

See: Order ~~WR~~
WR 84-10

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Application 25727)	
)	Decision: 1598
NATOMAS CENTRAL MUTUAL WATER COMPANY,)	
)	Sources: Sacramento River;
Applicant.)	Natomas Cross Canal;
)	Reclamation District 1000
CONTRA COSTA COUNTY WATER DISTRICT, ET AL,)	Main Drain, East Drain,
)	and West Drain
Protestants.)	
_____		Counties: Sutter and Sacramento

DECISION APPROVING APPLICATION 25727

BY THE BOARD:

Natomas Central Mutual Water Company having filed Application 25727 for a permit to appropriate unappropriated water; protests having been received; two days of public hearing having been held by the Board on August 20, 1979 and December 19, 1979; applicant, protestants and the California Department of Water Resources having appeared and presented evidence; all evidence in the record having been considered; the Board finds as follows:

Substance of the Application

1. Application 25727 is for a permit to divert 168 cubic feet per second (cfs) from the Sacramento River, Natomas Cross Canal, and Reclamation District 1000 Main Drain, East Drain, and West Drain during the period from October 1 of each year to April 1 of the succeeding year for irrigation purposes on 10,000 net acres within a gross area of 51,091 acres. The maximum amount of water to be diverted will not exceed 10,000 acre-feet per annum (afa). The location of the points of diversion and the place of use are identified in Tables A and B respectively, and are shown on Figure 1.

Table A

POINTS OF DIVERSION

<u>Point</u>	<u>Source</u>	<u>Within</u>	<u>County</u>
1	Sacramento River	SW $\frac{1}{4}$ of SE $\frac{1}{4}$ Sect. 23, T11N, R3E	Sutter
2	Sacramento River	SW $\frac{1}{4}$ of SE $\frac{1}{4}$ Sect. 12, T10N, R3E	Sacramento
3	Sacramento River	NE $\frac{1}{4}$ of SE $\frac{1}{4}$ Sect. 23, T10N, R3E	Sacramento
6	Sacramento River	SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sect. 17, T9N, R4E	Sacramento
A	Natomas Cross Canal	NE $\frac{1}{4}$ of NW $\frac{1}{4}$ Sect. 24, T11N, R3E	Sutter
B	Natomas Cross Canal	SE $\frac{1}{4}$ of NW $\frac{1}{4}$ Sect. 18, T11N, R4E	Sutter

VARIABLE POINTS OF DIVERSION
AND
POINTS OF REDIVERSION

<u>Between</u>	<u>Source</u>	<u>Within</u>	<u>County</u>
E and	East Drain	SE $\frac{1}{4}$ of SE $\frac{1}{4}$ Sect. 5, T10N, R4E	Sutter
F		SE $\frac{1}{4}$ of NE $\frac{1}{4}$ Sect. 22, T9N, R4E	Sacramento
G and	West Drain	SE $\frac{1}{4}$ of NW $\frac{1}{4}$ Sect. 26, T10N, R3E	Sacramento
F		(same as above)	Sacramento
F and	Main Drain	(same as above)	Sacramento
H		NE $\frac{1}{4}$ of SE $\frac{1}{4}$ Sect. 27, T9N, R4E	Sacramento

NOTE: All Townships and Ranges are from Mount Diablo Base and Meridian (MDB&M).

Table B

PLACE OF USE

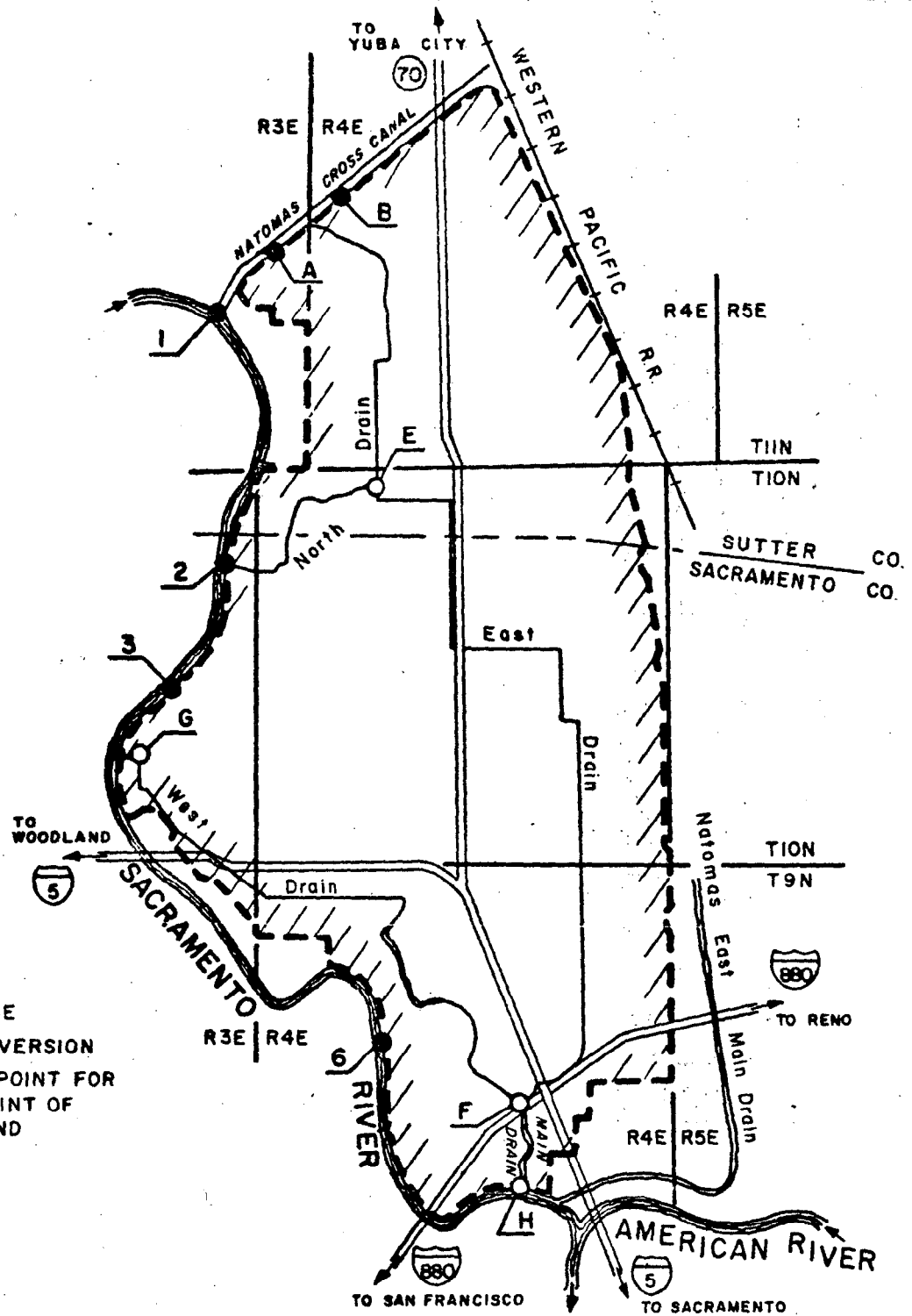
<u>Township</u>	<u>Range</u>	<u>Sections</u>
9N	3E	1.
9N	4E	1 thru 6, 8 thru 17, 20 thru 23, and 26 thru 28.
10N	3E	1, 12, 13, 23 thru 26, 35, and 36.
10N	4E	All.
11N	3E	13 and 24.
11N	4E	8 thru 10, 15 thru 23, and 26 thru 35.

NOTE: All Townships and Ranges are from Mount Diablo Base and Meridian (MDB&M).

Figure 1



M.D.B & M.



LEGEND

- PLACE OF USE
- POINT OF DIVERSION
- REFERENCE POINT FOR VARIABLE POINT OF DIVERSION AND REDIVERSION

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

APPLICATION
25727

SCALE
0 1 2 3 4 MI.

DATE: 7-10-79	DRAWN: GCW	CHECKED: RED	DWG. 3201
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Applicant's Project

2. The applicant currently furnishes its shareholders water diverted from the Sacramento River and various tributary drainage canals for summer irrigation of crops, primarily rice. Other major crops grown include wheat, tomatoes, corn, sugar beets, and to a lesser extent alfalfa, pears, milo, and safflower. The applicant holds appropriative water rights under licensed Applications 534, 1056, 1203, 1413, 15572, and 22309 for spring and summer diversion for these crops from the same sources and diversion points as specified under Application 25727. The applicant can also obtain irrigation water during the spring and summer months under a contract with the United States Bureau of Reclamation. In addition, individuals within the applicant's place of use divert from the Sacramento River and the Natomas Cross Canal under their own riparian and appropriative rights.

3. Application 25727 proposes diversion during the late fall and winter months to irrigate winter wheat and to pre-irrigate tomatoes.

Protests

4. Application 25727 was protested by Contra Costa County Water District (Contra Costa), the California Department of Fish and Game (Fish and Game), East Yolo Community Services District (East Yolo), and the United States Bureau

of Reclamation (Bureau). The California Department of Water Resources (Department) did not protest Application 25727 but appeared at the hearing in this matter pursuant to Water Code Section 184, which provides that the Department shall have an interest and may appear in any hearing held by the Board.

5. East Yolo protested Application 25727 on the basis of injury to its prior downstream right under Application 25616, which was approved by Board Decision 1559 adopted on June 16, 1980. East Yolo's protest was withdrawn on the condition that any permit issued on Application 25727 contain express provision that it is subject to all rights and priorities under Application 25616. A term to that effect will be included.

6. Fish and Game protested Application 25727 on the basis that the requested diversion could have detrimental impacts on the Sacramento River's salmon and steelhead fishery. A memorandum of agreement between the applicant and Fish and Game was signed on August 20, 1979, the first day of hearing in this matter. The agreement provides that the applicant will pay Fish and Game to rear and plant salmon and steelhead in the Sacramento River, or alternatively, the applicant will install fish screens on its points of diversion. A term setting forth requirements derived from the agreement will be included in the permit to be issued.

7. The Bureau protested Application 25727 on the basis of injury to its prior rights for the Central Valley Project under permits to divert from the Trinity River, Sacramento River, Rock Slough, and Old River. The Bureau

contends that no unappropriated water is available in the Sacramento River Basin when the Central Valley Project is providing water to maintain required water quality in the Sacramento-San Joaquin Delta (Delta).

8. The Department makes the same contention as the Bureau (Finding 7 above), but with respect to the State Water Project.

9. Contra Costa protested Application 25727 on the basis of injury to its downstream prior vested rights at Mallard Slough under licensed Application 5941, and on the basis of injury to its water supply as a downstream contractor of the federal Central Valley Project. Contra Costa is the sole user of water delivered to the Contra Costa Canal by the Bureau. The Bureau holds permitted Applications 9366 and 9367 for diversion of 350 cubic feet per second from Rock Slough in the Delta, into the Contra Costa Canal^{4/}. Contra Costa claims that the maximum chloride concentration of water at the intake to the Contra Costa Canal (Rock Slough) should be limited to 100 milligrams per liter (mg/l). At times, water from Rock Slough is of a better quality than that available under Contra Costa's own water rights from Mallard Slough and under the rights of individual industrial and municipal offshore diverters to the east of Mallard Slough. Therefore, water from Rock Slough generally is substituted for water obtainable under Contra Costa's and the individuals' own rights during periods when the chloride concentration at Mallard Slough and

^{4/} The Bureau also holds permitted Application 22316 for diversion from Rock Slough to storage in Contra Loma Reservoir. However, the maximum combined diversion rate from Rock Slough is limited to 350 cubic feet per second.

offshore in the vicinity of Antioch is greater than desired by Contra Costa and the municipal and industrial users.

Watershed Protection

10. The applicant argues that its proposed use of water is clearly within an area of origin as defined in Water Code Sections 11460 through 11463. Therefore, the applicant contends that it may appropriate natural flows with a priority higher than the priorities of the state and federal projects to export water from the Delta, including deliveries by the Bureau to the Contra Costa Canal. The applicant's contention is valid against direct diversion appropriations by the state and federal projects for export through the Tracy and Delta Pumping Plants, but is only partially valid with respect to the Bureau's diversion from Rock Slough at the Contra Costa Canal, as will be discussed below. Furthermore, releases of stored water by the state and federal projects for maintenance of required water quality in the Delta and Suisun Marsh are not available for appropriation by others under the watershed of origin protection statutes (Water Code Sections 11460 et seq.) or under any other claim of prior right.

11. Protestant Contra Costa argues that a portion of its service area is within the boundaries of the Delta as defined in Water Code Section 12220. Contra Costa further argues that the remainder of its service area is immediately adjacent to the Delta and has been supplied water from the Delta for over 35 years. Therefore, it argues that its entire service area is entitled to the same area (watershed) of origin protection in accordance with Water Code Sections 11460 and 12201.

12. Condition 22 of Board Decision 990, which approved Applications 9366 and 9367 of the Bureau for diversion from Rock Slough at the Contra Costa Canal, states:

"Direct diversion and storage of water under permits issued pursuant to Applications 5626, 9363, 9364, 9366, 9367, and 9368 for use beyond the Sacramento-San Joaquin Delta* or outside the watershed of Sacramento River Basin** shall be subject to rights initiated by applications for use within said watershed and Delta regardless of the date of filing said applications."

13. Condition 7 of Board Decision 1308, which approved diversion by the Bureau from Rock Slough for storage in Contra Loma Reservoir via the Contra Costa Canal, is essentially the same term as quoted in Finding 12 above. Contra Costa, upon petition for reconsideration, objected to condition 7 of Decision 1308 on the basis that it was not consistent with the Watershed Protection Act (Water Code Sections 11460-63). By its order of September 5, 1968, page 4, the Board stated:

* ...the Sacramento-San Joaquin Delta shall be that area defined in Water Code Section 12220.

** Definition-not quoted here.

"This subject was thoroughly considered and decided in Decision D990 which imposed on the Bureau's basic permits to divert and redivert water into the Contra Costa Canal certain limitations with regard to the watershed of origin."

14. As stated above, the predecessor of this Board has previously determined that diversion from Rock Slough through the Contra Costa Canal for use outside the boundaries of the Delta as set forth in Water Code Section 12220 is subject to rights within the Delta watershed. We find no reason to alter that determination.

15. Under Water Code Section 12220, the easterly portion of protestant Contra Costa's service area, including the cities of Antioch and Pittsburg, is within the boundaries of the Delta, and the more populous westerly portion, including Port Chicago, Martinez, Concord, and Pleasant Hill, is outside the boundaries of the Delta.

16. Since a part of the water diverted into the Contra Costa Canal from Rock Slough is used in the portion of protestant Contra Costa's service area that is within the boundary of the Delta, Application 25727 does not enjoy watershed of origin protection priority over such diversion, to the extent that the water is used within the Delta.

Water Quality Standards

17. Protestant Contra Costa claims that when the chloride concentration of the water begins to rise above 100 mg/l, salt sensitive industrial and agricultural users within its service area incur productivity declines. Accordingly, Contra Costa argues that the applicant's diversion should be restricted when the 30-day running average of mean daily chloride concentration at the intake to the Contra Costa Canal^{5/} exceeds 100 mg/l.

18. Water quality standards to be met by the Central Valley Project and the State Water Project in the Delta and Suisun Marsh for agricultural, industrial, and municipal uses and for fish and wildlife are set forth in Board Decision 1485, which standards are in accordance with the Delta Plan^{6/}, adopted on August 16, 1978. Under the Delta Plan, the maximum mean daily chloride ion concentration at the intake to the Contra Costa Canal, based on drinking water standards, is 250 mg/l. In addition, during a specified number of days each year, varying from 155 to 240 depending on year type, there must be a mean daily chloride concentration of no more than 150 mg/l. This latter requirement can be met at either the Contra Costa Canal Intake or the Antioch

^{5/} Protestant Contra Costa does not claim a water quality right at Mallard Slough under its licensed Application 5941 since Rock Slough water diverted through the Contra Costa Canal becomes its primary supply, as well as that of other nearby municipal and industrial users who divert under their own rights, when the offshore water quality in the San Joaquin and Sacramento Rivers dictates using the better quality water from Rock Slough.

^{6/} The water quality standards in Decision 1485 and in the Delta Plan are the same for the purposes of this decision.

Water Works Intake on the San Joaquin River. The Antioch area is the location from which nearby industrial and municipal users divert water directly from the San Joaquin River under their own rights. During low flow periods they obtain better quality water from Rock Slough through the Contra Costa Canal. The 150 mg/l requirement is intended to provide a level of protection for prior right industrial and municipal supplies equivalent to that which would have existed in the absence of the federal and state water projects.

19. Contra Costa's contentions on this issue are essentially the same as it made in the proceedings leading to Decision 1485 and the Delta Plan, and in its protest to Application 25616 of East Yolo (See Board Decision 1559). They were not accepted in either of those cases.

20. The Bureau has no obligation, under its contract 175r-3401 with Contra Costa, to provide water of any specific quality at the intake to the Contra Costa Canal.

21. The Delta Plan's water quality standards for the Contra Costa Canal are intended to provide water of a reasonable quality for drinking purposes, and water for other municipal and industrial purposes of no worse quality than would exist in the absence of the state and federal projects, all based on the standard of reasonableness contained in Section 2, Article X of the California Constitution. Pursuant to Water Code Section 1258, the Board shall consider the plan in acting upon this application, and may act in conformity with the plan. Consequently, the Board will herein rely upon the water quality standards set forth in the Delta Plan.

22. The Board expects to reopen hearings on the Delta standards by 1986. Standard permit term 80, which will be included in the permit to be issued, reserves jurisdiction to change the authorized diversion season to conform to later findings of the Board concerning water availability and the protection of beneficial uses of water in the Delta.

Availability of Unappropriated Water

23. The proposed diversions are located within the 20 mile reach of the Sacramento River and its tributaries between the Feather River and the American River.

24. Winter storms and spring snow melt runoff normally provide an abundance of water in the Sacramento River system during winter and early spring months. Often, protection from floods during this period becomes a major problem. When the discharge in the Sacramento River exceeds about 55,000 cfs at the Fremont Weir, located a few miles upstream from Natomas Cross Canal, flow in the river begins to overtop the weir and discharge into the Yolo Bypass. In the 40 years since storage of Sacramento River water in Shasta Reservoir began, Fremont Weir has been overtopped in 27% of the Decembers, 38% of the Januarys, 58% of the Februarys, and 43% of the Marches. The weir has only infrequently been overtopped in October and November.

25. In contrast to winter conditions, the Sacramento River Basin can be very dry during the summer and fall months. Often, releases of stored water from upstream reservoirs of the state and federal water projects provide a significant portion of the flow in the Sacramento River. The transition from

the higher winter runoff to the lower natural summer flows normally occurs about June. However, during critically dry years shortages of flow will occur much earlier, and during wet years there may be considerable flow through the summer.

26. The applicant contends that historical data and previously reported calculations by the Bureau based on simulated conditions assuming that the state and federal water projects do not exist, when compared to existing Delta standards show that considerable surplus Delta outflow occurs during most of the requested diversion season. Protestants Contra Costa and the Bureau however, point out several errors in the comparisons, and question the validity of the methodology and use of conditions that would exist without the state and federal projects as a measure of the existence of unappropriated water.

27. In the past few years the Board has conducted a comprehensive study on the availability of water in the Sacramento-San Joaquin Delta watershed, culminating in the adoption of Water Right Decision 1594 on November 17, 1983.^{7/} The determinations of water availability made in Decision 1594 are based on water quality standards contained in the Delta Plan. The Board herein takes official notice of Decision 1594.

28. Decision 1594 found that water availability in the Sacramento River watershed should be determined on a fixed season basis for projects diverting

^{7/} As a result of petitions for reconsideration, Decision 1594 was amended by Board Order WR 84-2 adopted on February 1, 1984.

less than one cubic foot per second by direct diversion or 100 acre-feet per annum by storage, and on a real-time basis utilizing standard water right permit term 91 for larger projects. The latter method applies to Application 25727. Further, Decision 1594 found that standard permit term 91 need not be included in any permit authorizing diversion that excludes the months of March through September. In other words, unappropriated water was found to be available in the Sacramento River Basin from October 1 to the end of February. Since the season requested by Application 25727 extends from October 1 to April 1, standard permit term 91 will be included in the permit to be issued.

29. The applicant's proposed use of water for winter irrigation of wheat and pre-irrigation of tomatoes is beneficial. The requested diversion may not be necessary during years of ample rainfall, and the supply of water may be limited in the month of March (for pre-irrigation of tomatoes) during very dry years. Under the latter condition, the applicant does not appear to have an alternate source of water; its contract with the Bureau covers only the period from April through October. Consequently, the applicant will be required to curtail its diversion in March when inadequate water is available to satisfy the permit.

Environmental Considerations

30. The Board as lead agency has prepared and approved a Negative Declaration in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) and the State EIR Guidelines (14 Cal. Admin. Code, Section 15000 et seq.). After the Board adopts this decision, it will file a Notice of Determination with the Secretary for Resources.

The Board determines that the project will have no significant effect on the environment. Consideration of the Negative Declaration and Initial Study and filing of the Notice of Determination will satisfy the Board's responsibilities under the California Environmental Quality Act.

31. Fish and Game protested Application 25727 because the requested diversions could have adverse effects on the Sacramento River's salmon and steelhead fisheries. Under National Audubon Society v Superior Court, 33 Cal. 3d 419, 189 Cal. Rptr. 346 (1983), fishery uses of the Sacramento River (a navigable waterway) are protected by the public trust. Consequently, the Board has considered the effect of the applicant's proposed diversions on the fishery uses of the Sacramento River, and to the extent feasible and within the standard of reasonableness contained in California Constitution Article X, Section 2, orders measures to avoid or minimize harm to that fishery.

32. The Board officially notes the Statement of Decision filed on April 13, 1984, in the Superior Court, City and County of San Francisco, Department Number Seventeen, in the action styled Delta Water Cases, Judicial Council Coordination Proceeding No. 548. Should final judgment in said action require amendment of any of the terms or conditions of the permit ordered to be issued hereby, we conclude that such amendment may be effected through reservations of jurisdiction and continuing authority under standard permit terms ordered to be included in said permit.

Conclusions

33. Based on the foregoing findings, the Board concludes that Application 25727 should be approved and a permit issued to the applicant subject to the terms and conditions set forth in the following order.

ORDER

IT IS HEREBY ORDERED that Application 25727 be approved for irrigation purposes and a permit issued to the applicant subject to prior rights. The permit shall contain applicable mandatory standard permit terms (6, 10, 11, 12, and 13)^{8/} in addition to the following terms and conditions.

1. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 168 cubic feet per second to be diverted from October 1 of each year to April 1 of the succeeding year. The maximum amount diverted under this permit shall not exceed 10,000 acre-feet per water year of October 1 to September 30.

2. Complete application of the water to the authorized use shall be made by December 1, 1988.

3. To the extent that water available for use under this permit is return flow, imported water, or wastewater, this permit shall not be construed as giving any assurance that such supply will continue.

4. The right to divert and use water under this permit is specifically subject to the prior rights of East Yolo Community Services District to appropriate water from the Sacramento River under Application 25616.

^{8/} A copy of the Board's mandatory standard permit terms is available upon request.

5. Permittee shall consult with the Division of Water Rights and prepare an Agricultural Water Conservation Plan, in accordance with Board guidelines, for the irrigation use of water on the place of use included under this permit. The proposed plan shall be prepared by professionals trained in irrigation practices, system design, and water management. The plan shall be presented to the Board for approval within one year from the date of this permit or such further time as may, for good cause shown, be allowed by the Board. A progress report on the development of the plan may be required by the Board.

The Board may require that all cost effective recommendations identified in the Water Conservation Plan be implemented prior to issuance of a water right license.

6. Permittee shall comply with the following provisions which are derived from the agreement between permittee and the California Department of Fish and Game executed on August 20, 1979 and filed with the State Water Resources Control Board:

- (a) In order to offset the loss of salmon and steelhead between the period of October 1 of each year to April 1 of the succeeding year, permittee shall reimburse the California Department of Fish and Game each year for the cost of rearing and planting 34,000 yearling-sized salmon and steelhead in the Sacramento River. The annual reimbursement shall be calculated at a rate per pound of fish equal to the prevailing cost of production and distribution at the Department's hatcheries as computed

for the fiscal year prior to the year of planting and as reported in the Department's Fish Production and Cost Report, a copy of which will be furnished to the permittee by the Department.

- (b) The number of yearling-sized salmon and steelhead for which permittee is obligated to reimburse the California Department of Fish and Game is based on the 10,000 acre-feet per water year maximum quantity of diversion authorized by this permit. Should this quantity be reduced upon petition to the State Water Resources Control Board or upon issuance of a license, the number of yearling-sized salmon and steelhead for which permittee is required to reimburse the Department shall be reduced proportionately for the next succeeding and following years, providing permittee furnishes the Department a copy of the State Board order or license by September 1 of any given year.
- (c) Rather than reimburse the California Department of Fish and Game for yearling-sized salmon and steelhead as provided above, permittee may, at its option, elect on or before September 1 of any given year, by written notice to the Department, to install fish screens in accordance with plans submitted to and approved by the Department at the points of diversion authorized under this permit. The screens at each point of diversion shall be adequate for the rate of diversion authorized by this permit, and must be in place whenever diversions are being made under this permit. This term is not intended to require that the screens be adequate for diversions under other water

rights in addition to this permit or used at a time when this permit does not authorize diversion.

7. In accordance with Section 1601, 1603, and/or Section 6100 of the Fish and Game Code, no work shall be started on the diversion works and no water shall be diverted under this permit until permittee has entered into a stream or lake alteration agreement with the Department of Fish and Game and/or the Department has determined that measures to protect fishlife have been incorporated into such diversion works. Construction, operation, and maintenance costs of any required facility are the responsibility of permittee.

8. The State Water Resources Control Board reserves jurisdiction over this permit to change the season of diversion to conform to later findings of the Board concerning availability of water and the protection of beneficial uses of water in the Sacramento-San Joaquin Delta and San Francisco Bay. Any action to change the authorized season of diversion will be taken only after notice to interested parties and opportunity for hearing.

9. This permit is subject to prior rights. Permittee is put on notice that during some years water will not be available for diversion during portions or all of the season authorized herein. The annual variations in demands and hydrologic conditions in the Sacramento River Basin are such that in any year of water scarcity the season of diversion authorized herein may be reduced or completely eliminated on order of this Board made after notice to interested parties and opportunity for hearing.

10. 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 all 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 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, and water released from Project storage, which is in excess of export diversions, Project carriage water, and Project inbasin deliveries.

The 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.

Dated: MAY 17 1984



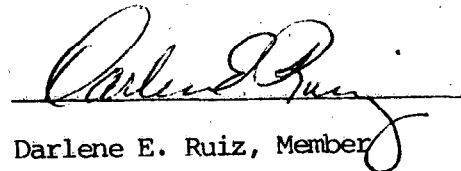
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Darlene E. Ruiz, Member