

**Los Vaqueros Project
of
Contra Costa Water District
and
U.S. Bureau of Reclamation**

Decision No. 1629

**Application 20245 and Petition for
Assignment of State-Filed Application 25516
of Contra Costa Water District**

**Petition for Change of 17 Permits
of U.S. Bureau of Reclamation
Issued on Applications 5626, et al.**

June 2, 1994



**STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY**

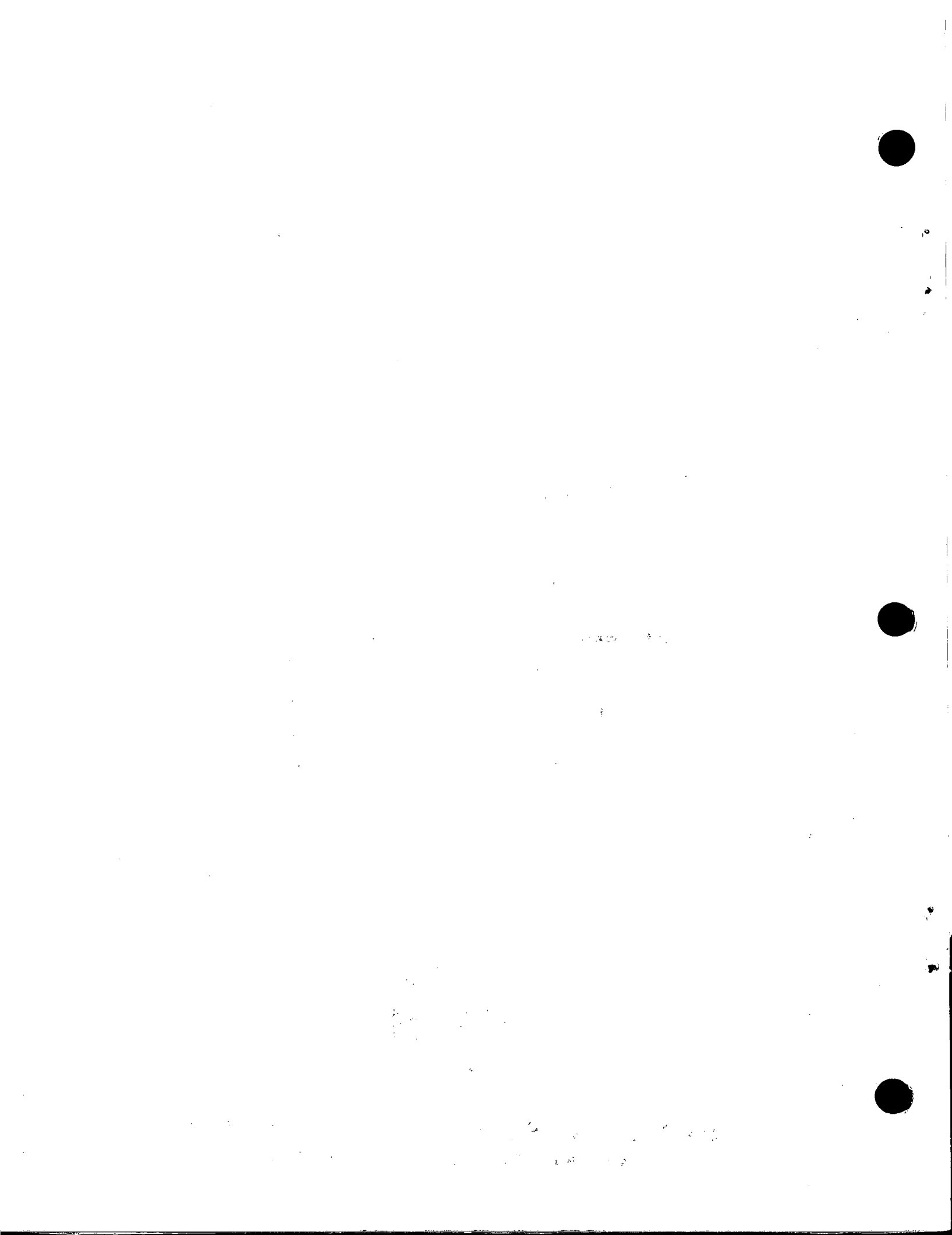


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**STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD**

In the Matter of Application 20245)	DECISION 1629
and Petition for Partial Assignment)	
of State Filed Application 25516)	SOURCE: (1) Kellogg Creek
of Contra Costa Water District)	Tributary to Old
and)	River, and (2) Old
Petition for Change of Permits)	River
12721, 11967, 12722, 12723, 12725,)	
12726, 11315, 11316, 16597, 11968,)	COUNTY: Contra Costa
11969, 11971, 11973, 12364, 13776,)	
16600, and 15735 issued on)	
Applications 5626, 5628, 9363,)	
9364, 9366, 9367, 13370, 13371,)	
14858, 15374, 15375, 16767, 17374,)	
17376, 18115, 19304 and 22316 of)	
U.S. Bureau of Reclamation)	
_____)	

**DECISION AUTHORIZING APPROPRIATION OF WATER
AND
APPROVING PETITION FOR CHANGE**

BY THE BOARD:

1.0 INTRODUCTION

The Contra Costa Water District (District) filed Application 20245 on June 5, 1961. The District assigned the application to the United States Bureau of Reclamation (Bureau) on January 30, 1963. Pursuant to an agreement, the Bureau assigned Application 20245 to Contra Costa Water District (District) in 1990. On January 24, 1991 the District filed a petition to amend Application 20245 for the Los Vaqueros Project. On August 30, 1991, the District also petitioned for partial assignment of state filed Application 25516. On November 22, 1991, the Bureau petitioned to change the terms and conditions of seventeen of its water

right permits for the Central Valley Project to authorize use of a point of diversion or rediversion at Old River for delivery of water to Los Vaqueros Reservoir. The State Water Resources Control Board (SWRCB) gave notice of the petitions and received protests. The SWRCB held a public hearing on the applications and petitions on October 14 and 15, 1992. The parties appeared at the hearing and presented evidence; the SWRCB held the record open for additional exhibits and environmental documentation. The parties were given an opportunity for further hearing with respect to the additional exhibits, but agreed that further hearing was not necessary. The record was closed on January 6, 1994, except for the receipt of the biological opinion prepared by the Department of Fish and Game and three documents provided by the District on January 7, 1994. The SWRCB has considered all the evidence in the hearing record. The SWRCB finds as follows:

2.0 BACKGROUND

2.1 Project Description

The District supplies water to more than 400,000 municipal and industrial customers. Currently, it obtains most of its water from the Bureau at a diversion point in Rock Slough and conveys the water to its service area via the Contra Costa Canal. The

quality of water diverted in Rock Slough varies, and at times is more saline than the District and its customers prefer. The proposed Los Vaqueros Project (Project) would improve the quality of water the District delivers to its customers because it would allow the District to store water during periods when water is fresher in the Delta and use this better-quality water during other seasons to improve the overall quality of water served to the customers. It would also improve the reliability of the water supply by providing emergency water storage. The District's current storage capacity will supply water for only three to five days during peak demand periods.

As proposed, the Project includes a diversion facility from Old River in the southern Delta, a pipeline to convey water from Old River to either the Los Vaqueros Reservoir (Reservoir) or to direct use, and the Reservoir. The Reservoir will be located on Kellogg Creek in the southeastern portion of Contra Costa County and will have a capacity of approximately 100,000 acre-feet (af). The Reservoir will store primarily water diverted from Old River, but will also store the available flows of Kellogg Creek. Kellogg Creek is a tributary of Old River.

The Old River diversion facility will include an intake channel, fish screening facilities, and a pumping plant, all sized to accommodate up to 250 cubic feet per second (cfs). The pipeline from the Old River diversion facility to a transfer reservoir will be 90 inches in diameter, to accommodate 250 cfs. From the transfer reservoir the District will regulate flow into Los Vaqueros Reservoir and into the Contra Costa Canal. The rate of flow from the transfer reservoir into Los Vaqueros Reservoir is approximately 200 cfs.

2.2 Sources of Water Supply

The District currently obtains most of its water from the Bureau under a contract for up to 195,000 acre-feet per annum (afa). Contra Costa takes delivery of the Bureau water at a diversion point in Rock Slough. The Bureau holds water rights to divert and redivert water at Rock Slough under most of the permits subject to the Bureau's change petition. The total diversion rate under Permits 12725, 12726, and 15735 is limited to 350 cfs. The capacity of the Rock Slough intake channel is approximately 328 cfs. Currently the District diverts between 120,000 and 130,000 afa of water from Rock Slough. Additional facilities are needed before more water can be diverted. (CCWD, 100, I, 1-11)

The District also currently holds water rights under which it obtains water. These rights include License 10514 issued on Application 5941 for direct diversion of 39.3 cfs and diversion to storage of 3780 afa from Mallard Slough from January 1 to December 31. The total diversion from Mallard Slough under this license is not to exceed 14,880 afa. The District also holds Permit 19856 issued on Application 27893, for direct diversion from Mallard Slough of 39.3 cfs from August 1 to December 31, not to exceed 11,900 afa.

2.3 Substance of Applications

2.3.1 Application 20245

The District filed Application 20245 on June 5, 1961. On January 30, 1963, the District assigned Application 20245 to the Bureau. The Bureau used this application as the foundation for planning a Kellogg Unit of the Central Valley Project. The SWRCB granted extensions of time to the Bureau in December, 1980 and in May, 1986. The most recent extension expired December 31, 1990. In December, 1990, the Bureau assigned Application 20245 to the District. The District submitted amended Application 20245 to the Division of Water Rights on December 20, 1990. As amended, Application 20245 seeks authorization for the District to divert from Old River tributary to the San Joaquin River in the Delta 163,000 afa to storage in Los

Vaqueros Reservoir or 135,000 afa in Kellogg Reservoir. The requested season of diversion is November 1 to June 30. The requested purposes of use are municipal, industrial, domestic, irrigation, recreation, incidental fish and wildlife preservation and/or enhancement, and water quality. Six alternative points of diversion are listed in the application. The selected alternative point of diversion is in the NW¼ of SE¼ of projected Section 31, T1N, R4E, MDB&M. The requested place of use is an area within Contra Costa County shown on a map dated April 8, 1965 prepared by the Bureau. The EIR/EIS describes and analyzes a smaller place of use within this area. The analyzed area includes the cities of Pittsburg, Antioch, and Brentwood with their spheres of influence, the Oakley subarea, the Los Vaqueros recreational area, the rural county subarea, and the District's service area and sphere of influence as shown in Figure 1-3 of the EIR/EIS. Since the effects of serving water in the full county have not been analyzed in the EIR/EIS, the SWRCB will authorize the place of use analyzed in the EIR/EIS.

2.3.2 Application 25516

Application 25516 is a state filed application. It was filed by the Department of Water Resources on September 30, 1977 under the provisions of Water Code

Section 10500. Applications filed under Section 10500 are filed to obtain a priority for projects that may be needed to develop and complete the State Water Plan. Upon filing, these applications are transferred to the SWRCB and are held by the SWRCB for the purposes stated in Section 10500. During the time they are held by the SWRCB, these applications are exempt from the diligence requirements in Part 2, Division 2 of the Water Code. An assignee of all or part of a state filed application is subject to the diligence requirements.

As filed, Application 25516 requested authorization to appropriate up to 9,000 cfs by direct diversion and 1,011,300 afa by storage, with a combined limit of 1,011,300 afa. The requested maximum rate of diversion to storage was 3,000 cfs. The application proposed storage of water in a Los Vaqueros Reservoir with capacity of 950,000 af and in a Kellogg Reservoir with capacity of 61,300 af. The application proposed to divert water from Kellogg Creek, Marsh Creek, and West Canal, all within Contra Costa County. The purposes of use were municipal, industrial, domestic, irrigation, recreation, incidental power, and fish and wildlife enhancement.

On August 30, 1991, the District petitioned for partial assignment of Application 25516. The District requests

assignment of enough water to divert from Kellogg Creek 500 cfs by direct diversion and 14,800 afa to storage in Kellogg Reservoir or 10,800 afa by storage in Los Vaqueros Reservoir. The requested season of diversion is all year. The requested point of diversion for Los Vaqueros Reservoir is in the NW¼ of NW¼ of projected Section 23, T1S, R2E, MDB&M. The requested place of use is the part of Contra Costa County shown on the April 8, 1965 map prepared by the Bureau. The EIR/EIS describes and analyzes a smaller place of use within this area, which is the same as for Application 20245. Since the effects of serving water in the full county have not been analyzed in the EIR/EIS, the SWRCB will authorize the place of use analyzed in the EIR/EIS.

2.4

Substance of the Bureau's Petition

Currently the Bureau delivers Central Valley Project (CVP) water to the District at Rock Slough under Permits 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 11968, 11969, 11971, 11973, 12364, and 15735. Of the permits subject to the petition, only Permits 13776, 16597, and 16600 do not include Rock Slough as a point of diversion or rediversion. Permit 12725 authorizes direct diversion of 200 cfs from Rock Slough from January 1 to December 31 for irrigation and domestic use. Permit 12726 authorizes direct diversion of 250 cfs from Rock Slough from January 1 to

December 31 for municipal and industrial use. Permit 15735 authorizes diversion to storage in Contra Loma Reservoir of 5,400 afa at a maximum diversion rate of 21.16 cfs from October 1 to June 30. Term 1 of Permits 12725 and 12726 provides that the combined rate of diversion under both permits shall not exceed 350 cfs. Term 10 of Permit 15735 provides that the combined rate of diversion under Permits 12725, 12726 and 15735 shall not exceed 350 cfs.

Overall, the Los Vaqueros Project may need to divert water at a higher rate of diversion at some times so that it can divert less water at other times. The authorized rate or season of diversion and use of water under a permit or license cannot be increased. Since there are maximum diversion rates on the existing permits for delivery of water to the District, and water will not always be available under the permits the District is seeking under Applications 20245 and 25516, the proposed changes in the Bureau's other permits to add a point of diversion and/or rediversion at Old River will improve the quality and reliability of the District's water supply as needs for water increase in the District in the future.

On February 25, 1992, the Bureau filed an amended petition for change for seventeen of its permits,

including the three listed above. The petition requested changes in (1) purpose of use for Permits 12723 and 12725, (2) point of diversion, to add a point of diversion and/or rediversion from Old River to each of seventeen permits, and (3) place of use, to include Contra Costa County in the place of use of each of the seventeen permits. Notwithstanding the Bureau's petition, Contra Costa County already is in the place of use for all of the subject Bureau permits except Permits 13776, 16597, and 16600. Six alternative points of diversion and/or rediversion from Old River were listed in the petition and in Applications 20245 and 25516 of Contra Costa Water District, but the District has since selected the alternative described as NW¼ of SE¼ of projected Section 31, T1N, R4E, MDB&M. The permits subject to the change petition are listed in Table 1, below.

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TABLE 1

Appli- cation Number	Permit Number	Principal Central Valley Project Facility	Source of Water	Petition to Add Point of Diversion (POD) or Point of Rediversion (PORD)
5626	12721	Shasta Dam	Sacramento River	PORD
5628	11967	Trinity Dam	Trinity River	PORD
9363	12722	Shasta Dam	Sacramento River and Delta	POD and PORD
9364	12723	Shasta Dam	Sacramento River and Delta	POD and PORD
9366	12725	Contra Costa Canal	Rock Slough	POD
9367	12726	Contra Costa Canal	Rock Slough	POD
13370	11315	Folsom Dam	American River	PORD
13371	11316	Folsom Dam	American River	PORD
14858	16597	New Melones Dam	Stanislaus River	PORD
15374	11968	Trinity Dam	Trinity River	PORD
15375	11969	Trinity Dam	Trinity River	PORD
16767	11971	Trinity Dam	Trinity River	PORD
17374	11973	Trinity Dam	Trinity River	PORD
17376	12364	Whiskeytown Dam	Clear Creek	PORD
18115	13776	Black Butte Dam	Stony Creek	PORD
19304	16600	New Melones Dam	Stanislaus River	PORD
22316	15735	Contra Loma Dam	Rock Slough	POD

The addition of a point of diversion at Old River will allow the Bureau to deliver water to the District at either the Old River intake or the Rock Slough intake, depending on which intake offers the better water quality at a particular time. The addition of the Old River point of rediversion to the existing permits to store water in upstream facilities also will allow the Bureau to redistribute stored water from the upstream facilities to Los Vaqueros Reservoir using the Old River point of diversion.

The Bureau requested changes in purpose of use to add municipal and industrial uses to Permits 12723 and 12725, but neglected to petition for changes in purpose

of use for seven other permits listed above that do not currently include municipal and industrial uses among their purposes of use. These permits are Numbers 12721, 11967, 11315, 11969, 11971, 11973, and 12364. Although the Bureau noted this oversight during the hearing, the Bureau has not filed a petition to make this change of purpose of use in connection with the Los Vaqueros Project. The SWRCB cannot make this change in this proceeding because the Bureau did not petition for this change in the context of the Los Vaqueros Project, and the notice of hearing on the Los Vaqueros Project consequently did not include this change. However, the Bureau petitioned for this change in purpose of use for the seven permits with respect to its petition for changes and extension of time under Permit 12721 and 18 others filed on September 24, 1985, as amended on February 6, 1986. Consequently, while this decision does not add municipal and industrial use to the seven permits, the SWRCB will consider those uses when it decides whether to approve the petition amended on February 6, 1986. The Bureau has not yet completed the draft environmental documentation for that petition.

The Bureau petitioned to add Contra Costa County to the places of use of all of the seventeen permits listed in Table 1. However, all except three of the Bureau's

permits listed in the petition already include all of Contra Costa County. Consequently, it is only necessary to amend the place of use of Permits 13776, 16597, and 16600.

For the three permits which do not already have Contra Costa County as a place of use, the added place of use will be the place of use analyzed in the final EIR/EIS. As noted above, the place of use described in the final EIR/EIS for the Los Vaqueros Project differs from the April 8, 1965 map submitted with the petitions. The final EIR/EIS describes and documents the environmental effects of using water in the place of use shown on Figure 1-3 of the District's Exhibit 100. The place of use for which environmental documentation has been completed includes the areas described in Section 2.3.1, above. Some parts of Contra Costa County are not included in this place of use. Since the effects of serving water in the full county have not been analyzed in the EIR/EIS, the SWRCB will authorize the place of use analyzed in the EIR/EIS.

2.5 Positions of the Parties

2.5.1 Persons Appearing at the Hearing or Commenting

The participants included the parties who filed protests against the applications and petitions in this proceeding and the S.H. Cowell Foundation which filed a

Notice of Intent to Appear in response to the Notice of Public Hearing. After the District objected to Cowell's presentation of evidence because Cowell's Notice of Intent to Appear was filed late, the SWRCB accepted Cowell's statement as a policy statement rather than accepting it as evidence. Protestant Delta Wetlands, Inc. also submitted a policy statement and did not present evidence at the hearing. The Department of Water Resources appeared at the hearing but did not present direct evidence.

2.5.2 Protests

Protests against this project were filed by:

1. California Department of Fish and Game (DFG)
2. San Joaquin County Flood Control and Water Conservation District (San Joaquin), et al.
3. U.S. Fish and Wildlife Service (USFWS)
4. California Sportfishing Protection Alliance (CSPA)
5. J. Philip and Mertie W. Day
6. Delta Wetlands, Inc.
7. East Contra Costa Irrigation District
8. Nancy D. Moore
9. National Marine Fisheries Service (NMFS)
10. A.C. Houston

Protests four through ten have been dismissed, leaving only the protests of DFG, San Joaquin, and USFWS. Of the dismissed protests, only the protest of CSPA was

subject to inclusion of a permit condition. Protests 5, 8, 9, and 10 were dismissed on December 7, 1992 for abandonment of the protests, since the protestants failed to appear at the hearing. Protest 7 was withdrawn on October 27, 1992 and dismissed on November 10, 1992. Protest 6 was dismissed on May 6, 1993.

The protests were based on environmental grounds and injury to senior water rights. Only three of the environmental protests are unresolved. The environmental protests addressed:

1. Adverse impacts to fish populations;
2. Impacts to the San Joaquin kit fox and to the seasonal and permanent wetlands, riparian woodlands, stream channels, and oak woodlands at the reservoir;
3. Direct and indirect impacts to various waterways and ecosystems from the operation of the project in conjunction with the CVP;
4. Potential adverse impacts in the Delta due to additional diversions;
5. Increased salinity intrusion, reduction in flushing flows, and decreased water elevations.

The prior rights protests addressed:

1. The Los Vaqueros Project would restrict or eliminate the natural flow in Kellogg Creek, thereby restricting downstream diversions;
2. Diversion from Old River could increase pumping and levee maintenance costs;
3. Three of the alternative points of diversion and conveyance facilities could affect other facilities.

2.5.3 CSPA Protest

CSPA protested based on potential impacts to the environment and to public trust resources. After communications from CSPA, the Division of Water Rights dismissed CSPA's protest by letter dated December 9, 1993 provided that any permits for the Los Vaqueros Project would require compliance with the requirements of the NMFS and USFWS to the extent that such requirements are within the jurisdiction of the SWRCB.

2.5.4 San Joaquin Protest

San Joaquin protested based primarily on potential impacts to riparian water rights in the Delta from diversion-related changes in water quality conditions in the Delta, drawdowns of water levels, and scour, seepage and other levee-related problems. San Joaquin also alleged that changes in Delta water quality could

have adverse effects on the Delta environment including the fisheries. The issues raised by San Joaquin are addressed in the discussion of hydrology in Part 3 of this decision and in the discussion of environmental considerations in Part 4 of this decision.

2.5.5 USFWS Protest

USFWS protested based on potential significant impacts of the project on fish and wildlife and their habitats. The USFWS indicated that its protest could be dismissed if (1) protective fish screens are installed on the existing diversion facility in Rock Slough or the diversion point is moved to a location that can be screened, and (2) quantitative baseline impact analyses are conducted and mitigation measures are implemented that will enhance Delta fisheries and will provide adequate protection for federally listed, proposed, and candidate fish species.

After the USFWS filed its protest, the District and the Bureau have conducted analyses and developed mitigation measures for the project. They have consulted with both USFWS and NMFS under the federal Endangered Species Act and the USFWS and the NMFS have imposed specific requirements on the development and operation of the project. These requirements are addressed in

the discussion of environmental considerations in Part 4 of this decision.

2.5.6 DFG Protest

DFG protested based on potential adverse impacts of the project on fish and wildlife resources. The potential overall diversion quantity is one specific factor which DFG alleges will cause adverse impacts. DFG alleged that authorization of the project could authorize the diversion of up to 298,000 afa of water from the Delta and could result in an increase in the frequency and duration of periods when the Delta is "in balance"; i.e., when the water quality standards for the Delta are being met but there are no significant fluctuations of better quality water in the Delta. These points are addressed in the discussion of project effects, in Part 6 of this decision.

Additionally, DFG alleges that the project could (1) impact fish populations through entrainment, (2) reduce cold water storage in upstream reservoirs that can be released for steelhead and salmon spawning, (3) adversely affect resources that depend on the Delta by increasing diversions from the Delta, (4) impact rare, threatened, and endangered animals and plants, wetlands, riparian woodlands, stream channels and oak woodlands in the area of the Los Vaqueros Reservoir and

Vasco Road construction work, and impact fish and wildlife downstream from the reservoir on Kellogg Creek.

DFG said in its protest that the mitigation measures for the project must (1) offset projected water demand from growth and project-induced growth, (2) eliminate or reduce to insignificance any adverse environmental impacts, (3) offset the loss of wetland habitat associated with the project so that there will be no net loss of wetland habitat acreage or wetland habitat value, (4) offset impacts on state-listed species, (5) include fish screening devices at all diversion intakes to prevent diversion of salmon, steelhead, striped bass, and Delta smelt, (6) mitigate for losses of striped bass or Delta smelt eggs and larvae too small to be screened, (7) provide a fish screen to offset adverse impacts at the existing Rock Slough intake, (8) focus on avoidance of adverse biological impacts, but provide compensation for unavoidable impacts to reduce the overall impacts to insignificance, and (9) provide a detailed monitoring plan which complies with Public Resource Code Section 21081.6 and includes contingency plans.

DFG's concerns have been addressed in the final EIR/EIS and in the biological opinions of the NMFS, USFWS, and

DFG. The various requirements to satisfy DFG's environmental concerns are addressed in Part 4 of this decision.

3.0 HYDROLOGICAL CONSIDERATIONS

3.1 Availability of Water for Appropriation

3.1.1 General

In considering whether to approve an application to appropriate water the SWRCB must determine whether unappropriated water is available for the proposed project. Water Code Section 1253. See also Water Code Sections 1201 and 1202. The SWRCB also is required to consider the public interest, streamflow requirements, the relative benefit to be derived from the various beneficial uses to which the water may be put, existing water quality control plans, and other matters. See Water Code Sections 1250 et seq.

3.1.2 Application 20245

Diversions to storage in Los Vaqueros Reservoir will be made only from Old River. The Reservoir will fill at a maximum rate of 12,100 af per month, based on a maximum diversion rate of 200 cfs at the Old River point of diversion. (T,I,82:6) The reservoir will have a surface area of 1,460 acres when full, and the dam will be 192 feet high. The capacity of the reservoir will be 100,000 af. (CCWD,100,2-9:2-6) The quantity of

water that can be stored is limited by the 200 cfs capacity of pumping facilities and pipelines that will transfer water from the transfer reservoir to Los Vaqueros Reservoir. Assuming that full diversions are made every day during the 242-day diversion season (November 1 to June 30), the maximum annual diversion to storage is 95,832 af. Since this is the maximum that can be diverted to storage, diversion to storage under Application 20245 will be limited to 95,850 af.

The District has indicated that it intends to reconvey Application 20245 back to the Bureau in the future, for integration with the Central Valley Project.

(T, I, 191:19)

3.1.2.1 *Water Availability*

The availability of water for appropriation is subject to the quantity which is needed to satisfy holders of prior rights and the quantity necessary for protection of other beneficial uses. The District calculated the quantities of unappropriated water available for the Los Vaqueros project using SWRCB Decision 1485 conditions and the conditions listed in the Coordinated Operations Agreement¹. (T, I, 81:8) These documents take

¹ "Agreement Between the United States of America and the Department of Water Resources of the State of California for Coordinated Operation of the Central Valley Project and the State Water Project, November 24, 1986."

into account the rights of most senior water right holders and the environmental requirements for the Delta and Suisun Marsh that were considered necessary in 1978. In addition, CCWD's water rights for the Los Vaqueros Project will be subject to Standard Water Right Permit Term 80, a special Delta term, and new requirements for protection of endangered species that have been added since the hearing. These requirements affect the availability of water for appropriation.

Under Term 91², water is not available for diversion when satisfaction of inbasin entitlements requires that the CVP and the State Water Project release

² Standard Water Right Permit term 91 states:

"No diversion is authorized by this permit when satisfaction of inbasin entitlements requires release of supplemental Project water by the Central Valley Project or the State Water Project.

a. Inbasin entitlements are defined as rights to divert water from streams tributary to the Sacramento-San Joaquin Delta or the Delta for use within the respective basins of origin or the Legal Delta, unavoidable natural requirements for riparian habitat and conveyance losses, and flows required by the State Water Resources Control Board for maintenance of water quality and fish and wildlife. Export diversions and Project carriage water are specifically excluded from the definition of inbasin entitlements.

b. Supplemental Project water is defined as water imported to the basin by the projects plus water released from Project storage which is in excess of export diversions, Project carriage water, and Project inbasin deliveries.

The State Water Resources Control Board shall notify the permittee of curtailment of diversion under this term after it finds that supplemental Project water has been released or will be released. The Board will advise the permittee of the probability of imminent curtailment of diversion as far in advance as practicable based on anticipated requirements for supplemental project water provided by the project operators."

supplemental Project water. Inbasin entitlements include senior water rights and water required by the SWRCB to maintain water quality and fish and wildlife. Supplemental Project water includes water imported to the basin and water released from CVP and State Water Project storage which exceeds exports diversions, carriage water in the Delta, and deliveries of project water within the basin. In Water Right Decision 1594 (D-1594), the SWRCB explained Term 91, affirmed its validity for determining water availability, and specified that permits for water diversions in excess of 1 cfs or 100 afa from specified stream systems would include Term 91. Since the Los Vaqueros Project will divert more than 100 afa of water to storage from the Delta, Term 91 is applicable.

Instead of Term 91, this decision requires a special Delta term for both permits issued to the District because Term 91 is not adequate to protect the water rights of the CVP and the SWP under the existing circumstances. Two reasons exist. First, Term 91 does not include releases by the CVP and SWP of stored water needed to provide or assure flow in the Delta to meet requirements imposed by agencies other than the Board. Subsequent to the SWRCB's review of Term 91 in Decision 1594, the National Marine Fisheries Service and the U.S. Fish and Wildlife Service have imposed additional

requirements on the CVP and the SWP under the federal Endangered Species Act. These additional requirements limit pumping, increase outflow requirements, and otherwise reduce the amount of water that the projects can divert from the Delta.

Second, while Term 91 recognizes the right of area of origin users junior to the projects to divert unregulated flows that the CVP and the SWP would otherwise divert directly from the Delta, the District has represented that it will divert water under Applications 20245 or 25516 only when water would be available according to the priority dates of these applications.

Thus, a permit term broader than Term 91 is needed in this instance. The District, the Bureau, and the Department of Water Resources have agreed that when the projects declare the Delta to be in balanced conditions under the Coordinated Operations Agreement, any new diversion of water would necessarily entail either an increase in releases from project reservoirs or a reduction in project exports from the Delta, adversely impacting SWP or CVP operations. Additionally, they agree that the diversion of water by the District at other times when the projects are operating either to provide or to assure any flow in the Delta that is

required to meet provisions of state or federal law (in particular, the Endangered Species Act) may similarly result in adverse impacts to the projects. In keeping with the principle of Term 91 and the District's representation that it will not interfere with SWP or CVP operations under these projects' permits and licenses in effect on the date of this decision, the three parties have agreed to the special Delta term which appears in the Order.

The District apparently is aware that water will be infrequently (less than 50 percent of the time) available under Application 20245, taking into account senior water rights. The District states that "unappropriated flows are available about 35 percent of the time in the Delta". (CCWD,35,5)

Water obtained pursuant to the Bureau contract and water obtained under Application 20245 will jointly be diverted from a common point of diversion on Old River for storage in Los Vaqueros Reservoir. The Bureau has requested authorization to change the point of diversion which is presently used to serve the District, to authorize diversion from both Old River and Rock Slough, instead of a single point of diversion on Rock Slough. The Bureau holds permitted

Applications 9366 and 9367 for direct diversion from Rock Slough.

3.1.3 Application 25516

Application 25516 is a state-filed application. A state-filed application is an application that is or may be required in the development and completion of the whole or any part of a general or coordinated plan looking toward the development, utilization, or conservation of the water resources of the State. Immediately upon its filing the application is transferred to the SWRCB. The application remains in the files of the SWRCB, exempt from the diligence requirements in the Water Code, until assigned.

Application 25516 was filed by the Department of Water Resources on September 30, 1977. The District petitioned for partial assignment of Application 25516 on August 30, 1991.

As filed, Application 25516 sought appropriation of 950,000 afa for Los Vaqueros Reservoir and 61,300 afa for Kellogg Reservoir. It requests 9,000 cfs by direct diversion and 1,011,300 afa by storage, with a combined limitation of 1,011,300 afa by both direct diversion and storage. Application 25516 requests a maximum rate of diversion to storage of 3,000 cfs. The sources of

water as filed were Kellogg Creek, an unnamed stream (aka Marsh Creek) and West Canal, tributary to the Sacramento-San Joaquin Delta. The points of diversion are in Contra Costa County. The requested purposes of use include municipal, industrial, domestic, irrigation, recreation, incidental fish and wildlife preservation and/or enhancement, and water quality uses.

As modified by the EIR/EIS, the District requests assignment of 500 cfs by direct diversion and 10,800 afa by diversion to storage in Los Vaqueros Reservoir, to be diverted from Kellogg Creek tributary to Old River in the NW $\frac{1}{4}$ of NW $\frac{1}{4}$ of projected Section 23, T1S, R2E, MDB&M. The requested diversion season extends throughout the year. The District included as part of its petition a proposed completed application. As filed, the petition requested use of water throughout Contra Costa County as shown on a map prepared by the Bureau on April 8, 1965 on file with the State Water Board. Since the proposed place of use described in the final EIR/EIS is a more limited place of use, the permit on this application will limit the authorized place of use to the areas shown on Figure 1-3 of the final EIR/EIS. A revised application map will be required prior to permit issuance.

3.1.3.1 *Findings and Partial Assignment for State-Filed Application*

The SWRCB may assign any portion of a state-filed application for the purpose of development not in conflict with either a general or coordinated plan for the use, development, or conservation of the state's water resources or with water quality objectives established pursuant to law. Water Code Section 10504. Assignment of state-filed Application 25516 under the terms and conditions required by this decision is not in conflict with a general or coordinated plan of development or water quality objectives.

Because Application 25516 is a state-filed application, it must be made subject to potential future uses within of the county of origin. Water Code Section 10505.5. Part of Kellogg Creek is outside Contra Costa County. Therefore, a special permit term will be included in the permit on Application 25516 to meet this requirement.

The recipient of an assignment of water under Water Code Section 10500, et seq., shall, before making any substantial changes in the project, submit such changes to the SWRCB for its approval. Water Code Section 10504.5. Standard Permit Term 119 will be

included in the permit on Application 25516 to implement this requirement.

3.1.3.2 *Availability of Unappropriated Water for Application 25516*

3.1.3.2.1 *Prior Rights*

One prior water right exists on Kellogg Creek. This is License 5173 (Application 15094) of Alba C. Houston Orchard Company. The license authorizes direct diversion of 0.67 cfs from March 1 to about July 1 of each year for irrigation purposes.

The District entered into an agreement with the licensee that includes a flow release schedule and further agreed that the agreement may be incorporated by reference in any permit issued on Application 25516. (CCWD, 64:1-4) The agreement is a private agreement between the District and the licensee, and may be enforced between the two parties. Since the agreement apparently contemplates delivery of a substitute water supply for License 5173 rather than establishing a means to ensure that the licensee obtains the water upon which the license is based, it need not be included in the permit on Application 25516. The permit will be subject to the prior right under License 5173.

The agreement includes a different delivery season and water quantities than License 5173. While the season of diversion under License 5173 is March 1 to about July 1, the agreement defines water availability based upon rainfall during the period November 1 of each year through April 30 of the following year. Rather than requiring the District to bypass natural flows sufficient to meet the senior rights of A.C. Houston, the agreement sets a water delivery schedule for the District to deliver water to A.C. Houston at other times of the year, apparently under the District's water right. The agreement sets upper limits for deliveries to the licensee; however, it does not actually require the District to deliver any water to the licensee during the licensee's authorized diversion season at times when natural flow is available in Kellogg Creek.

To ensure that the extent of prior rights each year is known, the District will be required to establish a method to measure or determine inflows to Los Vaqueros Reservoir. To satisfy the prior rights under License 5173, the District must either bypass the natural flow or sufficient Kellogg Creek flow from March 1 through July 1 to enable the licensee to divert the full 0.67 cfs at the License 5173 point of diversion, or provide a substitute water supply. The District may provide a

substitute water supply if the place of use of the substituted water includes the place of use of License 5173.

3.1.3.2.2 *Disposition of Remaining Quantities Under State-Filed Application 25516*

State-filed application 25516 requests 950,000 afa by storage in Los Vaqueros Reservoir and direct diversion at a rate of 9,000 cfs to fill the Los Vaqueros Reservoir. The District requested assignment of only 10,800 afa of the application by storage and 500 cfs by direct diversion for the Los Vaqueros facility. The District's hydrologic modelling demonstrates that the Kellogg Creek water resources are inadequate to support a finding of water availability of 950,000 afa and 9,000 cfs. (CCWD, 46)

The District's Exhibit 46 lists the simulated Kellogg Creek flow at Los Vaqueros dam site for water years 1921 through 1990. (CCWD,46:Table 3-5) The calculated maximum annual runoff is 9,639 afa. The calculated minimum annual runoff is 10 afa, and the average annual flow is 1,364 afa. The simulated average Kellogg Creek flow for June, July, August and September is zero. The District's streamflow study shows that there is flow at the dam only 38 percent of the time, and flow exceeds 5 cfs only 6 percent of the time. (CCWD,1E,2) During the

months of June, July, August, and September there is either no flow in Kellogg Creek or very minimal flow (averaging only slightly above zero cfs for the period of record). (CCWD,46:Table 3-5)

The maximum recorded daily flow in Kellogg Creek is 115 cfs during February 1969. The calculated maximum daily flow is 38.1 cfs. The estimated maximum monthly runoff is 3,174 af per month. (CCWD,46:Table 3-5) The District provided evidence that the probable maximum flood (without the project) at the Los Vaqueros dam site would be 21,300 cfs during a 72-hour storm. (CCWD,100:6-2) This would produce a maximum of 126,522 af, which far exceeds the maximum monthly. This is inconsistent with the estimated maximum monthly runoff of 3,174 af per month. (CCWD 46, Table 3-5) The SWRCB will not use the estimated maximum flood to establish the maximum rate of direct diversion under Application 25516.

The evidence does not establish that 500 cfs of unappropriated water is available in the Kellogg Creek watershed. The DWR flow record provides evidence to support a maximum direct diversion flow rate of 115 cfs. If flows in excess of 115 cfs do occur, the water could be retained in storage or regulated by Los Vaqueros Reservoir.

The District did not provide adequate evidence that the requested quantity of 10,800 afa is available in the Kellogg Creek watershed on a regular basis.

The SWRCB routinely reviews requests for partial assignment of state-filed applications to determine whether an adequate supply of unappropriated water is available to satisfy the request. In this case, the record indicates that sufficient unappropriated water is not available to satisfy the entire request. The maximum appropriation under state-filed Application 25516 is 115 cfs and 9,640 afa. This is less than the amount the District requested in its petition for partial assignment.

Since no additional water is available, Application 25516 as it applies to Kellogg Creek upstream of Los Vaqueros Dam will be assigned to the District, and will be approved for 115 cfs by direct diversion and 9,640 afa by storage, with a maximum total appropriation of 9,640 afa. Because Kellogg Creek is tributary to the Delta, the permit will be subject to the special Delta term discussed in Section 3.1.2.1 above.

Kellogg Creek will be fully appropriated upstream of Los Vaqueros Reservoir upon issuance of a permit to the District for state-filed application 25516. Therefore,

Kellogg Creek will be added to the list of fully appropriated streams under Water Code Section 1205 et seq. The unapproved portions of Application 25516 will remain on file, for appropriations from Marsh Creek and West Canal up to 61,300 afa.

3.2 Effects of Approving the Change Petition

The Bureau's change petition is auxiliary to the water rights the District seeks under Application 20245. Approval of the change petition filed by the Bureau will provide a water supply for the Los Vaqueros Project during periods when water is not available under Application 20245.

The Bureau has a contract to supply up to 195,000 afa of water to the District. The water currently is delivered at the Contra Costa Canal intake in Rock Slough. As noted above, the combined maximum rate of diversion under Permits 12725, 12726, and 15735 is 350 cfs.³ Of these permits, only Permit 15735 authorizes storage of water, for 5,400 afa in Contra Loma Reservoir. A supply of additional water that can be stored will be needed, especially during drier years. Except for the permits under which the Bureau currently delivers water to the District, the Bureau

³ This amount cannot be increased for these permits; to do so would initiate a new right, and would require a new application.

permits in this petition include rights to water that is stored upstream in reservoirs. Under the petitions, this water would be released from upstream storage and rediverted at the Old River point of diversion described above. This water then could be redistributed to storage in Los Vaqueros Reservoir or delivered to the Contra Costa Canal for immediate use.

Permits 12725, 12726, and 11973 are for direct diversion only, and the Bureau has not petitioned to store water under these permits. The maximum rates of diversion under Permits 12725 and 12726⁴ are 200 cfs and 250 cfs, respectively. The maximum rate of diversion to storage under Permit 15735 is 21.16 cfs, with a maximum of 5,400 afa, for storage in Contra Loma Reservoir. These quantities are the maximum rights under these permits, and cannot be increased at this time even with addition of the Old River diversion point. The terms of these permits will be amended to make this limitation explicit.

Redistribution of released water stored under Bureau permits authorizing storage is appropriate. Likewise, rediversion of water diverted from the Trinity River by direct diversion is appropriate. This change will not

⁴ Before this decision, these permits authorized direct diversion only at Rock Slough.

increase the right of the Bureau to appropriate water, since the base amounts of appropriated water are not being changed. A permit term will be added to the storage permits limiting the rediversion of stored water at Old River to the capacity of the diversion facilities. The term will also limit the direct diversion of water under these permits. This limit could be increased after a further change petition in the future if additional water diversion capacity becomes available.

The authorized period to complete beneficial use of water under all seventeen of the Bureau's water rights which are petitioned to be amended ended on December 1, 1990. The Bureau included a request for an extension of time in a petition it filed in 1985. The Bureau has not yet completed the draft EIR on the petition. Water right permits are not revoked merely because an extension of time to complete beneficial use under the permit has not yet been granted. However, increases in use of water after the permit expires are beyond the rights of the permittee, and cannot be counted for purposes of licensing the water right. Although the Bureau has filed a petition for extension of time, the extension of time is not before the SWRCB in this proceeding.

3.3 Other Issues Raised by Protests

3.3.1 DFG Protest

The DFG alleged in its protest that the Los Vaqueros Project would authorize the diversion of up to 298,000 af of water from the Delta for use by the District, thereby increasing the overall diversions from the Delta. A potential exists for an increase in overall diversions from the Delta if the overall diversion rate for the Los Vaqueros Project is not limited. To limit the effects on Delta beneficial uses, the permits under this project will include limits on the amounts of water diverted from the Delta at the two diversion points. This is discussed further in the discussion of project effects.

The DFG protest also alleges that the Los Vaqueros Project may increase the frequency and duration of occasions when the CVP and the SWP are releasing stored water to meet requirements for fish and wildlife and water quality protection in the Delta. DFG testified that it is concerned with the potential for the District to increase Delta withdrawals from the present rate of approximately 120,000 afa to 130,000 afa to the full 195,000 afa allowed by the Bureau contract. (T,II,7:1) The Bureau currently has permits authorizing direct diversion and/or storage of

sufficient water to deliver 195,000 afa or more to the District.

Even though this additional increment of water has not yet been delivered to the District, it is not necessarily water which is maintained as resident flows within the Delta. The Bureau is presently authorized under its permits to store the water in its storage facilities, or to deliver the water to other customers. DFG has not presented any direct evidence to demonstrate that delivery of this flow increment to the District will result in changed flows within the Delta, rather than a redirection to another use of water presently stored or directly diverted by the Bureau. Any reduction of uncontrolled Delta outflow, however, will be minimal because Los Vaqueros Project will divert the largest amounts of water during periods of high flow. The special Delta term along with the requirements the DFG has imposed on the project will prevent adverse effects on species protected under the federal and state Endangered Species Acts.

The DFG protest alleges that the project may result in impacts to State and federally listed San Joaquin kit fox in the area of the reservoir itself and in the area encompassed by realignment of Vasco Road, and that it may impact several sensitive plant and animal species,

may impact seasonal and permanent wetlands, riparian woodlands, stream channels and oak woodlands. Further, it alleges that appropriation of Kellogg Creek flows may impact fish and wildlife resources downstream of the reservoir.

In response to this allegation, the District proposed a reservoir release schedule for Los Vaqueros Reservoir in the EIR/EIS. (CCWD,100:6-6) A permit term based on the proposed release schedule will be included in the permit issued on Application 25516.

3.3.2 San Joaquin Protest

San Joaquin alleges that the project could increase sea water intrusion in the Delta, reduce flushing flows and create water level drawdowns detrimental to other water diverters and to the environment. The protest requests that additional diversion of any water which is not surplus flow take into consideration the area of origin and watershed protection laws. The protest also expressed concern that the diversion not create scour, seepage or levee related problems. Adequate evidence regarding scour, seepage or levee related problems was not produced in the State Water Board's hearing.

It is doubtful that the Los Vaqueros Project will increase sea water intrusion in the Delta or reduce

flushing flows. When there are unappropriated flows in the Delta, the flows tend to be very large. (CCWD,35,5) Over 85 percent of the time when unappropriated flow is available, the unappropriated flows are greater than 200,000 af per month. (CCWD,35,5) Diversion of approximately 12,000 af per month by the District when large unappropriated flows are present in the Delta should not increase sea water intrusion in the Delta or significantly reduce flushing flows.

Inclusion of the special Delta term will restrict diversion under Application 20245 to those days when flow, in excess of the flow needed to meet prior rights, water quality and environmental requirements in the Delta, is available for appropriation.

The Los Vaqueros Project is unlikely to create water level drawdowns detrimental to other water diverters. The District estimated an "order of magnitude" net change of 0.04 feet in water level near the Old River intake, at a diversion rate of 250 cfs. (CCWD,40,2) This evidence is uncontradicted. No evidence was introduced to demonstrate that an estimated drawdown of 0.04 feet would be detrimental to other users of water.

San Joaquin requested that approval of the Los Vaqueros Project be made subject to the area of origin and

watershed protection concepts. Application 20245 is not a state-filed application and is not being operated, at least at this time, by either a state or a federal agency. Therefore, it is not subject to Water Code Sections 11460 and 10500 et seq. Nor is it subject to the area of origin law at Water Code Section 1215, et seq, because it was filed before 1985. However, the special Delta term makes Application 20245 subject to the direct diversion rights of the State Water Project and the Central Valley Project. Since the rights of the State Water Project and the Central Valley Project to divert unappropriated flow are subject to the rights of other water right holders who are using water within the watershed of origin, the special Delta term in effect makes Application 20245 subject to the rights of water users in the area of origin of the water.

Water appropriated under Application 25516 will be used within a county of origin, Contra Costa County. Some of Kellogg Creek is in Alameda County. Water Code Section 10505.5 requires that a term be included in any permit on a state filed application, protecting the counties of origin. Therefore, a special permit term will be included in the permit issued on Application 25516.

The District has indicated that any water right permits obtained pursuant to Application 20245 will be assigned to the Bureau for integration into the Central Valley Project at some time in the future. (T,I,190:13-191:16) After the water right permit is assigned to the Bureau, there will be no non-federal water diverted by the District from the Rock Slough or Old River intakes under the permits affected by this decision.

(T,I,191:4) Since the Los Vaqueros Project will be integrated into the Central Valley Project (T,I,191:21), it will become subject to the watershed and area of origin protection provisions of Water Code Section 11460 et seq at that time, by operation of law⁵.

3.3.3 USFWS Protest

The USFWS protest is based upon the need to provide adequate protection to maintain the existing levels of fishery resources in the Delta. The protest requests the installation of protective fish screens on the existing diversion facility in Rock Slough, or, if

⁵ Water Code Section 11460 provides:

"In the construction and operation by the department of any project under the provisions of this part a watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom, shall not be deprived by the department directly or indirectly 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."

screens are not feasible, moving the diversion to a point that may be screened. USFWS requests that quantitative baseline impacts analysis be conducted, and mitigation measures be implemented to enhance Delta fisheries. The USFWS also requests adequate protections for federally listed, proposed and candidate fish species.

These issues are addressed in Part 4 of this decision.

3.4 Permit Conditions Needed to Measure Water Diversion and Use

A modified version of Standard Permit Term B-1 will be included in the permits issued on Applications 20245 and 25516, and in the permits of the Bureau that will allow diversions from Old River, to ensure that water diversion and use under the Los Vaqueros Project is adequately measured.

4.0 ENVIRONMENTAL CONSIDERATIONS

4.1 Compliance with the California Environmental Quality Act

Under the California Environmental Quality Act (CEQA), the District is the lead agency for preparation of environmental documentation. The Bureau is the lead agency for preparation of environmental documentation under the National Environmental Policy Act (NEPA).

The District and the Bureau jointly prepared an Environmental Impact Report (EIR)/ Environmental Impact Statement (EIS) (EIR/EIS) for the project.

The District certified the final EIR/EIS on October 27, 1993. On the same date, the District adopted a resolution approving the Los Vaqueros Project, including a statement of overriding considerations concerning significant environmental effects that the District cannot fully mitigate and an environmental mitigation and monitoring plan (Staff,1).

The SWRCB is a responsible agency for this project under CEQA. In deciding whether and how to approve the project, the SWRCB must consider the environmental effects of the project as shown in the final EIR/EIS. As a responsible agency, the SWRCB is responsible for mitigating or avoiding only the environmental effects of the parts of the project which it decides to approve. The SWRCB must make findings of overriding considerations for effects within its responsibility that it cannot avoid or mitigate. With the mitigation measures required by this decision, there will be no significant adverse effects on the environment that are within the responsibility of the SWRCB to mitigate. The District, as the lead agency, has adopted mitigation measures for the adverse environmental

effects of this project that are within the SWRCB's responsibility, but the SWRCB also is required, as a responsible agency, to mitigate the adverse effects within its responsibility.

Public Resources Code Section 21081.6(a) requires a public agency which requires changes or alterations in a project to mitigate or avoid the significant adverse environmental effects of the project to adopt a monitoring or reporting program to ensure compliance with the changes or alterations. The District adopted a mitigation monitoring and reporting plan for the Los Vaqueros Project, which is dated October 27, 1993. The plan includes mitigation monitoring and reporting for Bay-Delta fishery resources, Bay-Delta water quality, vegetation resources, wildlife resources, and cultural resources, which are within the responsibility of the SWRCB. This decision includes terms and conditions requiring implementation of the parts of the mitigation monitoring and reporting plan which are within the SWRCB's responsibility. Additionally, this decision requires the District and the Bureau to report to the Chief, Division of Water Rights, annually on its activities under the plan and the status of implementation of each mitigation measure.

4.1.2 Significant Effects of the Parts of the Project
Requiring SWRCB Approval

The SWRCB is being asked to approve water right applications and changes in water right permits that will allow the construction and operation of a new water diversion facility in the southern Delta on Old River and the construction and operation of a 100,000 AF capacity Los Vaqueros Reservoir on Kellogg Creek. The project also will entail revised operation of an existing Delta diversion facility at Rock Slough. Water diverted at Old River would be put to direct use or diverted to offstream storage in Los Vaqueros Reservoir, either under the District's water rights or under the Bureau's water rights pursuant to a contract. Additionally, the District will store water from Kellogg Creek in the reservoir. The Rock Slough diversion facility will continue to be used during periods of better water quality for direct diversion and for diversion of up to 5,400 afa of water to storage in Contra Loma Reservoir.

There are numerous significant or potentially significant effects of this project for which the SWRCB is responsible to mitigate or avoid adverse environmental effects. These are discussed below under the general headings of Bay-Delta fishery resources, Bay-Delta water quality, lower Kellogg Creek fish and

wildlife, vegetation resources, wildlife resources, and cultural resources. This decision requires mitigation measures for the effects of diversion and use of water by the project, including the effects on water-dependent beneficial uses during construction.

4.1.2.1 *Effects on Bay-Delta Fishery Resources*

Chapter 4 of the EIR/EIS evaluates potential impacts of constructing and operating the proposed new Old River diversion facility on migration, spawning and rearing, survival, and habitat of important fish species which occur in the Bay-Delta Estuary. Impacts to fishery resources could occur (1) during construction of the Old River intake, (2) through entrainment at both the Old River and Rock Slough intakes, (3) through effects on juvenile fish migration and survival, and (4) through impacts on threatened or endangered species.

During construction of the intake facility on Old River, suspended sediments could adversely affect local fish feeding, spawning and rearing activity. Further, structural changes to the levees and banks during construction of the intake could remove existing aquatic vegetation and reduce resident fish habitat. (CCWD,100,4-23 through 4-24) The EIR/EIS proposes mitigation measures. To minimize increases in suspended solids during construction, it recommends the

use of floating silt curtains, silt fences and stormwater detention facilities. To minimize loss of fish habitat and restore habitat lost at the construction site, it recommends avoiding losses as much as possible and reestablishing suitable new habitat for unavoidable losses. Terms and conditions will be included in the permit on Application 20245 and in the Bureau's amended permits to mitigate for adverse effects to the fishery resources that are caused by the construction activities.

Operation of the project would increase the long-term average annual diversion by or for the District by 2-3% relative to the level of diversions under existing and no action alternative conditions (CCWD,100,4-26).

This increase in annual diversion could cause significant increases in direct losses of Delta fish to entrainment. To mitigate for this potential impact, the District proposes to install and operate a state-of-the-art fish screen at the proposed new intake on Old River (CCWD,100,4-28). Appendix E of the District's biological assessment for the project (CCWD,23) and the USFWS biological opinion on Delta smelt (CCWD,101) provide details on a preliminary fish screen design and operation to minimize entrainment and impingement of fish exceeding approximately 21 millimeters (mm) in length. Final design and

operational details will be developed and implemented under the direction of DFG, USFWS and NMFS. Terms and conditions will be included in the permit on Application 20245 and in the Bureau's amended permits requiring implementation of this mitigation measure. Similar terms and conditions will be included for the Rock Slough intake, since USFWS is requiring a fish screen there.

Under the no-action alternative increased future demands for water from the Delta and its tributaries will require widespread increased diversions, even absent the Los Vaqueros Project. These increased diversions are expected to increase the proportion of cross-Delta movement of Sacramento River water toward the southern Delta and increased reverse flow conditions in the lower San Joaquin River, resulting in significant cumulative impacts on juvenile fish, particularly anadromous fish such as chinook salmon and striped bass. The impacts would include increased egg and juvenile fish mortality. (CCWD, 100, 4-11 through 4-23)

The Los Vaqueros Project will have a potentially significant cumulative impact on Delta fisheries because it will exacerbate to some degree future adverse impacts expected to be already cumulatively

significant. (CCWD,100,4-54) The District and the Bureau proposed seven operational rules to avoid or eliminate the project's potential contribution to future significant cumulative impacts on juvenile Delta fish. (CCWD,100,4-54-4-55)

The proposed rules will help to mitigate potential indirect cumulative impacts on juvenile Delta fish migration and survival. The rules also serve to partially satisfy measures required by DFG, USFWS and NMFS to avoid potential jeopardy to designated State or Federal threatened or endangered fish species, pursuant to the California Endangered Species Act (CESA) and the Federal Endangered Species Act (ESA). Appropriate terms and conditions requiring substantial implementation of these rules will be included in the permits issued to the District and in the amendments to the Bureau's permits. The rules require (1) operation of the water delivery system to improve water quality and system reliability, (2) from March 15 through May 15, diversion of as much of the District's water requirement as possible from Old River, (3) filling the Los Vaqueros Reservoir whenever the water quality goals of the project can be satisfied (4) no diversion to storage from March 15 through May 31 except when reservoir storage is below emergency storage levels, (5) avoiding all Delta diversions during April 1-30,

and instead using up to 12,500 af of water from Los Vaqueros Reservoir to meet demands, whenever the reservoir is above emergency storage levels, (6) modifications of the fourth and fifth rules at the request of DFG, USFWS, and NMFS if the District and the Bureau agree, and (7) the rules would not become effective until the Los Vaqueros Reservoir is initially filled to 90,000 af. The purpose of rule 7 is to ensure that the reservoir is filled at the earliest opportunity. A full reservoir will allow reduced springtime diversions, improving the Delta fishery protections.

The terms and conditions in this decision differ somewhat from the proposed rules, to make them consistent with additional or different mitigation imposed under the Endangered Species Acts after the EIR/EIS was certified and to ensure timely implementation of these rules. The changes specifically take into account that (1) both the Rock Slough and Old River intakes will be screened, but the incidental take permit for Delta smelt requires that water diversion at Rock Slough be used as little as possible, and after March 1997⁶ must not be used from

⁶ *The fish screens must be installed by January 1997 at Old River to comply with the biological opinions issued by USFWS and DFG under the ESA and the CESA.*

January 1 through August 31 unless approved by USFWS and DFG, (2) prior rights limitations and environmental mitigation requirements will limit the amount of water that can be diverted even when the water level in Los Vaqueros Reservoir is below emergency storage levels, and (3) if modifications in the fourth and fifth rules are necessary to minimize impacts on Delta fisheries, the District and the Bureau may have no choice but to comply.

With these mitigation measures, there will be no significant adverse effects on Bay-Delta fishery resources.

4.1.2.2 *Effects on Vegetation*

The EIR/EIS identifies potential significant impacts to vegetation communities including blue oak and valley oak woodlands, alkali grasslands, meadow, and marsh, a vernal pool, and willow-cottonwood, coast live oak, and mixed riparian woodlands. Much of the impact will be caused by filling Los Vaqueros Reservoir. As part of the project, the District will buy over 18,000 acres of land for habitat management, to replace lost habitat, and will coordinate its habitat management with DFG and USFWS. Mitigation measures listed in the EIR/EIS include avoidance of significant resources, restoration of disturbed sites, protection of oak trees from

construction impacts, compensation for lost resources, minimizing impacts, and establishing watershed management guidelines. This decision includes terms and conditions requiring implementation of these measures. With these mitigation measures, there will be no significant adverse effects on the vegetation resources.

4.1.2.3 *Effects on Kellogg Creek Fish and Wildlife*

The EIR/EIS does not identify any significant impacts on the fish or their habitat in Kellogg Creek above the dam as a result of construction and operation of the project.

Below the dam, the construction and operation of the project could have a significant adverse effect on fish and wildlife habitat. These effects would be caused by dewatering of the stream channel during or after construction and sedimentation of the stream channel because of construction. The EIR/EIS identifies mitigation measures including a pipe to carry water around the reservoir site during construction, rules prohibiting use of streamflow for construction, restrictions on stream crossings, prohibiting operation of construction equipment in flowing water outside the reservoir site, a bypass requirement to maintain up to 5 cfs of flow in lower Kellogg Creek and to maintain

perennial pools during the dry periods. Terms and conditions requiring implementation of these measures are included in this decision. With these mitigation measures, there will be no significant adverse effects on the fisheries and wildlife below the dam.

The EIR/EIS does not identify significant adverse impacts to the habitat or population of common wildlife species. It identifies potential significant impacts on special-status⁷ wildlife species including the San Joaquin kit fox, the golden eagle, prairie falcon, burrowing owl, ferruginous hawk, California tiger salamander, California red-legged frog, and western pond turtle.

Mitigation measures for impacts on the special-status species include avoidance of resources during construction where feasible, implementing protective measures, compensating for loss of habitat, installing fencing and undercrossings for kit foxes, establishing buffer zones for construction activities, preventing construction activities near kit fox breeding zones, preventing habitat damage, relocating animals near the

⁷ Special-status wildlife species are species that (1) are listed or proposed for listing as threatened or endangered under the ESA or the CESA, or (2) are Category 1 or 2 candidates for possible future listing as threatened or endangered under the ESA or the CESA, or (3) are designated species of special concern or special interest to DFG and are identified in DFG's Natural Diversity Database, or (4) meet the definition of rare or endangered species under 14 CCR Section 15380.

construction site, avoiding rock outcrop intermittent pools during construction, speed limits for construction vehicles, acquisition of replacement habitat lands, development of a final recreation plan before construction of long-term recreation facilities, monitoring wildlife populations, and restricting the use of mosquitofish. Terms and conditions in this decision require implementation of these mitigation measures. With these mitigation measures, there will be no significant adverse effects on the special-status wildlife species.

4.1.2.4 *Effects on Bay-Delta Water Quality*

The only potential significant impacts on water quality in the Bay-Delta Estuary will be during construction of the Old River intake and associated pipelines, and will be due to sediment and pollutants associated with construction equipment. Mitigation measures are included in this decision to reduce construction-related impacts to water quality to non-significant levels. These measures include grading methods, the use of mulches and revegetation, collection of pollutants, preservation of riparian and wetland vegetation, planning for spill prevention, proper disposal of excavated materials, and enforcement of strict rules for construction and maintenance. With

these mitigation measures, there will be no significant adverse effects on Bay-Delta water quality.

4.2 Compliance with the Federal Endangered Species Act

The District and the Bureau jointly consulted with the NMFS and the USFWS under Section 7 of the federal Endangered Species Act (ESA) (16 U.S.C. 1531 et seq.). ESA consultation was necessary because federal actions are necessary before the project can be constructed. The Bureau is a federal agency and is a project proponent, and the U.S. Army Corps of Engineers must issue permits before the project can be constructed. Chapter 19 of the EIR/EIS lists the environmental commitments the Bureau and the District agreed to as a result of the ESA consultation with NMFS and USFWS, in addition to other mitigation measures already incorporated in the project. The NMFS and USFWS have imposed additional terms and conditions in connection with incidental take permits they issued for the project. The NMFS and the USFWS are authorized to enforce these terms and conditions and may revise them from time to time as the protected species recover or decline, and as more is known about their needs. This decision requires the District and the Bureau to comply with all requirements in effect at the time of compliance that have been legally imposed by the NMFS and the USFWS under the ESA with respect to the Los

Vaqueros Project. Additionally, some of the terms and conditions are specified independently as conditions of this decision. These latter conditions address permanent facilities and their operation and maintenance. With the mitigation measures required by this decision, there will be no significant adverse effects on the species protected under the ESA.

The consultation with the NMFS addressed the winter-run Chinook salmon, which was at that time listed as threatened. The biological opinion took into account the expected long-term operational changes by the SWP and the CVP to avoid future jeopardy to the winter-run. The NMFS found that although the Los Vaqueros Project potentially could affect the winter-run directly, the impact would be relatively small compared with the effects of the CVP and SWP. NMFS found that the project is not likely to jeopardize the continued existence of the winter-run, but included an incidental take permit for entrainment of young fish. The incidental take permit requires that the fish screen at Old River meet NMFS criteria and that the District develop a monitoring and evaluation program to assess screening efficiency and effectiveness at Old River before initiating operations at Old River. The incidental take permit sets a take limit of 0.05 percent of each year's juvenile winter-run. NMFS will

require additional consultation if the take is higher than expected.

The consultation with the USFWS addressed the threatened Delta smelt, the endangered San Joaquin Kit Fox, and the endangered bald eagle.

In addition to considering the biological assessment, the USFWS in the biological opinion for Delta smelt took into account the impacts of the CVP and the SWP on the winter-run Chinook salmon. The USFWS found that the project as mitigated would have relatively small impacts compared with the impacts of existing diversions, and would not jeopardize the continued existence of the Delta smelt. Nevertheless, various adverse impacts to Delta smelt could occur because of inadequate fish screens, unrestricted diversions during initial filling allowed by operational rule 7 in the EIR/EIS, diversions during the period from January through June when the Delta smelt spawn, and construction of the Old River intake.

The USFWS issued an incidental take permit allowing the taking of all entrained juvenile and adult smelt at Old River, Rock Slough, and Mallard Slough, provided the

maximum water delivery is 148,000 afa⁸. The USFWS imposed conditions on the incidental take permit requiring that (1) diversions minimize the take, (2) entrainment losses be reduced through screening at Old River and Rock Slough and through screen cleaning, (3) losses and harrassment be reduced during construction and other operations at Old River, (4) losses to migrating adults and larvae be minimized by using the Old River intake in preference to the Rock Slough intake, and (5) initial filling may occur only upon approval of USFWS based on an assessment of conditions existing at that time.

After formal consultation with the USFWS regarding the San Joaquin kit fox, the District and the Bureau added habitat acquisition, protection, and enhancement measures which are listed in the EIR/EIS, Chapter 19. Regarding the bald eagle, the District and the Bureau added a monitoring program to determine the eagle's use of the reservoir and mortality rates from nearby wind turbines. The District and the Bureau added other mitigation and monitoring measures to protect other special status species.

⁸ *The biological opinion indicates the District and the Bureau have agreed that deliveries of water under the biological opinion will not exceed the current annual maximum of 148,000 afa.*

Compliance with the California Endangered Species Act

On February 16, 1994 the DFG issued a biological opinion to the SWRCB. The DFG consulted regarding the Los Vaqueros Project with the SWRCB and the District after a joint request, dated November 10, 1992, for consultation under the California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et seq.). CESA does not require local lead agencies to consult on projects. The joint request ensured that consultation could be carried out under the provisions of Section 2090, rather than DFG proceeding against the District under the takings provisions of the CESA.

The biological opinion DFG issued includes a Memorandum of Understanding (MOU) executed between the DFG and the District on February 16, 1994. Attached to the MOU and incorporated by reference is a Management Authorization signed by the Director of the DFG. DFG has authority to enforce the MOU and the Management Authorization and may amend them and the biological opinion when necessary. This decision does not repeat the specific terms and conditions in the MOU, Management Authorization and the biological opinion, but does require that the District and the Bureau comply with all measures required by the DFG under the CESA.

The biological opinion specifies the mitigation for project effects on the winter-run Chinook salmon, the Delta smelt, and the San Joaquin kit fox. The biological opinion also addresses the Alameda whipsnake, the Swainson's hawk, the bald eagle, the Sacramento splittail, the longfin smelt, the burrowing owl, the longhorn fairy shrimp, the vernal pool fairy shrimp, the California linderiella, the curve-footed Hygrotus diving beetle, the California red-legged frog, the California tiger salamander, the western pond turtle, the Diablo helianthella, the Brewer's dwarf flax, the brittle scale, and the San Joaquin spearscale. The DFG in its biological opinion concluded that construction and operation of the Los Vaqueros Project is unlikely to jeopardize the continued existence of the winter-run Chinook salmon, the Delta smelt, and the San Joaquin kit fox if the District and the Bureau comply with the terms of the MOU and the management authorization. It concluded that the other species would not be jeopardized because of mitigation measures the District had adopted as part of the Project, except that DFG added a term in the biological opinion for the Swainson's hawk.

The term added in the biological opinion is that to avoid construction impacts to Swainson's hawks, surveys shall be conducted weekly beginning the first week of

April through May 15 by a biologist acceptable to the DFG to determine if any Swainson's hawks are nesting within 1/2 mile of the Old River diversion point, and to determine whether there is any suitable nesting habitat within 1/2 mile. If nesting is occurring within 1/2 mile, construction may not be initiated or continued until August 15 without additional consultation with DFG. This term is fully set forth in the Order portion of this decision because it is covered only in the biological opinion and not in the MOU.

Many of the DFG terms are similar or identical to the terms and conditions required by the USFWS and the NMFS. Conditions 23 and 27 of the management authorization add terms and conditions which require that the District conduct salmon monitoring and evaluation programs to assess screening efficiency and effectiveness at the Old River intake, and provide that monitoring plans or data may be combined for reporting purposes. The management authorization also clarifies that the fish screen at the Old River intake shall be constructed prior to operation of the intake and no later than January, 1997; and that it must be designed and operated to achieve an average approach velocity of 0.2 feet per second for a 3/32 inch vertical slotted opening, and be operated to effectively screen Delta

smelt greater than 21 millimeters long; and that no later than March, 1997 all diversions of Bureau water shall take place at the Old River intake during the period of January 1 through August 31 unless other points of diversion are approved by DFG and USFWS. Specific terms and conditions in this decision require compliance with the terms of the DFG biological opinion. With these mitigation measures, there will be no significant adverse effects on the species addressed in the DFG biological opinion.

5.0 CULTURAL RESOURCES CONSIDERATIONS

The EIR/EIS identifies potential adverse effects to cultural resources as a result of the project. These include impacts from physical disturbance of cultural resources during construction, increased access to the area, demolition, removal or alteration of historically or architecturally significant structures, management of watershed lands, and introduction of visual elements that could alter the setting, integrity of location, or feeling associated with historic properties. (CCWD, 100, 11-9 through 11-21) With the mitigation measures required by this decision, there will be no significant adverse effect on cultural resources.

The Bureau, the District, the California State Historic Preservation Officer, and the Advisory Council on

Historic Preservation, the U.S. Army Corps of Engineers, and the SWRCB executed a Programmatic Agreement regarding implementation of the Los Vaqueros Project on February 3, 1993. (CCWD, 87) The Programmatic Agreement defines the roles and responsibilities of its signatories and specifies how and when mitigation will occur. The Programmatic Agreement requires the Bureau as the federal lead agency to ensure that measures be carried out including inventories of the historic properties affected by the project, evaluating the properties that are identified, establishing Historic Property Treatment Plans for individual components of the project, protecting sites, preparation of reports on archeological sites, consultation with the most likely descendants of native American historical sites, and curation or other provisions for disposition of recovered materials.

The EIR/EIS lists nine general mitigation measures for cultural resources that could be affected. Most of these measures will be more specifically delineated in the individual historic property treatment plans which will be prepared. Others are delineated in a Memorandum of Understanding executed July 21, 1993 by the District and seven of the Native American Most Likely Descendants, regarding treatment of Native American remains. The EIR/EIS finds that if the

historic property treatment plans required by the Programmatic Agreement are implemented, there will be no adverse effect on the 68 eligible properties within the area of potential effects of the project. (CCWD, 100, 11-14) This finding is based on a letter from the State Historic Preservation Officer to the Bureau dated September 9, 1992. All of the proposed mitigation measures will be met if the District complies with the Programmatic Agreement, the historic property treatment plans, and the Memorandum of Understanding.

A permit term requiring compliance with the Programmatic Agreement, the historic property treatment plans, and the Memorandum of Understanding will be included in the permits issued on Applications 20245 and 25516. Since the general mitigation measures in the EIR/EIS are not specific enough to enforce, they are not included as terms and conditions of this decision. This decision instead requires compliance with the more specific historic property treatment plans that will be prepared in accordance with the Programmatic Agreement.

6.0 EFFECTS OF THIS DECISION

Figures 6(a) and 6(b) of the District's Exhibit 36 show the average volume of Delta diversions, both with and without the project, under the existing and future

levels of development for the District. The graph for the existing level of development shows that operation of the project during the requested diversion season of November 1 through June 30 will result in only moderate increases in Delta diversion. The graph indicates that with the project there is likely to be on average a decrease in Delta diversions during November, April, May and June. During December, January and February, the graph shows on average an increase in Delta diversions with the project of up to 1,000 af per month. In March, the graph shows an increase in Delta diversions with the project of approximately 2,000 af.

The proposed project has several components for diversion and redirection of water to the District's service area. These include diversions and redirections to Los Vaqueros Reservoir at Old River, diversions and redirections to direct use at Old River, diversions and redirections to direct use at Rock Slough, and diversions to storage in Contra Loma Reservoir or Los Vaqueros Reservoir under Permit 15735 and direct diversions from Mallard Slough under the District's License 10514 and Permit 19856.

The District's evidence shows that the maximum diversion to Los Vaqueros Reservoir from Old River will be 12,100 af per month, because the pumping facilities

and pipeline from the transfer reservoir to the Los Vaqueros Reservoir will have a maximum capacity of 200 cfs. (T,I,82:6) (CCWD,100,2-17), (CCWD,27,23) For a 242 day diversion season (November 1 to June 30), diversion of 200 cfs on a daily basis yields an annual limitation on diversion of 95,832 af (200 cfs * 242 days * 1.98 af/day per cfs = 95,832 af). The District estimated that a 200 cfs diversion limitation would result in a total annual diversion of 96,900 afa. (T,I,20:21) SWRCB calculations indicate that the correct value is closer to approximately 95,850 af per annum (afa). Therefore, the permit issued on Application 20245 will limit annual diversion to storage to 95,850 afa.

Additional water will be diverted under a Bureau contract. The Bureau has petitioned for changes under 17 of its permits, to obtain authorization to divert and/or redivert water at the Application 20245 point of diversion in Old River for delivery to the District. Under a contract between the District and the Bureau, the Bureau will deliver up to 195,000 afa at Rock Slough and Old River, combined. (CCWD, 100:II, 1-11).

The contract provides in pertinent part that;

"In no event shall the total quantity of CVP water and Los Vaqueros water rights water, distributed within the District Service Area,

in any Year for use by its customers, exceed 195,000 acre-feet."

This limitation is a limitation on the amount of water the District can deliver to its customers under Applications 20245, 25516, and the Bureau permits, each of which involves a direct or indirect diversion from the Delta. The contract also sets 195,000 afa as the maximum amount of CVP water that can be diverted from the Delta, but does not set a maximum annual diversion for all rights under which water will be diverted at Old River and Rock Slough.

The permits should include a combined limit because an excessive amount of water diverted from the Delta can adversely affect beneficial uses in the Delta, including fish, wildlife, and in-Delta agricultural diversions. The SWRCB must ensure that more impacts do not occur in the Delta than were considered in the environmental documentation. If water is required to avoid or mitigate adverse environmental effects, it cannot be diverted.

The total potential Delta diversion if the maximum Bureau diversion under the change petitions were added to Application 20245 is 290,850 acre-feet per annum, which far exceeds the maximum to be delivered. The maximum annual diversion that CCWD analyzed anywhere in

the record appears to be 221,370 afa, to show the maximum that would be available based on the historic record. This diversion rate, however, was not discussed in the EIR/EIS.

The Department of Fish and Game and the United States Fish and Wildlife Service have restricted the project under the endangered species acts to delivering no more than 148,000 afa in the service area. While this does not directly limit the annual diversion from the Delta, the practical effect is that no more than 242,000 afa could be diverted in any year after the first year consistent with the biological opinion. This assumes delivery of a full 148,000 afa plus filling Los Vaqueros Reservoir to 90,000 af⁹ in one year, plus replacement of 4,000 afa of evaporation losses. If water were available for the reservoir to fill in the first year, an additional 10,000 af would be needed to fill the dead storage space at the bottom of the reservoir. The diversion of 252,000 af would occur only once, if it occurred at all. The additional 10,000 af for initial filling would be available only during a wet year when water is available for Applications 20245 and 25516 and during periods when diversions are authorized by the biological opinions. The Department

⁹ The 90,000 af figure is the operating level of the reservoir, according to the Fish and Wildlife Service biological opinion.

of Fish and Game and the Service will require additional documentation including a biological assessment before authorizing a higher annual delivery.

The District has provided no documentation to show that the full 290,850 afa can be diverted. Nor has the District indicated that it would divert this amount. In analyzing the project's environmental effects, the District in the EIR/EIS used a maximum Delta diversion of 188,000 afa in critical years and 175,000 afa in other years. The maximum annual diversion from the Delta that the District modelled is 221,370 afa.

(CCWD:96,15) The difference between 175,000 afa and 221,370 afa is 46,370 af, which would refill the reservoir after a dry year.¹⁰

The District's exhibits do not contemplate regularly delivering the full 195,000 afa even at maximum buildout. The District calculates that it will divert on average 179,480 afa from the Delta at full development. (CCWD:96,15) The District's exhibits show that the actual diversions from Rock Slough and Old River will vary, with 195,000 afa available in 12%

¹⁰ The emergency storage level in dry years for Los Vaqueros Reservoir will be 44,000 af. The maximum usable water storage in the reservoir will be 90,000 af. Thus, the reservoir could be refilled from the dry year emergency storage level with 46,000 af of water. Using the maximum Delta diversion for use in the District of 175,000 afa during a non-critical year, the reservoir could be refilled in one year if the District diverted 221,370 af, the maximum diversion which the District has modelled.

of the years, 200,000 afa available in 9% of the years, and 205,000 afa available in 5% of the years. The District will have additional water available under its other rights, primarily during wetter years, to facilitate its delivery of a full supply to its customers while refilling Los Vaqueros Reservoir after a dry year.¹¹

The hearing record does not contain an analysis to support diverting up to 290,850 afa in a single year, nonetheless, the District may in the future need to divert this quantity. This quantity would provide enough water to both deliver the maximum of 195,000 acre-feet allowed under the Bureau contract and to refill Los Vaqueros Reservoir after it has been drawn down to dead storage after a severe drought. Because the record does not analyze the effects of diverting the full 290,850 acre-feet per year that could potentially be diverted under the Bureau's petitions and Application 20245, this decision includes an annual limit on diversions of 242,000 afa, consistent with the biological opinion. Additionally, this decision authorizes the diversion of an additional 10,000 af

¹¹ In addition to the Rock Slough and Old River diversions affected by this decision, the District has rights to divert up to 26,780 afa from Mallard Slough. Additionally, this decision will authorize appropriation of up to 9,640 afa from Kellogg Creek under Application 25516. These rights will not be subject to the combined diversion limitation and can be used to serve the District's place of use.

during the first 12 months of filling the reservoir, to fill dead storage if adequate water is available. The combined limit controls total combined diversions, but it does not limit the water rights of either the Bureau or the District. The combined limit can be raised after a further petition supported by analysis adequate to show the effects of diverting a larger quantity.

Additionally, this decision limits the combined annual diversion and rediversion of water from Old River to 180,675 afa. This limit is based on the fact that the maximum diversion rate for the Old River facility is 250 cfs. (T,I,20:18) Per the following calculation, a 250 cfs diversion rate is equivalent to diversion of 180,675 afa: $[250 \text{ cfs} \times (1.98 \text{ af per day}/1 \text{ cfs}) \times 365 \text{ days/year} = 180,675 \text{ afa}]$.

The project is not expected to have significant effects on population, housing, or employment. The project will generate fifty or fewer long-term jobs.

Sufficient housing is available near to project to house people for the long-term jobs. (CCWD,100,12-33)

7.0

CONCLUSIONS

1. Application 20245 should be approved for diversion of water from Old River to storage in Los Vaqueros Reservoir up to 95,850 afa, to be collected at a

maximum rate of 200 cfs, subject to permit terms and conditions. Before the permit is issued, the District must provide to the Division of water Rights amended application maps showing:

- a. The area-capacity curves for Los Vaqueros Reservoir;
 - b. Only the approved Old River point of diversion in the NW¼ of SE¼ of projected Section 31, T1N, R4E, MDB&M.
 - c. The place of use map should show only the areas shown in Figure 1-3 in the final EIR/EIS.
2. State-filed Application 25516 should be assigned to the District and approved for storage of 9,640 afa in Los Vaqueros Reservoir and direct diversion of 115 cfs from Kellogg Creek, with a combined right limitation for storage and direct diversion from Kellogg Creek of 9,640 afa, subject to permit terms and conditions. The amended applications maps required for Application 20245 should also be filed for Application 25516 before permit issuance.
3. The Bureau's change petitions should be approved in part, subject to terms and conditions, as follows:
- a. Add the point of diversion or rediversion on Old River to Permits 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 16597,

11968, 11969, 11971, 11973, 12364, 13776,
16600, and 15735.

- b. Change the purpose of use of Permits 12723 and 12725 to add municipal and industrial uses.
- c. Add the place of use shown in Figure 1-3 of the final EIR/EIS to Permits 16597, 13776, and 16600.
- d. The amended application maps required for Application 20245 should be filed for the changes in Permits 16597, 13776, and 16600 before the amended permits are issued.

ORDER

IT IS HEREBY ORDERED that Application 20245 is approved for appropriation from Old River at a point located within the NW¼ of SE¼ of projected Section 31, T1N, R4E, MDB&M. The quantity to be appropriated is up to 95,850 acre-feet per annum to storage in Los Vaqueros Reservoir at a maximum diversion rate of 200 cubic feet per second. The permit on Application 20245 shall be subject to prior water rights and the terms and conditions in this decision. Issuance of the permit shall be subject to the Contra Costa Water District first submitting to the Chief, Division of Water Rights, amended application maps with the following features included and alternative features deleted:

- a. The area-capacity curves for Los Vaqueros Reservoir.
- b. The authorized Old River point of diversion in the NW¼ of SE¼ of projected section 31, T1N, R4E, MDB&M.

c. A place of use map showing the service area and sphere of influence of the Contra Costa Water District, the Cities of Pittsburg, Antioch, and Brentwood with their spheres of influence, the Oakley subarea, the Los Vaqueros recreation area, and the rural county subarea, as shown on Figure 1-3 in the final EIR/EIS.

1. This permit is subject to standard permit terms 9 through 13, 29A, 43, 48, 50, 63, 80, 90, and 100 (a copy of the State Water Resources Control Board's standard permit terms is available upon request), in addition to the following terms and conditions.
2. The purposes of use shall include municipal, industrial, domestic, irrigation, recreation, incidental fish and wildlife preservation and/or enhancement, and water quality. The place of use shall be that part of Contra Costa County shown on the map specified above, which is to be filed with the State Water Resources Control Board before issuance of the permit.
3. The water appropriated under this permit shall be limited to the quantity which can be beneficially used and shall not exceed 95,850 acre-feet per annum to be collected to storage from November 1 of each year to June 30 of the succeeding year.

The maximum rate of diversion to offstream storage in Los Vaqueros Reservoir shall not exceed 200 cubic feet per second.

4. Water appropriated under this permit shall be diverted from Old River at a point located within the NW 1/4 of SE 1/4 of projected Section 31, T1N, R4E, MDB&M.
5. No water shall be diverted under this permit until permittee has installed devices, satisfactory to the State Water Resources Control Board, which are capable of measuring the flow: (1) diverted into permittee's reservoir from Old River; and (2) releases through the outlet facilities of permittee's reservoir. Said measuring devices shall be properly maintained.
6. The permittee shall maintain a daily record of direct diversion and collection to storage under this permit and submit such record to the Division on an annual basis, on or before March 1. The record of water use under this permit may not be combined with diversion or storage records for water use under other rights maintained by the permittee.
7. The total quantity of water diverted under this permit, together with that diverted under Permits 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 16597, 11968, 11969, 11971, 11973, 12364, 13776, 16600, and 15735 issued

pursuant to U.S. Bureau of Reclamation Applications 5626, 5628, 9363, 9364, 9366, 9367, 13370, 13371, 14858, 15374, 15375, 16767, 17374, 17376, 18115, 19304 and 22316 shall not exceed 180,675 acre-feet per annum from Old River and also shall not exceed in any one-year period commencing on March 1, the sum of (i) 195,000 acre-feet and (ii) 4,000 acre-feet to replace evaporation losses and (iii) the difference between the quantity of water in storage in Los Vaqueros Reservoir at the end of the period and the quantity of water in storage at the beginning of the period, from Old River and Rock Slough, combined. If the storage at the end of the period is less than the storage at the beginning of the period, the change in storage shall be subtracted from the 195,000 acre-feet.

Until further order of the Board, the combined maximum annual diversion shall not exceed 242,000 acre-feet per annum from Old River and Rock Slough. Further order of the Board shall be preceded by notice to all interested parties, by opportunity for hearing, and a showing that water can be diverted in excess of 242,000 acre-feet per annum, taking into account the needs of public trust uses, senior water right holders, and other beneficial uses. The petition shall be accompanied by any environmental documentation required under California law. This requirement for further order of the Board shall not preclude the permittee from filing appropriate petitions for temporary changes or applications

for temporary permits under laws existing at the time of the petition or application.

Provided, however, that if during the twelve months after the date when water is first diverted to storage in Los Vaqueros Reservoir there is adequate water available under the water rights listed above, the combined maximum diversion during that initial twelve months shall be 252,000 acre-feet from Old River and Rock Slough.

The total quantity of water distributed under the permits on the above water rights within the authorized place of use served by Contra Costa Water District for use by the customers of the Contra Costa Water District, in any year commencing March 1 shall not exceed 195,000 acre-feet.

IT IS FURTHER ORDERED that Application 25516 is assigned in part, and in its entirety as applied to Kellogg Creek upstream of Los Vaqueros Dam, to the Contra Costa Water District and is approved for appropriation from Kellogg Creek at a point located within the NW¼ of NW¼ of projected Section 23, T1S, R2E, MDB&M. The quantity to be appropriated is up to 9,640 acre-feet per annum to storage in Los Vaqueros Reservoir and up to 115 cubic feet per second by direct diversion, with a combined limit of 9,640 acre-feet per annum. The permit on Application 25516 shall be subject to prior water rights and the terms and conditions in this decision. Issuance of the permit shall be subject to the Contra

Costa Water District first submitting to the Chief, Division of Water Rights, amended application maps with the following features included and alternative features deleted:

- a. The area-capacity curves for Los Vaqueros Reservoir.
 - b. The authorized point of diversion.
 - c. A place of use map showing the service area and sphere of influence of the Contra Costa Water District, the Cities of Pittsburg, Antioch and Brentwood with their spheres of influence, the Oakley subarea, the Los Vaqueros recreation area, and the rural county subarea, as shown on Figure 1-3 in the final EIR/EIS.
1. This permit is subject to standard permit terms 9 through 13, 27, 29A, 43, 48, 50, 63, 80, 90, and 100 (a copy of the State Water Resources Control Board's standard permit terms is available upon request), in addition to the following terms and conditions.
 2. The purposes of use shall include municipal, industrial, domestic, irrigation, recreation, incidental fish and wildlife preservation and/or enhancement, and water quality. The place of use shall be that part of Contra Costa County shown on a map on file with the State Water Resources Control Board.
 3. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 115 cubic feet

per second by direct diversion and 9,640 acre-feet per annum by storage from January 1 through December 31 of each year.

The total amount of water to be taken from the source shall not exceed 9,640 acre-feet per water year of October 1 to September 30.

4. Diversion of water under this permit for use outside the county of origin shall be subject to rights initiated by applications for use within said county regardless of the date of filing said applications, as provided in Water Code Section 10505.5.
5. Before making any change in the project determined by the State Water Resources Control Board to be substantial, permittee shall submit such change to the Board for its approval in compliance with Water Code Section 10504.5(a).
6. a. Permittee shall, from March 1 through July 1 of each year, bypass a sufficient quantity of Kellogg Creek inflow into Los Vaqueros Reservoir to provide 0.67 cubic feet per second or the natural flow, whichever is less, for diversion under License 5173 at the authorized point of diversion under License 5173. The permittee shall bypass adequate flow to account for channel losses and evaporation upstream of the point of diversion under License 5173. Nothing in this permit term shall be

construed as requiring release of stored water obtained from other sources or Kellogg Creek water stored prior to March 1 of each water year. Subject to the agreement of the holder of License 5173, permittee may instead provide water in sufficient quantity from an alternate source or in an alternative regime during the March 1 through July 1 period, including purchased water, to approximate the quantity which would be available under License 5173 as unimpaired runoff in Kellogg Creek. Such alternative water supply may be substituted only if the place of use of the alternative water supply includes the place of use of License 5173.

- b. Permittee shall release water from Los Vaqueros Reservoir at a rate equal to the estimated inflow to the reservoir, up to a maximum of 5 cubic feet per second. Permittee shall release sufficient water from the reservoir at all times to maintain existing perennial pools in the 1-mile reach immediately downstream of the dam.
7. The permittee shall maintain a daily record of direct diversion and collection to storage under this permit and submit such record to the Division of Water Rights on an annual basis. The record of water use under the permit may not be combined with diversion or storage records for water use under other rights maintained by the permittee.

8. For the protection of fish and wildlife resources in Kellogg Creek downstream of the Los Vaqueros Dam, permittee shall:
 - a. Install a temporary pipe to divert Kellogg Creek streamflow around the area that will be disturbed during construction of the Los Vaqueros Dam and convey water diverted back into Kellogg Creek downstream of the construction area during dam construction. This temporary diversion shall be operated in a manner which will minimize reduction of streamflow and minimize sedimentation of Kellogg Creek below the dam during dam construction.
 - b. Implement measures to prevent downstream water quality impacts during construction and operation, including restricting stream crossings to low-flow seasons, prohibiting use of streamflow for construction activities, prohibiting operation of construction equipment in flowing water outside the Los Vaqueros Reservoir inundation area, and employing suitable design criteria for stream crossing structures.
 - c. Immediately following cessation of temporary diversion of Kellogg Creek, permittee shall implement the release schedule specified in condition 6. b. above.

- d. No water shall be diverted under this permit until permittee has installed devices or provided other means satisfactory to the State Water Resources Control Board, to measure: (1) Kellogg Creek natural flow into Los Vaqueros Reservoir; and (2) minimum Kellogg Creek streamflows required by this permit. The permittee shall be responsible for monitoring compliance with the minimum streamflow requirements of this permit.

IT IS FURTHER ORDERED that the petition of the U.S. Bureau of Reclamation for change of Permits 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 16597, 11968, 11969, 11971, 11973, 12364, 13776, 16600, and 15735 (Applications 5626, 5628, 9363, 9364, 9366, 9367, 13370, 13371, 14858, 15374, 15375, 16767, 17374, 17376, 18115, 19304 and 22316) to add a point of diversion or rediversion from Old River within the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of projected Section 31, T1N, R4E, MDB&M, to add a place of use within the service area of the Contra Costa Water District, and to amend the purposes of use of Permits 12723 and 12725 is approved in part as set forth below, subject to standard permit term 63 and the terms and conditions listed in this decision. Issuance of permit amendments under this petition shall be subject to the permittee or Contra Costa Water District first submitting to the Chief, Division of Water Rights, amended application maps with the following features included and alternative features for the Los Vaqueros Project deleted:

- a. The area-capacity curves for Los Vaqueros Reservoir.

- b. The authorized point of diversion.
 - c. A place of use map for Permits 16597, 13776, and 16600 (Applications 14858, 18115, and 19304) showing the service area and sphere of influence of the Contra Costa Water District, the Cities of Pittsburg, Antioch, and Brentwood with their spheres of influence, the Oakley subarea, the Los Vaqueros recreation area, and the rural county subarea, as shown on Figure 1-3 in the final EIR/EIS.
1. The purpose of use of Permits 12723 and 12725 on Applications 9364 and 9366 is amended to include municipal and industrial purposes in Contra Costa County.
 2. Add to Permit 11973 (Application 17374) the following term:
The water rediverted from Old River within the NW¼ of the SE¼ of projected Section 31, T1N, R4E, MDB&M shall be limited to the quantity which can be beneficially used and shall not exceed 250 cubic feet per second by direct diversion from January 1 to December 31 of each year.
 3. Add to Permits 12721, 11967, 12722, 12723, 11315, 11316, 16597, 11968, 11969, 11971, 12364, 13776, 16600, and 15735 (Applications 5626, 5628, 9363, 9364, 13370, 13371, 14858, 15374, 15375, 16767, 17376, 18115, 19304 and 22316) the following term:

The maximum rate of diversion and rediversion to offstream storage in Los Vaqueros Reservoir shall not exceed 200 cubic feet per second.

4. Add to Permits 16597, 13776, and 16600 (Applications 14858, 18115, and 19304) the following term:

The authorized place of use shall include the service area and sphere of influence of the Contra Costa Water District, the Cities of Pittsburg, Antioch, and Brentwood with their spheres of influence, the Oakley subarea, the Los Vaqueros recreation area, and the rural county subarea as of fall 1989, as shown on a map filed with the State Water Resources Control Board.

5. Add to all the permits subject to the change petition the following terms:

- a. The permittee shall maintain a daily record of water diversion utilizing the Old River point of diversion and submit such record to the Division of Water Rights on an annual basis.
- b. No water shall be diverted from Old River under this permit until permittee has installed devices, satisfactory to the State Water Resources Control Board, which are capable of measuring the flow: (1) diverted into permittee's reservoir from Old River; and (2) released through the outlet facilities of permittee's

reservoir. Said measuring devices shall be properly maintained.

6. Amend term 10 of Permit 15735 (Applications 9366, 9367, and 22316) to read:

The combined rates of diversion from Rock Slough and Old River under Permits 12725, 12726, and 15735 (Applications 9366, 9367, and 22316) shall not exceed 350 cubic feet per second.

7. Amend term 1 of Permit 12725 (Application 9366) to read:

The water appropriated at the Old River and Rock Slough points of diversion shall be limited to the quantity which can be beneficially used and shall not exceed 200 cubic feet per second by direct diversion from January 1 to December 31 of each year, combined. The combined rates of diversion from Rock Slough and Old River under Permits 12725, 12726, and 15735 (Applications 9366, 9367, and 22316) shall not exceed 350 cubic feet per second.

8. Amend term 1 of Permit 12726 (Application 9367) to read:

The water appropriated at the Old River and Rock Slough points of diversion shall be limited to the quantity which can be beneficially used and shall not exceed 250 cubic feet per second by direct diversion from January 1 to December 31 of each year, combined. The combined rates of diversion from Rock Slough and Old River under Permits 12725, 12726, and

15735 (Applications 9366, 9367, and 22316) shall not exceed 350 cubic feet per second.

9. Amend term 1 of Permit 15735 (Application 22316) to read:
Water appropriated under this permit at the Old River and Rock Slough points of diversion and rediverted at Kellogg Creek shall be limited to the quantity which can be beneficially used and shall not exceed 5,400 afa to be collected from October 1 of each year to June 30 of the succeeding year. The maximum rate of diversion to offstream storage shall not exceed 21.16 cubic feet per second.

10. Add to all the permits subject to the change petition the following terms:
 - a. The total combined quantity of water diverted and/or rediverted under Application 20245 and under Permits 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 16597, 11968, 11969, 11971, 11973, 12364, 13776, 16600, and 15735 (issued pursuant to Applications 5626, 5628, 9363, 9364, 9366, 9367, 13370, 13371, 14858, 15374, 15375, 16767, 17374, 17376, 18115, 19304, 20245 and 22316) shall not exceed 180,675 acre-feet per annum from Old River and also shall not exceed in any one-year period commencing on March 1, the sum of (i) 195,000 acre-feet and (ii) 4,000 acre-feet to replace evaporation losses and (iii) the difference between the quantity of water in storage in Los Vaqueros Reservoir at the end of

the period and the quantity of water in storage at the beginning of the period, from Old River and Rock Slough, combined. If the storage at the end of the period is less than the storage at the beginning of the period, the change in storage shall be subtracted from the 195,000 acre-feet.

Until further order of the Board, the combined maximum annual diversion shall not exceed 242,000 acre-feet per annum from Old River and Rock Slough. Further order of the Board shall be preceded by notice to all interested parties, by opportunity for hearing, and a showing that water can be diverted in excess of 242,000 acre-feet per annum, taking into account the needs of public trust uses, senior water right holders, and other beneficial uses. The petition shall be accompanied by any environmental documentation required under California law. This requirement for further order of the Board shall not preclude the permittee from filing appropriate petitions for temporary changes or applications for temporary permits under laws existing at the time of the petition or application.

Provided, however, that if during the twelve months after the date when water is first diverted to storage in Los Vaqueros Reservoir there is adequate water available under the water rights listed above, the combined maximum

diversion during that initial twelve months shall be 252,000 acre-feet from Old River and Rock Slough.

The total quantity of water distributed under the permits on the above water rights within the authorized place of use served by Contra Costa Water District for use by the customers of the Contra Costa Water District, in any year commencing March 1 shall not exceed 195,000 acre-feet.

- b. The combined rates of diversion and/or rediversion from Old River under the permits issued pursuant to Application 20245 and under Permits 12721, 11967, 12722, 12723, 12725, 12726, 11315, 11316, 16597, 11968, 11969, 11971, 11973, 12364, 13776, 16600, and 15735 (issued pursuant to Applications 5626, 5628, 9363, 9364, 9366, 9367, 13370, 13371, 14858, 15374, 15375, 16767, 17374, 17376, 18115, 19304, 20245 and 22316) shall not exceed 250 cubic feet per second.
11. Add to Permits 12725, 12726, and 15735 (Applications 9366, 9367, and 22316) the following terms:
 - a. Permittee shall construct, operate, and maintain a fish screen and fish screen cleaning system at the Rock Slough intake of the Contra Costa Canal, satisfactory to the Department of Fish and Game, United States Fish and Wildlife Service, and National Marine Fisheries Service. The fish screening facility shall be constructed and made

fully operational by not later than October 1, 1998. The fish screening facility shall be designed and operated to achieve an average water approach velocity no greater than 0.2 feet per second for a 3/32" vertical slotted screen opening and shall effectively screen fish longer than 21 millimeters. After March 1997, water shall be diverted under this permit only at the Old River intake between January 1 and August 31 unless other points of diversion authorized under this permit are approved by DFG and USFWS.

- b. The permittee shall maintain a continual record of water diversion utilizing the Rock Slough and Old River points of diversion and submit such record to the Division of Water Rights on an annual basis.

- 12. Add to all the permits subject to the change petition the following term:

Permittee shall comply with all legally binding requirements of the California Department of Fish and Game, the United States Fish and Wildlife Service and the National Marine Fisheries Service imposed on the permittee under the federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544) and the California Endangered Species Act (Fish and Game Code Sections 2050 to 2098) with respect to the Los Vaqueros Project.

13. Add to all of the permits subject to the change petition the following term:

Permittee shall in cooperation with the Contra Costa Water District implement the mitigation monitoring and reporting measures for Bay-Delta fishery resources and Bay-Delta water quality which are set forth in the Environmental Commitments and Mitigation Monitoring and Reporting Plan for the Los Vaqueros Project Stage 2 Environmental Impact Report/Environmental Impact Statement, dated October 27, 1993. Permittee in cooperation with the Contra Costa Water District shall provide a report to the Chief, Division of Water Rights by April 1 of each year detailing the results of the previous year's monitoring, plans for the current year's monitoring, and the status of implementation of each mitigation measure required by this decision.

IT IS FURTHER ORDERED that the following terms and conditions shall be included in the permits on Applications 20245 and 25516.

1. Permittee shall comply with all legally binding requirements of the California Department of Fish and Game, the United States Fish and Wildlife Service, and the National Marine Fisheries Service imposed under either the federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544) or the California Endangered Species Act (Fish and Game Code Sections 2050 to 2098), with respect to the Los Vaqueros Project.

2. a. Permittee shall comply with the "Programmatic Agreement Among the U.S. Bureau of Reclamation (USBR), Contra Costa Water District, the California State Historic Preservation Office and the Advisory Council on Historic Preservation Regarding the Implementation of the Los Vaqueros Project", executed on February 3, 1993, and shall comply with it as it may be amended in the future. Permittee also shall comply with all historic property treatment plans prepared under the Programmatic Agreement.

- b. The permittee shall continue to consult with the U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, the Chief, Division of Water Rights, the State Historic Preservation Officer and the Advisory Council on Historic Preservation regarding cultural resources until all stipulations of the Programmatic Agreement have been completed to the satisfaction of the agencies. The permittee also shall comply with the "Procedure for the Protection of Historic and Cultural Properties" (36 CFR 60) and the implementing regulations of the Advisory Council on Historic Preservation, 36 CFR 800.

- c. Permittee shall comply with the Memorandum of Understanding executed July 21, 1993 between Contra Costa Water District and seven of the Native Americans Most Likely Descendants regarding treatment of Native American

human remains and the selection of Native American monitors.

3. Permittee shall comply with mitigation measures 7-1 through 7-19 and 8-1 through 8-12 set forth at pages 19-5 through 19-8 of the final Environmental Impact Report/Environmental Impact Statement (EIR/EIS) dated September 27, 1993. Permittee also shall comply with mitigation measures 1 through 13 under "Additional Environment Commitments Related to the Fish and Wildlife Coordination Act Report" set forth at pages 19-13 through 19-14 of the Final EIR/EIS. The Chief, Division of Water Rights, may grant a variance from any of these mitigation measures after making a finding that the variance will have no significant adverse effect on the environment. Any request for a variance shall include the reasons for the variance, environmental information necessary to demonstrate that it will not adversely affect the environment, and proof that the permittee has notified all interested parties of the request.

4. Permittee shall in cooperation with the United States Bureau of Reclamation implement the mitigation monitoring and reporting measures for Bay-Delta fishery resources, Bay-Delta water quality, vegetation resources, wildlife resources, cultural resources, and to comply with the Fish and Wildlife Coordination Act (16 U.S.C. Section 661 et seq.); which are set forth in the Environmental Commitments and Mitigation

Monitoring and Reporting Plan for the Los vaqueros Project Stage 2 Environmental Impact Report/Environmental Impact Statement, dated October 27, 1993. Permittee in cooperation with the United States Bureau of Reclamation shall provide a report to the Chief, Division of Water Rights by April 1 of each year detailing the results of the previous year's monitoring, plans for the current year's monitoring, and the status of implementation of each mitigation measure required by this decision.

5. No diversion is authorized that would adversely affect the operation of the Central Valley Project or State Water Project under permits and licenses for the Projects in effect on the date of this Order. An adverse effect shall be deemed to result from permittee's diversion at any time the United States Bureau of Reclamation and the Department of Water Resources have declared the Delta to be in balanced water conditions under the Coordinated Operation Agreement or at any other time that such diversion would directly or indirectly require the Central Valley Project or the State Water Project to release water from storage or to reduce their diversion or rediversion of water from the Delta to provide or assure flow in the Delta required to meet any applicable provision of state or federal law.

IT IS FURTHER ORDERED that the following terms and conditions shall be included in the permits on Applications 5626, 5628,

9363, 9364, 9366, 9367, 13370, 13371, 14858, 15374, 15375, 16767, 17374, 17376, 18115, 19304, 20245, and 22316.

1. Permittee shall minimize increased levels of suspended sediments discharged to Old River during construction, maintenance and repair of the Old River intake facility and minimize loss of fish and riparian wildlife at the Old River intake facility construction site by: (1) installing floating silt curtains, silt fences, stormwater detention facilities, and other appropriate sediment control facilities; (2) mapping existing riparian/aquatic fish habitat prior to construction and taking steps to avoid losses to existing habitat during facility construction as much as possible; and (3) reestablishing suitable new habitat on newly constructed or existing levees to compensate for unavoidable losses. Further, the permittee shall perform all construction, maintenance and repair operations on the Old River intake facility only during the period from September 1 through December 30 of each year, unless USFWS and DFG authorize these activities during other periods. Best management practices shall be used to minimize direct and indirect impacts to fish and wildlife.

2. a. During the period from March 15 through May 15 of each year, the permittee shall use the Old River point of diversion as much as possible in order to minimize diversions at the Rock Slough point of diversion under Permits 12725, 12726, and 15735 on Applications 9366,

9367, and 22316 of the United States Bureau of Reclamation.

- b. During the period from March 15 through May 31 of each year, the permittee shall not divert water from the Old River point of diversion to offstream storage in Los Vaqueros Reservoir when the reservoir storage level is more than 70,000 acre-feet (af) in a below normal, above normal or wet water year, or more than 44,000 af in a dry or critical water year. Water year types will be as defined in the February edition of the California Department of Water Resources Bulletin 120 or the Four Basin Index set forth in the permits and licenses of the Bureau of Reclamation.

- c. During the period from April 1 through April 30 of each year, permittee shall not divert water from the Delta for use by Contra Costa Water District at times when storage in the reservoir is more than 70,000 af in a below normal, above normal or wet water year, or more than 44,000 af in a dry or critical water year, unless more than 12,500 acre-feet is necessary to meet reasonable demands in the Contra Costa Water District service area during this period.

- d. If in any year the Department of Fish and Game, United States Fish and Wildlife Service or National Marine

Fisheries Service require modifications in the time periods specified in items b or c above to protect endangered or threatened species, permittee shall by February 15, or immediately if after February 15, notify the Chief, Division of Water Rights of the time period modifications for that year. Unless within 15 days the Chief, Division of Water Rights, objects to the proposed modifications or proposes an alternative, the permittee shall implement the modifications.

e. The requirements of this permit term shall become effective when Los Vaqueros Reservoir is initially filled to a level of 90,000 af.

3. Permittee shall construct, operate and maintain a fish screen and fish screen cleaning system at the Old River intake facility, satisfactory to the Department of Fish and Game, United States Fish and Wildlife Service and National Marine Fisheries Service. The fish screen facility shall be constructed and made fully operational prior to operation of the Old River intake facility and by not later than January 1, 1997. In addition, the screen facility shall be designed and operated to achieve an average water approach velocity no greater than 0.2 feet per second for a 3/32" vertical slotted screen opening, and be operated to effectively screen fish greater than 21 millimeters long.

4. To avoid construction impacts to Swainson's hawks, surveys shall be conducted weekly beginning the first week of April through May 15 by a biologist acceptable to the Department of Fish and Game to determine if any nesting is occurring within ½ mile of the Old River diversion point, and to determine whether there is any suitable nesting habitat within ½ mile. If nesting is occurring within ½ mile, construction may not be initiated or continued until August 15 without additional consultation with the Department of Fish and Game. This term shall expire upon completion of construction.

CERTIFICATION

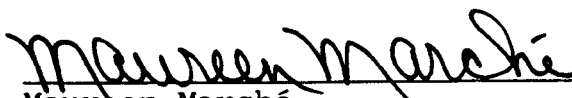
The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full and correct copy of a decision duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 2, 1994.

AYE: John Caffrey
James M. Stubchaer
Marc Del Piero
Mary Jane Forster
John W. Brown

NO: None

ABSENT: None

ABSTAIN: None



Maureen Marché
Administrative Assistant to the Board