

## Congressional Legislation to Benefit Fish and Wildlife in California's Central Valley

by Joe Krovoza

*Representative George Miller (D - Contra Costa, CA), Chair of the House of Representatives' Committee on Interior and Insular Affairs,<sup>1</sup> and Senator Bill Bradley (D - N.J.), Chair of the Subcommittee on Water and Power of the Senate Energy and Natural Resources Committee, have introduced bills in congress that promise to ensure the restoration and protection of fish and wildlife in California's Central Valley. The history of Central Valley water development, the resulting habitat losses, and relevant state and federal laws will be discussed before reviewing the proposed legislation.*

### Introduction

California's Central Valley is the vast basin defined by the Sierra Nevada on the east and the Coast Ranges on the west. The valley stretches nearly 500 miles from the town of Shasta to the city of Bakersfield. Its average width is 100 miles. Countless tributaries and numerous rivers flow from these mountains to the floor of the valley. There they meet the Sacramento River flowing from the north and the San Joaquin River flowing from the south; their confluence is the Sacramento-San Joaquin Delta Estuary (Delta) and the San Francisco Bay (Bay), through which they flow to the Pacific Ocean.

### I. Water for the West

With passage of the Reclamation Act of 1902, the federal government sanctioned irrigation as one of the prime methods of "reclaiming" the arid and semi-arid western United States.<sup>2</sup> The Act's purposes were to populate the West, develop the region's economy and promote the family farm.<sup>3</sup>

#### A. The Central Valley Project

In California, the federal government began the Central Valley Project (CVP) to implement the goals of the Reclamation Act. Dams became the cornerstone of this effort to ensure a year-round water supply and to guard against floods. To begin the CVP, the Rivers and Harbors Act of 1935<sup>4</sup> authorized the Army Corps of Engineers to begin construction of Shasta Dam on the Sacramento River above Redding. In this same year the Emergency Relief Appropriations Act<sup>5</sup> funded the Department of the Interior's (DOI) Bureau of Reclamation (Bureau) to build Friant Dam on the San Joaquin River above Fresno. The reauthorization of the Rivers and Harbors Act<sup>6</sup> brought both projects under the rubric of the Bureau<sup>7</sup> and specified the uses of the CVP as "first, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses; and third, for power." This Act specified that "said investigations and improvements shall include a due regard for wildlife preservation."<sup>8</sup>

Today the Central Valley Project is the largest irrigation project in the world. Its components include Shasta Dam and Reservoir; Friant Dam and Reservoir; Friant-Kern Canal; Delta Cross Channel; Folsom Dam and Lake; Trinity Dam, Reservoir and Diversion; San Luis Dam, Reservoir, Canal and Drain; New Melones Dam; Delta-Mendota Canal; and

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the Corning and Tehama-Colusa Canals (See Figure 1). These facilities control 20 percent of California's developed water and 30 percent of the state's water for irrigation.<sup>9</sup> In an average year, approximately 8 million<sup>10</sup> of the CVP's 8.5 million acre-feet of water<sup>11</sup> is used for irrigated agriculture. The Bureau distributes this water through contracts to 294 state-established water districts and rights holders. The districts allocate the water to end users. CVP water irrigates 3.25 million acres.<sup>12</sup>

In the 1960s, California began its own large-scale water project to divert water from its natural flow into the Delta to San Joaquin Valley farmers and urban users. The State Water Project (SWP) is run by the California Department of Water Resources. The annual delivery of water from this system is 2.4 million acre-feet, divided equally between urban and agricultural use.<sup>13</sup> The Metropolitan Water District, which serves major portions of Southern California, is the SWP's largest customer. Where the CVP and SWP operate jointly, a Coordinated Operating Agreement has been developed. Water policy is greatly complicated in California by dual federal-state legislative authorities and the resulting legal conflicts.

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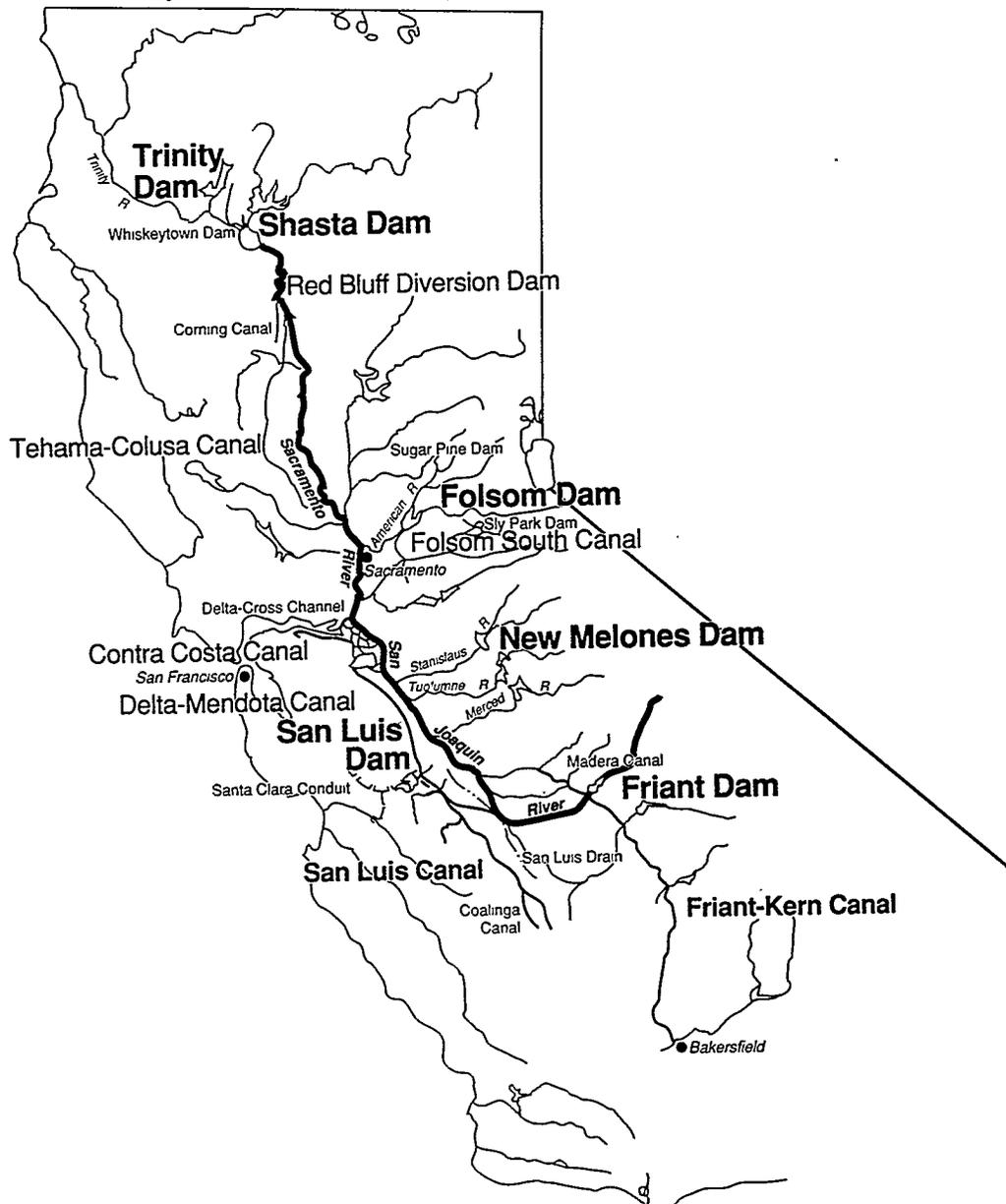


Figure 1. Major Components of the Central Valley Project (From GAO, Changes Needed)

## B. Agriculture

Agriculture irrigated by CVP water has been a boon to California's economy and the food needs of the United States. By most measures this water has been indispensable in fulfilling the Reclamation Act's goal of settling the state. Today California is the nation's most productive agricultural state, accounting for 16 percent of domestic production, including 50 percent of all fruit, 33 percent of all vegetables, 23 percent of cotton and 16 percent of rice. The Central Valley contains 78 percent of the state's irrigated land.<sup>14</sup> Of the state's \$700 billion gross domestic product, agriculture accounted for \$18.3 billion<sup>15</sup> (2.5 percent) in 1990.

Generous subsidies are one aspects of farming that draws criticism. Congress' original intent specified that users of the CVP repay its capital costs. As of 1990, irrigators had paid \$10 million, or one percent, of the estimated \$1 billion in CVP construction costs.<sup>16</sup> The average price of water to irrigators under non-renewed contracts is \$6.15 per acre-foot; this level does not even cover 10 percent of the government's operations and maintenance costs.<sup>17</sup> Water in the Central Valley, by weight, costs 2000 times less than dirt.<sup>18</sup> California farmers have also been assisted during the drought, receiving \$40 million through June 1990 under the Disaster Assistance Act of 1988.<sup>19</sup>

Congress is concerned that the Bureau is promoting increased agricultural production through subsidies at the same time the United States Department of Agriculture (USDA) is attempting to support crop prices by paying farmers to reduce production.<sup>20</sup> Further, CVP water is used to grow water-intensive crops such as cotton and rice and to maintain grazing lands for livestock. (These livestock consume twice as much water as California's entire human population.<sup>21</sup>) Irrigation for these uses reduces water for streams and wetlands, the major cause of fish and wildlife habitat losses.

The environmental effect of reduced flows is exacerbated by toxic agricultural drainage reaching streams and wetlands. (Figure 2) Irrigation dissolves mineral salts and trace elements present in the soil. If the water table reaches the roots of crops, saline water produces crop damage.<sup>22</sup> When this occurs, farmers must either abandon the "salted-up" land or drain the excess water. The western slope and southern end of the San Joaquin Valley have an

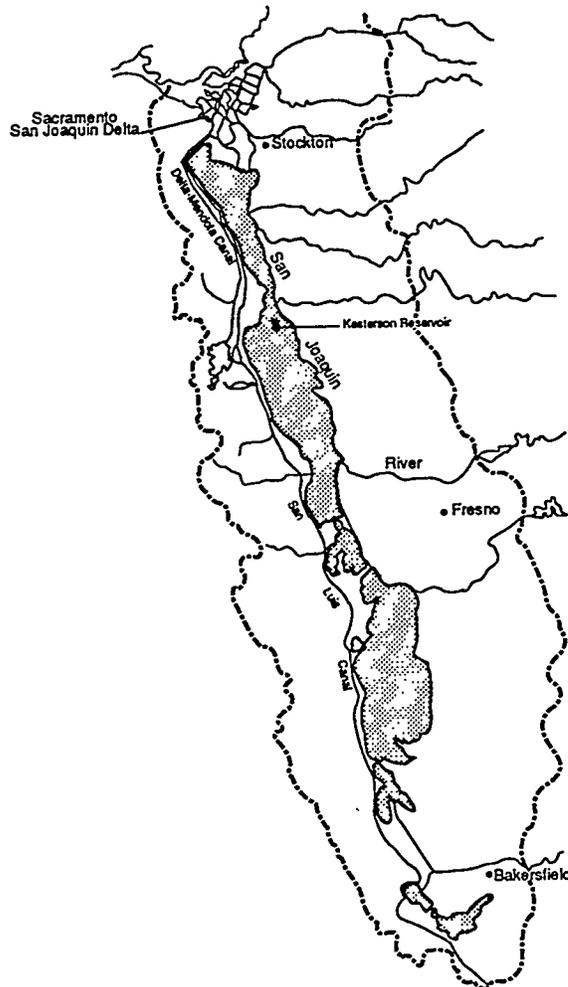


Figure 2. San Joaquin Valley Drainage Problem Area.

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impermeable layer of clay below the soil creating just such a dilemma. (Figure 3) As permitted by state and federal policy, farmers on this land have chosen to drain the water.

Selenium is one trace element removed from the soil during irrigation. It spreads throughout the valley when farm water is drained. Selenium above certain concentrations is toxic, both to wildlife when it reaches rivers and wetlands, and to humans when it reaches drinking water supplies.<sup>23</sup>

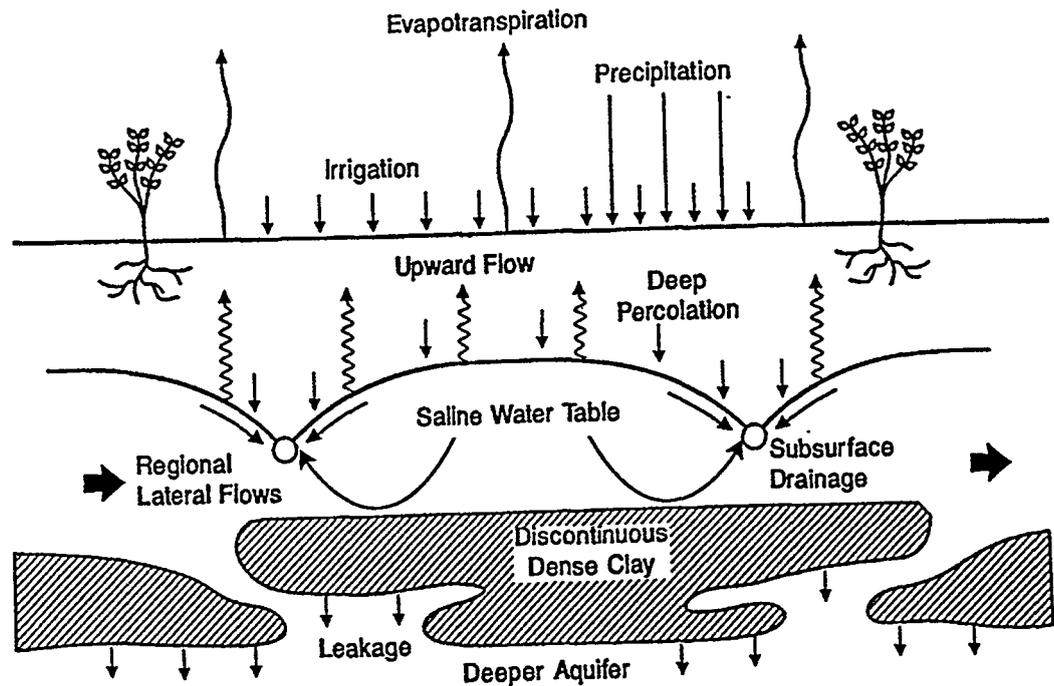


Figure 3. Water pathways in the crop root zone, showing drainage needs.

## II. Central Valley Habitat

Grizzly bears once ventured from the Sierras to the region's 4 million acres of wetlands. Huge herds of pronghorn antelope, Tule elk and mule deer roamed the then prairies of the Central Valley. The sound of waterfowl was deafening in the valley's wetlands, and the ducks and geese darkened the sky. Hundreds of thousands of salmon, rainbow and steelhead trout, and green and white sturgeon crowded its streams. The valley's ecosystem also supported the densest nonagricultural population of Native Americans (the Yokuts) in North America.<sup>24</sup> Water was once so plentiful in the valley that in the spring it was possible to travel by steamboat from San Francisco, up the San Joaquin River, and across Tulare Lake<sup>25</sup> to Bakersfield.

### A. Fish

The fall Chinook (King) salmon run on the Sacramento River has fallen 50 percent and the winter run has fallen 99 percent since 1969.<sup>26</sup> It is now designated as a threatened species under the Endangered Species Act (ESA).<sup>27</sup> The salmon population on the San Joaquin River has dropped 90 percent since 1945; its spring run is now extinct. Damming CVP rivers

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has reduced the habitat for anadromous fish, such as salmon, steelhead and shad,<sup>28</sup> from 6,000 miles to 300 miles and warmed the water in which these cold-water fish must live and reproduce.<sup>29</sup> The California Advisory Committee on Salmon and Steelhead Trout considers the natural production of 75 percent of salmon and 50 percent of steelhead to be at risk.<sup>30</sup>

Seventy percent of the salmon caught off the California coast use CVP rivers to spawn.

When the CVP reduces anadromous fish populations, there is a corresponding negative



impact on coastal fishing and the local economies it supports. The catch of Coho and Chinook salmon caught off the coast has dropped 70 percent in the last two years to a record low of 4.4 million pounds.<sup>31</sup> The annual striped bass catch is down to 150,000 from 750,000 in the 1960s.<sup>32</sup> It is estimated that commercial fisheries that rely on the region's waterways have lost \$3 billion over the last 20 years.<sup>33</sup>

In the early 1980s, toxic levels of selenium in agricultural drainage from the Westlands Water District on the western slope of the San Joaquin Valley reached the Kesterson Wildlife Refuge via the San Luis Unit of the CVP.<sup>34</sup> Although Kesterson's evaporation ponds were only to receive safe CVP water, the Bureau, under pressure to craft solutions for disposing of agricultural drainage, permitted toxic levels of selenium to flow into the refuge. All bass, catfish and carp on the refuge were destroyed by 1982.<sup>35</sup>

## B. Birds

The management of Central Valley water and the development of agricultural and urban areas has drastically reduced wetlands available for waterfowl in the Central Valley. Of the original four million wetland acres in the valley, 85 percent were lost before 1939. Between then and the mid-1980s, an additional 5,400 acres were lost per year; 95 percent of these losses have been attributed to agricultural development. Approximately 290,000 acres of wetlands remain in the Central Valley, accounting for one-third of those remaining in the state. Of these 290,000 acres, only 100,000 are protected by state or federal refuges (See Figure 4). There were once 800,000 acres of riparian habitat and vegetation; less than five percent remain.

The Central Valley is one of the five most important aviary habitats in the United States and perhaps the most important winter habitat for migratory birds, today supporting 60 percent of the migratory birds in the Pacific Flyway. Approximately 10 to 12 million waterfowl rely on Central Valley habitat. Since 1974, ducks in the Pacific Flyway have declined 50 percent to an all-time low of 3.4 million.

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Waterfowl in the Central Valley have been affected by agricultural drainage as well. At Kesterson the selenium in the drainage caused gross deformities in bird embryos; by 1984 it was considered responsible for the elimination of all coot nests and for the deaths of over 1,000 coots, ducks and other birds.<sup>36</sup> Also imperiled is the Grasslands habitat on the San Joaquin River, which comprises 100,000 acres of the valley's remaining wetlands. Instead of coming from the San Joaquin River, this area's water supply now comes from agricultural drainage, surface water or ground water,<sup>37</sup> according to the Bureau, these sources provide one-

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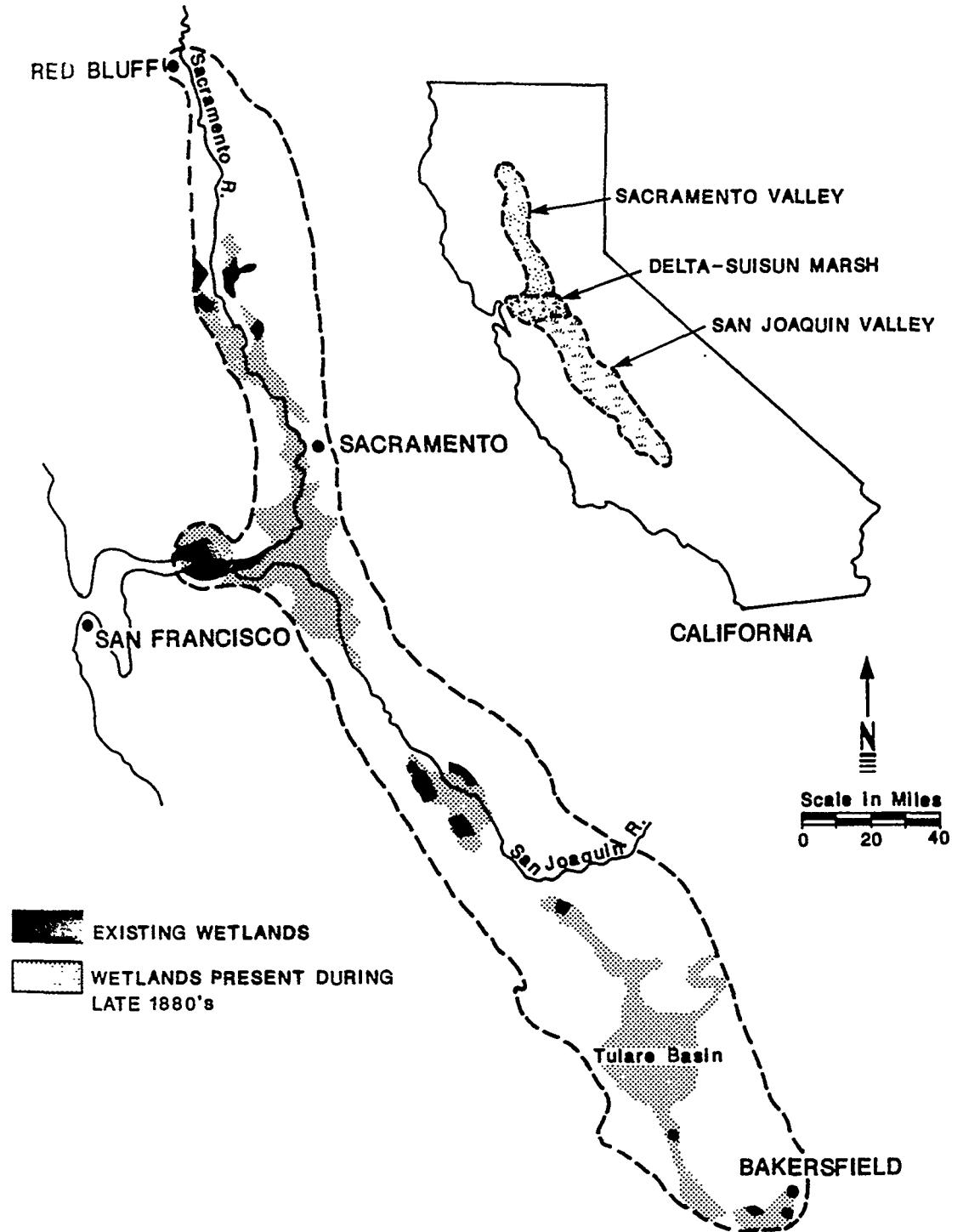


Figure 4. Current Distribution of Wetlands Compared with Late 1880's.

third of the firm supply of water the area needs. In 1990 the San Joaquin Valley Drainage Program recommended the Bureau seek authority to replace 74,000 acre-feet of water that was too polluted to be supplied to the Grasslands.<sup>38</sup>

### C. Listed Species

Twenty-four<sup>39</sup> threatened or endangered species (hereafter "listed" species), as specified by the ESA, depend on water for the habitat of the Central Valley. Endangered species include the San Joaquin kit fox and the blunt-nosed leopard lizard. The entire endangered Alutian Canada goose population relies on the valley's wetlands in winter.<sup>40</sup> Threatened species include the winter run of Chinook salmon and the recently-designated Delta Smelt, a fish that depends on a delicate mixture of fresh and ocean water in the Delta. Five other species are considered candidate species for possible designation as listed species.

### D. Solutions

The SWP and land development have clearly contributed to the fish and wildlife problems of the Central Valley. Yet there is no denying that the CVP has been the lead cause of fish and wildlife population reductions and that it's potential to reverse the harm is unmatched. The Bureau has established fish ladders around dams, projects to reduce instream temperatures below dams, and water for some wetlands,<sup>41</sup> but these efforts to date have not reversed population declines.

Substantial plans do exist to address the habitat needs of the Central Valley, but due to insufficient funds, they have for the most part not been implemented. In May 1986 the Canadian Minister of the Environment and the U.S. Secretary of the Interior signed the North American Waterfowl Management Plan (endorsed by Mexico). The Plan receives modest funding through the North American Wetlands Conservation Act passed in 1989.<sup>42</sup> The agreement designates the Central Valley as one of six priority sites and establishes federal-state-private ventures to preserve and develop wetland habitat for Pacific Flyway birds. The Central Valley Habitat Joint Venture is one such group. Its objective is to protect 80,000 additional acres of existing wetlands, to reclaim 120,000 wetland acres, to secure a firm water supply of 400,000 acre-feet for wildlife refuges, and to bring duck populations to their 1970s level of a fall flight of 100 million ducks.

In March 1989 the Bureau released its Report on Refuge Water Supply Investigations,<sup>43</sup> which listed necessary water levels for 15 wetland refuges within the CVP's service area. The Bureau estimated 500,000 acre-feet per year are necessary to provide an optimal amount of water to sustain these wetlands. On average, only 380,000 acre-feet have been available. The Bureau recognized that, due to long-term water contracts, wildlife areas typically receive water only after all agricultural, municipal and industrial demands are met.

Also in 1989, the California Resources Agency convened an advisory council that developed the Upper Sacramento River Fisheries and Riparian Habitat Management Plan (the Upper Sacramento River Plan) as a template for the restoration of fish habitat between the Sacramento River's confluence with the Feather River and Shasta Dam. Funding to implement this plan is not yet available.

The San Joaquin Valley Drainage Program, a joint federal-state project conducted in the late 1980s, examined the harm done by agricultural drainage in the San Joaquin Valley. The Program released its final report in 1990, identifying an array of methods state and federal

*Existing plans to address the habitat needs of the Central Valley have been underfunded.*

agencies might adopt to mitigate agricultural drainage's effects.<sup>44</sup> Implementation of these recommendations will depend on their acceptance by agencies and subsequent funding.

The California State Water Resources Control Board (SWRCB)<sup>45</sup> has been conducting hearings to determine water quality standards and fresh-water flow requirements for the Bay-Delta. In 1988, toward the beginning of this process, the SWRCB's staff recommended that an additional 1.5 million acre-feet be required to flow through the Delta to aid the critical migration of anadromous fish.<sup>46</sup> Agricultural and urban users strongly opposed this plan, fearing such a step would reduce their water supplies. This spring the SWRCB approved salinity standards for the Bay-Delta, apparently completing the standards phase of the hearings, which also resulted in approval of temperature and oxygen requirements.<sup>47</sup> This fall the United States Environmental Protection Agency (EPA) invoked its authority under the Clean Water Act<sup>48</sup> to disapprove major portions of these standards on the grounds that they are insufficient to protect instream beneficial uses. SWRCB has 90 days to modify their standards, otherwise the EPA has discretion to develop its own plan.<sup>49</sup> This exchange is still preliminary to the SWRCB setting the fresh-water flow requirements necessary to meet the final water quality standards. This water rights phase is expected to be completed by late 1992, but could easily become protracted.

### **III. Federal and State Water Laws**

#### **A. Delineating Jurisdiction**

Several aspects of state and federal law are important in understanding how the federal CVP is governed. Section 8 of the Reclamation Act of 1902 provided that nothing in the Act should "interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation." Although there is testimony strongly suggesting congress meant what it said, the Supreme Court ruled in *Ivanhoe Irrigation District v. MacCracken*<sup>50</sup> that federal laws were preeminent over California state laws. *Ivanhoe* governed federal-state water law conflicts until the United States challenged the SWRCB's denial of certain water rights sought by the Bureau for the New Melones Dam project on the Stanislaus River.<sup>51</sup> In 1978 the U.S. Supreme Court held in *California v. United States*<sup>52</sup> that states have the right to regulate the appropriation and distribution of water controlled by the federal government under the Reclamation Act of 1902 if congress has not issued any specific directive that contravenes state law.<sup>53</sup>

#### **B. Water Transfers**

The law governing water sales by a water rights holder provides an example of how federal law preempts state law. Federal law governing CVP water transfers does not permit the seller to earn a profit, nor may a transfer longer than one year in duration be arranged, nor may an urban water district be the purchaser. In contrast, California law, which governs all in-state non-federal transfers, allows transferors to earn a profit, allows longer term contracts, and allows transferees to be urban water districts. Further, federal law requires farmers to either use their annual contract allotment of water or lose it; state law allows users to retain rights not used. California's approach has successfully provided incentives for conservation.<sup>54</sup>

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The DOI issued a statement in support of state transfer law in the late 1980s, and the Lower Colorado River Basin Office of the Bureau applied state transfer laws in 1989.<sup>55</sup> But the Mid-Pacific Region Office, which oversees the CVP, has not indicated whether they will implement the directive,<sup>56</sup> leaving congressional action the only sure way of removing ambiguity and discretion.

#### IV. CVP Water Service Contracts

Several federal laws affect contract renewals. The National Environmental Policy Act (NEPA) requires federal agencies to prepare environmental impact statements (EIS) for major federal actions significantly affecting the environment.<sup>57</sup> The act only requires such statements where a federal agency has discretion with respect to the action anticipated. The ESA specifies that federal agencies not jeopardize the continued existence of listed species. The law most specifically governing CVP water service contracts has developed from the Reclamation Project Act of 1939,<sup>58</sup> which permits the Secretary of the DOI (Secretary) to sign 10-to-40-year contracts. Amendments to this Act in 1956<sup>59</sup> first addressed the renewal of CVP contracts. These amendments discuss the costs the government may recover in water service contracts; there is no language addressing renewal contract quantities.

Yet in 1988 the Solicitor of the DOI, formerly a lawyer for San Joaquin Valley water contractors,<sup>60</sup> interpreted the 1956 amendments to require that all new long-term contracts be renewed for the same quantity as their original contract where the water contractor so requests.<sup>61</sup> For the DOI this interpretation rendered the water quantity issue of each contract non-discretionary and thus not subject to a NEPA EIS. Disagreeing with this interpretation of the 1956 amendments, the Administrator of the EPA referred the question to the President's Council on Environmental Quality, the body assigned to review EISs and settle interagency disputes. In June 1989 the Council ruled that the 1956 amendments do not guarantee contractors the right to the same amount of water as their previous contracts. In May 1991 a DOI lawyer indicated that the agency will prepare EISs for renewal contracts when necessary, but that contract quantity provisions will not be modified because the Department still considers the issue non-discretionary.<sup>62</sup> This interpretation is being challenged in *National Resources Defense Council v. Hancock*.<sup>63</sup>

The Reclamation Reform Act of 1982<sup>64</sup> establishes that all new contract rates must cover CVP operation and maintenance costs, and requires federal capital expenditures to be recovered by 2030. Automatic adjustments are included to ensure that inflation does not prevent full cost recovery.

#### V. Pressures for Legislation

Between May 1989 and February 1991, 11 of the 238 CVP water service contracts for water districts were renewed through the year 2029. Neither NEPA nor the ESA were factors in the renewal of these contracts. Of the contracts remaining, 25 percent will come due for renewal in the next five years. The granting of new 40-year contracts for CVP water users without consideration of environmental needs would lock up the one resource indispensable to fish and wildlife restoration.

The original legislation of 1902 was intended to settle the West, and today constituencies other than farmers and Central Valley communities believe they have some claim to the natural extension of the Act's intent. The state's urban areas are witnessing dramatic population increases. During the past decade the state's population rose 26 percent

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to 29.8 million people.<sup>65</sup> Eighty-one percent of the state's developed water is being used for agriculture at the same time urban users are being asked to severely cut back water use. These same users are beginning to pay a premium for new water sources. Desalination plants designed to provide water costing \$1,300 to \$2,200 per acre-foot are being built on Catalina Island and in San Diego and Santa Barbara.<sup>66</sup>

Industry is asking for assurances that water will be available for its needs, whatever the source. According to industry figures, 1,000 acre-feet of water annually support 17,000 high-tech jobs, 3,300 urban industrial jobs or 8 agricultural jobs. These statistics accompany strong feelings in certain industry groups that the state must manage its finite water supply conservatively. Notably, industry has begun calling for California to adopt a market-based approach to water allotment.<sup>67</sup>

Proponents for change cite the enormous expenditures required when the ESA must be used to rescue a species.<sup>68</sup> Setbacks to the logging industry in the Pacific Northwest from the spotted owl controversy demonstrate that when a federal court intervenes, industry's ability to participate in more flexible solutions is greatly reduced. The designation of a fish species as endangered would give the federal government authority to modify agricultural water rights. In other scenarios, a federal court could seize control of the Project to enforce the Clean Water Act<sup>69</sup> or the Migratory Bird Treaty Act.<sup>70</sup> Some believe a California state court might use the Public Trust Doctrine<sup>71</sup> to control the amount of CVP water that must be shared with fish and wildlife habitat.<sup>72</sup> *California v. United States* indicates such an attempt would not be successful.

## **VI. California Fish and Wildlife Protection Act of 1991 (H.R. 1306)<sup>73</sup>**

Introduced by Representative Miller, this bill prohibits the Secretary from renewing any water service contracts for more than three years until specific environmental goals are met. It grants the power to withhold water from new and renewed Bureau contracts, and allows for the imposition of contract terms before future water use is approved. The bill gives the federal government's consent to citizen suits against the Secretary if any nondiscretionary portion of the Act is not implemented, or against any other person violating the Act. The Commission on Central Valley Fish and Wildlife Restoration (Commission)<sup>74</sup> would be created to give recommendations to the Secretary, and to review all final plans concerning the implement of the Act.

### **Goals to be met before the limitations on new contracts are lifted:**

1) For fish, two priorities are set: a) double the average 1981-90 levels of salmon, steelhead trout and striped bass by January 1st of the year 2000, primarily through the improvement of habitat; and b) restore anadromous fisheries "to the optimum carrying capacity of the habitat in a restored condition." For the Sacramento River, the Secretary is directed to implement the Upper Sacramento River Plan.<sup>75</sup> The bill creates the Upper Sacramento River Fisheries Task Force,<sup>76</sup> with which the Secretary must consult. For other fish habitat affected by the CVP, the Secretary must develop a permanent plan for restoring each Central Valley stream, river and basin below impassable dams to maximum naturally produced fish population levels. Where necessary, these goals shall be accomplished through fish production.<sup>77</sup> Within five years the Secretary must determine the volume and timing of flows necessary to meet the fish goals of the Act. The Secretary must provide these flows within 10 years.

2) For birds, the Secretary must meet federal responsibilities for the restoration of waterfowl and other migratory bird populations as set forth in the Central Valley Habitat Joint



Courtesy of Fish & Wildlife Service

### **PACIFIC FLYWAY**

The migration of waterfowl remains one of the marvels of Nature. Twice each year millions of ducks and geese fly from one end of the North American continent to the other, following the same routes each year. These migration routes are known as flyways, which are defined as definite geographic regions with breeding grounds in the north, wintering grounds in the south, and a system of migration routes between the two. There are four such flyways on the North American continent, each with its own population of ducks, geese, and other migratory birds.

The Pacific Flyway is the westernmost flyway and encompasses territory in three countries: northern and western Canada, Alaska and all states west of the Rocky Mountains in the United States, and western Mexico. Management of the flyway is governed by international treaties among the United States, Canada, Mexico, and Japan.

*The Bradley Bill limits the Secretary of the Interior's ability to enter into new water contracts until certain conditions are met.*

Venture of the North American Waterfowl Management Plan by January 1, 2000. This goal requires the meeting of minimal quantities of the "Dependable Water Supply Needs" table of the Bureau's Refugee Water Supply Report within 60 days. By the year 2000 the Secretary must provide for the permanent supply of water to the wetlands at optimal quantities. In addition, these levels must be sufficient to meet full habitat development, all United States treaty obligations, and contribute to the recovery of each listed species on any refuge dependant on CVP water. The law allows the Secretary to add refuges to meet the goals of the Act.

3) For each listed species that lives in whole or in part within the Central Valley, the Secretary is given two years to develop a plan for its recovery.

4) The SWRCB sets Bay-Delta water quality standards and flow requirements.

Additional provisions not affecting contract limitations:

5) Within one year the Secretary must report on water conservation plans for the CVP.

6) The bill amends the Rivers and Harbors Act of 1937 to specify that the CVP must provide for "the mitigation, protection, restoration and enhancement of fish and wildlife" and that any losses be mitigated concurrent with CVP construction and operations and maintenance activities.

Funding for the bill will be satisfied as follows: 30 percent from water users (but not to add more than one dollar per acre-foot to contract prices); 20 percent from entities generating hydroelectric power under a federal licence; 25 percent from the state (inkind permitted); and 25 percent from the federal government.

#### **VII. Central Valley Project Improvement Act (S. 484)<sup>78</sup>**

The Bradley Bill similarly limits the Secretary's ability to enter into new contracts until certain conditions are met. No contract may be renewed for longer than one year unless water districts accept a 20-year contract that reduces its water supply by an initial 10 percent, and then one percent per year from years 11 to 20. The water saved is designated for the goals of this Act. These 20-year contracts can only be entered into after all applicable environmental laws have been given due consideration. Like the Miller Bill, citizen suits are permitted.

##### **Provisions before other renewal contract can be considered:**

1) The bill pursues a program to restore the environment of fish and wildlife similar to provisions 1 and 2 of the Miller Bill, except that this bill does not set specific population requirements for any species and does not mention listed species covered by the ESA.

2) The SWRCB sets Bay-Delta standards, the Administrator of the EPA approves them, and the Secretary reports to congress on any CVP obligation to increase water flows into the Delta.

3) The Secretary of Commerce reports to congress on all the effects of the CVP on fish populations and the fisheries, communities, tribes and businesses that have or had an association with fish resources.

4) The Secretary develops a plan to fulfill obligations to the Hoopa Valley Tribe and any other tribes with respect to water and fisheries.<sup>79</sup>

Other provisions of the act:

5) California water transfer law shall govern the CVP; California Fish and Game Code Section 5937 will control the amount of water that must pass through dams;<sup>80</sup> state law shall supplement federal law in regulating agricultural drainage from CVP users; and state laws will govern the retention of water rights.

6) CVP water users must install volumetric water meters, ensuring a means of enforcing laws limiting the amount of ground water farmers may pump.

7) The Secretary shall set up a special office to review the best possible conservation methods available to CVP irrigators. Contractors must then submit their own plans for approval and subsequent implementation. The bill specifies sanctions for contractors who fail to meet their plans.

8) The Secretary must operate the CVP to “protect, restore and enhance fish, wildlife, and related habitat affected by the project.”

9) The bill establishes the Central Valley Project Transfer Advisory Committee to be charged with examining the desirability of transferring CVP facilities to the state.

Funding for the the bill will come from an operations and maintenance surcharge on all sales of CVP water users sufficient to generate \$30 million annually. A one-time sale of 100,000 acre-feet of water is authorized to meet urban water needs and generate revenue. The contracts for this sale shall not exceed 20 years and the price of the sale cannot be made for less than \$100 per acre-foot. A tax of 25 percent of the net proceeds from CVP water transfers shall be assessed and used for the purposes of the Act.

One half of this revenue will be placed in an account with DOI known as the Central Valley Project Restoration Fund and half shall be distributed to the Central Valley Project Restoration Trust, to be governed by an independent seven-member board.<sup>81</sup>

## VIII. Analysis

### A. Environmental Restoration

Environmental supporters see these bills as offering vital funding and new mechanisms to ensure that the needs of fish and wildlife are met. They believe the limitation of contracts is the stick necessary to command the attention of irrigators and the Bureau. They applaud language in the bills that explicitly designates environmental protection as a beneficial use for CVP water, thereby reducing the administrative discretion of the DOI in administering the CVP. Urban and industrial water users are encouraged that the transfer provisions of the Bradley Bill could permit a more efficient allocation of the state’s water.

Opponents believe the bills set impossible goals and will impair the progress of farming in the state. Many refuse to accept the CVP’s culpability in damaging the environment until all other factors are fully assessed. Others believe existing plans to restore the environment are adequate or only require secure funding. Some contend legislation of this sort threatens to destroy consensus, without which affected parties may not participate in solutions.<sup>82</sup>

### B. Funding

Significant and predictable funding is essential to implement the plans developed from the studies of the past decade. Representative Miller’s use of a four-part funding scheme is intended to recognize that environmental harm to the valley has multiple causes and that many benefit from its crops. Senator Bradley’s bill places the entire cost on water users. While this provision has provoked criticism from farmers, it may be the most efficient way to allocate costs. Because water users will pass costs on to consumers, this approach would tax precisely those who benefit, and it would better approximate the real cost of agriculture. Senator Bradley has expressed his interest in broadening the pool of the those

*The Bradley Bill’s Restoration Trust ensures revenues free from governmental influence.*

required to support the restoration of Central Valley habitat, but he wishes for this bill to focus solely on the CVP.<sup>83</sup>

The Bradley Bill's Restoration Trust ensures that half of the revenue generated is free from government influence. For those who believe the Bureau is too closely allied with farming interests, the Restoration Trust is viewed as appropriately independent. Others are concerned that it would neither be well coordinated with existing state, local or agricultural projects, nor with projects the Secretary may pursue.

The Miller Bill's reliance on each year's federal appropriations process could result in uncertainty when budget battles ensue. It raises the question of whether the amount contributed by water users would be reduced if the government could not appropriate its share. The Miller Bill would require an initial determination of funding needed for restoration, in comparison to the Bradley Bill's set \$30 million (plus the revenue from water transfers and the 100,000 acre-foot sale). The Bradley Bill would begin generating a set amount of revenue shortly after its passage. Under both bills, with new water contracts suspended, there would be considerable pressure on the Secretary to act promptly.

### C. Contracts<sup>84</sup>

Farmers question whether the new contract system would eliminate essential farm financing. Lender testimony on the Bradley Bill buttressed this concern: they believe that collateral could become too great a factor in loan approval and that one-year contracts may make the approval of multi-year financing difficult. Creditors indicate that the 20-year contracts offer more promise, but that loans under this regime would be more expensive to administer than present loans. The lenders who testified before the Senator's subcommittee would not say that credit could not be extended under the terms of the bill.<sup>85</sup>

### D. State Laws

Supporters of the Bradley Bill believe its designation of state laws will enhance the incentives and ability of irrigators to conserve water. They argue that state law, recognizing conservation as beneficial, is appropriately tailored to the realities of the arid and semi-arid west and will ensure efficient allocation and provide farmers with a source of revenue to install expensive conservation technologies. Some believe a water market in California could quickly deprive the environment of its precious water supply because urban users will gladly pay the modest rates (by urban standards) that a water market might demand. The Bradley Bill proposes to use market incentives wisely. It would guarantee environmental needs are met and provide a limited market through transfers that would encourage conservation and provide revenue for environmental restoration and expensive water-saving systems for farms. Representative Miller has no current objection to these provisions should the bills need to be reconciled.<sup>86</sup>

With CVP water being sold to farmers at rates between \$2 and \$17 per acre-foot<sup>87</sup> and to urban users at rates of at least \$260 per acre-foot,<sup>88</sup> it is conceivable that irrigators who find a way to conserve and sell a small percentage of their water could substantially reduce their net water cost. While some reports question the quantity of water CVP irrigators might conserve, even saving 10 percent of agricultural water could meet new state demand for decades.<sup>89</sup>

Senator John Seymour (R - CA) has expressed concern that the Bradley Bill won't help the state exercise greater control over CVP water because new federal laws would

*It is conceivable that irrigators who find a way to conserve and sell a very small percentage of their water could pay their entire water bill.*

further bind the state. Yet as long as the CVP remains a federal project and directed by congress to perform certain objectives, specific congressional deference to state law will be required for state laws to govern the CVP. Because state law does not currently cover CVP-related issues, if the federal government were to broadly defer to state law now there would not be laws to govern important matters.<sup>90</sup> The corollary of the Senator's concern would be that California, without congressional deference, could set environmental standards today that the CVP would have to meet. *California v. United States*, again, indicates otherwise. The Bradley Bill's call for a study of transferring the CVP to California will illuminate these issues.

Both bills would negate the DOI Solicitor's interpretation of renewal contract quantities and the need for environmental studies.

### **E. Economics**

For agriculture, slightly reduced water quantities at higher prices may force marginal, low-value, water-intensive crops out of production. Supporters of the bills believe this would increase economic efficiency, reduce the need for drainage projects, and make water generally more available. Other states' farmers believe that requiring California farmers to pay for environmental costs like they are, will level the playing field on which all must compete.<sup>91</sup> Water conservation incentives and accounting for environmental needs could partially remedy the problem of farmers being subsidized for conflicting purposes by the Bureau and the USDA. Opponents of the bills contend this approach would bring serious economic loss to their region and its workers.<sup>92</sup>

The bills would begin to correct a fundamental inequity in the way the federal government supports agriculture's needs but not those of the fishing industry. Thus, one of the most vocal constituencies supporting the passage of these bills is coastal fisheries. They point out that fish are food, one of the highest protein foods we consume. Fishers see themselves as one of California's long neglected indigenous economies, now on the cusp of irreparable damage. Fishing communities in Oregon are also affected by Central Valley fish population declines. Except for a few modest port facilities, the fishing industry has not received government subsidies.

## **IX. Legislative Prospects**

Because both bills are sponsored by the influential chairs of the committees where they are being considered, prospects for their passage are very good. A bill substantially similar to the Miller Bill was passed by congress last year but did not become law for lack of a like bill passing the Senate. There is optimism that the Bradley Bill will be passed by the Senate in the near future. But whether the bill will maintain its toughest provisions can not be foreseen. Should both bills pass, they will be reconciled in a conference committee.

Support for both bills comes from a broad range of environmental groups and fisheries industry associations and is being coordinated by the Share the Water coalition. Important support for the Bradley Bill was received this summer from J. Bennett Johnston (R - LA), Chair of the Senate Energy and Natural Resources Committee. California Senator Alan Cranston is a co-author of the Bradley Bill.

Opposition to the bill comes from a host of agricultural groups and some towns and counties in the Central Valley. The lead opposition group is the Central Valley Project Water

*Slightly reduced water quantities at higher prices may force marginal, low-value crops out of production.*

Users Association. Senator Seymour, a forceful opponent of the Bradley Bill and a member of the subcommittee Senator Bradley chairs, is sponsoring a competing bill.

### Summary

The farmers of the Central Valley are crucial contributors to the diversity and productivity of the American economy. Yet, as government resources become increasingly constrained and the public seeks the best use for its water and the restoration of its fish and wildlife, agricultural producers cannot expect to be immune from scrutiny.

In 1902 America's political process gave birth to the Reclamation Act. The resulting CVP allotted almost all of its water for irrigation, then the perceived best means to meet the needs of California. Today a more diverse set of needs argue for consideration in the same political process. The approaches sought by Representative Miller and Senator Bradley hold great promise to better balance the interests of all Californians.

### Endnotes

<sup>1</sup> Representative Miller was elected Chair of the Interior and Insular Affairs Committee in May 1991. He is a Class of 1972 graduate of the University of California, Davis School of Law.

<sup>2</sup> 32 Stat. 388 (1902).

<sup>3</sup> Promoting the family farm in the Central Valley has been an elusive goal. Congress once hoped the CVP would create and support 6,000 farms; nowhere near that number has been achieved. See generally, Paul S. Taylor, *The Excess Land Law: Execution of a Public Policy*, 64 *YALE L. J.* 477 (1955) for introduction to federal law prohibiting farms greater than 160 acres from receiving subsidized water. For an update on the issue see debate surrounding Reclamation Reform Act of 1982.

<sup>4</sup> 49 Stat. 1038 (1935).

<sup>5</sup> 49 Stat. 115 (1935).

<sup>6</sup> 50 Stat. 844, 850 (1937).

<sup>7</sup> Some CVP projects were constructed by the Army Corp of Engineers.

<sup>8</sup> This phrase has been used without success to protect fish and wildlife habitat in the CVP.

<sup>9</sup> Dep't of the Interior, Bureau of Reclamation, Mid-Pacific Region, Office of Pub. Affairs, Bureau of Reclamation and the Cent. Valley Project 3 (1991) [hereafter Bureau Pub. Affairs].

<sup>10</sup> *Id.*

<sup>11</sup> An acre-foot of water is approximately 326,000 gallons, the amount of water necessary to cover one acre with water one foot deep.

<sup>12</sup> See Bureau Pub. Affairs, *supra* note 9, at 3.

<sup>13</sup> Cal. State Lands Comm'n, *Delta-Estuary, Cal.'s Inland Coast, A Public Trust Report 38* (1991) [hereafter Lands Commission].

<sup>14</sup> Cent. Valley Project Improvement Act, Hearings Before the Subcommittee on Water and Power of the Committee on Energy and Natural Resources U.S. Senate on S. 484, 102d Cong., 1st Sess. 210 (1991) [hereafter Hearings] (statement of Daniel A. Sumner, Deputy Assistant Secretary for Economics, U.S. Dept. of Agric.).

<sup>15</sup> Cal. Dep't of Food and Agriculture, *Cal. Agric. Statistical Review 1990 1* (1991).

<sup>16</sup> U.S. Gen. Accounting Office, GAO/RCED-91-175, *Changes Needed Before Water Service Contracts are Renewed 10* (1991) [hereafter Changes Needed].

<sup>17</sup> Laura B. King & E. Phillip LeVeen, *Turning Off the Tap on Federal Water Subsidies, Vol. I The Central Valley Project: The \$3.5 Billion Givaway 4* (National Resources Defense Council, Inc. & California Rural Legal Assistance Foundation, 1985).

<sup>18</sup> See Hearings, *supra* note 14, at 325,327 (statement of Marc Reisner, author).

<sup>19</sup> Ted Bell, *California Farmers Reaping Millions from Another Drought*, *The Tribune* (Oakland), June 18, 1990, at A9.

<sup>20</sup> See Changes Needed, *supra* note 16, at 16 - 18. See generally, Economic Research Service, U.S. Dep't of Agric., *Production of Surplus Crops on Irrigated Land Served by the U.S. Bureau of Reclamation* (1984).

<sup>21</sup> Vlae Kershner, *Wildlife Water Proposal Angers Central Valley*, S.F. Chron., May 31, 1991, at A17.

<sup>22</sup> San Joaquin Valley Drainage Program, *Fish and Wildlife Resources and Agricultural Drainage in the Central Valley 1-3* (1990) [hereafter Drainage Program].

<sup>23</sup> *Id.* at 4-425. See also, The Bay Institute, *Toxic Selenium Levels Found in State's Aqueducts* (Press Release, W.T. Dovoren & Eugene Gardner, July 24, 1990).

<sup>24</sup> *Id.* at 2-3.

<sup>25</sup> Before its spring inflow was permanently diverted, Tulare Lake, though shallow and usually evaporated by August, was often temporarily larger than Lake Tahoe.

<sup>26</sup> See Drainage Program, *supra* note 22 at 2-25.

<sup>27</sup> 16 U.S.C. SS 1531 et seq. (1973).

<sup>28</sup> Anadromous fish are those that ascend rivers from the sea during certain seasons for spawning.

<sup>29</sup> Fifty-six to 60 degrees is the critical temperature range above which salmon do not spawn.

<sup>30</sup> The Committee is an eleven member board created by the state legislature in 1983. These figures are taken from their 1988 Annual Report, *Restoring the Balance*.

<sup>31</sup> Richard Reinhold, *Drought Taking Its Toll on California Environment*, N.Y. Times, Aug. 4, 1991, at p. 21.

<sup>32</sup> H.R. 1306, 102d Cong., 1st Sess. 3, (version as of October 1991).

<sup>33</sup> *Id.* at 4.

<sup>34</sup> See King, *supra* note 17, at 22, 23.

<sup>35</sup> *Id.* at 23.

<sup>36</sup> U.S. Gen. Accounting Office, GAO-RCED-87-128, *Nat'l Refuge Contamination Is Difficult to Confirm and Clean Up 2* (1987).

<sup>37</sup> See *Changes Needed*, *supra* note 16, at 19.

<sup>38</sup> *Id.*, at 19.

<sup>39</sup> See H.R. 1306, *supra* note 32, at 5.

<sup>40</sup> See Drainage Program, *supra* note 22, at 2-87.

<sup>41</sup> See generally, U.S. Dep't of the Interior, Bureau of Reclamation, Mid-Pacific Region, *Accomplishments* (1991).

<sup>42</sup> 101 Stat. 233 (1989).

<sup>43</sup> U.S. Dep't of the Interior, Bureau of Reclamation, Mid-Pacific Region, *Report on Refuge Water Supply Investigations, Central Valley Hydraulic Basin, California* (1989).

<sup>44</sup> See Drainage Program, *supra* note 22.

<sup>45</sup> The State Water Resources Control Board is the agency designated by the state legislature with granting and managing state water rights, including those granted to the federal government for the CVP.

<sup>46</sup> Elliot Diring, *The Next Move in Bay Water Plan*, S.F. Chron., May 1, 1991, at A13.

<sup>47</sup> Elliot Diring, *State Panel Skirts Key Water Issue*, S.F. Chron., May 2, 1991, at A1.

<sup>48</sup> S 303(c) of the Clean Water Act (33 U.S.C. SS 1251 et seq. (1956)) grants this authority.

<sup>49</sup> EPA Vetos State's Water Standards for Bay-Delta, *California Environmental Insider* (Bancroft-Whitney), Vol. 5, No. 7, p.1,2. September 15, 1991.

<sup>50</sup> 357 U.S. 275 (1958).

<sup>51</sup> *United States v. Cal.*, 404 F. Supp. 874 (E.D. Cal. 1975).

<sup>52</sup> 438 U.S. 645 (1978).

<sup>53</sup> See generally, Roderick E. Walston, *The Supreme Court's Changed Perspective of Federal-State Water Relations: A Personal Memoir of the New Melones Case*, 29 *Journal of the West* 28-39 (1990) providing narrative of this case by state's attorney who argued it before Supreme Court.

<sup>54</sup> See Hearings, *supra* note 14, at 331 (statement of Brian E. Gray, Professor of Law, University of California, Hastings College of the Law).

<sup>55</sup> See Hearings, *supra* note 14, at 246 (statement of Thomas J. Graff, Senior Attorney, Environmental Defense Fund).

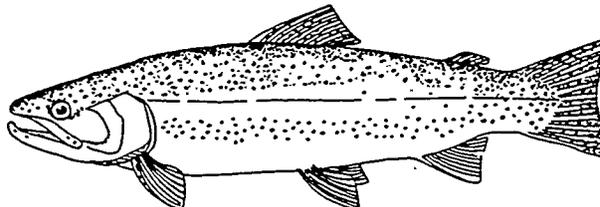
<sup>56</sup> *Id.*

<sup>57</sup> 42 U.S.C. S 4332(2)(c) (1969).

<sup>58</sup> 43 Stat. 485 (1939).

<sup>59</sup> 70 Stat. 483, 485 (1956).

<sup>60</sup> Michael Doyle, *Council's Split Opinion Backs Water Contract Reviews*, Sacramento Bee, July 1, 1989, at A18.



<sup>61</sup> Memorandum, Renewal of Friant Unit Contracts, Solicitor, Dep't of the Interior (Nov. 10, 1988) President Carlos Salinas de Gortari has not only enacted some of Mexico's toughest environmental legislation but is enforcing it.

<sup>62</sup> See Changes Needed, supra note 16, at 29.

<sup>63</sup> No. CIVS-88-1658-LKK-EM (E.D. Cal.), filed December 21, 1988.

<sup>64</sup> 43 U.S.C. SS 390 aa to zz-1, et seq. (1982).

<sup>65</sup> State of Cal., Economic Report of the Governor (1991).

<sup>66</sup> Betty Brickson, Sea Water Desalination, Western Water, July/Aug. 1991, at 5.

<sup>67</sup> See, e.g., Ronald H. Schmidt and Frederick Cannon, Using Water Better: A Market-Based Approach to California's Water Crisis (Bay Area Economic Forum, 1991); Marc Reisner & Sarah Bates, Overtapped Oasis: Reform or Revolution for West Water Policy, (Island Press 1990).

<sup>68</sup> See Hearings, supra note 14, at 2,3 (opening statement of Willam Bradley, Senator, New Jersey).

<sup>69</sup> 33 U.S.C. SS 1251 et. seq. (1956).

<sup>70</sup> 16 U.S.C. SS 715-715r (1929).

<sup>71</sup> The Public Trust Doctrine allows the state to fulfill certain public trust values by acting as trustee of certain lands. In 1979 this doctrine was applied to water rights in National Audubon Society v. Superior Court of Alpine County (658 P. 2d 709 (Cal. 1983)).

<sup>72</sup> See Hearings, supra note 14, at 2,3.

<sup>73</sup> See H.R. 1306 supra note 32.

<sup>74</sup> The Commission would be comprised of 15 members to be appointed by the president on the recommendation of the U.S. Senate and House of Representatives, Cal. State Assembly and Senate. The Commission is authorized until January 1, 2000.

<sup>75</sup> The bill requires consulting California Advisory Committee on Salmon and Steelhead Trout, 1988 Annual Report, Restoring the Balance.

<sup>76</sup> The Task Force is to assist Secretary with coordination and implementation of Plan. It will be composed of 35 members: 27 from state agencies, counties and assns. and seven from fed. agencies.

<sup>77</sup> The bill allows for spawning, incubating, hatching and rearing fish in hatcheries.

<sup>78</sup> S. 484, 102d Congress, 1st Sess. (version as of October 1991).

<sup>79</sup> The Hoopa Tribe is dependent on the salmon of the Trinity River.

<sup>80</sup> The code provides, "the owner of any dam shall allow sufficient water to pass... [the dam] to keep in good condition any fish that may be planted or exist below the dam. See generally, Comment, Joel Baiocchi, Use It or Lose It: California Fish and Game Code Section 5937 and Fisheries Resources, 14 U.C. DAVIS L. REV. 431 (1980) discussing effectiveness of code in protecting instream flows for fish.

<sup>81</sup> The Central Valley Project Restoration Trust will include three appointees of the governor of California, one from each U.S. Senator from California, and one from each branch of the California legislature.

<sup>82</sup> See Hearings, supra note 14, at 162 (statement of Jason Peltier, Manager, Central Valley Project Water Users Association).

<sup>83</sup> Id. at 3.

<sup>84</sup> The information for this topic uses Hearings, supra note 14. A specific response to the three-year contracts could not be obtained.

<sup>85</sup> See Hearings, supra note 14, at 413 (statement of Barry Brown, Irrigation Engineer, Western Farm Credit Bank).

<sup>86</sup> Phone conversation with Lynelle Johnson, Office of Representative Miller, October 29, 1991.

<sup>87</sup> See Bureau Pub. Affairs, supra note 9, at 3.

<sup>88</sup> Beth Hawkins, Funds Sought for Desalination Research, L.A. Times, July 21, 1991, at A17.

<sup>89</sup> See Schmidt, supra note 67.

<sup>90</sup> See Hearings, supra note 14, at 332 (Gray).

<sup>91</sup> Hearings, supra note 14, at 180 (statement of Mark Hatfield, Senator, Oregon).

<sup>92</sup> See, Walter Goldschmidt, As You Sow: Three Studies in the Social Consequences of Agribusiness, (Allanheld, Osmun 1978) for more on how water policy has affected farm workers.

