc. v. Selas Corp.*, 902 F.2d 703, 714-15 (9th Cir. 1990) (law clerk's bias not attributable to judge). In our case, the Board's staff, examined by Central Delta, indicated that their job functions required interactions with other agencies and water users, but they disclaimed any substantive communications with Board members during the hearing process. *See* Transcript at Bates no. 6595-96 (AR/3298/158–59) (Johns) ("We're very careful not to communicate with the Board on matters that are the subject of the hearing outside the public forum, or outside the deliberating process when we're actually working with the Board on that process."). As in *Kenneally*, without a more specific showing, these staff actions cannot be attributed to the Board. Having found any statement by or communication to the SWRCB staff to be legally irrelevant to a due process determination absent the unmade showing, the Court declines the Central Delta Petitioners' request for specific determinations in regard to such alleged actions involving staff (Central Delta Petitioners' Objections to Proposed Statement of Decision, Pg. 6).

After being briefed by Board staff on conflict-of-interest law, none of the Board members recused themselves, and their refusal to do so is afforded a "presumption of honesty and integrity." *Withrow v. Larkin*, 421 U.S. 35, 47 (1975). However, another possibility must also be considered, *i.e.*, whether certain official commitments made by the Board chair or the Board's superior agency created actual bias or an "unconstitutional risk of bias" in the decisionmaking process. *Id.* In this regard, Central Delta petitioners point to the 1994 Framework Agreement actually signed by John P. Caffrey, as Chair of the SWRCB, along with officials of the Department of Interior, holder of the CVP water rights, and the California Department of Water Resources, holder of the SWP water rights. Central Delta is also concerned that the 1994 Principles of Agreement (Bay-Delta Accord), while not signed by the SWRCB, was signed by the Secretary of the California Environmental Protection Agency (SWRCB's umbrella agency), other government agencies, and many water users. *See* Bay-Delta Accord (AR/2540).

A recent California appellate decision has held that the actual predisposition of one member of a multi-member decisionmaking board is insufficient in itself to cause a due process violation. In *Breakzone Billards v. City of Torrance*, 81 Cal. App. 4th 1205 (2d Dist. 2000), a member of the city council was also a member of the planning commission and, in that capacity, had voted unsuccessfully against granting a conditional use permit. This same official appealed the decision to the city council on which he also served, and he voted along with other council members in overturning the conditional use permit. The court ruled the procedure did not deprive the permit applicant of a fair hearing. *Id.* at 1240.

Especially as to the SWRCB, the Framework Agreement is a procedural agreement. In Exhibit A to the Agreement, the Board commits itself to a revision of the 1991 Water Control Plan and the initiation of a water rights proceeding to allocate responsibility for meeting the newly revised plan. Except for a basic schedule to accomplish these tasks, the Board pledged itself to nothing more than what was already required by the federal Clean Water Act and the state Porter-Cologne Act. The only unique feature of this agreement is the SWRCB's promise to seek a temporary commitment by the California DWR and the Bureau of Reclamation to meet the updated water quality plan until the Board had completed the D-1641 proceeding.

None of these provisions are sufficient to suggest either a prejudgment of adjudicative facts or an actual or perceived bias by the Board to rule a certain way on the merits of Bay-Delta water quality standards and water user responsibilities. The Board's execution of the Framework Agreement and its

procedural commitments do not rise to the level of a decisionmaker's prejudgment of legislative facts—a predisposition that, even if shown, would not be grounds for disqualification. *See Federal Trade Commission v. Cement Institute*, 333 U.S. 683 (1948) (commission's previously formed opinion on a general category of antitrust violations did not disqualify commission); *Skelly Oil Co. v. Federal Power Comm'n*, 375 F.2d 6, 18 (10th Cir. 1967), *modified on other grounds*, 390 U.S. 747 (1968) ("[N]o basis for disqualification arises from the fact or assumption that a member of an administrative agency enters a proceeding with advance views on important economic matters in issue.").

The Principles of Agreement contain more detailed, substantial agreements among the parties, but the SWRCB is not a signatory to this agreement. The only question can be whether the commitment by the Secretary of the California EPA is attributable to, and thereby biases, the SWRCB. The SWRCB is contained within the California EPA for administrative convenience. The Secretary does not participate in or review the Board's decisions. No evidence has been adduced indicating the Secretary pressured the Board or the Board feared adverse consequences if it failed to rule in a certain way. The California Supreme Court has indicated that "'[b]ias and prejudice are never implied and must be established by clear averments.' [citation omitted.] Indeed, a party's unilateral perception of an appearance of bias cannot be a ground for disqualification unless we are ready to tolerate a system in which disgruntled or dilatory litigants can wreak havoc with the orderly administration of dispute-resolving tribunals." *Andrews v. Agricultural Labor Relations Bd.*, 28 Cal. 3d 781, 792 (1981).

The Court finds that the Central Delta Petitioners have had a fair hearing on their due process claims, and that there was no denial of due process because of the invocation of any deliberative privilege process or any other actions on the part of the SWRCB or agency staff factually documented in the record. Accordingly, the Central Delta Petitioners do not prevail on their due process claim.

C. California Environmental Quality Act (CEQA) Issues

As previously mentioned, two environmental impact reports (EIRs) were prepared under the California Environmental Quality Act in association with the SWRCB's decision in D-1641. The first, known as the Implementation EIR, addressed any significant adverse effects resulting from the Board's anticipated orders to implement the flow-dependent objectives of the 1995 Plan. The second, referred to as the Place of Use EIR, studied the possible environmental effects of

the Bureau of Reclamation's petition to change the place of use and purposes of use under its CVP permits.

The Central Delta and Anderson petitioners contend that both of these EIRs are deficient in many respects and should be remanded to the Board for curative measures. They also ask for the suspension of the underlying decisions on the merits until these EIRs are correctly prepared. After addressing the State's request for reconsideration of a standing issue, the challenges to the Implementation EIR are discussed. Since the Place of Use EIR is intertwined with legal arguments concerning the change in place of use application, challenges to this EIR are taken up later. *See* V(D)(5), *infra.* Similarly, CEQA issues concerning the San Joaquin River Agreement are discussed later. *See* V(I)(7), *infra.*

1. Reconsideration of Standing Question

As a preliminary matter, the State Respondents asked the Court to reconsider its earlier decision overruling the State's demurrer contesting the standing of the Anderson and Central Delta petitioners to raise CEQA issues. *See* Order (May 4, 2001). The State again cites to *Waste Management of Alameda County v. County of Alameda,* 79 Cal. App. 4th 1223 (3d Dist. 2000), involving a CEQA challenge brought by a competitor of the project applicant. The court indicated that the Waste Management firm had shown "no demonstrable interest in or commitment to the environmental concerns which are the essence of CEQA; rather, it is pursuing its own economic and competitive interests." *Id.* at 1238-39. CEQA's goal generally is to encourage public participation in the consideration of environmental effects of proposed projects undertaken or permitted by government. 14 CAL. CODE REGS. § 15201 (CEQA GUIDELINES). *Waste Management* is readily distinguishable since it concerned a transparent anticompetitive maneuver by a business rival. A new case cited to the Court, *Not About Water Committee v. Solano County Board of Supervisors,* 95 Cal. App. 4th 982 (1st Dist. 2002), *petition for review denied,* 2002 Cal. LEXIS 3304 (May 15, 2002), adds little to this discussion. That decision characterizes certain water districts as lacking in general governmental authority; the holding does not diminish these entities' interest in the important water issues affecting them. The Court sees no reason to reconsider its decision allowing petitioners to raise CEQA issues.

2. General Issues Concerning Implementation EIR

The Board issued its notice of preparation of the Implementation EIR in 1995. The project to be investigated was described as the development of a water rights decision assigning responsibility for the flow, operational, and water quality requirements of the 1995 Plan; the possible combined use of the CVP and

SWP points of diversion in the Delta; habitat improvements in the Central Valley; and measures to improve water supply reliability for users dependent on the Delta. Separate volumes of the draft EIR were issued in 1997 and 1998. The final EIR was completed in November 1999.

The Central Delta petitioners generally contend that the EIR failed to study important environmental impacts likely to result from the Board's assignment of salinity objectives at Vernalis and the interior Delta to the CVP and SWP. Central Delta rhetorically asks where the water will come from to meet this objective and what will be the foreseeable environmental consequences of providing that water. Central Delta's position is without merit.

The EIR studies a range of flow objective alternatives. The flow objectives include "salinity objectives in the Delta that occasionally control Delta outflow" and "the salinity objectives on the San Joaquin River at Vernalis." FINAL IMPLEMENTATION EIR at II-16 (AR/1486/II-16). The entirety of chapter V of the EIR addresses the water supply impacts of these flow-dependent measures. In analyzing Alternative 8, which is the closest alternative to D-1641 (since it assumes the implementation of the San Joaquin River Agreement), the EIR discusses the water supply impacts of the alternative on Sacramento Basin sources, New Melones Reservoir (including carryover storage), the San Joaquin tributaries group, New Don Pedro Reservoir, Lake McClure, CVP and SWP exports, and water transfers. *Id.* at V-21. A complete evaluation of the environmental effects of implementing the flow and operational objectives of the plan is set forth in the 161 pages of Chapter VI of the EIR. All this discussion is sufficiently complete to describe the environmental effects of providing water to meet the flow objectives of the plan, including water source impacts.

Applying the required CEQA substantial evidence standard, the SWRCB did not abuse its discretion in the preparation of its EIR. The SWRCB proceeded in the manner required by law and its decisions concerning EIR preparation are supported by substantial evidence.

D. Place of Use Issues

The federal authorization of the Central Valley Project includes lands that are outside the place of use limitations described in the existing SWRCB-issued CVP water right permits. In some cases, CVP water has been delivered to these lands ("encroachment lands"). In other cases, lands having never received CVP water are still authorized to do so under the federal project authorizations ("expansion lands").

The SWRCB approved the Bureau of Reclamation's petition, on the condition of mitigation, to change the place of use to include encroachment lands. Again, these are lands presently receiving CVP water although they are located outside the permitted place of use. The Board did not decide that portion of the Bureau's petition concerning expansion lands, those within the federally authorized CVP service area but outside the permitted place of use and never served by CVP water. The Board indicated the environmental review was insufficient to reach a decision concerning these expansion lands. *See* V(D)(5), *infra*. The Westlands and Santa Clara Valley petitioners, both CVP contractors, contest these decisions. The Central Delta petitioners also object, arguing they will suffer injury as legal users from these changes.

These change petitions were filed under Water Code section 1701 *et seq.* Change procedures are quasi-judicial, adversarial proceedings where the burden of going forward and the burden of persuasion shift back and forth between a change petitioner and any protestor. Under the law in effect at the time the SWRCB issued D-1641, and even after amendments in 2001, the applicable criteria set forth in section 1702 is as follows: "Before permission to make such a change is granted the petitioner shall establish, to the satisfaction of the board, and it shall find, that the change will not operate to the injury of any legal user of the water involved." Thus, the petitioners must make a *prima facie* showing that the proposed change will not injure other legal users of water. The burden then shifts to any protestant to present the information "reasonably necessary to determine if the proposed change will result in injury to the protestant's exercise of its water right." CAL. WATER CODE § 1703.6(c)(3); *id.* §1703.5; *cf.* Supplement to Revised Notice of Public Hearing for Phase 2B at 3 (April 20, 1999) (AR/630) (criteria for proceedings under CAL. WATER CODE §§ 1707(b)(2) & 1736). The burden of persuasion ultimately falls to the applicant to satisfy the Board that the requirements of section 1702 are met.

This case is complicated by the Bureau of Reclamation, the petitioner, apparently relying on federal sovereign immunity and not being before the Court. *See* Order (Feb. 9, 2001) (denying motion to dismiss for failure to join an indispensable party); Order (Feb. 26, 2001) (relieving petitioners of the obligation of continuing service of pleadings upon the United States). The record is silent as to whether the Bureau is pleased, displeased, or has simply acquiesced in the Board's decision. The United States is entitled to exercise its sovereign prerogatives as it sees fit; but the Court notes to its regret that the government was not present to assist the Court in determining important reclamation law principles including the ownership and management of reclamation project water rights and the relationship between environmental laws such as the federal Endangered Species Act and project water rights.

The Bureau's contractors, Westlands and Santa Clara Valley Water District, have registered their displeasure; but the initial question is whether they have standing to do so. Specifically, in the absence of the Bureau, do these petitioners have standing to complain about the Board's imposition of a mitigation requirement for the approach of the place of use petition concerning the encroachment lands and the Board's failure to reach a final decision concerning expansion lands? This issue touches on a question well-stated in a recent law-review, "Whose water is it anyway?"[7]

The initial question here is whether Westlands and Santa Clara Valley, as contractors receiving Central Valley Project water, have standing as "legal user[s] of the water involved" under section 1702, to challenge the Board's disposition of the Bureau of Reclamation's place of use petition. Because "legal user" is ambiguous on its face in this water law context, and the section's meaning has not been definitively resolved by the appellate courts of this state, it is necessary to examine the legislative history of this language.

1. Original Meaning of "Legal User"

The inquiry into the original meaning of "legal user" requires a return to early California water law history and the tension between the prior appropriation and riparian doctrines, discussed earlier in part IV(B), *supra.* As there mentioned, the legislature in 1872 amended the Civil Code to codify many of the appropriative customs. While the legislation indicated that "[t]he rights of riparian proprietors are not affected by the provisions of this title," Civil Code section 1422 (since repealed), the legislation appeared to protect both appropriators and riparians in the event a change in point of diversion was contemplated by an appropriator. Section 1412 provided, "The person entitled to the use may change the place of diversion, *if others are not injured by such change,* and may extend the ditch, flume, pipe, or aqueduct by which the diversion is made to places beyond that where the first use was made." Act of Mar. 21, 1872, *codified at* CAL. CIV. CODE § 1412 (1912) (since repealed) (emphasis added).

By 1911, under-utilized riparian and "cold-storaged" appropriative rights led to the study and recommendations of the California State Conservation

[7] The answer suggested by the author is complex and involves a consideration of these factors: (1) how project ownership is split among the federal government, state, district or association, and landowners; (2) variation in the rights and responsibilities of these four actors by state, by project, and within projects; and (3) the specific context within which the ownership question arises. Reed D. Benson, *Whose Water is It? Private Rights and Public Authority Over Reclamation Project Water,* 16 VA. ENVTL. L.J. 363, 367 (1997). Thus, issues of standing and ownership involve a calculus of state and federal law, water supply contracts, and, as we shall see, general concepts of trust law.

Commission, chaired by former governor George Pardee. Indeed, popular sentiment against wasteful riparian uses was so strong that the Commission recommended the conversion of riparian into appropriative rights. *See A.E. Chandler, The "Water Bill" Proposed by the Conservation Commission of California*, 1 CALIF. L. REV. 148 (1912).

The Commission's water law recommendations were enacted by the legislature in 1913 and approved by the voters in 1914. 1913 Stat. 1012 ch. 586 (June 16, 1913). The legislation went to great lengths to void what were perceived to be wasteful water practices. Water tied up under speculative appropriations was declared to be unappropriated. Riparian uses were conclusively abandoned if water was not applied to a useful or beneficial use on land for ten consecutive years. *Id.* at § 11.[8] A permit issued by the newly formed State Water Commission became the exclusive method for new appropriations of surface water.

California was not alone in facing the transitional issues generated by this type of legislation although the situation was complicated by the state's continued recognition of a hybrid riparian-appropriative system. Other state legislatures addressed the same problem of protecting other water right holders who did not have appropriative permits from an administrative agency, including pre-code appropriative rights, nonappropriative groundwater, and small domestic and stockwatering uses. For example, in Arizona, the change statute protects "other vested rights." ARIZ. REV. STAT. § 45-153(A) (2002).

Several sections of the 1913 law are instructive on the meaning of "legal user." Section 10, concerning applicants for appropriative rights, provides as follows:

> The state water commission shall have authority to, and may, for good cause shown, upon the application of any appropriator or *user of water under an appropriation made and maintained according to law prior to the passage of this act*, prescribe . . . . [a period of reasonable diligence]. (emphasis added).

In this context, the term "user" refers to someone who commenced an appropriation under the law prior to 1913. It may also be read as distinguishing

[8] Technically, the consequence of section 11's conclusive presumption is one of subordination. If water is not applied on riparian land for "beneficial and useful purposes" for ten consecutive years, the water is presumed not needed on the land and declared unappropriated. Apparently, riparian use could commence but with no seniority rights against appropriators. *See In re Waters of Long Valley Creek Stream System*, 25 Cal. 3d 339 (1979). Section 11 was subsequently declared unconstitutional. *Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist.*, 3 Cal. 2d 489 (1935).

between a "user" who began an appropriation under the old law and an "appropriator" under the new law.

Section 16 expands on the change of point of diversion language in the 1872 statute and provides the basis for present-day section 1702:

> If any permittee or licensee, or the heirs, successors, or assigns of any permittee or licensee, desire to change the point of diversion . . . such applicant must establish, to the satisfaction of the state water commission, and such commission must so find, that such change in the place of diversion will not operate to the injury of any other appropriator or legal user of such waters before permitting such change in the place of the diversion.

This section, by introducing the modifier "legal," suggests a slightly different concept than the one contained in section 10. In the context of this anti-speculative, anti-riparian statute, the most plausible meaning of "legal user" is a person (a) who appropriated under prior law and who uses water for beneficial purposes or is making a diligent effort to do so; or (b) who, as a riparian, is applying water for "useful and beneficial purposes" upon riparian land, in a manner that avoids the conclusive presumption of relinquishment in section 11.

For our purposes, what is most striking about this 1913 legislation is its total silence about irrigation districts or other suppliers, or the members, shareholders, or customers of those entities. Samuel C. Wiel, the dean of California water law at the time, offers a contemporaneous explanation. Samuel C. Wiel, *Determination of Water Titles and the Water Commission Bill*, 2 CAL. L. REV. 435 (1914). In discussing the water rights determination features of the 1913 legislation, Wiel questions whether "consumers" of water carriers or companies will be adjudicated title as the result of the new water rights determination process. He concludes that California is following the Colorado approach and that individual farmers should not expect a water deed from the state representing their water. *Id.* 448.

In a separate article that same year, Wiel discusses the water rights of water service corporations and their consumers and summarizes California law as holding "that after public use attaches [to a water delivery system] the whole title must remain in the distributor, and that the consumer under the canal can have no 'water-right' as a share in the system." Samuel C. Wiel, *Water Titles of Corporations and Their Consumers*, 2 CAL. L. REV. 273 (1914). He also reasons that, since the state water commission is not going to adjudicate priorities along a canal, there is no basis to administer the rights and no reason to consider these users as title holders. *Id.* 282-83. Responding to this article, Morris Bien, an

influential official with the U.S. Reclamation Service, indicated his understanding of the irrigation "provider-user" situation under the Reclamation Act. He describes the Reclamation Act as not specifically providing a water right for landowners. In exchange for their project repayments, "the water-users will acquire a usufructuary interest *in the canal system . . . .*" *Editorial Note,* 2 CAL. L. REV. 481 (1914) (emphasis added).

While the legislature has modified and recodified section 16 of the 1913 law, nothing indicates that the legislature has sought to modify the meaning of "legal user." Based on this review, the Court concludes that the legislature, in using the concept "legal user," did not intend to include those persons who use water provided under contract with a water supplier entity, such as the Central Valley Project or State Water Project. Nothing in the text or legislative history suggests that contractors of the Reclamation Service were to be protected as legal users. The Anderson petitioners, Westlands, and Santa Clara Valley Water District are not legal users within the meaning of section 1702. *Cf. Fort Hall Water Users Ass'n v. United States,* 921 P.2d 739 (Idaho 1996) (water users within reclamation project lacked standing to object to Indian water rights settlement in context of general stream adjudication).

2. Trust Theory and Standing

In addition to the plain meaning of statute argument, rejected above by the Court, Westlands offers "appurtenancy," "special relationship," and "trust" arguments supporting its claim of protection as a legal user of water.

The appurtenancy argument appears to suggest that Westlands' landowners become legal users of water because the water, under certain code provisions and prior Board decisions, is affixed to their land and they are the ones who actually put water to beneficial use. Indeed, the appurtenancy doctrine was an important feature of the Reclamation Act (section 8 provides, "the right to the use of water . . . shall be appurtenant to the land irrigated"), but its importance has been eroded by subsequent federal laws and the incorporation of state laws into subsequent federal reclamation project authorizations. *See* Brian Gray *et al., Transfers of Federal Reclamation Water: A Case Study of California's San Joaquin Valley*, 21 ENVTL. L. 911, 942-43 (1991).

Fundamentally, however, the appurtenancy doctrine is a restraint on out-of-project transfers of project water and not a basis for standing in litigation involving the Bureau's water permits. Regardless of whether project water is appurtenant to certain lands, the Bureau is still the appropriator and the named permittee under the permit or decision identifying those lands as the place of use. An injured landowner with appurtenancy claims may have contractual

remedies in the event of shortage. A homeowner in the Santa Clara Valley service area might have received domestic water for 50 years and have contractual or other legally protectable "appurtenancy" expectations of continued service. Neither that homeowner nor a Central Valley irrigator, on the basis of appurtenancy claims alone, has standing to claim injury in change proceedings before the Board or before this Court.

Westlands indicates that the Bureau-contractor relationship has been described as a trust relationship, citing both federal and state cases. Three U. S. Supreme Court cases support the proposition, stated in *Nevada v. United States*, 463 U.S. 110, 126 (1983), that "[o]nce these lands were acquired by settlers in the Project, the Government's 'ownership' of the water rights was at most nominal; the beneficial interest in the rights confirmed to the Government resided in the owners of the land within the Project to which these water rights became appurtenant upon the application of Project water to the land." *See also Ickes v. Fox*, 300 U.S. 82 (1937); *Nebraska v. Wyoming*, 325 U.S. 589 (1945).

While the Supreme Court repeatedly speaks of a trustee-type relationship, it never clarifies whether this interpretation is required by federal law or the state law in which the particular project is located. In *Nebraska*, the Court says, "Appropriation was made not for the use of the government, but, under the terms of Reclamation Act, for the use of the land owners; and by the terms of the law and of the contract . . . , the water-rights became the property of the land owners, wholly distinct from the property right of the government in the irrigation works." 325 U.S. at 613-14. This phrasing suggests that the trust relationship results from both the contract and federal law (since "Reclamation Act" and "the law" appear in the same sentence). However, the Court in *Nevada* is somewhat more precise and appears to tie the trust concept to the intersection of the pertinent reclamation contract and state law. 463 U.S. at 126 ("As in Ickes v. Fox and Nebraska v. Wyoming, the law of the relevant state and the contracts entered into by the landowners and the United States make this point [beneficial ownership in landowners] very clear."). The Supreme Court appears to implicitly prefer an interpretation that state law applies to characterize the government-landowner relationship.

The SWRCB has often referred to a trust relationship in its permits; but, as a matter of California law, the trust concept has been flatly discredited by our supreme court in *Ivanhoe Irr. Dist. v. All Parties*, 53 Cal. 2d 692, 715-16 (1960) ("Thus the trust theory is not the law of this case, is dicta, and for that reason should not be construed as a statement of the law of California.").

If we did assume that Bureau-contractor relationship is that of a trust, what would be the implications for these proceedings? First, the legislature used

term "legal user" which, in the context of trust law, would mean the trustee. If the legislature had intended to allow contractors to object to change proceedings, it could have more clearly referred to "user;" "other" person, as in the 1872 statute; or "legal or beneficial user" that in trust law would include both the trustee and the beneficiary.

Second, when we consult general principles of trust law, the beneficiary would have limited opportunities to participate in these proceedings. The trustee has general management powers including the power to sue at law or equity, participate in other legal proceedings, and compromise claims involving the trustee property so long as the trustee exercises reasonable prudence. *See* RESTATEMENT (SECOND) OF TRUSTS § 280 (Actions by Trustee) & § 192 (Power to Compromise, Arbitrate and Abandon Claims); *see also* CAL. PROB. CODE § 16249 (West 2002) (trustee has power to prosecute and defend actions). In the event the beneficiary believes the trustee has failed to act prudently, the beneficiary can maintain a suit in equity, *inter alia*, to compel the trustee to perform its trust duties, to redress a breach of trust, or to appoint a receiver to assume possession of trust property. RESTATEMENT (SECOND) OF TRUSTS at § 199 (Equitable Remedies of Beneficiary) & § 205 (Liability in Case of Breach of Trust). Other jurisdictional questions aside, this case is not a trust-based equitable proceeding.

Even if the United States had acted as a trustee in petitioning the SWRCB to change the place of use (akin to a compromise of a claim), the contractors cannot step into the Bureau's shoes to appeal that outcome. Their remedy is through their trust relationship with the Bureau. *See also Saks v. Damon Raike & Co.*, 7 Cal. App. 4th 419, 430 (1st Dist. 1992) (beneficiaries do not have the capacity to sue third parties concerning issues that are internal to the trust; such issues are properly before the probate department of court). The contractors often characterize the water right permits held by the Bureau as contracts between the SWRCB and the Bureau. If this is the case, the Restatement (Second) supports the conclusion that Westlands and the other contractors have no direct right to enforce these permits as contractual documents. RESTATEMENT (SECOND) OF TRUSTS § 218, Comment (c) ("If a contract right is held in trust, the beneficiary cannot maintain an action at law against the promisor.").

Thus, even on the basis of a trust interpretation, this Court concludes that when the Bureau has petitioned the SWRCB concerning some aspect of the water right held in its name but benefiting contractors or landowners, the contractors and landowners cannot impeach or challenge the outcome of that proceeding in a subsequent appeal or writ proceeding. The beneficiaries' remedy is directly against the trustee, and certainly such remedies against the United States may be more limited than against a private trustee. *See* RESTATEMENT (SECOND) OF TRUSTS § 95 (United States or State as Trustee).

A beneficiary's position may be enhanced in limited situations if the harm is caused by a third party. Under Restatement (Second) section 281, "[I]f the beneficiary is in possession of the subject matter of the trust, he can maintain such actions [at law] against the third person as a person in possession is entitled to maintain." Thus, it is arguable that a contractor of the Bureau may sue in its own name to prevent an unlawful diversion by another water user, so long as the contractor has been using (has been "in possession") of the water. This possibility appears to have been recognized by the Board when it amended D-1641 to provide that the "legal user" requirement does not preclude water service contractors from protesting changes to existing project water rights or applications for new rights or from filing protests based upon injury to the water right holder whom they rely on for deliveries under their water service contracts. AR/0770/143. This provision, however, contemplates actual harm and does not provide a basis for allowing contractors to participate here on the assumption of future harm.

Restatement (Second) section 282 allows the beneficiary to sue both the trustee and third person in equity when the trustee improperly refuses to sue a third person. The section also allows the beneficiary to sue the third party alone in equity when the trustee cannot be subjected to the jurisdiction of the court or cannot be found. This section might be invoked if the Bureau failed to take action against an unlawful diverter, and the Bureau could not be subjected to state court jurisdiction, thereby allowing the beneficiary to sue the unlawful diverter separately in equity. This proceeding, however, does not involve allegations or evidence of actual harmful diversions. This case involves the propriety of the SWRCB's water permitting decisions. *See also Saks*, 7 Cal. App. 4th 419, 427-28, 431-32 (beneficiary's action is against trustee in equity; may join third parties only to prevent loss or prejudice; "The substantive basis for the real party in interest rule is to prevent just this kind of multiplication of lawsuits arising from the same facts, in order to protect potential defendants from the harassment, vexation, and expense of having to meet several lawsuits from different claimants involving the same claim or demand . . . .").

In summary, trust law interpretations of the water provider-contractor relationship are generally disfavored by the California courts. Even if trust law principles applied, they would not afford the contractors a basis to challenge the permits issued to their supplier under the facts of these cases.

3. Merger Statute

The Anderson petitioners request relief based on a state legislative enactment, the so-called Merger Statute, CAL. WATER CODE §§ 37800-37856.

Westlands Water District is the result of the consolidation of two pre-existing entities. The original Westlands was formed in 1952 and consisted of approximately 400,000 acres located on the eastern two-thirds of the present-day district. The original Westlands obtained a CVP contract in 1963. West Plains Water Storage District was formed in 1962 and originally covered 200,000 in the western one-third of today's district. West Plains itself was divided into an area entitled to receive CVP water and a second area qualified for SWP water. However, West Plains was unable to secure a contract for either source of water. The Solicitor of the U.S. Department of Interior opined that federal water could be delivered only to Westlands and that portion of West Plains entitled to receive CVP water. Because of this problem, federal and state officials began discussing the merger of the two districts so that water could be provided to West Plains. In a 1964 memorandum from the Department of the Interior ("Holum memorandum"), the department suggested a merger and pledged to provide water to a combined district under Westlands' original 1963 contract, plus the remaining yield of the CVP San Luis Unit. Anderson Petitioners' Request for Judicial Notice Ex. C (Granted July 15, 2002).

In response, the California Legislature enacted the Merger Statute, effective June 29, 1965. The Court believes the act is unambiguous on its face, leading to the conclusion that the legislature effectuated a statutory authorization for the delivery of federal CVP water to all of the lands of the combined Westlands-West Plains district. Numerous provisions of the Merger Statute support this result:

- For the benefit of the state and the inhabitants and property owners within the CVP San Luis Unit service area, the act seeks "the greatest possible use and conservation of the waters to be made available from said unit and the greatest use thereof to the area, thereby assuring that the greatest productivity of the *largest possible area* may be accomplished . . . ." CAL. WATER CODE § 37801 (emphasis added).

- The statute, as special legislation is "necessary for the proper distribution, use, and control of the natural supplies of water now available for said area and of the water to be made available from the San Luis unit . . . and the more efficient and effective utilization of ground water and imported water supplies." *Id.* at 37802.

- The merged district includes all the land of the two, preexisting districts. *Id.* § 37821. "Upon the merger, the surviving district

succeeds to all properties, rights, and contracts of each of the two districts[,]" *id.* § 37826, thus authorizing the use of contract water on all district lands.

- The act specifically establishes water delivery priorities favoring property owners in the original Westlands area over West Plains owners, *id.* § 37856, indicating that the legislature was aware the Merger Statute would have immediate, actual water distribution consequences for water supplied "under any contract with the United States …".

- Most importantly, the legislature directed that the statute be "given a liberal interpretation for the purpose of sustaining any and all proceedings taken hereunder." *Id.* § 37805.

The legislature may not have explicitly said that the place of use under the Bureau's CVP permits was accordingly modified, but the normal and intended consequences of what the legislature did say are to require and effectuate such a place of use modification. Thus, all lands within the combined Westlands-West Plains area, as of 1965, are declared to be included in the place of use of the Bureau's CVP permits. The Board is required, in the performance solely of a ministerial act, to modify the permits accordingly. CEQA § 21080(a); CEQA GUIDELINES § 15268. Because such an administrative confirmation involves no discretion, CEQA is inapplicable to this permit correction and mitigation (even though imposed on the Bureau and not Westlands) cannot be required as a condition to do so.

4. Request for Declaratory Relief

The Santa Clara Valley Water District (SCVWD) has, in support of its claim for declaratory relief, pointed to the language in actual water rights applications and permits, and to its own authorizing legislation, the Santa Clara Valley Water District Act, CAL. WATER APP. § 60-1 *et seq.*, and the provision that defines the boundaries of the district as coterminous with the county, *id.* § 60-2. This act, however, is in the form of an organization statute, similar to those authorizing other water districts throughout the state. The act lacks the specificity of the Merger Statute in terms of responding to West Plains' inability to secure CVP water and facilitating the distribution of San Luis Unit and other CVP water throughout the merged district. The Santa Clara act cannot be read with the same certainty to conclude that the legislature intended to expand the CVP place of use to include all of Santa Clara County.

An application for declaratory relief may be asserted when one person seeks a determination of rights or duties, with respect to another person (a) concerning a written instrument (excluding a will or trust) or contract; or (b) concerning property or the location of the natural channel of a watercourse. An actual controversy must exist between the parties, and the application may be joined with other relief. CAL. CODE CIV. PROC. § 1060 (West 2002).

The substance of SCVWD's claim is that the SWRCB, as a matter of law, must conclude that the authorized place of use of CVP water delivered by the Bureau of Reclamation to SCVWD is the entirety of Santa Clara County. Taken directly from SCVWD's petition (Page 6, lines 24-26), "the District's point … (is)…that the express terms of the Board's own permit includes the District's entire service area within the authorized place of use." If this position is correct, then the SWRCB's action taken in D-1641 as it affects the SCVWD would have been an abuse of discretion and SCVWD would arguably be entitled to relief.

As a starting point in analyzing this claim, the Court looked at the only permit specifically mentioned by permit number in SCVWD's petition, Permit No. 11967 based on Application 5628, originally filed July 30, 1927 (see AR/1847). While SCVWD can find the language in this application (AR/1847/7) that the "water will be used within the service areas of districts," the whole sentence in which this language is found reads: "The water will be used within the service areas of districts, municipalities, water companies, corporations, and other legal entities within the gross area of the place of potential use delineated on Map 416-208-341, provided that the delivery of the water is conditioned upon execution of valid contracts for such deliveries." Should this language have required the SWRCB to find, as a matter of law, that the whole of Santa Clara County had already been determined to be the authorized place of use under Permit 11967? No. Does this language require this Court to find, as a matter of law, that the whole of Santa Clara County (which the Court understands to be a county where "it is not likely that water can be delivered to much of the area due to mountainous terrain" (AR 2917/11)) has already been determined to be the authorized place of use under Permit 11967? No.

Giving legal effect to the plain language leads this Court to conclude that the outer limit of the authorized place of use for the water in question under the permit in question is the outer boundary of the "place of potential use delineated on Map 416-208-341." No matter how far one is "within the service area" of a district and no matter how clear a contract between the Bureau and a district is in not limiting the place of use of water, if the area in question is not "within the gross area of the place of potential use delineated on Map 416-208-341", the area is not covered by the permit language set out above. Similar language is found in the testimony of Joan Maher in regard to Application No. 5626 (AR/1203/2).

The Court's own review of the exhibits shows that this phrasing is very common language. (See, for example, AR/1854/9; AR/1858/10; AR/1859/9; AR/1862/8; AR/1864/9; AR/1865/5). The Court specifically rejects SCVWD's request that the Court find that the "only reasonable way to read this language is in terms of the entire service area of a contractor whose service area *overlaps* (emphasis added) the gross areas of the maps attached to the Bureau's applications." (SCVWD Opening Brief, pages 15 and 16). To do so would require the Court to rewrite the application language from "within the gross area of the place of potential use delineated on Map …" to "in any way overlapping the gross area of the place of potential use delineated on Map … ." It appears to the Court that such a change in the language would be a major change rendering the maps and the language in applications and permits referring to maps useless in supplying meaningful information concerning the gross area of potential use. Interpreting the language in the manner requested by SCVWD would, additionally, have this Court attributing two completely different meanings to the same word ("within") used twice in the same sentence.

The Court does not find the SWRCB's action in interpreting the language of the permits to be an abuse of discretion. The Court does not find that any facts shown in the record support a legal conclusion that the SWRCB is in any way estopped from interpreting the language in the permits in the manner followed in D-1641. The Court does not believe that interpreting the language in the manner followed in D-1641 places SCVWD is "an impossible and essentially absurd position," or that SCVWD will somehow "be expected to dismantle and replace that (water delivery) system now, at a potential cost over a billion" dollars. (SCVWD's Objections to Proposed Statement of Decision, pages 1 and 2). There is no reason to believe that the encroachment land standard used does not include all of the land where water is currently being applied, or will not include all of such lands if a proper showing is made to the SWRCB. Santa Clara Valley Water District is not entitled to its requested relief.

5. Mitigation Requirement

The contractors also complain about the mitigation requirements imposed by the Board as a condition for approving the change petition. The mitigation is required so as to "provide compensation and habitat values equivalent to those that were associated with the lands (encroachment lands) that were receiving CVP water prior to being added to a CVP place of use on December 29, 1999, provided that such lands were converted from native habitat as a result of the application of CVP water." D-1641 at 164 (AR/0770/178). The maximum required compensation is 45,390 acres of habitat including a mix of vegetation types.

In addition to the limitation concerning the Merger Statue and Westlands discussed above, the mitigation requirement suffers from several other infirmities. In a section 1702 change proceeding, the Board is required to protect other legal users of water from the injurious consequences of the proposed change and is empowered to impose conditions and mitigation to provide protection to these other water users. In a section of its decision titled "Terrestrial Endangered Species," the Board requires replacement habitat for "land conversion [that] had adverse impacts on plant and animal species formerly inhabiting those lands." *Id.* at 140 (AR/0770/154). The Board does not justify how its authority to protect legal users of water requires land use measures to protect terrestrial species. Environmental review under CEQA does not enhance the Board's authority to do so. *See* CAL. PUB. RES. CODE § 21004 (when imposing mitigation requirements, "a public agency may exercise only those express or implied powers provided by law other than [CEQA]"). The State has also attempted to justify these conditions are required by the public trust doctrine; but the argument requires a broad expansion of the doctrine, protective of publicly important waters, *see National Audubon Soc. v. Superior Court*, 33 Cal. 3d 419 (1983), to land-based values. Additionally, without a more convincing rationale, the mitigation obligation arguably violates federal constitutional requirements of "nexus" and proportionality. *See Nollan v. California Coastal Comm'n*, 483 U.S. 825 (1987) (land-use condition must substantially advance legitimate state interests and be based on a nexus between the imposed condition and the harm that would justify permit denial); *Dolan v. City of Tigard*, 512 U.S. 374 (1994) ("rough proportionality" must be shown between the project's impacts and the exactions that will be imposed to mitigate impacts).

Aside from the Court's ruling concerning mitigation in the context of the Merger Statute, the legality of these mitigation requirements is not properly before the Court. As the Court has previously ruled, the contractors do not have standing under section 1702. The mitigation requirements are imposed on the Bureau rather than the contractors; and the Bureau is not here to complain. The contractors offered only weak and speculative evidence that mitigation costs would be ultimately paid by them. Also, there has been no showing that available administrative remedies have been exhausted. Decision 1641 allows the Bureau to demonstrate to the Board's executive director that compensatory acreage should be reduced because the land conversion occurred prior to CEQA's enactment, the encroachment has been previously mitigated, or CVP water was applied to land already converted from native habitat to agricultural use. D-1641 at 164 (AR/0770/178). The record does not indicate that this remedy has been invoked or the Board or its executive director have finally determined the amount of habitat to be supplied. Because of the Court' ruling

concerning the Merger Statute, the Board will have to modify the mitigation requirements in any event.

6. CEQA Issues: Place of Use EIR

The SWRCB prepared a separate environmental impact report in response to the Bureau's petition to consolidate the places and purposes of use for the agency's sixteen CVP-related permits. The draft Place of Use EIR was completed on December 11, 1997, and was circulated among interested parties for comment. The final Place of Use EIR was certified by the SWRCB on December 29, 1999. PLACE OF USE EIR (AR / 1490).

The Place of Use EIR was originally challenged by three petitioners: the Anderson petitioners; the Central Delta petitioners; and the San Luis Water District, whose petition was dismissed on April 11, 2002, and whose allegations are no longer before the Court.

The Anderson petitioners include the Westlands Water District (a CVP contractor) and landowners or lessees who receive their water through Westlands. They allege that the EIR process was inadequate since it proceeded on the incorrect assumption that the place of use boundary was actually being expanded and not simply being conformed to the federally authorized service area. They contend that the SWRCB failed to evaluate adequately the impacts of conforming the place of use boundaries, and also failed to respond properly to public comments. Anderson Petitioners' First Amended Petition ¶¶ 69-72 (Jan. 31, 2000). They also allege that mitigation was improperly imposed to address non-existent environmental impacts.

The propriety of imposing certain types of mitigation has been discussed in the previous section. The Court observes, however, that the Place of Use EIR is not defective simply because it *discusses* mitigation. An agency is not bound to adopt and implement mitigation requirements included in an EIR. *See Laurel Heights Improvement Ass'n v. Regents of the University of California,* 47 Cal. 3d 376, 401 (1988) ("[n]ot until project approval does the agency determine whether to impose any mitigation measures"); *Native Sun/Lyon Communities v. City of Escondido,* 15 Cal. App. 4th 892 (4th Dist. 1993) (adoption of mitigation depends upon economic and technological feasibility and practicality). If the SWRCB had finally concluded, as this Court believes it should have, that Westlands' merger argument was correct, the Board could have decided that mitigation was unwarranted.

In one of their petitions (the San Francisco case, No. 309539), the Central Delta petitioners present an extensive menu of alleged CEQA violations. The Place of Use EIR, they say, is defective because it included an inaccurate description of the environment (baseline), framed a narrow selection of project alternatives, presented incomplete analysis of direct and cumulative impacts, improperly deferred mitigation, responded insufficiently to public comments, and violated CEQA in other ways. Central Delta Petitioners' Petition for Writ of Mandate ¶¶ 58 & 59 (Jan. 28, 2000). In its briefing concerning the Place of Use EIR, however, Central Delta limits its discussion to the alleged failure of the EIR to analyze the impact of approval of the Bureau's change petition on salinity in the lower San Joaquin River, as well as the agency's failure to mitigate for this impact. Central Delta's other Place of Use EIR arguments are, therefore, deemed abandoned.

Several of the petitioners argue that the SWRCB failed to act on that portion of the Bureau's petition requesting the inclusion of so-called "expansion lands" in the CVP's place of use under the permits. Since this argument also turns on a CEQA issue, it is discussed here and will be taken up first.

a. Expansion Lands

Once again, expansion lands are those within the service area of several of the Bureau's contractors (Santa Clara Valley Water District and Westlands) but not yet receiving CVP water. The Board cited the repeated problems in securing an adequate environmental impact report from the Bureau. Once completed, the EIR was limited to a programmatic review of the expansion lands and did not complete sufficient site-specific analysis concerning these lands. D-1641 at 116 n.64 (AR/0770/130). Based on the Court's earlier decision concerning the Merger Statute, CEQA is inapplicable to the ministerial act of conforming the place of use under the Bureau's permits to include both the encroachment and expansion lands within Westlands. CAL. PUB. RES. CODE § 21080(b).

The California Environmental Quality Act requires a lead agency to utilize its independent judgment and determine whether an EIR has been completed in compliance with the statute. *See* CEQA GUIDELINES § 15084(e) (adequacy and objectivity of draft EIR); § 15090(a) (certification of final EIR). The courts afford those agencies having CEQA experience with substantial discretion in determining whether they have sufficient environmental information to satisfy the statute. In this instance, the Board indicated the environmental information concerning expansion lands was incomplete. The Santa Clara Valley petitioners argue the Board should have utilized the environmental information contained in the previously prepared San Luis Unit EIR. The CEQA Guidelines do allow the use of a previously prepared EIR. *Id.* at 15084(d)(5). However, the

administrative record does not indicate that the complete San Luis EIR was ever presented to the Board prior to the completion of the Place of Use EIR. In any event, the Board has considerable discretion in determining how an EIR will be prepared and the adequacy of the information on which it is based.

As to lands in the Santa Clara Valley Water District service area, the Court sustains the Board's conclusions that the environmental information concerning the expansion lands was incomplete. Applying the Court's earlier reasoning, the Bureau—not the contractors—has the authority to determine whether to submit additional environmental information or to challenge the Board's failure to act on this issue. The Court also observes that under the change procedures in the Water Code, the Board has discretion to determine when "additional information is reasonably necessary to clarify, amplify, correct, or otherwise supplement the information required to be submitted under this article." CAL. WATER CODE § 1701.3. The Board, however, must act on a petition within a reasonable time, whether it is to approve or deny the request, as the Water Code requires that "after hearing the board *shall grant or refuse, as the facts warrant*, permission to change the point of diversion, place of use, or purpose of use." *Id*. § 1705 (emphasis added).

b. Negative Declaration Issue

The Anderson petitioners' several challenges raise a somewhat peculiar problem--one that might best be characterized as a "negative declaration" issue under CEQA. An agency may issue a negative declaration if it concludes that a proposed project will not have a significant effect on the environment and, thus, does not require an EIR. CEQA GUIDELINES § 15371.

The Bureau's change petition before the Board, which was contested, contemplated changes in place of use and purposes of use for all sixteen of the permits and licenses for the massive Central Valley Project, one of the largest public works projects in the state's history. The Anderson petitioners, however, appear to argue that as to the place of use issue, the EIR process was unnecessary since all that was required was a clerical conformance of the place of use under these sixteen permits and licenses to include the encroachment lands. Any finding of adverse environmental effects and any need for mitigation would be unsupportable since water has already been applied to these lands. Though they do not explicitly fashion the argument as such, the Anderson petitioners seem to believe a negative declaration was required. While they have redeemed their position based on the Merger Statue argument, V(D)(3), *supra*, the Court continues so that its views as to the adequacy of environmental review under CEQA are clear.

An EIR is required if substantial evidence supports a "fair argument" that a project may have significant environmental impacts. *No Oil, Inc. v. City of Los Angeles,* 13 Cal. 3d 68 (1974). As the leading CEQA treatise indicates, "[t]he 'fair argument' standard creates a 'low threshold' for preparation of an EIR. . . . because adopting a negative declaration has a 'terminal effect on the environmental review process . . . .'" MICHAEL H. REMY *ET AL.*, GUIDE TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT 206-07 (10th ed. 1999) (citations omitted).

Presented with the Bureau's petition, the SWRCB had a fair argument that the apparent magnitude of the proposal required the preparation of an EIR to help decisionmakers assess the potential impacts. The EIR evaluated a reasonable set of alternatives that involved potentially different outcomes based on the petition. PLACE OF USE EIR at 1-2 to 1-3 (AR/1490/15-16). The EIR, in this case prepared by an outside consulting firm, would have been an inappropriate vehicle to resolve the pending legal issue of whether the place of use had already been expanded by operation of law. *See* CEQA § 21100 (required content of EIR emphasizes environmental, not legal, information). The Board was required to resolve this legal issue under its change in diversion responsibilities under Water Code section 1700 *et seq.* and not in the process of preparing an EIR under CEQA.

Anderson's position also manifests itself in the argument that, regardless of the legal outcome, the EIR used the wrong environmental baseline, that is, terrestrial conditions existing before water was applied, rather than current conditions. *See* CEQA GUIDELINES § 15125(a) (the existing environment normally is the baseline against which the agency determines whether an impact is significant). The courts, however, defer to the agency's discretion in selecting the appropriate baseline in situations of apparent prior illegal or unpermitted activity. *See Fat v. County of Sacramento,* 97 Cal. App. 4th 1270 (3d Dist. 2002) (upholding current baseline); *Lewis v. Seventeenth Dist. Agricultural Ass'n,* 165 Cal. App. 3d 823 (1985) (upholding predevelopment baseline where environmental impacts would evade CEQA requirements and go unremediated).

c. Response to Public Comments

In support of its charge that the SWRCB failed to adequately respond to public comments, the Anderson petitioners point to several comment letters on the draft EIR suggesting that the environmental analysis was in error since the legislature had already added encroachment lands to the Bureau's existing place of use by virtue of the Merger Statute. Anderson Opening Brief at 30. The SWRCB responded, "[r]egardless of when other parties historically decided to include the entire water district with the place of use, the pending petition before the Board requires that a formal decision be made at this time." PLACE OF USE

EIR at Bates no. 128384 (AR/1490/153). The Anderson petitioners claim this response to be inadequate as a matter of law, citing CEQA Guidelines section 15088(b).

The lead agency responsible for EIR preparation is required to provide good faith, reasoned analysis in response to public comments concerning environmental issues raised in a draft EIR. *Id.* at § 15088 (a) & (b). The comment identified by the Anderson petitioners is a letter from their attorney to the Board summarizing many of the same legal arguments raised by them here. The particular comment argues that the Bureau's petition is essentially one for clerical recognition of the merger brought about by legislative action. This is not a comment on an environmental issue, the type contemplated by section 15088, but a legal argument that goes to the heart of the decision before the Board. Though not required to respond to a legal argument rather than an environmental concern, the Board's response was accurate and sufficient, *i.e.*, "the pending petition before the Board requires that a formal decision be made at this time." PLACE OF USE EIR at Bates no. 128384 (AR/1490/153).

d. Water Application on Saline Lands

Central Delta and its associated entities commented on the Draft EIR on March 31, 1998. They did not raise the issue of increased salinity in the lower river due to the application of water on saline-prone encroachment lands. PLACE OF USE EIR at Bates no. 128682 (AR/1490/153). AR/1490/451. The Court has reviewed all the comments on the draft Place of Use EIR. While other commentators discussed salinity issues in other contexts, the issue of applying water to saline-prone, Westside lands apparently was not raised by anyone before the close of the public comment period associated with this EIR, although Central Delta apparently made some mention of this narrow issue in closing briefs. The Court is of the opinion that, under the facts of this case, the mention of this issue in closing comments was insufficient to raise the issue when these same petitioners made specific and numerous comments on March 31, 1998, and failed to raise this issue. Accordingly, petitioners failed to exhaust their administrative remedies and the Court will not address this narrow issue now. CEQA § 21177(a) ("No action or proceeding may be brought . . . unless the alleged grounds for noncompliance . . . were presented to the public agency orally or in writing by any person during the public comment period . . . .") makes clear the importance of timely raising issues when there can still be factual development of the issue made in the record.

7. Conclusion

The reclamation program resulted because of the failure of individuals and small irrigation entities to develop and distribute water necessary for western settlement. The Reclamation Service brought centralized authority, engineering expertise, and innovative financing to the development of western water. The Bureau and water users structured their relationship through water user associations and contracts. Westlands' argument concerning standing would lead to the unworkable result that the Bureau's petitions before the Board could be impeached by one of many contractors or one of many of the hundreds of water-using landowners. Problems between the Bureau and its contractors would increasingly find their way to the Board which, as the State notes, has no special expertise in the interpretation of federal reclamation law. This would be a substantial fragmentation of the Bureau's overall management authority and a change in the Bureau-contractor relationship. The end-result of Westlands' and Santa Clara's arguments would be an unworkable situation from the state water management perspective; and the law does not require such an interpretation.

E. Area of Origin Protections

The challenges considered in this portion of the opinion are based on a series of five statutes collectively referred to as "area of origin protections."[9] These statutes are as follows:

- County of Origin Statute, California Water Code sections 10505 and 10505.5 (originally enacted in 1931);
- Watershed Protection Act, California Water Code sections 11460-11465 (originally enacted in 1933);
- Extension of the Watershed Protection Act to the federal government, California Water Code sections 11128 (originally enacted in 1951);
- Delta Protection Act, California Water Code sections 12200-12205 (originally enacted in 1959); and
- San Joaquin River Protection Act, California Water Code sections 12230-12333 (originally enacted in 1961).

[9] A sixth area of origin provision is found at Water Code section 1215. It applies only to appropriation applications filed after January 1, 1985, and is inapplicable to the present proceedings as all relevant water rights predate 1985.

These statutes are similar to other measures employed in western water law to protect certain persons with slow-developing water uses from the consequences of intervening appropriations that otherwise would have priority. For instance, the typical appropriator "reserves" his priority from the date of filing so long as he diligently develops his water right. A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES § 5.68 (2000) (relation-back doctrine). Even though he may actually use water later than some intervening appropriator, his priority relates back to his filing. In a similar fashion, a municipality may appropriate water, with a firm priority date, although it may take many years to build-out the system. Montana has a water reservation program that allows state and local agencies to reserve water for future uses, and these uses, once developed, have priority over intervening users. MONT. CODE ANN. § 85-2-316 (2002). The federal reserved water (*Winters*) rights doctrine allows tribes and federal agencies to reserve water (essentially a priority date) based on the date the reservation was established or the implementing legislation enacted. *Winters v. United States,* 207 U.S. 564 (1908).

An evaluation of the claims under these statutes requires an examination of the purpose and context of these protections. In the late 1920s, as California began developing these major water projects, the Department of Finance was authorized to appropriate much of the water in many of the northern watersheds so as to prevent appropriations by others and speculation. 1927 Stat. ch. 286. In 1956, this responsibility was later transferred to DWR. As governmentally sponsored projects were actually developed, DWR (later the California Water Commission and now the SWRCB) would conduct proceedings to assign the application to the project or, in the case of no intervening appropriators, just release the priority so that the new project would advance in line. *See generally* Gavin M. Craig, *California Water Law in Perspective,* 68 CAL. CODE (WATER) lxv, lxxv-lxxx (West 1971).

As this water development plan was begin conceived, "[t]he old private feud between prior appropriator and riparianism—diversion and natural flow, reemerged to be" reenacted on a public law stage. Weatherford, *Legal Aspects of Interregional Water Diversion, supra* at 1308. A legislative committee in 1931 identified the riparian doctrine as a foremost obstruction to the plan. *Id.* at 1307.

The County of Origin Statute and the Watershed Protection Act were written with these problems in mind. The statutes are primarily limitations on DWR and the SWRCB. DWR initially makes the application (section 10500) and then it is transferred to SWRCB until someone comes forward with a specific proposal to develop the water (section 10504). SWRCB must ensure that the application is consistent with the general state development plan and water

quality objectives (section 10504), ensure that assignment and release of the DWR-established priority will not deprive the county-of-origin of water necessary for development (section 10505), and insert a condition in the permit and license that subordinates it to those in-county water uses necessary for development. *See Racanelli,* 182 Cal. App. 3d at 138-139.

As the *Racanelli* court noted, "[v]irtually none of this protective legislation has been interpreted by the courts. " *Id.* at 139. Some commentary closer to the time of these enactments suggests their meaning. The leading reference is an attorney general's opinion, now commonly known as the "Moskovitz opinion," after the deputy attorney general who authored it. Opinion No. 53-298, 25 Op. Cal. Att'y Gen. 8 (1955). The opinion concludes that this legislation "require[s] that water which had been put to use in the operation of the [CVP] in areas outside the county of origin, or the watershed of origin and areas immediately adjacent thereto, be withdrawn from such outside areas and made available for use in the specified areas of origin." *Id.* at 9. To trigger such protections, however, a local resident would have to "comply with the general water law of the state, both substantively and procedurally, to apply for and perfect a water right for water . . . ," *id.* 21, or apply for an assignment of the state's own filing, *id.* 18.

Under this authoritative attorney general's opinion, which is generally accepted as correct by water lawyers, no presently definable water right is vested in any individual, but a priority as against the state is reserved to a class composed of the inhabitants and property owners within a protected area. Whenever an application for appropriation is made by individuals within a protected area it must be honored even if it will be necessary to use water being exported to other units of the Central Valley project. Thus individuals within a protected area can "recapture" any amount of water they can use beneficially, up to the capacity of the watershed. Note, *State Water Development: Legal Aspects of California's Feather River Project,* 12 STANFORD L. REV. 439 (1960).

Other commentators at the time believed that these provisions would work as political leverage to ensure slow-developing areas would not be left behind in state water development. Facing the threat of recapture, urban areas would be enlisted to help rural northern areas obtain the water development they needed to provide for future growth. *See* ATTORNEY GENERAL'S COMMITTEE OF WATER LAWYERS ON COUNTY OF ORIGIN PROBLEMS, REPORT TO EDMUND G. BROWN, ATTORNEY GENERAL at 41-42 (Jan. 3, 1957).[10]

[10] Judicial notice is taken of this governmental report.

1. County of Origin Statute

The San Joaquin County Petitioners allege a violation of the County of Origin Statute in the eleventh cause of action of their first amended petition. Specifically, North San Joaquin River Water Conservation District, one of the San Joaquin County entities, alleges that it has previously filed applications with the state for water, once on the Mokelumne River and twice on the American River. Both applications were denied and, additionally, North San Joaquin has been unable to obtain a contract with the Bureau of Reclamation for American River water. The county of origin protection has been violated in D-1641, according to North San Joaquin, because the decision "fails to recognize the facts and circumstances that were the founding premise for D-858 and D-893 [the earlier rejections of the preference] have either been substantially altered or have not materialized" with the consequence that North San Joaquin will be deprived of water under its existing water right and watershed of origin in favor of exports out of the basin." North San Joaquin River Water Conservation Dist.'s First Amended Petition at ¶¶ 115 & 116 (Jan. 2, 2001).

The D-1641 proceeding did not involve any request by the San Joaquin County Petitioners for a release from priority or an assignment of water originally appropriated by DWR relating to the Mokelumne River under the procedures discussed previously—that is, under section 10500 or in an application for a transfer of appropriation or release of priority under section 10504. Thus, the protections afforded by the County of Origin Statute have not been invoked and petitioners' claims are premature. The San Joaquin County Petitioners may seek the benefit of the County of Origin Statute by applying for a transfer or release under section 10505 or pursuing legal remedies other than this writ proceeding. *See* CAL. WATER CODE §§ 1052 (SWRCB enforcement against unauthorized diversion or use), 1831-1845 (SWRCB-issued cease and desist orders), 1851 (private enforcement). *See also* Weatherford, *supra* at 1310-11 (settlement following litigation filed in 1957 by rural counties against EBMUD under county of origin provisions).

2. Watershed Protection Act

The Central Delta petitioners allege that D-1641 violates the Watershed Protection Act by allowing the export of water that would otherwise be available for uses within the watershed, requiring additional releases of water from New Melones Dam to cure salinity and fish flow problems that would be mitigated by reduced exports, and by applying water to saline-prone lands thereby requiring the application of additional watershed water to dilute the runoff. Central Delta Petitioners' Amended Petition at 6th & 7th Causes of Action.

The San Joaquin County entities also allege numerous violations of the Watershed Protection Act. In their first, second, and sixth causes of action, they argue that the salinity control, river flow, and Delta outflow conditions imposed on New Melones Project in D-1641 effectively reduces the water available from that project for use by in-watershed beneficiaries of the statute. The entities also allege that the Board has permitted water exports through the CVP and SWP to the detriment of in-watershed needs. San Joaquin County Petitioners' First Amended Petition at 9th Cause of Action. Additionally, North San Joaquin suggests the same allegations, discussed previously concerning the County of Origin Statute, also indicate a violation of the Watershed Protection Act.

A careful look at the Watershed Protection Act is instructive:

- Section 11460 requires that DWR's construction and operation of the Central Valley Project (actually the State Water Project; *see* IV(F)(1), *supra*) shall not deprive the watershed or area where water originates, or the area immediately adjacent, "of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area or any of the inhabitants or property owners therein."

- Section 11461 indicates that the provisions of the act are strictly limited to the acts and proceedings of DWR. The statute does not apply to any other persons or state agencies.

- Section 11462 holds that no new property rights are created under the statute, other than against DWR. Also, DWR is not required to provide "any person" with water "made available" from any DWR project, unless there is "adequate compensation."

- Section 11463 provides that when DWR exchanges water, the water requirements of the watershed must first and at all times be satisfied "to the extent requirements would have been met were the exchanges not made . . . ."

In 1951, the requirements of section 11460 and 11463 were later imposed on any other agency of the state or federal governments "which shall undertake the construction or operation of the [Central Valley] project, or any unit thereof . . . ." CAL. WATER CODE § 11128.

By its terms, the Watershed Protection Act strictly applies to DWR or other state and federal agencies actually operating units of the Central Valley Project. The SWRCB does not operate projects, and the protections of the statutes

in question cannot be directly enforced against that regulatory agency in this writ proceeding. While DWR and the U.S. Bureau or Reclamation are also named respondents in these petitions, the United States, having invoked sovereign immunity, is not before the Court. There is no administrative record or other evidence of a final action taken by DWR that would trigger the protections of the statute; hence, there is a total failure of proof as against DWR.

The Court is of the opinion that the above discussion adequately handles the issues concerning Water Code section 11460 et seq., the Watershed Protection Act. Discussion of those impacts in a specific section of this opinion in no way indicates an opinion by this Court that the issues in these consolidated cases can be completely resolved by looking only at isolated water code sections. Accordingly, to the extent that any requests are not otherwise, expressly or by implication, covered in this Statement of Decision, the Court declines to make the 22 specific determinations requested in Central Delta's Objections to Proposed Statement of Decision (at pages 9 through 12).

3. Delta Protection Act

The Central Delta Petitioners allege that D-1641 violates the Delta Protection Act by authorizing the export by the SWP and CVP of 100 percent of the flow of the San Joaquin River, augmented by increased flows from New Melones Dam. Petition at 4th and 7th Causes of Action. They indicate that the exports are beyond those allowed before the decision and result in a deprivation of water that is needed within the Delta. The San Joaquin County entities make similar claims and, in addition, point to reduced water levels and reversed flows in Delta channels that interfere with pumping and reduce water quality. Central Delta Petitioners' First Amended Petition at 8th Cause of Action.

The Delta Protection Act is set forth at sections 12200 to 12205. Section 12200 discusses three geographic areas: (1) Sacramento River Valley and north coastal area (areas-of-origin providing water surplus to their needs); (2) Sacramento-San Joaquin Delta (gathering point for a "common source of fresh water supply for water deficient areas"); and (3) "water deficient areas to the south and west of the Sacramento-San Joaquin Delta" (areas of need). The Delta itself is legally described in section 12220. Under section 12931, which concerns funding for the SWP, "the Sacramento-San Joaquin Delta shall be deemed to be within the watershed of the Sacramento River."

Section 12201 (findings) essentially says that, in the context of the Delta, there are two purposes for the state's water development program, both of which are necessary for the health and safety of the state: (1) to provide adequate water for in-Delta existing and expanding uses; and (2) to provide fresh water for

export to areas of need (so long as county of origin and watershed protection provisions are satisfied).

Section 12202, which speaks of salinity control, only seems to be an amendment to the authorization for the state's water development plan. The SWP, in cooperation with the CWP, is authorized to provide water for in-Delta salinity control and for the "adequate water supply" of in-Delta users. Apparently, if project managers believe that substitute water is more feasible for salinity control, they may provide it but cannot charge in-Delta users for the cost of substitution. Nothing in this section guarantees any level of salinity protection to in-Delta users.

The only substantive protections available to in-Delta users are afforded by the interplay of sections 12203 and 12204. Read together, they appear to mean:

> No water shall be exported from the Delta if it is necessary to meet these requirements:
>
> a. Salinity control undertaken by the SWP, in conjunction with CVP (again, no guarantee of any specific level of protection); and
>
> b. Water to which the users within the Delta are entitled.

The in-Delta "entitlement" seems to refer to section 12201 which requires adequate water for (1) existing (that is, at the time of the SWP/CVP) uses; and (2) expanded, future uses for agriculture, industry, urban needs, and recreation. Salinity control is not explicitly part of this "entitlement." Most importantly, this "entitlement" is juxtaposed with the other co-equal purpose expressed in section 12201, *i.e.*, the need to export water to water-deficient areas.

As such, these Delta protections appear to work similarly to the other county and watershed protections. In-Delta users can contest new proposals to export water as potential violations of this act. In-Delta users can enforce their riparian rights and pre-project appropriative rights in a water rights enforcement proceeding. They can also apply for a new in-Delta permit or project that would have automatic priority over existing and future exports.

What in-Delta users cannot do is to challenge D-1641 as violating the Delta Protection Act. The ambiguity of the statute's salinity control protection invites a specific determination by the SWRCB to be afforded deference by the Court. *See Racanelli,* 182 Cal. App. 3d at 139 ("But the crucial question left unanswered by

the protective legislation is exactly *what* level of salinity control the projects must provide.") (emphasis added). The competing purposes of section 12201 further invites a public interest balancing of in-Delta needs and export needs by the SWRCB, which it has done reasonably in D-1641. Petitioners have failed to demonstrate that the decision was reached in an arbitrary or capricious fashion. Petitioners do retain the remedies described in the preceding paragraph, as well as their direct remedies under the County of Origin Statute and the Watershed Protection Act. *See* discussion at V(E)(1) & (2), *supra.*

Additionally, the record is convincing that salinity conditions in the Delta will improve and annual CVP and SWP exports will be reduced as the result of D-1641. *See* IMPLEMENTATION EIR at VI-32-33, Fig. 48-51 (AR/1486/VI-32-33). Modest salinity exceedances may occur in drought years when exporters face as much as 745,000 ac-ft reductions. *Id.* at V-10, Fig. V-14 (AR/1486/V-10). Water quality and conditions for fish and aquatic resources generally improve for many areas within the Delta. *Id.* at VI-9 & -60 (AR/1486/VI-9 & -60).

The Court is of the opinion that the above discussion adequately handles the issues concerning Water Code section 12200 et seq., the Delta Protection Act. Discussion of those impacts in a specific section of this opinion in no way indicates an opinion by this Court that the issues in these consolidated cases can be completely resolved by looking only at isolated water code sections. Accordingly, to the extent that any requests are not otherwise, expressly or by implication, covered in this Statement of Decision, the Court declines to make the 12 specific determinations requested in Central Delta's Objections to Proposed Statement of Decision (at pages 13 through 16).

4. San Joaquin River Protection Act

Only the Central Delta Petitioners assert a claim based on the San Joaquin River Protection Act, sections 12230-12233. Two allegations are made: (1) increased CVP and SWP exports deprive downstream San Joaquin River users of water to which they are entitled under the act; and (2) the increased application of exported water to the west side of the San Joaquin Valley results in additional saline-loaded return flows to the San Joaquin River. Central Delta Petitioners' Petition at 5th Cause of Action.

The San Joaquin River Protection Act, enacted in 1961, begins with a legislative finding in section 12230 that there is a serious water quality problem on the San Joaquin River between the Merced River and Middle River. The legislature sets forth the policy in section 12231 that no one should divert water from the San Joaquin River and its tributaries to which users in this reach are entitled. Section 12233 indicates the act does not apply to any vested right to use

water or project applications with priority date prior to June 17, 1961. As a change to a pre-1961 water right would not change that water right's priority date, the change in question here would not appear to trigger application of the San Joaquin River Protection Act.

Thus, the act is very specific in its protections: (1) it applies only to the San Joaquin River reach between the Merced River and the Middle River; (2) it benefits only those users along this reach; and (3) it applies only against post-1961 water right/project applications. There is some residual restraint on the SWRCB in section 12232. The SWRCB and DWR "shall do nothing further, in connection with their responsibilities, to cause further significant degradation of the quality of water" in that river reach.

The administrative record discloses that all the relevant water rights at issue in D-1641 have priority dates preceding 1961. *See* SWRCB, Order Denying Petitions for Reconsideration and Amending SWRCB Decision 1641 at 14 (March 15, 2000) (AR/0771b/14). Thus, there is no legal avenue under this statute to modify pre-1961 water rights to protect users along this stretch of the San Joaquin River—the first aspect of Central Delta's claim. Concerning the second Central Delta allegation, however, SWRCB does have a responsibility under section 12232 not to further deteriorate the water quality in that reach. Substantial evidence supports the conclusion that water quality will be improved, not depreciated, as the result of D-1641.

F. Reasonableness

The California Constitution requires both the Board and this Court to ensure that water is not used unreasonably or in an unreasonable method of use. CAL. CONST. art. X, § 2. In reviewing D-1641, the Court must ensure that substantial evidence supports a legal conclusion that water will be reasonably used pursuant to the decision. After a review of the record, this Court does conclude that D-1641 is in accord with this constitutional requirement. *See Racanelli*, 182 Cal. App. 3d at 130 n.24 (reasonable water use is a question of fact and suggesting that the Board's finding on this issue will be upheld if supported by substantial evidence).

The Central Delta petitions claim that water will be unreasonably used for the following reasons: Vernalis salinity standards will continue to be violated as much as 15 percent of the time during the irrigation season; through exports, water will continue to be applied to saline-prone lands that drain saline waters to the lower San Joaquin River and the Delta; the Bureau of Reclamation has no plan to meet the salinity objectives; and water from New Melones Dam on the

Stanislaus River and San Luis Reservoir will be used for dilution purposes when it could be utilized for in-basin purposes. The San Joaquin County petitioners make similar arguments, emphasizing that the Board itself acknowledged that "controllable factors," apparently land and drainage management activities, could significantly reduce the lower San Joaquin River salinity problem without using higher quality New Melones water releases as diluting flows.

The salinity issue is complex and resistant to solution. Much of the salt loading comes from lands on the northwest side of the San Joaquin River and the Grasslands area (perhaps as much as 72 percent). D-1641 at 82 (and transcript references there cited) (AR/0770/96) The Bureau of Reclamation was required as part of the 1960 San Luis Act to construct an interceptor drain to prevent high saline content drainage water from returning to the river, but the drain has not been built. The federal government's obligation to build a drain has been and continues to be litigated before the federal courts. *See Firebaugh Canal Co. v. United States,* Nos. 95-15300 & 95-16641 (Feb. 4, 2000) (Bureau has obligation to provide drainage but has discretion in choosing the method).

While certain areas may contribute more salinity to the river than others, there is no reason why New Melones and the contractors for its water should be exempt from a strategy for addressing salinity in the lower river. New Melones is managed as part of an integrated multi-unit federal Central Valley Project. All users benefit from the multiple projects, overall size, and flexibility of the system. While Stanislaus River water is of high quality, the Board recognized that diversions from this and other tributaries also reduce the natural flow in the San Joaquin, as well as the river's ability to assimilate saline contributions from other sources. D-1641 at 80 (AR/0770/94).

This is not a situation, however, where the Board has blatantly ignored both a wasteful water practice and its own responsibilities under the law. The record indicates that the Board has initiated (perhaps belatedly, in the view of some) a series of reasonably based and phased regulatory requirements to meet the 1995 Plan's salinity objectives in the lower river. First, the Board has imposed the ultimate responsibility for meeting the Vernalis salinity and interior Delta objectives on the Bureau of Reclamation. *Id.* at 86 (AR/0770/100). Second, apparently to address the likelihood of summer-month violations, the Bureau is ordered to develop a program to consistently meet the Vernalis objectives. *Id.* at 161 (AR/0770/175). In the event the program is unsuccessful, the Bureau is essentially ordered to "turn itself in" to the Board's executive director for other potential enforcement actions by the Board. In developing its program, the Bureau is given leeway in selecting the methods for meeting this requirement, and these measures would be expected to include many of the land and water management techniques described and used by Westlands that apparently have

reduced, if not eliminated, agricultural water drainage from that district. Third, the Board has instructed the Central Valley Regional Water Quality Board to set salinity objectives and issue a program of implementations for locations on the San Joaquin River upstream of Vernalis. *Id.* at 85 (AR/0770/99). If the regional board fails to do so, water users and members of the public have other legal avenues to enforce this obligation.

In addressing San Joaquin River salinity issues, the Board necessarily balances multiple factors including the need to reduce salinity levels, the time necessary to adopt more specific regional regulations, the time necessary to fund and implement new land and water management controls, and the continuing dependence of a large part of the state's population on exports from the Delta. As the *Racanelli* decision well states:

> Obviously, some accommodation must be reached concerning the major public interests at stake: the quality of valuable water resources and transport of adequate supplies for needs southward. The decision [concerning reasonableness] is essentially a policy judgment requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of its special knowledge and expertise and its continued statewide responsibility to allocate the rights to, and to control the quality of, state water resources.

182 Cal. App. 3d at 130. This Court does candidly observe that reasonable accommodations made in 1986, and even seventeen years later in 2003, may appear unreasonable in the harsher light of subsequent judicial review undertaken in the context of California's increasing water problems.

The Central Delta argument that, in their view, the Bureau will violate the salinity standards as much as 15 percent of the time during the irrigation season and that this scenario requires this Court to invalidate D-1641 deserves to be addressed directly. The fallacy of this argument lies in the assumption that this Court can take action in the instant litigation to guarantee litigants that there will never be any salinity standard violations. In this Court's view, the Court is no guarantor of any party's performance here – much less the guarantor of the performance of a party (the Bureau of Reclamation) which has chosen not to participate in these proceedings and over which the Court currently has no jurisdiction. The Court rather is looking, in regard to this issue, to ensure that there is a full, complete, reasonable, and legally enforceable assignment of responsibilities for meeting the 1995 Water Quality Control Plan standards. Does adoption of such a reasonable legally enforceable assignment of responsibilities guarantee that there will never be violations of the applicable salinity standards?

Absolutely not. Several back-to-back critically dry years might well put the Bureau and other water suppliers in technical breach of their water delivery and salinity standard responsibilities. But this Court will have done its job in regard to this issue if, at the end of this litigation, the Court has insured that there is a reasonable legally enforceable assignment of responsibilities for meeting the 1995 Water Quality Control Plan standards. For this Court to seek to do more on this issue would be to undertake a search for the confluence of the rivers of arrogance and ignorance – a place this Court is not desirous of going.

G. Joint Point of Diversion

1. Background

The Central Delta Water Agency petitioners object to the SWRCB's approval of the petition of the Department of Water Resources and the U.S. Bureau of Reclamation for the joint operation of their points of diversion in the southern Delta. *See* SWRCB, Revised Notice of Public Hearing, (May 6, 1998) (AR/365). Under the petition, which was approved with conditions by the Board, the Bureau will be able to divert water for the Central Valley Project at the State's Banks Pumping Plant and DWR will be able to divert water for the State Water Project at the federal Tracing Pumping Plant. Since both the CVP and SWP export water southward, this joint point of diversion (JPOD) will allow greater coordination and flexibility in the operation of both projects. This arrangement will be particularly valuable if one pumping plant is shut down for maintenance, an extraordinary emergency, or other circumstance such as the presence of threatened or endangered fish at the intakes of one of the plants. D-1641 at 96 (AR/0770/110). One principal reason for the requested JPOD is to allow the Bureau to supply water, in an alternative manner, to areas south of the Delta that have been shorted due to water restrictions imposed by biological opinions under the federal and state endangered species acts. *Id.* Also, more water can be supplied to San Luis Reservoir during high water conditions.

Joint diversion operations have been allowed in the past under D-1485. On February 28, 1995, the present petition was filed; and the Board granted temporary approval under Order WR 95-6, which was later extended. The petition was incorporated in the D-1641 proceedings and taken up during Phase 6. The proposed joint operation was studied in an EIR. In D-1641, the Board approved the JPOD subject to a three-stage process that imposes increasingly stringent requirements on the applicants. The final stage may result in the construction of permanent tidal barriers to stabilize water levels in the southern Delta.

2. Water Code Requirements

The petitioners challenge the JPOD both under the provisions of the Water Code and CEQA. The water law arguments are addressed here; the CEQA allegations are considered in the following section.

The Board's approval of the JPOD petition was subject to the requirements of Water Code sections 1702 to 1705. *See* discussion at V(D), *supra*, concerning the burden of proof under these change provisions.

The Central Delta petitioners argue that the result of the JPOD will be to increase exports from the Delta and thereby lower water levels in the South Delta to their detriment. Central Delta also complains that the JPOD arrangement will result in the 1995 Plan's water quality standards not being met at Vernalis on the San Joaquin River.

The record indicates that the applicants satisfied their initial obligation under section 1702 by presenting the Bureau's modeling evidence to the Board demonstrating that, assuming the JPOD, water levels remained basically the same as compared to base conditions under D-1485. D-1641 at 102 (AR/0770/116). With such a *prima facie* showing, the burden shifted to the protestants to demonstrate both their status as legal users and injury.

The petitioners maintain they represent both riparians and appropriators although most of the southern Delta users are riparians. Water Code section 1703.6(c)(2), added subsequent to D-1641 (in 2001), indicates the Board can cancel a protest based on legal injury if the protestant does not provide the information necessary to determine whether the protestant has a valid water right. The record is lacking as to the detailed showing sometimes required by California courts for demonstrating riparian title. *See Hudson v. West*, 47 Cal. 2d 823 (1957). The Board, however, effectively waived objecting to protests on the grounds of a lack of a showing of riparian or appropriator status by discussing riparian issues at length in D-1641. Also, the record before the Board does contain testimony from two appropriators.

The record is also lacking in convincing demonstrations of existing injury to legal users, whether appropriators or riparians, from previously authorized JPOD operations or anticipated injury from approval of the more permanent JPOD arrangement. The two apparent appropriators in the South Delta, Alex Hildebrand and Jerry Robinson, testified before the Board. When asked about insufficient water supply, Hildebrand indicated he had "no figures" concerning inadequate supply during recent drought periods. SWRCB Public Hearing Transcript at 13871 (Jan. 19, 1999) (AR/3339/87). When questioned about salinity

impacts, he indicated, "I don't think we have a continuing buildup of salt load within the South Delta as they have down in the CVP service area, because in the wet years we get it leached out." *Id.* at 13872 (AR/3339/88). When asked to quantify damage to his agricultural crops in past years, Mr. Robinson could provide no specifics, saying, "I will do that if you would let me go home and come back a later time." *Id.* at SWRCB Public Hearing Transcript at 6752 (July 2, 1998) (AR/3299/67). Based on this meager showing alone, the Board was substantially justified, in a section 1702 proceeding, to find that protestants had failed in their burden of coming forward with evidence. The Board could conclude that there was no threatened injury to a legal user of water.

The Board, however, undertook a more intensive review of these water level and quality criticisms of the JPOD proposal. The Board concluded there can be no legal injury if downstream users are deprived of water levels to which they would otherwise not be entitled. In reviewing the 73-year hydrologic record of water availability in the southern Delta, the Board conducted an "unimpaired flow" analysis and determined that, under natural flow conditions, water would be unavailable 16 percent of the years in July, 56 percent of the years in August, 78 percent of the years in September, and 70 percent of the years in October. D-1641 at 32 (AR/0770/44). Thus, riparians cannot complain of any reductions of water levels where the water would not be available during these normally dry periods. The Board's legal conclusion is correct. The basis of the riparian doctrine is access to natural flow, and riparians do not generally have rights to store water themselves or to water stored by others. *See Pleasant Valley Canal Co. v. Borror,* 61 Cal. App. 4th 742 (1998); *People v. Shirokow,* 26 Cal. 3d 301, 307 n.7 (1980).

The petitioners also argue, both under substantive California water law and CEQA, that the Board could not approve the JPOD in a staged manner. They believe the Board impermissibility deferred a final decision on the application, vested the Board's executive director with excess authority, and failed to satisfy the water quality objectives under the 1995 Plan.

The Board approved a three-stage process for increasing the use of the JPOD. A simplified version of the Board's order follows:

- During Stage 1, the Bureau may, by using both pumping facilities, export no more water than otherwise would have been permissible without use of the state facilities.

- During Stage 2, total permissible exports at the Banks facility are increased to the limits of the existing, separate U.S. Corps of

Engineers' permits. Operations are subject to a plan approved by the SWRCB executive director.

- During Stage 3, the Bureau and DWR are authorized to use the pumping plants up to their capacities or the lesser of their water rights. Operation at this level is conditioned on an operations plan approved by the SWRCB executive director.

D-1641 at 114-15 (AR/0770/128-29). The DWR and the Bureau are presently authorized to divert a total of 14,900 cfs.

At each stage, numerous Board-imposed requirements must be satisfied including (depending on the stage) consultations with federal and state fish and wildlife officials, clearances from the Board's executive director, consultation with the Contra Costa Water District and the South Delta Water Agency, preparation of a project-specific EIR (if permanent tidal barriers are installed), and other limits. *See id.* at 149-59 (AR/0770/162-73). These requirements do not represent a deferral of the Board's responsibility under section 1702 but an appropriately designed set of conditions that are permissible under section 1704(a) ("The board, after a hearing, may approve with conditions, or deny, a petition."). The executive director's decisions concerning the "response plan" condition are reviewable by the Board, and the Board's decision is likewise subject to judicial review. CAL. WATER CODE § 1126(b).

The Board's approval, with conditions, of the JPOD also satisfies the requirements of the 1995 Water Quality Control Plan. Decision 1641 specifically incorporates the water quality objectives for fish and wildlife beneficial uses, and requires that the Bureau and DWR operate the JPOD in such a way that the various salinity and export objectives are met. *Id.* at 154 & 158 (AR/0770/168 & 172).

3. CEQA Issues Concerning Joint Point of Diversion

Central Delta brings two principal charges against the Board's environmental analysis of the proposed joint point of diversion: first, that the study failed to examine the impacts (particularly as the result of salinity and reduced pumping levels) of the JPOD on the San Joaquin River and, second, that the Board failed to specify appropriate mitigation for these impacts.

It should be initially observed that the Bureau is obligated to meet the San Joaquin River salinity objectives set forth in the 1995 Plan, as well as the flow objectives in the event the SJRA (*see* V(I), *infra*) is terminated. *Id.* at 160-62 (AR/0770/174-76). This is accomplished through an amendment to the Bureau's

New Melones permit requiring that protection. Logically, there can be no significant adverse environmental effect in meeting a previously established environmental regulation, in this case, the objectives of the 1995 Plan. If Central Delta was concerned about the adequacy of that objective, the issue should have been addressed before the Board in 1995.

Additionally, the Implementation EIR indicates that, even in utilizing the JPOD, San Joaquin River flow and salinity objectives will be met in almost all circumstances. Only in dry years will Alternative 9, most resembling the JPOD proposal, result in exceedances in July and August, and the Board believes this is within modeling error. Other salinity increases are attributed to the 1995 Plan itself. *Id.* at 108 (AR/0770/122). *See also* IMPLEMENTATION EIR at XIII-7 (AR/1486/XIII-7) ("Combined use of the SWP and the CVP points of diversion in the Delta is limited by the permitted diversion rates of the projects in the Delta"); *id.*, Fig. XIII-57 to –60 (AR/1486/XIII-42 to –43). This violation attributed to the JPOD, however, is largely theoretical since, as discussed, the Bureau is obligated to meet the objectives which suggests the Bureau would have to increase downstream deliveries, decrease exports, or some combination thereof to remain in compliance.

Finally, as previously discussed, the implementation of the JPOD is phased in three stages with an increasing amount of additional environmental review. Certain ongoing requirements are applicable to all three stages including a response plan approved by the Board's executive director ensuring that water levels in the southern Delta are not "lowered to the injury of water users" in that area. D-1641 at 155-56 (AR/0770/169-70). This requirement is sufficiently definite to constitute a permissible performance standard under CEQA's mitigation requirements. CEQA GUIDELINES at § 15126.4(a)(1)(B). Also, the permittees must complete operations plans for Stages 2 and 3, acceptable to the SWRCB's executive director, that protect fish and wildlife and other legal users of water. D1641 at 152 (AR/0770/166). Before the JPOD can be operated up to the physical capacity of the Banks and Tracy pumping plants, the permittees must ensure that they will "protect water levels in the southern Delta through measures to maintain water levels at elevations *adequate for diversion of water for agricultural uses.*" *Id.* at 153 (AR/0770/167) (emphasis added). If tidal barriers are used as part of Stage 3 operations, a project-specific EIR must be prepared. All these are sufficient, enforceable performance measures. If an operational plan is not approved by the executive director or the Board, joint point operation is not permitted at that level.

The Court finds no error in this approach by the SWRCB.

H. Salmon Objective

The issue here is whether, in D-1641, the SWRCB has taken sufficient steps to enforce, as a water rights matter, the narrative salmon objective set forth in the 1995 Bay-Delta Water Quality Control Plan. The dispute is between the Central Delta Water District, Golden Gate Audubon Society, and the Pacific Coast Federation of Fishermen's Associations (referred to as the Pacific Coast Federation petitioners), who urge a strict interpretation of the requirements of the 1995 Plan, and the Board and other parties who believe the plan authorized a flexible, adaptive management program to improve salmon survival in the estuary. The petitioners and all other parties agree that the substantial evidence standard applies to this question.

Neither the Court nor probably any of the parties fundamentally dispute the dramatic and unfortunate decline of salmon and other anadromous fish in the Delta, San Joaquin River, and Sacramento River. Total Chinook salmon production declined by 70 percent between the early 1940s and 1987 and today no Chinook salmon may be found on the San Joaquin River upstream of Friant Dam. CAL. DEP'T OF FISH & GAME, THE STATUS OF SAN JOAQUIN DRAINAGE CHINOOK SALMON STOCKS, HABITAT CONDITIONS AND NATURAL PRODUCTION FACTORS (July 1987) (AR/1100). Winter-run Chinook on the Sacramento declined from 80,000 fish in the 1960s to 191 in the early 1990s when the run was listed as endangered under the federal Endangered Species Act. 59 Fed. Reg. 13838 (1994). Since most salmon migrate downstream in the spring, higher flows are necessary in late April and early May—but at a time when water is also diverted for spring-time irrigation. When the fish return two years later, sufficient fall attraction flows must be available to assist them in reaching their spawning waters. Five fish species or runs are listed as threatened or endangered under federal and state law.

1. 1995 Plan Requirements

As previously discussed, *supra* IV(G), under the federal Clean Water Act section 303, 33 U.S.C. § 1313 (2003), states such as California with delegated water quality programs must have water quality control plans including standards for fish and wildlife. The state must submit these to EPA for approval, and the state must review and may revise the standards every three years.

As the *Racanelli* decision explains, water quality regulation in California is a two-step administrative process in the context of federal law and the Porter-Cologne Act: (1) the development of a water quality plan (including the identification of beneficial uses to be protected, the objectives or standards to be met, and a program of implementation); and (2) a water rights proceedings to

implement the objectives. In the aftermath of *Racanelli*, the Board adopted the 1995 Plan including three main provisions concerning salmon:

- First, the Board adopted certain Delta outflow objectives, measured in cubic feet per second flows using a model called the Net Delta Outflow Index. WATER QUALITY CONTROL PLAN at 25 (AR/2367/34). These objectives are not challenged in these proceedings.

- Second, the Board adopted so-called numeric flows standards specifying minimum flows, measured at Vernalis on the San Joaquin River, under various hydrologic conditions. These standards set flow requirements for critically dry, dry, below normal, average, and wet years. The 1995 Plan sets forth Vernalis flow objectives ranging from 710 to 8620 cfs, depending on the time of year and the type of "water" year. More water is scheduled for the April 15-May 15 pulse flows necessary to move smolt out of the river and for fall salmon "attraction" flows. The assignment of responsibility for meeting these objectives was one of the purposes of the D-1641 proceedings. The challenges to these objectives, which also implicate the Vernalis Adaptive Management Plan and San Joaquin River Agreement, are discussed in the next section.

- Third, the Board adopted an additional narrative objective: "Water quality conditions shall be maintained, together with measures in the watershed, sufficient to achieve a doubling of natural production of Chinook salmon from the average production of 1967-1991, consistent with the provisions of State and federal law." *Id.* at 18 (AR/2367/27).

The Board also addressed the restoration of salmon runs in another part of D-1641 approving "the [San Joaquin River Agreement] for the purpose of conducting the [Vernalis Adaptive Management Plan or "VAMP"] experiment and authoriz[ing] a staged implementation of the Vernalis pulse flow objectives so that experimental operations can be conducted in lieu of meeting the objectives as the first stage of implementation." D-1641 at 48 (AR/0770/61). Challenges to the San Joaquin River Agreement are discussed elsewhere in this decision. *Infra* at V(I).

The Court notes how tentatively the Board proceeded in some areas in developing the water quality objectives for fish and wildlife, including salmon, in the 1995 Plan. In addressing dissolved oxygen levels, salinity, and water temperature, the Board was confident enough, based on past scientific studies, to

define a threshold beyond which adverse impacts to fish and wildlife beneficial uses would occur. *Id.* at 14 (AR/2367/23). For these parameters, numeric criteria (*e.g.,* EC for salinity) are relatively exact, measurable, and appropriate. For other parameters, especially those involving Delta outflow, river flow, and the impact of project exports, the Board acknowledged that a "continuum of protection" exists. So while the Board specified numeric flow objectives for Delta outflow and the San Joaquin River at Vernalis, it did so "based on a subjective determination of the reasonable needs of all of the consumptive and nonconsumptive demands on the waters of the Estuary." *Id.* at 14-15 (AR/2367/23-24). The Board went on to recognize the need for additional studies of the relationship between flows and project operations, on the one hand, and fish and wildlife benefits, on the other. These inquiries would "provide a level of protection predicated on more optimal physical facilities and management actions." *Id.*

2. Petitioners' Challenges

The Pacific Coast Federation petitioners believe the SWRCB, by adopting the 1995 Plan and the accompanying implementation measures, properly performed its quasi-legislative functions under state law. *See* WATER QUALITY CONTROL PLAN at 28 (AR/2367/37) (will "require measures by the [SWRCB] under both its water quality and water rights authorities"). Due to several alleged deficiencies in D-1641, however, the Pacific Coast Federation petitioners argue that the Board has failed in the implementation of the plan, particularly in its quasi-judicial function of modifying water permits to achieve the objections of the 1995 Plan. The principle alleged defects are as follows:

- The Board has failed to take the necessary steps to achieve the salmon-doubling objectives of the 1995 Plan. Flows under the numeric standards alone will not achieve salmon doubling. The flows provided under the VAMP, utilizing water made available under the San Joaquin River Agreement, are also insufficient to achieve salmon-doubling. Indeed, the flows are so low they will frustrate the efforts of other agencies working toward fish recovery.

- Implementation of the salmon-doubling requirement was to be immediate under the terms of the 1995 Plan; but the VAMP will proceed over twelve years and still not attain the objective.

- Under California's public trust doctrine, the SWRCB has a separate, additional obligation to implement the salmon-doubling requirement.

- The San Joaquin River Agreement is an illusory, unenforceable agreement, an argument that is taken up later. *See* V(I), *infra.*

Thus, Pacific Coast Federation petitioners, urging a somewhat static interpretation of the 1995 Plan, argue that the SWRCB had a mandatory duty to review the evidence to determine what flows were necessary to implement salmon-doubling and then adopt those numbers. The implementation of these flow requirements was to be immediate. In evaluating these claims, the Court reviews what the 1995 Plan had to say on this question.

3. Salmon Requirements of 1995 Plan

The so-called salmon-doubling requirement apparently comes from language contained in the federal Central Valley Project Improvement Act of 1992 (CVPIA) and indeed similar language is found at section 3406 of the act. Pub. L. No. 102-575 (1992). The 1967 date is apparently the year during which the State Water Project became fully operational. However, unlike the 1995 Plan objective, the federal requirement pertains to all anadromous fish, elsewhere defined as salmon, steelhead, striped bass, sturgeon, and American shad. *Id.* at § 3403(a). The Secretary of the Interior is commanded to implement a recovery program that will lead to the long-term sustainable doubling of natural protection of anadromous fish over 1967-1991 averages. Even this congressional language has facial ambiguity as it could be read either requiring fish doubling by 2002 or only the completion by 2002 of the necessary program measures that will result in fish doubling on a sustainable, long-term basis. The same debate is played out in the instant case in terms of the "immediacy" requirement, discussed later.

The Pacific Coast Federation petitioners' prime objection to D-1641 is that the decision allegedly fails to provide sufficient flows to achieve salmon-doubling, which they also believe is the single-most important fish recovery measure. They point to a 1995 Working Paper on Restoration Needs, prepared under the auspices of the U.S. Fish and Wildlife Service, as being the most definitive scientific study of the relationship between San Joaquin River flows and salmon production. (AR/1066). At Vernalis, the Working Document recommends smolt migration flows of 4500 cfs in critically dry years, 6000 cfs in dry years, and 8000 cfs in below normal years. *Id.* at 1-IV-39 (AR/1066/89). By comparison, the 1995 Plan calls for flows of 3110 to 3540 cfs during critically dry years, 4020 to 4880 cfs during dry years, and 4620 to 5480 cfs during below

normal years, for this April 15-May 15 period. 1995 Plan at 19 (AR/2367/28). The Pacific Coast Federation petitioners then argue that the parties to the San Joaquin River Agreement are committed only to provide 2000 cfs in critically dry years. SJRA at § 5.5 (AR/1023/12). They cite the testimony of several witnesses before the Board who concluded that the VAMP and the SJRA will fail to provide sufficient water to attain salmon doubling. *See* Testimony of William Kier 3 (Sept. 1998) (AR/1211/3) (VAMP is thoughtful experiment but falls far short of achieving salmon-doubling); Testimony of David Yardas & Spreck Rosekrans 2 (July 1998) (AR/091/3) (SJRA will provide only 50 percent of the flows deemed necessary by the federal working group).

Any comparison between the Working Group's numbers and the 1995 Plan is irrelevant since no one apparently appealed that plan and it is not now before the Court.

The 1995 Plan recognized that a multi-faceted, multi-agency effort would be necessary to secure a doubling of salmon. The implementation plan includes (1) measures within SWRCB's authority; (2) measures requiring combination of SWRCB's water quantity and water right authority and the authority and actions of other agencies; (3) recommendations to other agencies to improve habitat; and (4) a monitoring and special studies program. WATER QUALITY CONTROL PLAN at 27 (AR/2367/36). Under the implementation provisions of the plan, a major heading is titled "Implementation Measures Requiring SWRCB Water Quality and Water Rights Authority and Multi-Agency Cooperation." *Id.* at 28 (AR/2367/37). This section goes on to say:

> It is uncertain whether implementation of the numeric objectives in this plan will result in achieving the narrative objective for salmon protection. Therefore, in addition to the timely completion of a water rights proceeding to implement river flow and operational requirements which will help protect salmon migration through the Bay-Delta Estuary, other measures may be necessary to achieve the objective of doubling the natural production of Chinook salmon from average 1967-1991 levels. This narrative objective is consistent with the anadromous fish doubling goals of the CVPIA; thus, prompt and efficient actions taken to implement this CVPIA goal, in concert with other recommendations in this plan, are important to achieving the salmon protection objective.

Id.

The plan also includes an extensive discussion of fourteen categories of such other actions, "many of which are under the authorities of other agencies."

Id. at 33 (AR/2367/42). These include, *inter alia,* habitat improvement, money, reduction of losses at all stages of life-cycle, screening, fish barriers, preventing illegal harvesting, reducing exotic species, improving hatchery production, reducing flow fluctuations, improving diversion facilities, and temperature controls.

The 1995 Plan recognizes the triennial revision of the plan will be informed by the results of monitoring and scientific experiments such as the VAMP. The results of this monitoring and experimentation "will be considered in the ongoing review to evaluate achievement of this objective and the development of numeric objectives to replace it." *Id.* at 28 (AR/2367/37); *see also id.* at 42 (AR/2367/51) (consideration of monitoring and special studies in triennial review). The flexible, adaptive nature of the 1995 Plan is especially apparent in this language from the plan:

> The SWRCB will consider, in a future water rights proceeding or proceedings, the nature and extent of water right holders' responsibilities to meet objectives in this plan. Water Code section 1258 charges the SWRCB, when it acts on water appropriations, to consider water quality control plans, and it authorizes the SWRCB to subject the appropriations to terms and conditions that are necessary to carry out the plans. It does not, however, impair the SWRCB's discretion to decide whether to impose such conditions or the conditions to be imposed. *If necessary after the water rights proceeding, this plan could be amended to reflect any changes that may be needed to ensure consistency between the plan and the water right decision.*

Id. at 4 (AR/2367/13) (emphasis added).

Salmon-doubling was an important objective of the 1995 Plan, but the Board never relied solely on flows to achieve that goal. The plan intended that the Board act in concert with many other responsible parties, and flows were to be one of many curative measures. The petitioners are in error in imposing the entire burden on the salmon-doubling obligation on the SWRCB and its water right modification process.

4. Immediacy

Pacific Coast Federation petitioners repeatedly point to this language in the plan, "If no time schedule is included, implementation should be immediate," as if to suggest that flows should be set high enough to secure an

almost immediate doubling of salmon survival. *See id.* at 27 (AR/2367/36). However, as previously discussed, the plan also acknowledges the uncertainty concerning these objectives and need for more information. *See* V(F)(1), *supra*. Furthermore, Water Code section 13242, by requiring that a time schedule and surveillance plan to monitor compliance be part of an implementation plan, anticipates that most water quality objectives indeed will be achieved over time.

In terms of SWRCB's own implementation responsibilities under the plan, the Board was obligated to commence a water rights proceeding to implement river flow and operational requirements that will help protect salmon migration through the Bay-Delta region. The Court believes the "immediate" phrase is better read as requiring the SWRCB to expeditiously undertake the water rights proceeding and other obligations under its control. The SWRCB did so by initiating the proceeding that eventually produced D-1641, although the Board did begin hearings a year late. In the scheme of this entire water quality effort, the delay is unfortunate but is not legally cognizable at this point in time.

5. Public Trust Obligation

The Pacific Coast Federation petitioners argue that the state's public trust doctrine imposes an over-arching fiduciary obligation on the SWRCB to implement the salmon-doubling requirement. The public trust doctrine, however, affords no basis for requiring the SWRCB to adopt or implement any specific salmon-doubling requirement. *National Audubon Soc. v. Superior Court*, 33 Cal. 3d 419 (1983), as is well-known, concerned a situation where "the salient fact is that no responsible body has ever determined the impact of diverting the entire flow of the Mono Lake tributaries into the Los Angeles Aqueduct." *Id.* at 440. Accordingly, "the state has an affirmative duty to take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible." *Id.* at 446. The supreme court indicated that the SWRCB and the courts must often engage in an informed balancing of public trust (usually instream or *in situ*) values and diversionary or consumptive uses.

In our case, the Board, the appropriate "responsible body," *has* undertaken extensive and reasoned consideration of the "human and environmental uses" in the San Joaquin-Delta system. The 1995 Plan, numerous environmental impact reports, and D-1641 itself are indicative of that deliberate review. The 1995 Plan's salmon objective was not challenged by petitioners or any one else. Substantial evidence previously discussed indicates that salmon survivability will likely improve under D-1641. *See* IMPLEMENTATION EIR at VI-48 to -50, Fig. VI-64 to –70 (AR/1486/VI-48 to –50). On balance, the Court finds

that the evidence supports the conclusion that public trust interests will be advanced, not harmed, by this decision.

6. Conclusion

The SWRCB used both numeric and narrative standards in the 1995 Plan because the Board did not have a good understanding of the relationship between flows and salmon survival. Also, the Board recognized that neither flows alone, nor restrictions on other water users' water rights, would necessarily achieve salmon-doubling. Thus, the 1995 Plan commenced an adaptive, learning-based management process. Similar to experiments being used in many river systems around the world, this process will test the relationship between salmon survival and other variables, elicit multi-agency action, and evaluate the results as a preface for future modification and action. Additionally, this is all taking place within the context of the CALFED Bay-Delta process, a 30-year, multi-faceted state-federal joint venture to improve Delta environmental conditions. *See* Testimony of Dr. Charles Hanson at 10646-47 (Feb. 24, 1999) (AR / 3349 / 18-19); *See also* IV(F)(8), *supra.*

Even conceding the adaptive nature of the 1995 Plan, the Pacific Coast Federation petitioners appear to argue that D-1641 fails to make any meaningful contribution to the salmon-doubling objective. In essence, the argument is that the Board abused its discretion. However, this is an area that is within the Board's expertise and its formulation of the implementation of the 1995 Plan is to be given deference.

The Court is mindful that the Board itself defined flow-dependent objectives in such a way as to imply the inclusion of all objectives that could be met by the flow of water or by changes in the operations of facilities, notwithstanding that such objectives also could be met entirely or partially through other means, such as land management measures. The Court, however, is required to interpret matters in a fashion that fits, if possible, within the applicable statutory and constitutional framework. *See* CAL. CIVIL CODE § 3541 (West 2002) (an interpretation that gives effect is preferred to one which makes void). This Court is required to read the Board's definition of flow-dependent objectives as including all objectives that could *reasonably* be met by the flow of water or by changes in the operations of facilities, notwithstanding that such objectives could be met entirely or partially though other means. Viewed in this light, the salmon-doubling requirement is simply not a flow-dependent objective.

The Court has no quarrel with the view of the environmentally sensitive litigants that flow is probably the single most important factor in salmon survival. Yet, the administrative record shows that these same litigants' own

experts admits that "we do not know what the flow levels should be in order to achieve a doubling of natural salmon production, . . ." Testimony of David Yardas & Spreck Rosekrans, *supra* at 2 (AR/091/3). Many other factors have an obvious influence on salmon survival (*e.g.*, fish take rates, habitat, pollution). Also, D-1641 provides some "bottom-line" fish protections by imposing this condition on the CVP and SWP permits: "This permit does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future" under either the federal or state endangered species acts. D-1641 at 148 (AR/0770/162).

Under these facts and circumstances, the Court believes it is simply unreasonable to insist that D-1641 empirically ensure a doubling of salmon survival rates. The Court's conclusion is not based on whether the administrative record guarantees that D-1641 will actually double salmon survival, but whether the decision supports and advances that narrative goal. The Court is satisfied that substantial evidence in the record demonstrates that D-1641 supports and advances the narrative goal of doubling salmon survival.

I. San Joaquin River Agreement Issues

1. Background

Early in the D-1641 proceedings, the SWRCB encouraged the parties to consider settlement of some of the issues and indicated that it would conduct hearings on any resulting settlement submitted to the Board. One resulting settlement is the San Joaquin River Agreement (SJRA) (AR/1023) in which a group of water users agreed to provide water to conduct the VAMP experiment, meet the San Joaquin River flow objective of the 1995 Plan, and allocate responsibilities for providing water for these dual purposes among the signatories (with the Bureau of Reclamation and Department of Water Resources providing certain "back-stop" guarantees). The other is the Mokelumne River Agreement, considered later in this decision. *See* V(J), *infra*. Both agreements have been challenged here by nonsettling parties.

The major parties to the SJRA (signed in February 1998) are several federal agencies (U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service); certain parties diverting water from the San Joaquin River (members of the San Joaquin River Group Authority, members of the San Joaquin River Exchange Contractors Water Authority, members of the Friant Water Users Authority, and the City and County of San Francisco); parties exporting water from the Delta region including the State Water Contractors, Westlands Water District, and Metropolitan Water District; and several environmental organizations (which

participated in negotiations leading to the SJRA, but only one of which actually signed the final agreement). SJRA § 1 (AR/1023/6).

When the SWRCB originally provided notice of the D-1641 proceedings, it indicated it would address the assignment of responsibilities among water right holders for meeting the objectives of the 1995 Plan. Revised Notice of Public Hearing (May 6, 1998) (AR/0365). Apparently anticipating that arrangements such as the SJRA were in the works, the Board also indicated it would receive evidence on these agreements and consider adopting water right provisions consistent with the agreements. *Id.* at 5 (AR/0365/5). The members of the San Joaquin River Group Authority then petitioned the Board for long-term changes in their water rights, under the provisions of Water Code sections 1707 and 1735 *et seq.*, to allow them to use water in the manner called for by the agreement; and the SWRCB provided notice of these petitions. Notice of Petition for Long Term Changes (Feb. 25, 1999) (AR/0590). In April 1999, the Board issued a third notice essentially folding these petitions and consideration of the SJRA into the Bay-Delta water rights hearings. Supplement to Revised Notice of Public Hearing (April 20, 1999) (AR/0630).

The SJRA is properly considered in the context of the flow objectives of the 1995 Water Quality Control Plan pertaining to the San Joaquin River and its contribution to Delta outflow. The 1995 Plan has many objectives affecting the San Joaquin River, *e.g.*, chloride limitations at the Antioch Water Works intake on the river. The SJRA, however, addresses only those objectives of the 1995 Plan relating to flows at Vernalis, specifically: "(1) River Flows/San Joaquin River at Airport Way Bridge, Vernalis p[.] 19 [of the plan]; (2) San Joaquin River Salinity p. 18[;] (3) Southern Delta/San Joaquin River at Airport Way Bridge, Vernalis; and (4) the San Joaquin River basin share of all Delta outflow objectives [that is determined, in part based on mean daily flows at Vernalis]. SJRA at § 3.4 (AR/1023/10).

Both the *Racanelli* decision and the 1994 Bay-Delta Accord required the SWRCB to set water quality objectives for the Bay-Delta Estuary. In adopting fish and wildlife objectives in the 1995 Plan, the SWRCB recognized scientific uncertainty in the setting of flow-dependent objectives:

> Unlike water quality objectives for parameters such as dissolved oxygen, temperature, and toxic chemicals, which have threshold levels beyond which adverse impacts to the beneficial uses occur, there are no defined thresholds that can be used to set objectives for flows and project operations. Instead, the available information indicates that a continuum of protection exists. Higher flows and lower exports provide greater protection for the bulk of estuarine

> resources up to the limit of unimpaired conditions. Therefore, these objectives must be set based on a subjective determination of the reasonable needs of all of the consumptive and nonconsumptive demands on the waters of the Estuary.

WATER QUALITY CONTROL PLAN at 14-15 (AR/2367/23-24); *see also* discussion at V(H)(3), *supra*. In view of this uncertainty, the Board recognized, "As the long-term planning process for the Estuary [envisioned by the CALFED program] is developed and implemented, these objectives will be evaluated and modified, as necessary, to provide a level of protection predicated on more optimal physical facilities and management actions." WATER QUALITY CONTROL PLAN at 15 (AR/2367/24).

In the 1995 Plan, the Board sets a range of river flows measured at Airport Way Bridge, Vernalis, that vary depending on the water type year (wet, above normal, below normal, dry, or critical) and on the time of year. The flows range from a low of 710 cfs during most of the spring in a critically dry year to a high of 8620 cfs in a wet year during the important salmon out-migration period of April 15-May 15 (when the X2 isohaline is required to be at or west of Chipps Island). *Id.* at 19, 21 n.17, 26.

2. Vernalis Adaptive Management Plan (VAMP)

The SJRA is integrally related to the Vernalis Adaptive Management Plan, but D-1641 is spartan in its description of the origins of this study. A preface to the SJRA recites that in order to implement the 1994 Bay-Delta Accord and the 1995 Plan, and given the uncertainty already expressed by the Board in the plan, state and federal scientists met with stakeholders to develop a study "to gather the best available scientific information regarding the impact of flow and export rates on the salmon fisheries in the lower San Joaquin River." Statement of Support for the San Joaquin River Agreement (1998) (AR/1023). Both the VAMP and a detailed description of the plan are presented as appendices to the SJRA. App. B, "Planning and Operation Coordination for the Vernalis Adaptive Management Plan" (Mar. 16, 1998) (AR/1023/51); App. A, "Conceptual Framework for Projection and Experimental Determination of Juvenile Chinook Salmon Survival Within the Lower San Joaquin River in Response to River Flow and SWP/CVP Exports" (Mar. 20, 1998), *id.* (AR/1023/29).

The specific, stated purposes of VAMP are to:

> (1) Implement protective measures for San Joaquin River fall-run Chinook salmon within the framework of a carefully designed management and study program which is designed to achieve, in

> conjunction with other non-VAMP measures, a doubling of natural salmon production by improving smolt survival through the Delta.
>
> (2) Gather specific information on the relative effects of flows in the lower San Joaquin River, CVP and SWP export pumping rates, and operation of a fish barrier at the head of Old River on the survival and passage of salmon smolt through the Delta.
>
> (3) Provide environmental benefits on the lower San Joaquin River during the April-May Pulse Flow Period at a level of protection equivalent to the Vernalis flow objectives of the 1995 WQCP and implement the remaining San Joaquin River Portion of the 1995 WQCP.

Id. 1-2 (AR/1023/29-30). In analyzing this statement and other features of the plan, it is apparent that the VAMP is a scientific experiment based on the principles of adaptive management that have been discussed earlier. *Supra* at V(H)(1). The experiment is intended to study the relationship between three important variables: SWP/CVP exports from the Delta, flows on the lower San Joaquin River, and operation of a tidal barrier at the head of Old River. The study is performed during a 31-day period during the natural smolt emigration period of mid-April to mid-May (an additional two-week "ramping" period is also provided). The VAMP intends to fulfill the essence, if not the literal requirements, of the 1995 Plan's April-May flow requirements.

The VAMP is intended to operate in years when existing flows at Vernalis are expected to be less than 7,000 cfs on April 15th. The main experimental feature of VAMP is the measure of salmon smolt survival rates under at least five combinations of San Joaquin River flows and CVP/SWP export rates. For instance, at the high end, a Vernalis flow rate of 7000 cfs is matched with a export limit of 3000 cfs. At the low end, a 3200 cfs flow rate is matched with an export limit of 1500 cfs. Table 1, App. A, *supra* at 4 (AR/1023/31). Operations of the head of Old River tidal barrier is also varied in these test years.

3. San Joaquin River Agreement & Its Relationship to VAMP

The SJRA is a ten-year agreement (through 2009) designed to enable the VAMP. Essentially, the members of the San Joaquin River Group Authority (the Modesto, Turlock, Merced, South San Joaquin, and Oakdale irrigation districts) agree to provide the target flows or 110,000 ac-ft/yr, which ever is less, necessary to conduct the experiment (additional water may be provided from Oakdale). SJRA §§ 5.1 & 8.5 (AR/1023/10-11, 16). They are to be paid $4 million per year (with additional payments to Oakdale) for this water from federal and state

accounts. *Id.* § 6.1 (AR/1023/12-13). While the agreement is in effect, the United States Bureau of Reclamation and, as appropriate, the California Department of Water Resources assume all responsibility for the 1995 Water Quality Control Plan objectives for the San Joaquin River basin share of Delta outflow. *Id.* § 2.1.2 (AR/1023/7). While the agreement may be terminated before the end of the ten-year period, id. § 13.0, the Bureau of Reclamation is required to meet the San Joaquin River Portion of the 1995 Plan's objectives for a maximum of two years, thereby giving the SWRCB the opportunity to issue a final order assigning responsibilities among all San Joaquin River water right holders. *Id.* § 10.1.1 (AR/1023/17-18). Thus, while the agreement remains in effect, any obligation of other San Joaquin River water right holders to contribute water to meet these flow and Delta outflow requirements is suspended.

When the San Joaquin River Agreement was presented to the Board, it was submitted with the request that the Board find that the agreement provided equivalent protection to the Vernalis flow objectives set forth in the 1995 Plan. D-1641 at 23 (AR/0770/35). The Board endorsed the potential value of the VAMP and welcomed the commitments made under the SJRA to make the VAMP possible, but the Board concluded that it was "premature . . . to make a finding of equivalent protection." *Id.* at 44 (AR/0770/56).

Specifically, the SWRCB approved the SJRA "for the purpose of conducting the VAMP experiment and authorize[d] a staged implementation of the Vernalis pulse flow objectives so that experimental operations can be conducted in lieu of meeting the objectives as the first stage of implementation." *Id.* at 48 (AR/0770/60). The Board also approved the water right changes necessary to effectuate the agreement and confirmed that the obligations of the SJRGA members were no greater than those under the agreement. *Id.* 22-23 (AR/0770/34-35). However, the Board candidly indicated that, first, the SJRA may not always provide the water necessary to meet the experimental requirements of the VAMP and, second, the VAMP may not always provide enough water to satisfy the 1995 Plan's protections for Chinook salmon (the Board urged the Bureau of Reclamation to provide any additional needed water). The Board rationalized these shortcomings, "Conducting the VAMP will . . . provide better information than is currently available on how large a pulse flow is needed to protect the salmon, and could provide a basis for changes in the objectives at a future review of the Bay-Delta Plan objectives." *Id.* 48 (AR/0770/60).

The Bureau of Reclamation and DWR are required to meet or "back-stop" the flow-dependent and Delta outflow measures at all times other than the April 15-May 15 period; and the Bureau is required to meet the flow-dependent standards during that period if the SJRA is not effective. Finally, the 1995 Plan

itself recognizes that if there is any variance between its requirements and the results of the D-1641 water rights proceeding, "this plan could be amended to reflect any changes that may be needed to ensure consistency between the plan and the water right decision." WATER QUALITY CONTROL PLAN at 4 (AR/2367/13).

The petitioners in these proceedings raise a variety of challenges to the San Joaquin River Agreement and the Board's approval of the change petitions filed by members of the San Joaquin River Group Authority. The petitioners' principal complaints, as set forth as causes of action in their petitions, are addressed in the following sections.

4. Meeting 1995 Plan Objectives

Central Delta and Pacific Coast Federation petitioners argue that, as to flows for fisheries and agriculture, D-1641 does not meet the objectives of the 1995 Plan. Additionally, as observed by the Board itself, the SJRA is faulted for not providing sufficient water for the VAMP.

Many factors weigh in support of this arrangement. First, in the 1995 Plan, the Board clearly articulated the scientific uncertainties associated with the flow and project operation requirements and need for such work to ultimately reach more solidly grounded numeric criteria. *See id.* at 28-29 (AR/2367/37-28). The plan recognizes the uncertainty involved in settling the flow related standards, the resulting "subjective determination" of needs for the various beneficial uses, and the importance of continued planning to improve the understanding of the needed levels of protection. *Id.* at 14-15 (AR/2367/23-24). The VAMP and the water provided under the SJRA allow that scientific investigation to proceed. The plan encourages scientific inquiry and experimentation to better determine the flow requirements, export restrictions, and tidal barrier operations necessary to meet the flow-dependent objectives and the narrative salmon doubling requirement. By its recognition of a time schedule for implementation, California Water Code section 13242(b), the Porter-Cologne Act envisions that the achievement of the objectives may take time, and D-1641 plots a reasonable, adaptive management route to obtain additional scientific information on the way to compliance with the objectives. Specifically, in the program of implementation required by section 13242(b), the plan encourages monitoring and special studies "to provide physical, chemical, and biological data that will: (1) provide baseline information and determine compliance with the water quality objectives . . .; (2) evaluate the response of the aquatic habitat and organisms to the objectives; and (3) increase understanding of the large-scale characteristics and functions of the Estuary ecosystem to better predict system-wide responses to management options." WATER QUALITY CONTROL PLAN at 41

(AR/2367/50). While the implementation plan emphasizes the work of the Interagency Ecological Program, the overall monitoring and special studies program appears to contemplate other informative studies as well, such as the VAMP. Indeed, the Board indicates that the special studies "should emphasize the understanding of the ecological responses of species of special concern to water project operations resulting from implementation of this plan . . . ." *Id.* at 42 (AR/2367/51). The VAMP obviously informs that inquiry.

Additionally, the Board cannot control the timing of all events pertaining to the Bay-Delta. In the San Joaquin River Agreement, there is a fortunate confluence of offers of water, money, and motivation to allow the experiment to proceed. The needed scientific inquiry might be difficult to arrange in the future. The agreement does fulfill an important goal of the D-1641 proceeding: the assignment of responsibilities among the signatories. In the water rights context, as the Board aptly notes, settlements are often preferable to extended litigation. Finally, the agreement appears to substantially meet the 1995 flow objectives for Vernalis through the guarantees provided by the Bureau of Reclamation. In its modification of the Bureau's New Melones permits, the SWRCB imposes the responsibility for meeting Vernalis flows directly upon the Bureau—with the exception of pulse flows. While the agreement is in effect, the Bureau is obligated to provide the pulse flows provided by the agreement (with water contributions presumably made by the other signatories which may, in some years, total 110,000 ac-ft during the one-month pulse flow period). D-1641 at 161-62 (AR/0770/175-76); SJRA § 5 (AR/1023/10-11).

Despite the many benefits of this arrangement, however, the Court is particularly mindful of the *Racanelli* decision's admonition that it is impermissible to mix quasi-legislative, water quality planning functions with quasi-judicial allocations of responsibilities all in the same proceeding. 182 Cal. App. 3d at 119. The Board's commendable acknowledgement that the 1995 objectives may not always be met and its encouragement of the VAMP experiment and approval of the SJRA, unfortunately, end up as a quasi-legislative reformulation of the objectives themselves. This is a troublesome issue; but after careful consideration, the Court concludes that while the VAMP and SJRA are appropriate and permissible steps toward the implementation of the 1995 Plan, they do not satisfy at all times of the year the flow requirements of the 1995 Plan. These are the legal minimum flow objectives that must be satisfied unless changed in an appropriate proceeding to modify the 1995 Plan itself. This portion of D-1641 must be returned to the Board for further proceedings. While there is considerable merit to both the VAMP and SJRA, they can only be undertaken if all requirements of the 1995 Plan are legally satisfied or, in the alternative, the 1995 Plan's minimum flow objectives are modified through another noticed hearing process.

To sanction the Board's action here would effectively allow the Board to change the no longer challengable 1995 Plan's objectives unilaterally without completing the necessary legal steps allowing for interested parties' input, comments, and challenges. The Board could readily bless the SJRA and VAMP if that action were coupled with an express requirement that some entity (such as the Bureau of Reclamation or other entity) always has the legal obligation to provide the necessary additional water to comply with all aspects of the 1995 standards.

The Court does not accept, nor does the Court believe, that such a requirement placed on the Bureau or some other entity would be illusory or somehow impossible for the Bureau or other entity to satisfy. Certainly in low-water years, a requirement that the Bureau or some other entity must make up the difference will raise Herculean challenges drawing the close attention of the interested parties. Yet, the Court is satisfied that the legal responsibility of meeting the standard may be assigned without an explicit, advance determination of what source the responsible entity will identify to purchase, cut back, or dip into to find each acre-foot of water needed to make up the shortage. If the Board decides to require the Bureau to be the legal backstop for making up any shortfall and if the Bureau believes that it is being put in a situation where compliance is impossible, then the Bureau would be obliged to seek legal redress. In any event, the Board is required to complete what it said it would do in the relevant hearing notices: assign responsibility for meeting the 1995 objectives. The SWRCB has not completed this task, and D-1641 must be returned to the Board for further action consistent with this opinion.

The Court will address in the following sections the other major objections to the San Joaquin River Agreement since the parties have briefed these issues extensively and their resolution may be of future assistance to decisionmakers.

5. Use of New Melones Water to Meet Flow Objectives

In another of their arguments, the San Joaquin County entities maintain that the required use of New Melones water to meet the Vernalis flow and Delta outflow objectives violates the state permits for New Melones Dam and is not supported by substantial evidence. As previously indicated, the Board authorized but did not require the use of New Melones water for this purpose if other sources can be utilized. Since the San Joaquin County entities are contractors of the Bureau, they do not have standing to challenge or complain of the characteristics of the permits held by the Bureau. As a matter of federal law, the New Melones project authorization includes downstream water quality

purposes. Sec. 203, Flood Control Act of 1962, Pub. L. No. 87-874, 76 Stat. 1173 ("*And provided further*, That the Secretary of the Army give consideration during the preconstruction planning for the New Melones project to the advisability of including storage for the regulation of streamflow for the purpose of downstream water quality."). The petitioners make a rather technical argument that the places of use under the existing state permits for New Melones do not include the downstream locations where flows and quality will be measured. Petitioners have not presented a convincing argument that such a place of use modification is necessary under these circumstances. Even if required, the Board's authorization of such water use impliedly includes the authorization to allow the water to flow downstream.

The petitioners complain that the SWRCB recognized that the CVP and SWP contribute greatly to the water quality problems of the lower river, but the Board ended up looking to New Melones to mitigate the problem through additional releases. They say that insubstantial evidence supports this result. The petitioners argue that federal law and the 1995 Plan first require the use of controllable factors, such as reduced exports, before diluting water is required. The federal law they cite is the same Clean Water Act section 1252, which the Court separately determined was inapplicable. *See* V(I)(8), *infra.* For state law authority, they generally refer to the Porter-Cologne Act and the 1995 Plan. The Porter-Cologne Act does not provide the explicit "hierarchy" of approaches the petitioners envision; rather, Water Code section 13241 discusses multiple considerations that factor into the determination of water quality objectives. Section 13242 talks only generally of the "nature of actions" that will be required to implement the objectives. The 1995 Plan does not embrace any specific hierarchy of control. In fact, the plan disclaims any such purpose, indicating that it "is not to be construed as establishing the responsibilities of any water right holders. Nor is this plan to be construed as establishing the quantities of water that any particular water rights holder or group of water rights holders may be required to release or forego . . . ." WATER QUALITY CONTROL PLAN at 4 (AR / 2367 / 13).

The fundamental argument here is between an integrated view of the Central Valley Project with the Bureau as overall manager, or a semi-autonomous view with reclamation units managed independently of, and sometimes at odds with, other reclamation entities in the Valley. Congress and the courts have chosen the integrated project approach.

This choice is demonstrated by cases involving other units of the Central Valley Project, and their reasoning provides convincing guidance here. In *Westlands Water Dist. v. Dep't of Interior,* 805 F. Supp. 1503 (E.D. Cal. 1992), the district sued the Bureau during the 1991-92 drought to enjoin deliveries from the

San Luis Unit to the Exchange Contractors on the upper San Joaquin River (water users who, starting in 1939, accepted a replacement water supply to allow construction of Friant Dam). Westlands based its claim on its 1963 contract with the Bureau for water also from the San Luis Unit.

The trial court upheld the Bureau's authority to supply the Exchange Contractor, even if Westlands was shorted; and the decision is replete with language endorsing the integrated view of the CVP. The court noted that Congress never intended to limit the use of San Luis Reservoir water to lands within that unit. Indeed, "the Bureau's longstanding operational flexibility had allowed both the movement of water long distance, through the Delta-Mendota Canal, to supply the Exchange Contractors and to supply, over 25 years, 120,000 acres of Westlands' land outside the original San Luis Unit boundaries (the place of use issue that is now part of these proceedings). *Id.* at 1508 n.9. The Reclamation Act had provided the Secretary with broad authority in management of the reclamation program, 43 U.S.C. § 373 (2003), and the deliveries to the Exchange Contractors did not violate Westlands' contract. The court concluded:

> Water allocation is within [the Bureau's] statutorily granted authority and special expertise. It has been made the manager of an integrated water storage and delivery project. The Bureau has made allocations in accordance with its contractual obligations. The Bureau's water allocation decisions are entitled to judicial deference, they are neither unlawful or unreasonable.

Id. at 1513. The court of appeals affirmed, *Westlands Water Dist. v. Firebaugh Canal*, 10 F. 3d 667 (9th Cir. 1993), noting that Congress was aware that the Bureau intended to use San Luis Reservoir water outside the unit and Congress had acquiesced.

As the manager of an integrated water delivery system, the Bureau is required to comply with environmental law mandates, such as the ones at issue here, even if contractual water deliveries are reduced. In *Barcellos & Wolfsen, Inc. v. Westlands Water Dist.*, 849 F. Supp. 717 (E.D. Cal. 1993) (Wanger, J.), some of the district's members sued to require the delivery of 900,000 ac-ft to the district or, in lieu thereof, for damages, forgiveness of assessments, and waiver of their obligation to sell excess lands. While the case is largely one of contract interpretation, the court held that the Bureau must comply with the mandatory requirements of federal environmental laws, such as the Endangered Species Act, 16 U.S.C. § 1536(a)(2) (2003) (agency must insure that its actions are not likely to jeopardize the continued existence of any threatened species). The Bureau did not surrender its ability to regulate by signing the 1963 contract, citing *Bowen v.*

Public Agencies Opposed to Social Security Entrapment, 477 U.S. 41, 52 (1986) (sovereign power, even unexercised, is an "enduring presence" that governs all contracts unless surrendered in unmistakable terms). The court ruled that the 1963 contract included a shortage clause exonerating it from liability due to delivery reductions required by the ESA and other mandatory federal regulation ("but in no event shall any liability accrue against the United States . . . direct or indirect, arising from a shortage on account of errors in operation, drought, or any other causes . . ."). 849 F. Supp. at 722. The appurtenancy language of the Reclamation Act, 43 U.S.C. § 372 (2003) ("the right to the use of water . . . shall be appurtenant to the land irrigated . . ."), did not abrogate the shortage provision of the contract. *Id.* at 724-25. The court of appeals affirmed, holding that the "other cause" provision of the contract relieved the government from liability for reduced water deliveries due to legislative mandates like the ESA. *O'Neill v. United States*, 50 F. 3d 677 (9th Cir. 1995).

Thus, the courts have consistently acknowledged the integrated basis of the Central Valley Project and the multifaceted obligations that must be addressed by the Bureau as water manager. One of the system-wide obligations of the CVP, both under federal and state law, is to satisfy its environmental requirements; and D-1641 properly allows, but does not require, the use of New Melones water for that purpose.

6. San Joaquin River Protection Act Allegations

The Central Delta Petitioners argue the Board has violated the San Joaquin River Protection Act, California Water Code sections 12230-12233, by allowing significant degradation in water quality along a specific reach of the lower river. This allegation was previously raised and rejected, and will not be reconsidered here. Suffice it to say, this statute applies only to applications to appropriate filed on or after June 17, 1961—thus, not including any of the relevant CVP rights. While Central Delta argues that the Board has a public trust obligation to require greater protection of San Joaquin River water quality, D-1641 and the record repeatedly indicate the Board was cognizant of its overall trust responsibilities and was attempting to meet them in a complex situation plagued with many cross-cutting considerations. Finally, there is substantial evidence that overall water quality improves in the San Joaquin River as the result of D-1641. See IMPLEMENTATION EIR at VI-32-33, Fig. 48-51 (AR/1486/VI-32-33). Modest salinity exceedances may occur in drought years when exporters face as much as 745,000 ac-ft reductions. *Id.* at V-10, Fig. V-14 (AR/1486/V-10). Water quality and conditions for fish and aquatic resources generally improve for many areas within the Delta as well. *Id.* at VI-9 & -60 (AR/1486/VI-9 & -60).

7. CEQA Allegations

Central Delta also faults the EIR for failing to study some of the potential environmental effects of adopting portions of the San Joaquin River Agreement. In its brief, Central Delta is especially concerned about the consequences of "redirecting" the 137,000 ac-ft/yr. of water potentially made available under the agreement. Central Delta anticipates that the earlier use of this water in the spring to provide pulse flows will result in changes in the return flow regime, groundwater usage, and in hydroelectric power operations (which strongly influence the amount and timing of instream flows in the basin).

Several sections of the Implementation EIR address these issues with respect to the various flow alternatives, including Alternative 8 that contemplates the San Joaquin River Agreement. For instance, the EIR acknowledges that "achieving these flows often requires a shift in reservoir releases from the summer to the spring" and proceeds to analyze the impacts on hydropower operations at CVP, SWP, and other facilities. *Id.* at VI-102 (AR/1486/VI-102). The chapter also discusses impacts to groundwater, concluding that [s]urface delivery reductions may result in the affected water user purchasing water from another source, fallowing land, or pumping additional groundwater. *Id.* at VI-107 (AR/1486/VI-107). Decision 1641 also discusses these problems, noting that water storage during peak power production months will likely be reduced by 17 percent and decreased surface water deliveries due to the flow objectives and the SJRA will likely lead to increased groundwater use. D-1641 at 141 & 143 (AR/0770/155 & 157). The Board suggests mitigation strategies. The Board concludes that all these impacts cannot be mitigated but adopts a statement of overriding considerations that provides the legal basis for ultimately adopting the decision. *Id.* at 145-46 (AR/0770/159-60) (in order to prevent further decline in fish and wildlife resources that could result in regulatory actions affecting water supply to other users, "overriding considerations of the greater public interest requires this action").

The environmental effects of the SJRA are adequately studied within the context of the Implementation EIR. The petitioners' CEQA-related allegations are without merit.

8. Federal Clean Water Act Allegations

The San Joaquin County Petitioners argue the Board's required use of New Melones water to meet Vernalis salinity objectives violates the federal Clean

Water Act. They point to a requirement that pollution first be controlled by adequate treatment at the source and not by dilution with higher quality waters. *See* 33 U.S.C. § 1252 (b)(1) (2003). This statutory provision, however, is part of a subsection that addresses planning for the construction of dams and reservoirs. The entire sentence reads, "In the survey or planning of any reservoir by the Corps of Engineers, Bureau of Reclamation, or other Federal agency, consideration shall be given to inclusion of storage for regulation of streamflow, except that any such storage and water releases shall not be provided as a substitute for adequate treatment or other methods of controlling waste at the source." This provision is inapplicable to the present situation involving water quality conditions imposed by a state agency on state water rights. Additionally, while D-1641 amends the Bureau of Reclamation's New Melones water rights to allow use of water releases for San Joaquin River water quality purposes, it does not require that such water be used. D-1641 at 48 (AR/0770/60).

9. Other Allegations

The petitioners advance other arguments against the San Joaquin River Agreement including that it sanctions unreasonable applications of water to saline-prone lands, increases exports that are allegedly the principal cause of salinity problems in the river (often because of the application of water in the west side of the valley), and shifts the burden of proof under Water Code section 1702 to objectors. As discussed, the agreement, in conjunction with other D-1641 measures, actually improves water quality. Exports are being reduced, and the Board acted reasonably in accommodating the needs for continued exports and San Joaquin River-Delta water users.

10. Conclusion

The Court finds only that the San Joaquin River Agreement fails to assign responsibility for Vernalis flows in all instances, and the Board's attempt to disregard this shortcoming results in an impermissible modification of the 1995 Plan. All other challenges to the agreement are without merit. The matter must be returned to the SWRCB with directions for the Board to actually assign responsibility to meet the 1995 standards or proceed to change the standards.

J. Mokelumne River Agreement

In D-1641, the SWRCB "recognized" the so-called Mokelumne River Agreement and approved the flows specified in that agreement as the limit of the responsibilities of the EBMUD, Woodbridge Irrigation District, and North San

Joaquin Water Conservation District in meeting the 1995 Bay-Delta Plan. D-1641 at 2 (AR/0770/14). Concurrently, the Board amended the licenses and permits of EBMUD and Woodbridge to reflect these flow dedications. *Id.* at 170-80 (AR/0770/184-94) (Woodbridge, being lower on the river, was required to pass along—bypass—the flows augmented by EBMUD).

The Mokelumne River Agreement is actually two separate agreements that accomplish the same dedication of flows. The Lower Mokelumne River Joint Settlement Agreement (JSA) was entered into in 1996 by and among EBMUD, the U.S. Fish and Wildlife Service, and California Department of Fish and Game as a settlement of contested proceedings involving the reissuance of EBMUD's hydroelectric license for Project 2916 on the lower Mokelumne River. Soon thereafter, EBMUD agreed with the California Urban Water Agencies and the agricultural export contractors (1996 Memorandum of Understanding) to adopt the JSA flow regime in full satisfaction of EBMUD's, Woodbridge's, and North San Joaquin's responsibilities in meeting the 1995 Bay-Delta Plan. The agreement was subsequently submitted to the Board during Phase 4 of the proceedings. *Id.* at 57 (AR/0770/69). EBMUD presented evidence that the agreement would augment Mokelumne River flows by 36,000 ac-ft/yr. in dry years and 29,000 ac-ft/yr. in critically dry years. Testimony of John B. Lampe 6-7 (June 1998) (AR/0897/12-13). Additionally, EBMUD has contributed millions of dollars to support fishery and restoration measures. *See* Joint Settlement Agreement, Lower Mokelumne River Project 5 (1996) (AR/2951/8).

Both the Central Delta Petitioners and the North San Joaquin County Water Conservation District (despite the benefits accruing to it under the agreement) challenge the Board's acceptance of the agreement. Central Delta complains that the specification of Mokelumne River fish was not noticed as part of the D-1641 proceedings, it was premature to set the responsibilities of water users until those of the SWP and CVP had been determined, the resulting flows were inadequate for fish, particularly in the Delta, among other arguments. North San Joaquin challenges the agreement as causing injury to a legal user under section 1702 and, by discounting North San Joaquin's own pressing water needs, violating the public trust doctrine.

The Board's notice of the D-1641 proceeding was sufficient to alert other water users and interested persons of the Mokelumne River flow changes ultimately adopted by the Board. The 1998 revised notice indicated that the Board would "consider implementing flow-dependent objectives in the 1995 Bay-Delta Plan by allocating responsibility among water right holders to meet water flows and by requiring changes in the operations of facilities used in the diversion and use of water." SWRCB, Revised Notice of Public Hearing (May 6, 1998) (AR/365). The revised notice also lists the water right holders who might

be affected by the proceeding, and those of EBMUD and Woodbridge were listed. *Id.* at Enc. 2(a), pp. 3 & 12 (AR/365/25 & 34).

EBMUD and Woodbridge did not petition for a change in their rights under Water Code section 1700 *et seq.* The Board indicated that its legal basis for the overall proceeding was the reasonable beneficial use provisions of the state constitution and statutes, as well as the public trust doctrine. *Id.* at 2890; *see also* CAL. CONST. art. X, § 2; CAL. WATER CODE §§ 100 & 275. Consequently, the question of any injury to a legal user under section 1702 was not before the Board (although even in Board-instituted changes under Water Code sections 100 and 275, the Board does not have unbridled authority to make changes that harm others).

Even if the "injury to legal user" question were before the Court, North San Joaquin could not prevail on the issue. The agency's water right on the Mokelumne River stems from D-858, decided by the Board in 1956. AR/2265. After issuing rights to Calaveras County Water District and EBMUD (one of the rights at issue here), the Board concluded that no unappropriated water remained for North San Joaquin. *Id.* at 79 (AR/2265/79). The Board, recognizing that not all of EBMUD's water would be put to immediate use, granted North San Joaquin a temporary permit under Water Code sections 1462 and 1463. *Id.* The Board could not have granted North San Joaquin a junior water right on a fully appropriated river. However, under section 1462, a temporary permit allows North San Joaquin the use "of the excess of the permitted appropriation over and above the quantity being applied to beneficial use from time to time by the municipalities."

If EBMUD pledges to allow a certain agreed instream flow before EBMUD would otherwise begin to divert and store water under its water rights as part of an arrangement to secure its FERC license and major water supply, it is a reasonable accommodation to ensure continuity of service to its customers. As a matter of water law, EBMUD has voluntarily agreed to a condition on its right and the Board has imposed that condition to enhance flows. *See* CAL. WATER CODE §§ 1257 (public interest) & 1257.5 (streamflow requirements). While a junior holder might claim water relinquished by a senior user, the present situation is different since North San Joaquin's temporary right is entirely derived from EBMUD's own temporary under-utilization of its appropriated water on a fully appropriated stream. If that surplus is reduced or eliminated by EBMUD, North San Joaquin's temporary usage correspondingly retracts. There can be no injury to a legal user as the result of these facts or the normal, basic consequences of the prior appropriation system.

The public trust doctrine does not avail North San Joaquin. While the agency appears to have legitimate water needs, D-1641 was noticed to address the implementation of the 1995 Bay-Delta Plan—not a reallocation of water to meet North San Joaquin's requirements.

Central Delta's position is somewhat more amorphous, tending toward arguments that the settlement does not accomplish enough for Delta fish, should have been postponed until the water quality responsibilities of others had been determined, and will not deliver the promised flows.

An initial observation is that an agreement that delivers additional, relatively good quality water downstream to the Delta as a practical matter benefits, and does not itself harm, the Central Delta Petitioners. *See* Testimony of John B. Lampe 7-9 (June 1998) (AR/0897/11-13). Even in its natural state, the Mokelumne only provided two percent of the unimpaired flow to the Delta. Under present operations, the river provides little of the salinity causing problems in the Delta. Even if the allocation of responsibility pursuant to the Mokelumne agreement were premature, the Central Delta Petitioners, because of their geographic position, would not be called to provide additional flows. While one USFWS witness before the Board indicated that Mokelumne flows would remain too low for Delta smelt, the Board was substantially justified in relying on the Service's formal endorsement of the agreement. *See* Letter from Wayne S. White, USFWS, to FERC 23 (Mar. 23, 1998) (AR/0907/23) ("After reviewing the current status of delta smelt, the environmental baseline, effects of the Settlement Agreement alternative and cumulative effects, it is the Service's biological opinion that the Settlement Agreement alternative . . . is not likely to jeopardize the continued existence of the delta smelt . . . .").

The Board itself admits that more water could be released under other alternatives studied in the Implementation EIR. However, the Board reasons that additional releases would further impact North San Joaquin's water shortages and, due to accelerated release of cold water, might cause additional harm to fish due to warmer water. *See* D-1641 at 63 (AR/0770/77); *see also* Testimony of Robert E. Grace (June 1998) (AR/0884). Substantial evidence supports the Board's decision to adopt the flow releases it did for EBMUD and Woodbridge.[11]

[11] Central Delta argues that Table VI-62 of the Implementation EIR, p. VI-126 (AR/1486/VI-126), in reporting flow releases in different water-type years, is not consistent with the flow schedule in D-1641, p. 178 (AR/0770/192). However, the argument is inconclusive since Table VI-62 reports flows for recreational purposes and the D-1641 flow schedule is for releases by Woodbridge.

VI. CONCLUSION AND ORDER

The Court rules as follows concerning the specific allegations contained in the various petitions:

- Except as otherwise indicated, the State Water Resources Control Board's decision approving the Bureau of Reclamation's petition for changes in the places and purposes of use of its Central Valley Project permits and licenses is SUSTAINED, as against petitioners' challenges, by a finding of substantial evidence in the administrative record and the Court's determination that the approval is otherwise in accordance with law.

- The Anderson petitioners' request for a writ of mandate concerning the effect of the Merger Statute is GRANTED. A writ of mandate shall issue directing the SWRCB to conform the places of use under the Bureau of Reclamation's Central Valley Project permits to include both the encroachment and expansion lands within the Westlands Water District. The Board shall not require mitigation for this ministerial confirmation.

- Petitioners' challenges to those provisions of D-1641 approving the Vernalis Adaptive Management Plan and San Joaquin River Agreement are SUSTAINED, as not fully satisfying the flow-dependent objectives of the 1995 Plan for the San Joaquin River. A writ of mandate shall issue remanding this portion of D-1641 to the SWRCB for further proceedings consistent with this decision, i.e., fully assign responsibility for meeting all of the flow-dependent objectives or modify the 1995 Plan objectives. To allow for certainty while the SWRCB responds to any writ issued by this Court concerning flow objectives, the parties are hereby ordered to comply with any and all obligations to meet flow objectives to the same extent as if D-1641 had been fully validated by this Court until further order by the SWRCB or this Court.

- The SWRCB's decision approving the California Department of Water Resources' and Bureau of Reclamation's petitions for a joint point of diversion (accomplished by modification of the points of diversion contained in their respective State Water Project and Central Valley Project permits and licenses) is SUSTAINED, as against petitioners' challenges, by a finding of substantial evidence in the administrative record and the Court's determination that the approval is otherwise in accordance with law.

- The Board's approval and incorporation of certain provisions of the Mokelumne River Agreement in D-1641 is SUSTAINED, as against petitioners' challenges, by findings of substantial evidence in the administrative record and the Court's determination that the approval is otherwise in accordance with law.

- Except as to any mitigation requiring replacement habitat for land conversions attributable to encroachment or expansion lands in the Westlands Water District, the Implementation EIR and Place of Use EIR are SUSTAINED, as against petitioners' challenges, by findings of substantial evidence in the administrative record and the Court's determination that the EIRs were otherwise prepared in accordance with law.

- The SWRCB's decision as to the narrative salmon doubling objective is SUSTAINED, as against petitioners' challenges, by findings of substantial evidence in the administrative record demonstrating that D-1641 supports and advances the narrative goal of doubling salmon survival, and the Court's determination that the SWRCB's decision as to this objective is otherwise in accordance with law.

- Except as otherwise indicated in this decision, D-1641 is SUSTAINED, as against petitioners' challenges, by findings of substantial evidence in the administrative record and the Court's determination that the decision is otherwise in accordance with law.

Where petitioners have raised legal issues requiring *de novo* review by the Court (including legal requirements for preparation of the EIRs), the Court has independently reviewed these allegations and now rules against petitioners on these issues. Furthermore, the Court finds no violation of federal and state constitutional guarantees, particularly those pertaining to due process and the reasonable use of water. The Court finds no violation of the public trust doctrine. The Court finds no violation of various California statutes commonly known as "area-of-origin protections" or of the federal Clean Water Act.

The Court finds no merit to any of the estoppel claims in any of the petitions, finding that there have been no facts established in the record of these cases that would support any such estoppel finding.

Within thirty days, the Attorney General shall prepare and submit a proposed judgment and, where applicable, a proposed writ of mandate to the Court, for each of the coordinated cases, approved as to form by the necessary petitioners. The Court reserves jurisdiction over all matters to the extent necessary to ensure compliance with this Court's orders. It is so ORDERED.

DATED this __ day of May 2003

ROLAND L. CANDEE
Judge of the Superior Court
Coordination Trial Judge