see: D-1594

WATER RIGHT DECISION 1594

IN THE MATTER OF WATER RIGHT PERMITS IN THE SACRAMENTO— SAN JOAQUIN DELTA WATERSHED IN WHICH THE BOARD RESERVED JURISDICTION TO CHANGE THE SEASON OF DIVERSION (TERM 80 PERMITS)

AND ORDER WR 84-2

AMENDING AND AFFIRMING DECISION 1594 AND DENYING PETITIONS FOR RECONSIDERATION



November 1983 and February 1984

STATE WATER RESOURCES CONTROL BOARD



STATE OF CALIFORNIA George Deukmejian, Governor

STATE WATER RESOURCES CONTROL BOARD

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STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of

WATER RIGHT PERMITS IN THE)
SACRAMENTO-SAN JOAQUIN DELTA)
WATERSHED)

In Which the Board Reserved Jurisdiction to Change the Season of Diversion (TERM 80 PERMITS) Decision 1594

DECISION AMENDING WATER RIGHT PERMITS
WITHIN THE SACRAMENTO-SAN JOAQUIN DELTA WATERSHED

STANDARD WATER RIGHT PERMIT TERM 80

WHICH ARE SUBJECT TO

TABLE OF CONTENTS

| Section | Subject | Page | | |
|---------|--|------------|--|--|
| | Decision Preamble | | | |
| 1 | Subject of Decision | _ 1 | | |
| 2 | Description of Watershed | 2 | | |
| . 3 | Standard Water Right Permit Term 80 | 4 | | |
| 4 | State and Federal Projects | 4 | | |
| 5 | Delta Water Quality Standards | 7 | | |
| 6 | Standard Water Right Permit Term 91 | 8 | | |
| 7 | Water Availability Study | 9 | | |
| 8 | Hearing on Water Availability For Term 80 | | | |
| | Permittees | 10 | | |
| 9 | Methods of Determining Water Availability: | | | |
| | Overview | 11 | | |
| 10 | Term 91 Method | 12 | | |
| 11 | Storage Release Tracking Method | 15 | | |
| 12 | Natural Flow Tracking Method | 16 | | |
| 13 | Department of Water Resources Operations | | | |
| | Studies | 17 | | |
| 14 | Bureau of Reclamation Delta Balance Method | 18 | | |
| 15 | Comparison of Methods | 20 | | |
| , 16 | Deletion of Term 91 From Permits For Small | | | |
| | Quantities of Water and For Certain Power | | | |
| | Projects | 2 5 | | |
| . 17 | Determination of Fixed Season of Diversion | | | |
| 3 | For Minor Water Users | 28 | | |

| 18 | Relationship of Delta Demands and Local | |
|------------|---|----|
| | Demands to Season of Diversion | 29 |
| 19 | Lack of Hydraulic Continuity | 30 |
| 20 | Continued Exclusion of July and August | |
| | From Diversion Season of Existing | '. |
| | Term 80 Permittees | 31 |
| 21 | Water Availability in the San Joaquin River | |
| | Basin | 33 |
| 22 | Responsibility of Term 80 Permittees | |
| | Toward Delta Water Quality Standards | 34 |
| 23 | San Francisco Bay Outflow Requirements | 36 |
| 24 | Continuation of Reserved Jurisdiction | |
| | Under Term 80 | 38 |
| 25 | Continuing Authority of Board Under | |
| | Term 90 | 38 |
| 26 | Application of Watershed Protection | |
| | Statutes To CVP | 39 |
| 27 | County of Origin Statutes | 48 |
| 2 8 | Return Flow | 49 |
| 29 | Petition of Bureau of Reclamation to Defer | |
| | Decision | 51 |
| 30 | Board Policy for Future Applications | 54 |
| | Order | 57 |

DECISION AMENDING WATER RIGHT PERMITS WITHIN THE SACRAMENTO-SAN JOAQUIN DELTA WATERSHED WHICH ARE SUBJECT TO STANDARD WATER RIGHT PERMIT TERM 80

BY THE BOARD:

The State Water Resources Control Board (Board) having reserved jurisdiction through Standard Permit Term 80 over the season of diversion for over 500 water right permittees within the Sacramento-San Joaquin Delta watershed; notice of a hearing on possible adjustments to the season of diversion having been provided to Term 80 permittees and over 800 other interested parties; the Board having conducted a hearing on water availability on April 11, 12 and 13, 1983; Term 80 permittees, interested parties, and Board staff having appeared and presented evidence; legal briefs having been submitted; the evidence and legal briefs having been received and duly considered; the Board finds as follows:

1. Subject of Decision

Since 1965, the Board has reserved jurisdiction over water right permits issued within the Sacramento-San Joaquin Delta watershed (Delta watershed) due to incomplete information regarding water availability. Through use of Standard Water Right Permit Term 80, the Board reserved jurisdiction to change the season of diversion when water availability becomes known with greater certainty. Information from recently completed

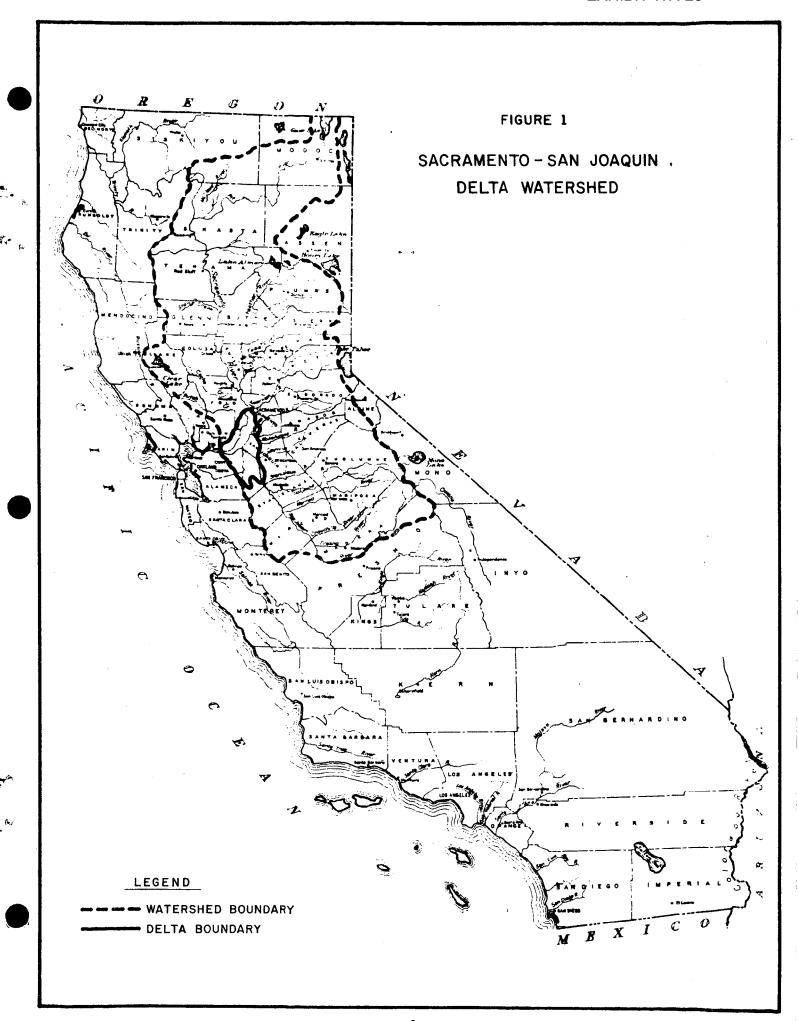
studies of water availability and other evidence was presented at the Board hearing on April 11, 12, and 13, 1983. In accordance with the findings of the Board, the season of diversion for Term 80 water right permits shall be determined as specified in this decision.

Description of Watershed

The Sacramento-San Joaquin Delta watershed is the largest watershed in California. As shown in Figure 1, the Sacramento River and the San Joaquin Rivers flow into the Delta. The outflow from the Delta flows into Suisun Bay and then into San Francisco Bay.

The availability of water for appropriative water right permittees is affected by the quantity which is needed to satisfy holders of prior rights and the quantity necessary for protection of other beneficial uses. The availability of water throughout the Delta watershed is generally affected by the demand for water of suitable quality within the Delta and Suisun Marsh. Without adequate freshwater outflow from the Delta into Suisun Bay, seawater intrudes into the Delta and degrades water quality. High salinity and low Delta outflows can be harmful to agricultural production, municipal and industrial uses of water, and to various species of fish and wildlife throughout the Bay-Delta estuary.

The need for adequate flow to protect water quality in the Delta and Suisun Marsh affects water availability throughout the Delta watershed. Although local factors may affect water availability along a particular stream reach, such factors were



not addressed in any detail by the studies presented at the hearing. Therefore, the adjustments to the season of diversion for Term 80 permittees made in this decision relate primarily to the effect of Delta and Suisun Marsh water quality needs on the availability of water for diversion throughout the Delta watershed.

3. Standard Water Right Permit Term 80

In exercise of the authority granted under Sections 1253 and 1394 of the Water Code, the Board has included standard water right permit Term 80 in over 500 permits for diversion within the Delta watershed. The wording of Term 80 used prior to 1980 is as follows:

"The State Water Resources Control Board reserves jurisdiction over this permit for the purpose of conforming the season of diversion to later findings of the Board on prior applications involving water in the Sacramento River Basin and Delta. Action by the Board will be taken only after notice to interested parties and opportunity for hearing."

From 1980 to the present, the wording of Term 80 has been as follows:

"The State Water Resources Control Board reserves jurisdiction over this permit to change the season of diversion to conform to the results of a comprehensive analysis of the availability of unappropriated water in the [name of river basin or watershed]. Action to change the season of diversion will be taken only after notice to interested parties and opportunity for hearing."

4. State and Federal Projects

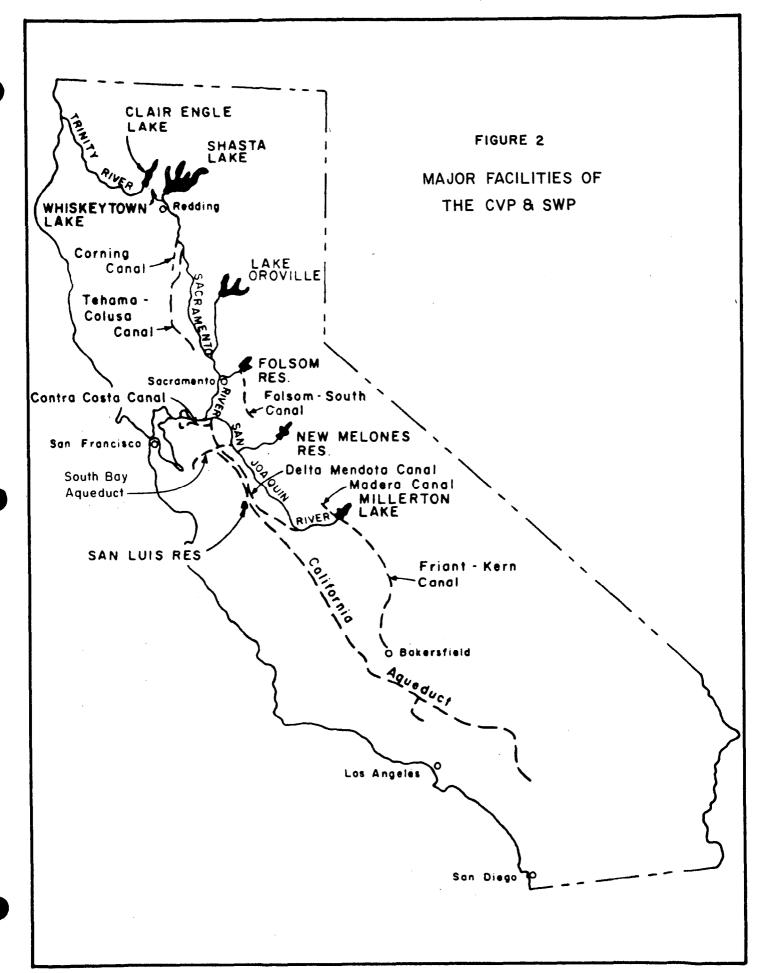
The Central Valley Project (CVP) operated by the Bureau of Reclamation (Bureau) and the State Water Project (SWP) operated by the Department of Water Resources (Department) substantially

alter flows within the Delta watershed. The major facilities of the SWP and CVP are shown in Figure 2. The CVP reservoirs include Clair Engle Lake on the Trinity River, Shasta Lake on the Sacramento River, Folsom Reservoir on the American River, New Melones Reservoir on the Stanislaus River and Millerton Lake on the San Joaquin River.

CVP canals include the Tehama-Colusa Canal on the Sacramento River, the Delta-Mendota Canal which transfers water from the Delta to the Delta-Mendota Pool on the San Joaquin River, and the Friant-Kern Canal which transfers water from Millerton Lake south to Bakersfield. SWP facilities include Lake Oroville, the California Aqueduct and the South Bay Aqueduct. The CVP and SWP jointly operate San Luis Reservoir, an offstream storage reservoir for water diverted from the Delta.

The Projects¹ store winter and spring runoff and then release and transport it to satisfy demands within the Sacramento River Basin, San Joaquin Basin, Tulare Basin, San Francisco Bay Area communities and Southern California communities.

¹ The term "Projects" refers jointly to the SWP and CVP.



5. Delta Water Quality Standards

Board Decision 1485 requires the Bureau and the Department to meet specified water quality standards in the Delta and Suisun Marsh established for agricultural uses, municipal and industrial uses, and fish and wildlife. Five categories of water years were established: wet, above normal, below normal, dry and critical. The standards vary in accordance with the runoff of each year. Less stringent standards were established for dry and critical years than for above normal and wet years. The underlying principle of the standards is that water quality in the Delta should be at least as good as what would have existed had the state and federal projects not been constructed, as limited by the constitutional mandate of reasonable use. (SWRCB Decision 1485, p. 10.) The effect of the standards is to require the Projects to release water from storage or to curtail diversions when the flow entering the Delta would otherwise be insufficient to meet the water quality standards.

In addition to the Decision 1485 standards, Decision 1422 established a 500 parts per million total dissolved solids standard to be met at the Vernalis gaging station on the San Joaquin River at the southern boundary of the Delta. Decision 1422 requires the Bureau to release conserved water from New Melones Reservoir if necessary to meet the specified standard. The high salinity of the San Joaquin River is primarily due to salts from irrigation return flows and reduced river flows. The water released from storage in New Melones Reservoir serves to reduce the salinity levels of the San Joaquin River before it flows into the Delta.

The water quality standards established by Decisions 1485 and 1422 may be amended or augmented as the result of future Board proceedings. The hearing on water availability, however, did not involve any detailed examination of water quality standards. All of the analyses of water availability using the methods proposed at the hearing were based on the assumption that all or portions of the existing Delta water quality standards apply. If the standards are changed in the future, the proposed methods are sufficiently flexible to allow for modification of the season of water availability based on revised standards.

6. Standard Water Right Permit Term 91

Following Board Decision 1485, adopted on August 16, 1978, the Bureau and the Department protested numerous water right applications within the Delta watershed. The protests were based on claims by the Bureau and the Department that diversion by new applicants at certain times would force the Projects to release more stored water to meet the Delta water quality standards established by Decision 1485. As an interim solution to the problem, the Board adopted Standard Water Right Permit Term 91 on March 25, 1980. The Term 91 Method of determining water availability was developed by the Bureau and the Department. The term has been placed in permits issued on applications for diversion within the Delta watershed filed after August 16, 1978.

Term 91 prohibits permittees from diverting water when stored Project water is being released to meet Delta water quality standards or other inbasin demands. Board Order WR 81-

15, adopted on November 19, 1981, specifies a procedure for determining when this condition is occurring. Use of Term 91 enabled resolution of most of the Bureau's and the Department's protests against new applications. Term 91 was adopted as an interim measure to allow processing of new water right applications pending development of a long-term method for determining when water is available for appropriation. The fact that water availability for Term 91 permittees was tied to Delta water quality standards, however, reflected the Board's view that it is proper for new appropriators to share in the responsibility of meeting Delta water quality standards by curtailing diversions.

7. Water Availability Study

To develop a long-term solution to the water availability issue, the Board authorized a water availability study in Resolution 80-18, adopted on April 17, 1980. A hearing to discuss the scope of the study was held on January 19, 1981. The hearing was followed by four technical sessions of Board staff and interested parties held between June 8, 1982, and January 17, 1983.

Staff had originally proposed a comprehensive analysis of water supply and demand which attempted to identify and quantify water usage by all diverters below the foothill reservoirs within the Delta watershed. (SWRCB Exh. 1, pp. 19-20.) This approach was discontinued due to the lack of adequate data for factors such as return flow, groundwater accretions, unmeasured

tributary inflow, riparian use, appropriative use, and Delta consumptive use. (RT (4/11/83), p. 14, lines 16-20; SWRCB Exh. 1, p. 19.)

After discontinuing the comprehensive analysis of water supply and demand, staff conducted an analysis of water availability using the Term 91 Method and two new methods designated as the Storage Release Tracking Method and the Natural Flow Tracking Method. In addition, staff evaluated additional limitations on water availability in the San Joaquin River Basin based on the water quality standard at Vernalis established by Decision 1422. The methods for determining water availability which were considered by staff prior to the hearing are discussed at length in the Prehearing Staff Report (SWRCB Exh. 1).

8. Hearing on Water Availability for Term 80 Permittees

A hearing on water availability for Term 80 permittees was held in Sacramento on April 11, 12 and 13, 1983. Notice of the hearing was sent by certified mail to the addresses of record of all Term 80 permittees. In addition, notice was sent by regular mail to all parties whose applications to appropriate water were pending before the Board and to over 800 other parties thought to have an interest in the matter.

The following parties entered appearances at the hearing:

Department of Water Resources, U. S. Bureau of Reclamation,

Department of Fish and Game, Kenneth A. Torri, County of

Tuolumne, State Water Contractors, San Francisco Bay Regional

Water Quality Control Board, South Delta Water Agency,

Environmental Defense Fund, Friends of the River, the Bay
Institute of San Francisco and attorney Anne J. Schneider and
engineer Donald E. Kienlen. The legal brief filed by Anne
Schneider clarified that the appearance at the hearing by
herself and Donald E. Kienlen was made on behalf of the
following parties: Browns Valley Irrigtion District, Yolo
County Flood Control and Water Conservation District, Burtis
Jansen, Scheidel and Osterli Farming Company, Natomas Central
Mutual Water Company, Gunnersfield Enterprises Inc., South
Sutter Water District, Reclamation District No. 2068, Sacramento
River Contractors Association, 2047 Drain Water Users
Association, East Contra Costa Irrigation District, North Delta
Water Agency, Newhall Land and Farming Company, Donald R. Frost
and East Bay Municipal Water District.

The hearing record was held open until May 29, 1983 to allow for submission of legal briefs. Briefs were filed by the Bureau of Reclamation, the Department of Water Resources, attorney Anne Schneider on behalf of the parties named above, the Environmental Defense Fund and Save San Francisco Bay Association.

9. Methods of Determining Water Availability

Several methods for determining water availability were presented at the hearing. Board staff discussed four methods: the Term 91 Method, the Storage Release Tracking Method, the Natural Flow Tracking Method, and the Vernalis Method. The Bureau proposed an alternative method refered to as the Delta

Balance Method. The Department presented an analysis of water availability based on operations studies using 57 years of hydrologic record.

Three methods (Term 91, Storage Release Tracking and Delta Balance Methods) can be used on a "real-time" basis. A real-time method can determine water availability based on actual conditions as they occur, rather than on the basis of historical conditions or a long-term average. Due to the wide variation in water availability from year to year, a real-time procedure allows for more efficient utilization of water supplies when they are available and better protection of prior rights when water supplies are scarce.

As an alternative to a real-time procedure or a fixed season of diversion, the season of diversion specified in permits could be based upon the water year type (e.g., critical, dry, below normal, above normal, wet.) However, due to different run-off patterns, water availability can vary considerably even amongst different years of the same water year type. (DWR Exh. 3-C, SWRCB Exh. 1, p.47, Table VII-2). Use of a real-time method for determining if water is available for diversion avoids this difficulty.

10. Term 91 Method

The Term 91 Method was developed by the Bureau and Department. Following input by other parties, a Board hearing and modification by the Board, Term 91 was adopted by the Board as an interim measure in 1978. The method for implementing Term 91 is described in Board Order WR 81-15.

Under the Term 91 Method, water is not available for diversion by Term 91 permittees when two conditions exist simultaneously. First, the Delta must be "in balance". The Delta is defined as being "in balance" when the CVP and SWP are being operated to meet water quality conditions in the Delta. The controlling conditions are usually water quality standards established by the Board. Water is considered to be available for appropriation if the Delta is not "in balance".

The second condition for the Term 91 Method relates to Project storage releases and exports. Under the Term 91 Method, water is not available if Project exports plus "carriage water" requirements are less than Project storage releases and imports from the Trinity River. The availability of water using the Term 91 Method can be expressed by the following equation:

AW = (EX + CW) - SR

Where: AW = Available Water

SR = Project Storage Releases
 plus Trinity River imports

CW = Carriage water, i.e the amount
 of additional Delta outflow
 required to compensate for
 currents created by the
 export pumps.

If AW is greater than zero, then water is available for diversion by Term 91 permittees. Water is not available for diversion when project storage releases plus Trinity River imports are greater than Project export diversions plus carriage water. In this latter case, a portion of Project storage releases is assumed to be needed to maintain Delta water quality standards. Additional upstream depletion of natural flows would require increased Project storage releases to meet Delta standards.

Stated another way, water is considered available for Term 91 permittees at all times when natural flow² is sufficient to meet inbasin demands and Delta water quality standards. If the natural flow is sufficient to meet inbasin demands and the Projects release stored water only to satisfy their export demands, then water is still considered available for Term 91 permittees. This is true even though the Projects have large direct diversion rights under their early priority applications. (USBR Exh. 8, 9 and 10.) Since water is considered available for inbasin use by Term 91 permittees at times when the natural flow is insufficient to satisfy the Projects' earlier direct diversion export rights, the Term 91 Method implicitly assumes that the watershed protection statutes apply to the CVP and the SWP. (Water Code Sections 11128, 11460-11463.) The method does not involve identifying the particular

As used in this decision, the term "natural flow" refers to any surface water in the Delta watershed except for CVP/SWP storage releases.

county within which water originates. Thus, it makes no assumptions with respect to the county of origin statutes. (Water Code Sections 10505 and 10505.5.)

11. Storage Release Tracking Method:

The Storage Release Tracking Method divides the Sacramento River Basin and Delta into seven reaches, three along the Sacramento River, two along the Feather River, one along the American River and one in the Delta. (SWRCB Exh. 1, p. 27.) The method provides a means of "tracking" storage releases from reach to reach, determining how much stored water was used within each reach and determining how much stored water enters the Delta. The method allows for determining water availability on each stream reach rather than assuming that it will be the same throughout the watershed. As with the Term 91 Method, the Storage Release Tracking Method implicitly assumes that the watershed protection statutes apply (Water Code Sections 11128, 11460-11468), but it makes no assumptions with respect to the county of origin statutes. (Water Code Sections 10505, 10505.5.) The operation of the method is described in the prehearing staff report (SWRCB Exh. 1, pp. 24-31.)

The Storage Release Tracking Method was used to determine water availability during 1979, 1980, and 1981 using data available for those years. The results for the three years examined were similar to the results of the Term 91 Method with the exception of the late summer when the Storage Release Tracking Method showed water to be available for approximately one week longer than shown by the Term 91 Method. (SWRCB Exh. 1, p. 42.)

The Storage Release Tracking Method was developed as a real-time method of determining water availability based on actual data. The method was not used to determine water availability for years before 1979 because the Project storage releases were not yet governed by the water quality standards established by Decision 1485. In order to examine water availability for earlier years, Board staff developed the Natural Flow Tracking Method.

12. Natural Flow Tracking Method

The Natural Flow Tracking Method tracks releases of stored water using the same procedure as the Storage Release Tracking Method until the water reaches the Delta. The amount of unappropriated water within the Delta is calculated by subtracting the quantity of storage release entering the Delta, Delta consumptive use and Delta outflow requirements from the total Delta inflow. This can be expressed by the following equation:

WA = IN - SR - CU - DO

Where: WA = water availability, i.e., the

amount of unappropriated water

within the Delta

IN = total Delta inflow plus Delta
 precipitation

SR = storage release entering the Delta

CU = Delta consumptive use

DO = Delta outflow requirement

Further explanation of the Natural Flow Tracking Method and the sources of data used in the above equation are provided in the prehearing staff report. (SWRCB Exh. 1, pp. 31-33, 41-47.) The Board staff presented an analysis of the season of water availability for the 22-year period from 1960 through 1981 using the Natural Flow Tracking Method. The analysis was based on historical data reflecting the level of development for the years considered but with the assumption that the D-1485 Delta outflow requirements applied. The results presented in Table VII-2 of the prehearing staff report show that the Delta was usually the controlling reach for determining water availability throughout the Sacramento River Basin and Delta. (SWRCB Exh. 1, p. 47.)

13. Department of Water Resources Operations Studies

The Department of Water Resources presented DWR Exhibits 3-A and DWR 3-C which show the results of an analysis of water availability using the Term 91 Method and data from the Department's operations studies for the 57 year period from 1922 through 1978. (RT (4/11/83, p. 165, line 8 to p. 168, line 5.) The season of water availability varied from year-round availability in some years to as little as seven months availability in other years. (DWR Exh. 3-A.) The median season of unavailability was from June 11 to August 27.

The Department also presented DWR Exhibits 3-B and 3-D which set forth the results of an analysis of water availability using a variation of the Storage Release Tracking Method and data from the Department's operations studies for the same 57-year

period. The Department's testimony indicates that when using data from Department operations studies, the season of water availability is the same using the equations proposed by Board staff for either the Natural Flow Tracking Method or the Storage Release Tracking Method. (RT (4/11/83), p. 168, line 18 to p. 169, line 15.)³ For the 57-year period examined, the median season of unavailability of water under the Department's use of a tracking method approach is from June 10 to August 22. (RT (4/11/83), p. 176, lines 21-25.)

14. Bureau of Reclamation Delta Balance Method

The Bureau of Reclamation proposed that water availability for Term 80 permittees be determined by a method referred to as the Delta Balance Method. (RT (4/12/83), pp. 99-105.) Under this method, water is not available for Term 80 permittees whenever the Delta is "in balance". The Bureau considers the Delta to be "in balance" whenever the CVP and SWP are operated to meet water quality standards in the Delta through specific operation decisions. (Written Testimony of John A. Renning, p.2). When the Delta is in balance, all available water is

The analysis reflected in DWR Exhibits 3-B and 3-D requires consumptive use estimates for water use within the Delta. (RT (4/12/83), p. 35, lines 6-118.) Similar consumptive use estimates were used in the Natural Flow Tracking Method, but not in the Storage Release Tracking Method developed by Board staff. Therefore, despite the words "Storage Tracking Method" in the titles of DWR Exhibits 3-B and 3-D, the method reflected in those exhibits should not be confused with the Board's Storage Release Tracking Method.

A.

being fully utilized by existing in-basin use, project export, Delta consumptive use, and Delta outflow. (RT (4/12/83), p.99, lines 17-20.) Bureau Exhibit 12 shows the period of time in which the Delta was in balance for the years 1970 through 1982. The exhibit shows that the season of water availability determined by the Delta Balance Method is generally much shorter than the season calculated by any other method.

In addition to the Bureau's analysis of the period of availability under actual conditions for 1970 through 1982, the Bureau also used the Delta Balance Method to analyze when water was available over a 50-year period assuming a 1980 level of development. Bureau Exhibits 15 and 17 show the season of water availability using the Delta Balance Method assuming that Decision 1485 standards apply. The period of water availability for Term 80 permittees using the Delta Balance Method is generally reduced by one to three months over what is shown by the Department's historical analysis using a tracking method for a similar period of time. In the drought years of 1976 and 1977, the Delta Balance Method showed the period of water availability to be about six months shorter than shown by the Department's historical analysis using a tracking method. (RT (4/12/83), p. 103, lines 7-26.)

The Delta Balance Method incorporates legal assumptions which are consistent with the position stated in the Bureau's post-hearing brief. These assumptions are that the watershed protection and county of origin statutes are not applicable to the Bureau and that the Bureau retains rights to all return

flows from all water delivered under the Bureau's rights. (RT (4/12/83), p. 104, line 17 to p. 105, line 2, "Statement In Support of Bureau of Reclamation," May 31, 1983 pp. 5, 9).

15. Comparison of Methods

The three real-time methods for determining water availability in the Delta watershed which were presented at the hearing are the Term 91 Method, the Board's Storage Release Tracking Method, and the Bureau's Delta Balance Method. The Board's Natural Flow Tracking Method and the Department's operations studies were presented to provide historical information on water availability rather than as proposals for determining water availability for Term 80 permittees on a real-time basis.

Method estimated considerably shorter periods of water availability. The primary reason for the difference is that the Delta Balance Method assumes that the watershed protection statutes are not applicable to the Central Valley Project. (RT 4/12/83 p. 128, line 8 - p. 129, line 7). This assumption would allow the CVP to meet its water export requirements completely with water diverted from the natural flow before later priority appropriators for in-basin use may divert. Since CVP direct diversion permits issued prior to 1965 have an earlier priority than virtually all Term 80 permits, the period of water

availability to most Term 80 permittees would be greatly reduced using the Delta Balance Method.⁴

As discussed in Section 26, herein, the Bureau's position on the watershed protection statutes is contrary to several past decisions of this Board, the express language of Water Code Section 11128, and the clear implication of the Supreme Court decision in California v. United States (1978) 438 U.S. 465, 98 S Ct. 2985. For this reason, the Board finds the Delta Balance Method to be an unacceptable procedure for determining water availability for Term 80 permittees.

As is the case with the Term 91 approach and the Storage Release Tracking Method, the Delta Balance Method does not involve identification of water on the basis of the county in which it originates. Applicability of the county of origin statutes to the CVP (Water Code Sections 10505 and 10505.5) does not appear to be a relevant issue for purposes of this decision.

The record does not establish what the effect of the differing assumptions regarding rights to return flow would be on the season of diversion for Term 80 permittees. (RT (4/12/83) p. 118 line 9 to p. 121 line 7). However, the Board believes that the assumption in the Delta Balance Method that the Bureau holds an automatic right to all CVP return flows is

The Bureau assumed that all Term 80 permittees have a later priority than CVP direct diversion rights. At least one permit has an earlier priority. However, the issue is not critical for our purposes since the Board finds the legal assumptions of the Delta Balance Method to be erroneous and the method is therefore unacceptable.

inconsistent with the Bureau's apparent practice of applying for rights to redivert return flow. (RT (4/12/83) p. 121, line 8 to p. 122, line 13; Decision 990, p. 32.)

The Term 91 Method and the Storage Release Tracking Method showed similar seasons of water availability. The major objections to the Storage Release Tracking Method were that it treats all return flow from the Colusa Basin Drain as part of the natural supply available for appropriation, and that it requires data which is not as readily available or as reliable as the data used for the Term 91 Method. (RT (4/11/83) p. 154, line 3 to p. 155, line 7; p. 181, line 19 to p. 183, line 7; RT (4/12/83) p. 108, lines 15-23; p. 152, line 5 to p. 153, line 17.)

The general limitation of the Term 91 Method is that it assumes that all stored water released from CVP and SWP reservoirs actually reaches the Delta. While this is not the case during midsummer it does appear to be the case in late summer, when water again becomes available for appropriation. In establishing the season of water availability, the Board is primarily concerned with the time when water either becomes available or unavailable. The Term 91 Method appears to provide a close approximation of that time.

⁵ See SWRCB Exh. 1 p. 39, Figure VII-1 which shows water availability as determined by the Term 91 Method and the Storage Release Tracking Method. The difference between the two values for any month indicates the amount of stored water releases used upstream of the Delta.

Another assumption of the Term 91 Method is that the carriage water values used in the Term 91 calculations accurately reflect actual conditions. During the Department's testimony, questions were raised as to the flows assumed to be needed to meet water quality standards during September in their operation studies. The flows the Department used in their operation studies are substantially higher than those assumed in the Board's natural flow tracking method. The testimonv indicates that these higher flows may be due to "ramping flows"6 needed by the projects to meet the October Suisun Marsh Standards (RT (4/12/83) p. 16, line 8-p.18, line 26). Department asserts that such ramping flows should be treated similar to the Delta standards since these flows assist the projects in meeting Delta standards. However, ramping flows could also be considered a project responsibility similar to carriage water since these flows allow more consistent project operations from month to month and more operational flexibility in October.

During this hearing, no testimony was presented on the adequacy of the carriage water numbers used in the Term 91 calculations. They vary depending on the Board's Delta

Water quality standards in the Delta and Suisun Marsh may call for substantially better water quality conditions to exist in one month than in the preceding month. In order to deal with this situation, project operators take actions which will incrementally increase Delta outflow required to meet the standard of a subsequent month, even though such higher flows may not be required to meet the standards of the present month.

standards, export rates and San Joaquin River flow. The Board's Delta standards are to be extensively reviewed beginning in August 1986 or earlier. During the hearing leading to revised Delta standards, the concerns raised here regarding the September ramping flows can be more thoroughly addressed.

In light of all the evidence, the Board finds the Term 91
Method to be a simple and acceptable method for determining
water availability on a real-time basis. The Storage Release
Tracking Method requires more data and at the present time does
not yield substantially different results.

A practical problem with both the Term 91 Method and the Storage Release Tracking Method is that the change from nonavailability to availability of water is not rapid. Although the change in spring or early summer is quite sudden, the late summer change is not well defined. Staff analysis of daily data for the late summer period showed that both methods indicate brief periods in which water is available during a three week period before water becomes available for the remainder of the season. It would not be practical to notify permittees of each brief change in water availability. For this reason, the Board will notify permittees that they may begin diverting on September 1 except in years where water will not be available for significantly longer or where the season has been further restricted due to local conditions. In those years when water will not be available until significantly after September 1, the Board will notify permittees as appropriate.

16. Deletion of Term 91 From Permits For Small Quantities of Water And Permits For Certain Power Projects

The months of July and August are currently excluded from the season of diversion specified in all Term 80 permits. some areas, the Board has excluded additional periods of time where necessary for protection of local prior rights, fish flow requirements and other restrictions imposed by adjudications. Until the adoption of Term 91 as an interim measure in 1978, the Board made no general effort to regulate water users' season of diversion on a real-time basis. Permits were issued for a fixed season of diversion with the understanding that water may not always be available to a later permittee after satisfying the rights of riparians and earlier appropriators. The large yearly variations in availability of water, together with the existence of a method for determining water availability on a real-time basis, however, support adoption of a new approach toward specifying the season of diversion authorized in permits for relatively large quantities of water.

Table 1 below shows the total quantity of direct diversion authorized by Term 80 permits excluding permits held by the Bureau.

TABLE 1
Direct Diversion by Term 80 Permittes

| Diversion Rate (cfs) | No | % of Total | Amount of Wate | _ |
|-------------------------|------------|--------------|--------------------|----|
| 0.0 - 0.09 | 57 | 36 | 3 0.5 | 5 |
| 0.10 - 0.49 | 30 | 19 | 8 1.4 | 1 |
| 0.50 - 0.99 | 12 | 7 | 8 1.4 | Ļ |
| 1.00 - 1.99 | 20 | 12 | 26 4.4 | 1 |
| 2.00 - 3.00 | 9 | · 6 | 20 3.4 | ļ |
| > 3.00 | 32 | 20 | 521 88.9 | |
| Total | <u>160</u> | <u>100</u> % | 586 1 <u>00.</u> 0 | ₹(|

As Table 1 indicates, there are a total of 160 Term 80 permits with a total direct diversion of 586 cubic feet per second (cfs). There are 61 permits with a direct diversion rate of 1.0 cfs or more. These permits represent 38% of the total number of permits, but account for 97% of the water that is diverted.

TABLE 2
Storage by Term 80 Permittees

| Storage | <u>P</u> | ermits | Amoun | t |
|------------------|-----------------|-------------------|------------------|------------|
| Amount (af) | <u>No</u> | % of Total | | of Total |
| 0 - 9.9 | 181 | 48 | 662 | 1 6 |
| 10 - 99.9 | 176 | 46 | 5,007 | |
| 100 - 1,000 | 20 | 5 | 6,823 | 9 |
| > 1,000 Total | $\frac{5}{382}$ | $\frac{1}{100}$ % | 66,400 78,892 | 84 100% |

As shown on Table 2, there are 382 term 80 permits for total storage of 78,892 acre-feet (AF). There are 25 permits for storage demand of 100 AF or more. These 25 permits account for 6% of the total number of permits but account for 93% of the stored water.

All permits are subject to prior rights. There is no legal requirement that the Board formally regulate a permittee's season of diversion on a real-time basis. With limited exceptions, real-time regulation of diverters has traditionally been the function of a watermaster. From the above tables, it is clear that most of the benefits of real-time regulation of Term 80 permittees can be achieved by focusing on relatively few permits. The Board finds that in view of the small quantity of water involved, it is inefficient to establish real-time regulation of hundreds of parties diverting small quantities of Therefore, at this time, the Board will apply the Term 91 Method of determining water availability only to those Term 80 permits which authorize direct diversion at a rate of 1.0 cfs or more or which authorize diversion to storage of 100 AF per year or more. Term 80 permits which authorize diversion of smaller quantities of water will continue to be subject to a fixed season of diversion except for those permits which will receive Term 93 as specified in paragraph 7 of the order.

Term 91 has been included as an interim condition of all permits in the Delta watershed issued on applications filed after August 16, 1978. The term has been included in such permits without regard to the quantity of water involved. For the reasons discussed, Term 91 will remain in those permits which authorize direct diversion at a rate of 1.0 cfs or more or which authorize diversion to storage of 100 AF per year or more. Term 91 will be deleted from permits authorizing diversion of smaller quantities of water and such permits will

be subject to a fixed season of diversion as described in Section 17. Term 91 will also be deleted from permits authorizing diversion of water for power generation provided such projects do not change the streamflow regime in a way which alters the rate or quantity of flow entering the Delta.

17. Determination of Fixed Season of Diversion for Minor Water Users

The fixed seasons of diversion specified in Term 80 permits are generally based upon the results of previous studies showing that water was available at the time in question during half or more of the years of record. With certain exceptions, if water was shown to be available during more than half the years, then the period in question was included in the season of diversion.

The results of several analyses of historic water availability in the Delta watershed were presented at the hearing. The Department's 57-year analysis using the Term 91 Method and data from the Department's operations studies show the median season of unavailability to be between June 11 and August 27. (Calculation of median season of diversion from DWR Exh. 6). The Department's analysis using the same data and their "Storage Tracking Method" shows the median season of unavailability to be between June 10 and August 22. (RT (4/11/83) p. 176 lines 21-25). Board staff's analysis using the Natural Flow Tracking Method and historical data for a 22-year period shows the median season of unavailability to be between June 12 and August 15. (SWRCB Exh. 1, Figure VII-3, p. 44).

The analyses agree that water is generally not available from mid-June until mid or late August. As discussed in Section 15, the Term 91 Method will be used for determining the season of diversion for permittees who will be regulated on a real-time It is appropriate to apply a method based on the same basis. underlying assumptions when determining the median season of water availability for permittees who receive a fixed season. Using the findings of the Department's 57 year analysis under the Term 91 Method would result in excluding the period of June 11-August 27 from the fixed season of diversion for permittees diverting small quantities of water. However, the Board recognizes that the dates of availability determined in the study are approximations and that the season of diversion specified in permits has traditionally been specified in monthly Therefore, the Board concludes that the or bi-weekly periods. fixed season of diversion for Term 80 permittees diverting less than 1.0 cfs by direct diversion or less than 100 AF to storage should exclude the period from June 16 to August 31. exception to this conclusion is that permittees who do not have hydraulic continuity with the Delta should be allowed to continue diverting subject to the conditions of their permits. (See Section 19).

18. Relationship of Delta Demands and Local Demands to Season of Diversion

All water users in the Delta watershed have a responsibility to share in meeting Delta water quality needs for riparian and other uses. (See discussion in Section 22). Therefore, it is

proper for Term 80 permittees throughout the watershed to stop diverting water when all remaining natural flow is needed for maintaining water quality in the Delta and Suisun Marsh. Although the season of water availability in areas tributary to the Delta may be shorter due to local demands, it cannot be longer than the season of availability within the Delta.

In order to protect prior rights in the Delta, July and August have been excluded from the season of diversion specified in all Term 80 permits. Previous Board decisions have further restricted the season of diversion permitted in some areas of the Delta watershed due to local demands. The Term 91 Method focuses only on restrictions on water availability due to conditions in the Delta. Therefore, prior decisions which further restrict the season of diversion due to local limitations on water availability are not affected by the findings of this decision.

19. Lack of Hydraulic Continuity

If, in the absence of a permittee's diversion, there would be no hydraulic continuity between the permittee's point of diversion and the Delta, then curtailing diversion of water by such a permittee would not normally assist in meeting the water needs of the Delta. The South Delta Water Users Association (South Delta) recommends that permit terms requiring curtailment of diversion to assist in meeting Delta standards should apply whenever there is "either surface or subsurface continuity of flow. "(RT (4/12/83) p. 169, lines 4-7, emphasis added). However, South Delta introduced no evidence showing that the

rate of subsurface flow is such that water quality conditions in the Delta would be affected within the expected period during which water is not available. In the absence of such evidence the Board will continue to apply Term 91 only to these permittees who have surface hydraulic continuity with the Delta.

The fact that some Term 80 permits authorize diversion during July and August despite previous Board decisions that water is generally unavailable during those months implies that hydraulic continuity may not normally exist between the permittee's point of diversion and the Delta during the summer months. None of the studies presented at the hearing, however, provided sufficient information to determine which permittes may lack hydraulic continuity with the Delta during periods of inadequate supply. In instances where Board records indicate that hydraulic continuity is questionable, it would be unwise to further restrict the permittees' season of diversion until the issue is resolved. Therefore, in this decision, the Board will not further restrict the season of diversion specified in those Term 80 permits which authorize diversions during July and August.

20. Continued Exclusion of July and August from Diversion Season of Existing Term 80 Permittees

In order to avoid protests and to conform to prior decisions of the Board, many of the applications filed by Term 80 permittees excluded July and August from the requested season of diversion. When notice of such applications was provided to the

public and potentially affected water users, there was no indication that the season of diversion would include July and August. If the July and August exclusion were to be removed from existing Term 80 permits at this time, the season of diversion would be determined solely by operation of Term 91. In wet or above normal years, permittees would be allowed to divert for all or a portion of July and August.

Since most of the applications were never noticed for July and August, however, allowing diversions during those months could raise due process objections by claimants of prior rights. In addition, as discussed in the preceding section, the Term 91 Method only addresses restrictions on water availability due to conditions in the Delta. It makes no assessment of water availability in areas where local demand may be the controlling factor. For these reasons, it would be improper to remove the July and August exclusion from the season of diversion authorized in existing Term 80 permits.

Permittees who will continue to be subject to Term 91 and who wish to divert during July and August in years when water is available should file a new application for those months. Such parties are advised, however, that in most years water will not be available during that period. In accordance with the Board's policy of specifying a fixed season of diversion for diversion of small quantities of water, parties who have hydraulic continuity with the Delta and who divert less than 1.0 cfs or 100 AF should not apply for July and August since those months cannot be included in a fixed season of diversion.

21. Water Availability in San Joaquin River Basin

The Term 91 Method determines restrictions on water availability resulting from prior rights and water quality demands within the Delta. The restrictions on the season of availability established by the Term 91 Method are applicable to tributaries having hydraulic continuity with the Delta, including the San Joaquin River and its tributaries. The season of diversion for Term 80 permittees along the San Joaquin River is further restricted by the need to protect water quality in the southern Delta. Partially as a result of salt buildup from irrigation return flow, water quality problems in the southern Delta increase during times of low flow. (RT (4/11/83) p. 33, line 33- p. 34 line 2, RT (4/12/83) p. 165 line 25 - p. 166 line 7).

Board Decision 1422 and the Delta Water Quality Control Plan (SWRCB Exh. 8 p. VI-29, Table VI-1) established a water quality standard of 500 parts per million total dissolved solids for the San Joaquin River at the Vernalis gaging station. Decision 1422 requires the Bureau to release water from New Melones Reservoir to meet the Vernalis standard. Using the Vernalis Water Quality Method, water is considered unavailable for Term 80 permittees upstream from Vernalis when the flow is not sufficient to meet the water quality standard at Vernalis in the absence of releases of conserved water from New Melones. (SWRCB Exh. 1 p. 34). Prohibiting diversion by Term 80 permittees at such times will prevent further reduction in the natural flow of the San Joaquin River and will assist in meeting the water quality standards established by Decision 1422.

22. Responsibility of Term 80 Permittees Toward Delta Water Quality Standards

Using the Term 91 Method to determine water availability requires permittees to cease diverting water any time that natural flow is insufficient to meet Delta water quality standards as established by Decision 1485. Thus, the method is based on the assumption that Term 80 permittees must share in the responsbility of protecting Delta water quality by curtailing diversions when necessary to meet water quality standards.

The standards established in Decision 1485 protect agricultural uses, municipal and industrial uses, and fish and wildlife. The agricultural standards and most of the municipal and industrial standards are based upon protection of prior rights. The fish and wildlife standards and the 250 miligram/liter chloride standard for municipal and industrial use were established on public interest grounds. (Decision 1485, p. 9-17, SWRCB Exh. 1, p. 72). To the extent that the Term 91 Method limits water availability to protect prior rights, the method simply provides a means of enforcing a condition applicable to all appropriative water right permits. Therefore, in the exercise of its reserved jurisdiction, it is clearly appropriate for the Board to limit the season of diversion of Term 80 permittees as necessary to protect prior rights.

In some instances the Term 91 Method restricts diversions when the remaining natural flow is needed to meet water quality

standards established to protect fish and wildlife or other public interest concerns. Restricting diversions by Term 80 permittees in such cases goes beyond protection of prior rights. However, the scope of the Board's jurisdiction under the original and the revised versions of Term 80 is broad. (Section 3 infra., SWRCB Exh. 1 pp. 72 and 73). Moreover, all permittees are subject to the continuing authority of the Board to regulate permittees in accordance with the constitutional requirements of reasonable and beneficial use of water and the Board's duty to consider public trust values. (California Constitution, Article X, Section 2, National Audubon Society et al. v City of Los Angeles (1983) 33 Cal. 3d 419, 189 Cal. Rptr. 346). Term 80 and these authorities clearly authorize the Board to do more than simply adjust the season of diversion as necessary to protect prior rights. In exercising its reserved jurisdiction over Term 80 permittees, the Board concludes that it is equitable for such permittees to share in the responsibility for meeting the Delta water quality standards established to protect fish and wildlife and other public interest concerns.

In summary, the Board concludes that it is appropriate for Term 80 permittees to share in meeting all Delta water quality standards whether based on protection of agricultural uses, municipal and industrial uses, or fish and wildlife and other public interest requirements. The standards currently in effect were established by Board Decision 1485. Term 80 permittees

will be notified of any future Board proceedings involving revisions to Delta water standards which could affect their season of diversion.

23. San Francisco Bay Outflow Requirements

Board Decision 1485 requires the CVP and the SWP independently or in cooperation with other agencies to participate in studies to determine "outflow needs in San Francisco Bay, including ecological benefits of unregulated outflows and salinity gradients established by them." (Decision 1485, p. 30). At the request of the Department of Water Resources and the Bureau of Reclamation, a study is being carried out by the Department of Fish and Game. It is hoped that the information obtained in this study will assist the Board in establishing flow standards to protect beneficial uses in the Bay. Although the study is not complete, the Department of Fish and Game presented a summary of the results obtained thus far. (Fish and Game Exh. 2).

The preliminary results indicate that reduced flows definitely can cause significant biological changes in estuary environments such as the Bay. (RT (4/13/83) p. 26 lines 17-23). Although presently available information is insufficient for setting Bay flow standards, the evidence is sufficient to justify putting Term 80 permittees and new applicants on notice that the Board may exercise its reserved jurisdiction under Term 80 to revise their season of diversion as may be necessary for the protection of beneficial uses in the Bay. Notice and opportunity for hearing will be provided before modifying the season of diversion in any Term 80 permits.

The testimony of the Department of Fish and Game indicates that the unregulated outflows necessary to protect the Bay are relatively large amounts of water, particularly when compared to the smaller quantities diverted under most Term 80 permits. (Transcript (4/13/83), p. 47). The Department of Fish and Game recommends that the Board expressly reserve jurisdiction to adjust large new water right permits as may be necessary to meet future outflow standards for the Bay and other areas of the Bay/Delta estuary from Chipps Island downstream. (Dept. of Fish and Game Exh. 4, RT (4/13/83) p. 61, line 7 p. 62 line 11).

It is apparent that the larger projects which have the greatest impact on freshwater outflow to the Bay are the projects for which future changes in permit conditions are most likely. In order to assure that all such permittees are expressly on notice that their permit conditions are subject to change, the Board concludes that Permit Term 80 should be revised to reserve jurisdiction over large new permittees to make adjustments as necessary to meet future Bay outflow standards. The revised Term 80 should be included in permits for direct diversion of 1.0 cfs or more and permits for diversion to storage of 100 AF or more.

In addition to revising Term 80, a new permit term should be developed for use in the large permits authorizing diversions from streams tributary to San Francisco Bay, but which are not tributary to the Delta. The new permit term will reserve jurisdiction to adjust the season of diversion as necessary to meet future Bay standards. As with the revised Term 80, the

term would be included in permits for direct diversion of 1.0 cfs or more and permits for diversion to storage of 100 AF or more. A suggested wording for this new term is included in Section 30.

24. Continuation of Reserved Jurisdiction Under Term 80

The likelihood of adjustments to Delta water quality standards, the prospect of establishing Bay outflow standards and the possibility of developing more accurate means of determining water availability in the future justify retaining Term 80 in all permits for direct diversion of 1.0 cfs or more and permits for diversion to storage of 100 AF or more. instances, the Board may have the same or similar authority to adjust the season of diversion under its mandatory duty to consider public trust values. (National Audubon Society et al. v City of Los Angeles, (1983) 33 Cal. 3d 419, 189 Cal. Rptr. 346). In the interest of clarity and fairness, however, the Board determines that it is appropriate to continue to advise permittees of the Board's reserved jurisdiction over their season of diversion through standard water right permit The wording of Term 80 in existing permits will not be changed.

As shown in Tables 1 and 2 in Section 16, permittees diverting less than 1.0 cfs by direct diversion or less than 100 AF by diversion to storage account for a very small percentage of the water subject to the Board's reserved jurisdiction under Term 80. Such permittees will receive a fixed season of diversion which excludes the period of June 16 to August 31.

(See Section 17). The Board does not believe that continuation of reserved jurisdiction over the season of diversion for such water users is justified by the small quantity of water involved. Therefore, Term 80 will be deleted from permits for direct diversion of less than 1.0 cfs or for diversion to storage of less than 100 AF.

25. Continuining Authority of Board Under Term 90

Standard water right permit Term 90 states:

"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 [name of the 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."

Term 90 was developed following the 1976-77 drought in order to put new permittees expressly on notice that their season of diversion could be reduced or eliminated as necessary to protect prior rights. The language of the term indicates that any Board-ordered reductions in the season of diversion would be of limited duration in response to conditions during a particular water year. Although all permits are issued subject to prior rights, it is reasonable to put permittees expressly on notice that their season of diversion is subject to direct Board action taken to protect prior rights. Term 90 has been included in permits for both large and small diverters when hydraulic continuity with the Delta exists, or is likely to exist, during the authorized season of diversion. The Board concludes it is

reasonable to continue use of such a term to deal with specific water shortages that may occur. Term 90 will remain in all permits in which it is presently included.

26. Application of Watershed Protection Statutes to CVP

a. Position of Bureau of Reclamation

The CVP and SWP have large direct diversion rights for water export which are based on earlier dates of filing than the rights of most Term 80 water users. (USBR Exh. 8, 9 and 10; DWR Exh. 2-A). Under the Term 91 Method, water is considered available for inbasin use even at times when natural flow is insufficient to satisfy the export demand of the CVP and SWP under their direct diversion rights. Thus, an underlying assumption of the Term 91 Method is that inbasin water use is entitled to preference over CVP and SWP exports by virtue of the watershed protection statutes. (Water Code Sections 11128, 11460-11463).

The Department of Water Resources does not contest the assumptions of the Term 91 Method with respect to exports of water. The Bureau of Reclamation asserts, however, that the watershed protection statutes do not apply to the United States. The Bureau further contends that it is improper for the Board to adopt a method of determining water availability for Term 80 permittees based on the assumption that the statutes do apply. (RT 4/12/83 p. 69 lines 2-18, Statement in Support of Bureau of Reclamation, pp. 5-8).

b. Statutory provisions

The State Central Valley Project Act was enacted in 1933. (Calif. Stats., 1933, Ch 1042, p. 2643). The statutory antecedent of present Water Code Section 11460 was a provision of that Act (Calif. Stats. 1933, ch. 1042, sec. 11, pp. 2650-2651) and, with minor amendment, has remained in force to the present. Water Code Section 11460 states:

"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 regired to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein."

In 1951, Water Code Section 11128 was enacted. It expressly applies the requirements of Water Code Section 11460 to any "units" identified in the State Central Valley Project Act when constructed or operated by the Federal Government. Section 11128 also provides that the limitations should apply to additional units which may be constructed and operated as part of the project. The major components of the CVP come within the description of Section 11128.

c. Board policy

In light of the statutory protections for the area of origin, the Board has expressly conditioned numerous CVP permits to reflect that the rights granted are subject to

the prior rights of present or future water users within the watershed in which the water originates. Still other permits have been conditioned to reflect a similar statutory preference granted to counties within which water originates. Although many CVP permits contain express protections for the area of origin, the absence of such protections as a condition in the permit does not imply that the watershed protection statutes do not apply. As stated in State Water Rights Board Decision D935:

"The limitations imposed by the watershed protection law are not dependent upon administrative action but exist by force of the statute itself." (Decision D935, p.71).

d. Application of the Watershed Protection Statutes to
the CVP is not inconsistent with Congressional
directives

The Bureau argues that the CVP is exempt from the watershed protection statutes on the grounds that the state

Permits issued on the following applications filed by or assigned to the Bureau contain permit terms based on provisions of the watershed protection statutes (Water Code Sections 11128, 11460-11463): Applications 5626, 9363-9368, 15764, 13370-13372, 14662, 18721, 18723, 21636, 21637, 21542, 22316, 1119, 12578, 12716, 234, 1465, 5638, 18006, 15763, 18812, 18733, 18714, 1131, 11332, 11761, 11762 and 11989.

Permits issued on the following applications filed by or assigned to the Bureau contain permit terms based on provisions of the county of origin statutes (Water Code Sections 10505 and 10505.5): Applications 5625, 5626, 9363-8, 5627, 5628, 15374-15376, 16767, 16768, 17374, 16857, 16858, 19303, 19304 and 18115

may not impose conditions on water right permits of the United States which are inconsistent with congressional provisions. (Statement in Support of Bureau of Reclamation, pp. 6, 7). The Bureau has not cited any provision of the legislation authorizing the CVP that expressly exempts CVP water rights from the watershed protection statutes. (RT 4/12/83) p. 82 lines 19-23). Rather, the Bureau argues that any restrictions or conditions which could reduce the quantity of water available under the Bureau's rights have the effect of limiting the project's ability to meet a stated congressional goal and are therefore invalid under the standard established in California v United States (1978) 438 U. S. 645, 98 S Ct. 2985.

Although the Bureau cites California v. United States in support of its position, it ignores the clear language of the decision. In discussing provisions of the Reclamation Act of 1902 (43 U.S.C. Secs. 372, 383) which govern the appropriation of water for the CVP and other Federal reclamation projects the Court states:

"The legislative history of the Reclamation Act of 1902 makes it abundantly clear that Congress intended to defer to the substance, as well as the form, of state water law." (Id. 438 U.S. at 676).

Thus, the presumption is that the Federal government is subject to state laws concerning water rights. In contending that the CVP is exempt from the watershed protection statutes, the Bureau has the burden of presenting specific Congressional directives which are directly

inconsistent with the provisions of state law. None were presented.

In reviewing the legislative history of the Reclamation Act of 1902, the Supreme Court states:

"As Representative Sutherland, later to be a Justice of this Court, succintly put it, 'if the appropriation and use were not under the provisions of the State law the utmost confusion would prevail.' ... Different water rights in the same state would be governed by different laws and would frequently conflict," (Id. 438 U.S. at 668, 669).

The statutory preference provided to areas where water originates is a substantive element of California water rights law. The appropriative water rights of the CVP and SWP for export of water out of the watershed of origin or adjoining areas are considered to be junior to later inbasin use, just as they are considered to be junior to future riparian use. If the Bureau's permits were not subject to watershed protection provisions, CVP water rights would be treated considerably different than SWP water rights. As stated in California v United States , "...'the utmost confusion would prevail' ... Different water rights in the same state would be governed by different laws... "(Ibid.). Fortunately, however, the Reclamation Act of 1902 provides that the federal government is to obtain water rights for federal reclamation projects in accordance with state law. (43 U.S.C. Sec. 383). Thus, application of California's watershed protection statutes to the water rights acquired for the CVP is entirely consistent with Congressional directives.

e. Use of the Term 91 Method for determining water

availability does not interfere with the export of

water to which the Bureau has a superior right

The Bureau contends that use of Term 91 Method is improper since it interferes with export of water to which the Bureau has a superior right. (Statement in Support of Bureau of Reclamation, p. 7). This assertion ignores the fact that the water rights which the Bureau holds are the rights it has been granted under state law. The water right permits for the CVP do not guarantee the Bureau the right to divert any certain quantity of water in any year. The Bureau's permits which authorize diversion of water for export simply grant the right to divert and use up to a stated quantity of water, provided that riparian rights and appropriative rights for use within the area where the water originates are satisfied and other terms of the permits are complied with.

The purpose of the hearing on water availability for Term 80 permittees was not to consider changes in the water rights acquired by the Bureau before Term 80 was adopted. Although future inbasin development can diminish the quantity of water available for export, that fact was recognized by all parties at the time the Bureau's permits were issued. In most instances, the statutory provisions regarding areas of origin were expressly acknowledged in the form of permit conditions. If the Bureau wished to challenge the basic nature of the water right entitlements

which it has received, it should have done so at the time the permits were issued -- not many years later as part of a proceeding on totally different permits. Our recent statement in Decision 1587 regarding the Bureau's contentions in the SOFAR proceeding is equally applicable to the Bureau's contentions in the present proceeding:

"We further find that over the long period during which it has been constructing or operating water projects in California, the Bureau has sought and obtained many appropriative permits under California's water right laws... Virtually all of these permits contain conditions protecting the prior rights of the areas of the waters' origin. The Bureau has accepted these water right entitlements issued under the laws of this State. It has availed itself of the authority and benefits conferred by these entitlements in constructing or operating works for the appropriation of the waters of this State. The hour is very late for the Bureau's assertion that it need not respect the entitlement conditions protecting the interests of the areas in which the water originates. These conditions -- no less than the authority and benefits -- are part and parcel of the entitlements." (Decision 1587 p. 47, enphasis added).

Using the Term 91 Method to determine water availability simply recognizes that the export rights of the Bureau are subject to the prior rights of water users in the area where the water originates. Since the Bureau's rights are, and always have been, subject to such rights of inbasin users, use of the Term 91 Method does nothing to interfere with the export of water to which the Bureau has a superior right.

f. There is no evidence showing that the financial integrity of the CVP is endangered by continued use of the Term 91 Method

The Bureau asserts that use of the Term 91 Method to determine water availability endangers the "financial integrity of the CVP by injecting uncertainty as to the quantity and price of water available under contract." (Statement in Support of Bureau of Reclamation, p. 7). The reasoning seems to be that if the quantity of water available for export by the CVP is reduced as a result of inbasin development, the "financial integrity" of the entire project is thereby endangered. The Bureau presented testimony that if there is a reduction in the total amount of water available from the project, there is a narrower base on which to spread the repayment costs. (RT (4/12/83)p. 80 lines 3-6). It is reasonable to assume that if less water were available for sale, the price per unit of the remaining water would increase in order to recover a given amount of money. The Bureau introduced no evidence, however, of the amount of increase in the per unit cost of water due to compliance with the watershed protection statutes, nor did it introduce evidence that purchasers would be unavailable if the price of CVP water were to increase. Thus, there is no basis for concluding that compliance with laws regarding protection of the watershed of origin endangers the "financial integrity of the CVP."

g. Compliance with the watershed protection statutes does not constitute impairment of contracts within the meaning of Article 1, Section 10 of the United States Constitution

The Bureau argues that the effect of the watershed protection statutes is to impair contracts between the United States and various public agencies in violation of Article 1, Section 10 of the U. S. Constitution. (Statement in Support of The Bureau of Reclamation, p. 7). This argument overlooks the fact that the Bureau may legally contract to deliver only that water to which it has a legal right under California law. The water rights under which the CVP may export water are subject to the superior rights of the areas within which the water originates just as they are subject to the superior rights of riparian users.

The fact that the Bureau has entered into a contract to deliver water to a third party does not bestow upon the Bureau a greater water right than it previously held. Water right permits for the CVP were subject to the watershed protection statutes before water delivery contracts were executed and they continue to be subject to the same statutes following execution of contracts. State regulation which restricts a party to gains it reasonably expected from a contract should not be deemed to be an unconstitutional impairment of contracts. (Energy Resources Group, Inc. v. Kansas Power and Light Co. (1983) _______ U.S. ______, 103 S Ct. 697, 704-05). Board recognition of the watershed

protection statutes does not constitute impairment of contracts within the meaning of Article 1, Section 10 of the United States Constutution.

27. County of Origin Statutes

Water Code Sections 10505 and 10505.5 apply to water rights initiated by State applications which were later assigned, including applications assigned to the Federal Government or to a State agency. The statutes provide preferential treatment for use of water within the county in which it originates if the water is needed for development of the county. None of the methods of determining water availability proposed at the hearing identify the particular counties within which water originates or is consumed. Since it does not identify the counties in which water originates or is used, the Term 91 Method does not make any specific assumptions with respect to the county of origin protections. Although the requirements of the county of origin statutes may definitely affect the availability of water for particular permittees, such effects will have to be analyzed on a case by case basis.

28. Return Flow

Although quantities of return flows are not measured or estimated, the Term 91 Method makes certain assumptions through which return flows affect the calculation of storage releases entering the Delta and natural supply available for appropriation. (SWRCB Exh. 1 pp 49, 50, 58). The method assumes that if there is no inbasin use of storage releases, all return flows become a part of the natural supply available for

use by downstream diverters in order of priority. When there is inbasin use of storage releases, return flows are used to replenish the storage releases. (SWRCB Exh. 1, p. 49).

The Bureau of Reclamation asserts that it is entitled to "all return flows which result from operation of the CVP," and that the treatment of CVP return flows under the Term 91 Method is improper. (Statement In Support of Bureau of Reclamation, pp. 8 & 9). The Bureau's claim to return flows from direct diversion cannot be accepted for at least two reasons.

First, neither the Bureau nor any other party introduced any detailed evidence of the specific sources and quantities of return flows in the Delta watershed. One of the reasons the Board staff discontinued the comprehensive supply/demand analysis of water availability was the lack of adequate information on return flows within the Delta watershed. (SWRCB Exh. 1, p. 62). Although the Bureau disputes the assumptions of the Term 91 Method regarding return flows, it acknowledges that it would be very difficult to even estimate CVP return flows on a real-time basis (RT 4/12/83) p. 121 lines 1-7).

The law is clear that a party seeking to recapture previously controlled water may reclaim only such water as the party can show by decisive proof that it is entitled to.

(Butte Canal and Ditch Co. v. Vaughn (1858) 11 Cal. 143, 152,

Page v. Rocky Ford Canal and Irrigation Co. 83 Cal. 86, adhered to 83 Cal. 84). In the absence of convincing evidence on the source and quantities of return flows at particular locations in the Delta watershed on a real-time basis, a Board decision on

water availability could not properly account for the Bureau's claim to return flows even if there were an adequate legal basis for such claim.

The second reason that the Bureau's claim to return flows from direct diversion should not be accepted is that such a conclusion would be inconsistent with prior Board policy and with the Bureau's apparent practice of filing separate applications for diversion of return flow under appropriative permits. In Decision D990, the Board referred to CVP return flow as unappropriated water and granted the Bureau a year-round season of diversion from the Sacramento River and Delta channels due to the availability of such water. The decision cites two Bureau studies which showed that water was not available or infrequently available during July and August and not always available in September. However, the Bureau presented evidence that unappropriated water would be available on the Sacramento River below Keswick Dam and in the Delta due to return flows from applied CVP water. (Decision D990, p. 32). Having applied for and obtained permits to appropriate such water, it is illogical for the Bureau now to contend that it is automatically entitled to all CVP return flows irrespective of the terms and conditions of the permits which they obtained.

The purpose of the water availability hearing is not to adjudicate the rights to CVP return flow. In determining the availability of water for Term 80 permittees, the Board must make reasonable assumptions regarding use of water under other rights, but it need not attempt to quantify and precisely define

the legal basis for each separate diversion. It should be emphasized that for purposes of this decision, the practical implications of the theoretical argument over rights to CVP return flow are minimal. Since the Bureau applied for and obtained extensive direct diversion rights under state permits (USBR Exh. 8), it is entitled to divert large quantities of CVP return flow and other available water by virtue of those permits. Any export of such return flow is subject to the watershed protection statutes irrespective of whether the Bureau claims the water under its appropriative permits or whether it claims to have an independent water right to all CVP return flow.

29. Petition of Bureau of Reclamation to Defer Decision

On March 18, 1983, the Bureau of Reclamation submitted a petition requesting that the Board postpone the hearing on water availability for Term 80 permittees, or, in the alternative, that the Board proceed with the hearing but delay issuance of a decision pending resolution of several lawsuits referred to as the Delta Water Cases. (San Francisco County, Superior Court, Judicial Council Coordination Proceeding No. 548). The Bureau's statement in support of the petition states that many of the legal issues identified in the Delta Water Cases will have an effect on water availability in the Delta Watershed. The Bureau argues that it is premature for the Board to adopt a methodology to determine water availability when some of the legal assumptions of the method may be found to be incorrect. The Bureau also contends that Term 91 provides a satisfactory means

for the Board to act upon new applications until the legal issues in the Delta Water Cases have been ruled upon.

The Bureau's request to delay the hearing was denied in Board Order 83-5 dated April 6, 1983, and the request to delay issuance of a decision was taken under consideration. As discussed more fully in Order 83-5, ultimate resolution of the legal issues in the Delta Water Cases could take a considerable time. The assumptions of the Term 91 Method regarding the watershed protection statutes and the Board's authority to establish the water quality standards set forth in Decision 1485 are consistent with applicable statutes and past Board decisions. In addition, when reviewing the season of diversion specified for Term 80 permittees, the Board has an obligation to consider current information on water availability

For the reasons stated above, the Board concludes that the Bureau has not presented sufficient cause to delay issuance of a Board decision. In the unlikely event that any underlying legal assumption of this decision is found to be incorrect in a judicial proceeding, the provisions of the decision can be modified at that time.

It should be noted that the present decision should have no adverse effect upon the operations of the CVP. As discussed in previous sections, the Board intends to include Term 91 in all Term 80 permits authorizing direct diversion of 1.0 cubic-foot per second or more or diversion to storage of 100 acre-feet per year or more. Since the Board's action will increase the quantity of water subject to real-time regulation under Term 91,

the decision will increase the protection of CVP storage releases against unauthorized diversion.

30. Board Policy For Future Applications

The Board adopts the following policies for use in acting upon future applications to appropriate water in the Bay-Delta watershed.

a. For use in new permits, Standard Permit Term 80 shall be revised to provide as follows:

"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."

Said term shall be included in new permits for direct diversion of 1.0 cubic foot per second or more, and in new permits for diversion to storage of 100 acre-feet per annum or more, from the Sacramento-San Joaquin Delta watershed when hydraulic continuity with the Delta is likely to exist during some portion of the authorized diversion season.

- b. Standard Permit Term 90 shall continue to be included in new permits for diversion from the Sacramento-San Joaquin Delta watershed when hydraulic continuity with the Delta is likely to exist during some portion of the authorized diversion season.
- c. Standard Permit Term 91 shall be included in new permits for diversion from the Sacramento-San Joaquin Delta watershed except when:

- (1) Hydraulic continuity with the Delta is not likely to exist at any time during the authorized diversion season.
- (2) Diversion is from the Putah Creek, Stony Creek or Cache Creek watersheds.
- (3) The authorized use of water is for power or other nonconsumptive purposes that do not alter the rate or quantity of the flow regime in the Delta.
- (4) The authorized diversion is for less than 1.0 cubic foot per second by direct diversion or less than 100 acre-feet per annum by diversion to storage.
- (5) The authorized season of diversion excludes the months of March through September. 9
- d. The following term (designated as Standard Permit Term 93) shall be included in all new permits for diversion from the San Joaquin River watershed upstream from Vernalis when hydraulic continuity with the San Joaquin River at Vernalis is likely to exist during some portion of the authorized diversion season:

"No diversion is authorized by this permit when conserved water released from New Melones Reservoir is

See Table VII-3 on p. 44 of SWRCB Exh. I which shows seasons of water availability over a 22 year period including the 1976-1977 drought. During the period studied, the availability of water for Term 80 permittees during the months of October through February was never restricted due to water quality conditions in the Delta.

being used to maintain water quality in the San Joaquin River at Vernalis at a level of 500 parts per million (ppm) Total Dissolved Solids (TDS), or when TDS levels at Vernalis exceed 500 ppm. This restriction shall not apply when, in the judgment of the Board, curtailment of diversion under this permit will not be effective in lowering the TDS at Vernalis, or when, in the absence of the permittee's diversion, hydraulic continuity would not exist between the permittee's point of diversion and Vernalis. The Board shall notify the permittee when curtailment of diversion is required under this term."

e. The following term (designated as Standard Permit Term 94) shall be included in new permits for direct diversion of 1.0 cubic foot per second or more and in new permits for diversion to storage of 100 acre-feet per annum or more from the watershed tributary directly to San Francisco Bay:

"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 protection of beneficial uses of water in San Francisco Bay. Action to change the season of diversion will be taken only after notice to interested parties and opportunity for hearing."

- f. A fixed season of diversion shall be used for all permits for diversion in the Sacramento-San Joaquin Delta watershed of less than 1.0 cubic foot per second by direct diversion or less than 100 acre-feet per annum by storage. The allowable season of diversion shall exclude the period from June 16 thru August 31.
- g. Permit terms 80, 91, 93 & 94 shall not be included in new permits for generation of hydroelectric power, and for other non-consumptive uses, which do not alter the rate or quantity of the flow entering the Delta or San Francisco Bay.

ORDER

IT IS HEREBY ORDERED that the permits containing Standard Water Right Permit Term 80 (original or revised wording) be amended to comply with the provisions set forth below:

(1) All Term 80 permits which authorize direct diversion of 1.0 cubic-foot per second or more or diversion to storage of 100 acre-feet per year or more shall be subject to Standard Water Right Permit Term 91 which states as follows:

"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 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."

Term 91 shall be added to all such permits in which it does not now appear, provided that the term shall not be added to permits which authorize hydroelectric power generation, or other non-consumptive uses, by projects which do not change the streamflow regime in a way which alters the rate or quantity of flow entering the Delta.

- (2) Any periods of time presently excluded from the season of diversion specified in any Term 80 permit shall continue to be excluded from the season specified in such permit.
- (3) Term 91 shall be deleted from those permits in which it now appears which come within either of the following two categories:
 - (a) Permits which authorize direct diversion of less than 1.0 cubic-foot per second or diversion to storage of less than 100 acre-feet per year.
 - (b) Permits for hydroelectric power generation for projects which do not change the streamflow regime in a way which alters the rate or quantity of flow entering the Delta.
- (4) All Term 80 permits which authorize direct diversion of less than 1.0 cubic-foot per second or diversion to storage of less than 100 acre-feet per year shall specify a fixed season of diversion except as provided in paragraphs (6) and (7) below. The season of diversion for such permits shall exclude the period of June 16 to August 31. Where the season of diversion

in a Term 80 permit has been further restricted due to local conditions, prior Board decisions, fish flow requirements, or water right adjudications, such further restrictions shall continue to apply.

- (5) Term 80 shall be deleted from all permits which authorize direct diversion of less than 1.0 cubic-foot per second or diversion to storage of less than 100 acre-feet.
- (6) The season of diversion specified in Term 80 permits which authorize diversion during July and August shall not be changed at this time. If, after receipt of further evidence, the Board concludes that there is hydraulic continuity between the Delta and the point of diversion specified in a particular permit, the Board may amend the conditions of the permit accordingly. Notice and opportunity for a hearing will precede any Board action amending conditions of such permits.
- (7) All Term 80 permittees who divert water from the San Joaquin River watershed upstream from Vernalis shall have the following term (designated as Standard Water Right Permit Term 93) added to their permits and diversion of water under their permits shall be restricted accordingly:

"No diversion is authorized by this permit when conserved water released from New Melones Reservoir is being used to maintain the water quality in the San Joaquin River at Vernalis at a level of 500 parts per million (ppm) Total Dissolved Solids (TDS) or during any time of low flows when TDS levels at Vernalis exceed 500 ppm. This restriction shall not apply when, in the judgement of the Board, curtailment of diversion under this permit will not be effective in lowering the TDS at Vernalis, or when, in the absence of the permittee's diversion, hydraulic continuity would

not exist between the permittee's point of diversion and Vernalis. The Board shall notify permittee at any time curtailment of diversion is required under this term."

- (8) The changes described in this decision are summarized in the attached Appendix A showing the previous season of diversion, the new season of diversion and certain applicable permit terms for each of the Term 80 permits.
- (9) Except as expressly provided herein, all Term 80 permits remain subject to all terms and conditions presently specified in said permits.
- (10) Except as provided in the last paragraph of Section 15 herein, the method of calculation and implementation of Standard Permit Term 91 shall continue to be as specified in findings 8 through 13 of Board Order WR 81-15.
- (11) The delegation of authority to the Chief of the Division of Water Rights as specified in order 5 of Board Order WR 81-15 shall continue.

IT IS FURTHER ORDERED that the petition of the Bureau of Reclamation to defer issuance of this decision pending the resolution of the Delta Water Cases is denied.

Dated: NOV 17 1983

Carole A. Onorado, Chairwoman

Warren D. Noteware, Vice Chairman

F. K. Aliibury, Member

Kerneth W. Willis, Member

APPENDIX A

in the

Appendix A

LEGEND

| HEADING | EXPLANATION |
|-----------|--|
| APPL | |
| NO. | Water Right application number |
| PERMITTEE | Self Explanatory |
| USE | Allowable uses of water are shown by the following |
| | codes: |

| Code | Use |
|---------|--------------------------------|
| В | Mining |
| С | Milling |
| D | Domestic |
| Е | Fire Protection |
| G | Dust Control |
| H | Fish Culture |
| I | Irrigation |
| J | Industrial |
| L | Heat Control |
| M | Municipal |
| N | Frost Protection |
| P | Power |
| R | Recreation |
| S | Stockwatering |
| W | Fish and Widlife Protection or |
| | Enhancement |
| ${f z}$ | Other |
| | |

DIRECT The amount of water that can be diverted under

DIVERSION direct diversion rights in units of cubic feet per

(cfs) second (cfs). Values less than 0.005 cfs are

rounded to 0.01 cfs. Gallon per minute values

given in permits have been converted to cfs.

STORAGE

The amount of water that can be diverted to

(acre-feet)

storage in units of acre-feet (AF) per annum.

| | EXISTING | SEASON | |
|---------|-----------|--------|---------|
| DIRECT | DIVERSION | | STORAGE |
| PRIMARY | SECONDA | ARY | SEASON |
| SEASON | SEASON | | |

These three columns discribe the existing season of diversion for direct diversion & storage

PRIMARY

The allowable period during which water may be

SEASON

diverted by direct diversion before the summer

period of unavailability. A year-round primary

direct diversion season usually indicates that the

applicant does not have hydraulic continuity with

the Delta or does not use water consumptively.

SECONDARY

The allowable period for direct diversion after

SEASON

the summer period of unavailability.

| | REVISED SEASON | |
|---------|----------------|---------|
| DIRECT | DIVERSION | STORAGE |
| PRIMARY | SECONDARY | SEASON |
| SEASON | SEASON | |

These three columns describe the allowable season of diversion for the periods described above. There are several possible entries:

| Entry | Explanation |
|-------|-------------------------------|
| | No entry (ie. not applicable) |
| N.C. | No change to existing season |

| Mayl-Jun15 | The dates indicate the revised |
|--------------|-------------------------------------|
| | allowable season of diversion |
| Term 91 | The diversion season depends on the |
| | availability of water as determined |
| | by the Term 91 method and the |
| | existing season of diversion which- |
| | ever is more restrictive |
| Term 91 & 93 | These permit terms apply to |
| | diversions in the San Joaquin |
| | basin, south of the Vernalis gaging |
| | station. The diversion season |
| | depends on the availability of |

water as determined by the Term 91 method and the Term 93 method and the existing season of diversion, whichever is the most restrictive.

REVISIONS TO PERMIT TERMS 80 91 93

These three columns define the Board action taken on standard water right terms 80, 91 and 93. There are four possible entries:

| Entry | Explanation |
|-------|-------------------------------|
| - | No entry (ie not applicable) |
| Add | The term will be added to the |
| | existing water right permit |

Ret

The existing term will be retained

in the revised permit

Del

The existing term will be deleted

from the permit

| | | • | | DIRECT | , | E | CISTING SEASO | DIA | REV | ISED SEASON | | | |
|---|----------------------------|---------------------------|--------------|-------------------------|----------------------------|----------------------------|------------------------|----------------|------------------------|----------------------|------------------|--|--|
| | APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | SIORAGE (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT DI PRIMARY | VERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 | |
| | 5645C | EID & ED Co WA | WRLNJ DMI | 150.00 | 70,000 | Nov 1-Jun30 | - | Nov 1-Jun30 | Term 91 | - | Term 91 | Ret Ret - | |
| | 7938A | EID & ED CO WA | RP | 600.00 | 200,368 | Jan 1-Dec31 | - | Nov 1-Jun30 | Term 91 | - | Term 91 | Ret Ret - | |
| ٠ | 11792A | Calaveras Co WD | ERJEID | 30.00 | 50,938 | Nov 1-May 1 | | Nov 1-May 1 | Term 91 | - | Term 91 | Ret Add - | |
| | 14602 | Pit Resources Cons. Dist. | WSRMJID | - | 75,000 | - | - | Sep 1-Jun15 | - | | n.c. | Ret | |
| | 18063A | EID & ED CO WA | WRL NJDMI | - | 70,000 | - | ~ | Nov 1-Jun30 | - | - | Term 91 | Ret Ret - | |
| | 18065A | EID & ED CO WA | WRLN JDMI | - | 30,000 | | • | Nov 1-Jun30 | • | - , | Term 91 | Ret Ret - | |
| | 18067A | EID & ED Co WA | WPLN JEMI | · _ | 31,000 | - | - | Nov 1-Jun30 | - | - | Term 91 | Ret Ret - | |
| | 18069A | EID & ED Co WA | WRLN JDMI | - | 11,000 | - | - | Nov 1-Jun30 | - | | Term 91 | Ret Ret - | |
| | 18721 | US Bureau of Rec | ZRMJID | 100.00 | 1,700,000 | Nov 1-Jul 1 | . • | Nov 1-Jul 1 | N.C. | - | N.C. | Ret | |
| | 18723 | US Bureau of Rec | RPD " | 6300.00 | 1,700,000 | Jan 1-Dec31 | - | Nov 1-Jul 1 | N.C. | - | N.C. | Ret | |
| | 18733 | US Bureau of Rec | RID | | 74,000 | - | - | Dec 1-Apr30 | - | - | N.C. | Ret | |
| | 21636 | US Bureau of Rec | P | 600.00 | 800,000 | Jan 1-Dec31 | - | Nov 1-Jul 1 | N.C. | - | N.C. | Ret | |
| | 21637 | US Bureau of Rec | ZWRMUID | 900.00 | 800,000 | Nov 1-Jul 1 | _ | Nov 1-Jul 1 | N.C. ` | - | N.C. | Ret | |
| | 22061 | Paradise ID | RMD | - | 8,800 | - | - | Oct 1-May31 | - | - | Term 91 | Ret Add - | |
| | 22189 | O'Brien, RM & E | ID | 1.00 | - | Mar 1-Jun30 Jan 1-Dec31 | Sep 1-Oct31 | . - | Term 91 | Térm 91 - | - | Ret Add - | |
| | 22260 | Fiddyment Estate | SIG | 11.00 | 300 | Apr 1-Jun30 | Sep 1-Oct31 | Nov 1-Apr 1 | Term 91 | Term 91 | Term 91 | Ret Add - | |
| | 22296 | Heiber, K & E | sı | - | 450 | - | - | Oct 1-May30 | - | - | Term 91 | Ret Add - | |
| | 22643 | O'Brien, RM & E | IRS D | 1.00 | 17 | Mar 1-Jun30 Sep 1-Jun30 | Sep 1-Oct31 | Sep 1-Jun30 | Term 91 Sep 1-Jun15 | Term 91 | Sep 1-Jun15 - | Ret Add - | |
| | 22914 | Trust of Rothaus | RID | 1.25 | 30 | Apr 1-Jun 1 | • | Nov 1-Jun 1 | Term 91 | - | N.C. | Ret Add - | |
| | 2 2 9 46 | Kalfsbeek, J | RI | 16.25 | - | Marl5-Jun30 | Sep 1-Jan15 | | Term 91 | Term 91 | - | Ret Add - | |
| | 23130 | Lauchland, RM & LR | sı | 1.00 | • - | Feb 1-Oct31 | - | - | N.C. | - | - | Ret | |
| | | | | | | | | | | | | | |

e.

| | | | DIRECT | | 1 | existing sea | SON | I | REVISED SEASO | N | |
|---------------|----------------------|--------------|-------------------------|----------------------------|----------------------------|------------------------|----------------|---------------------|------------------------|---------------|--|
| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 23201 | Recl Dist 1004 | I R | 110.00 140.00 | Ξ | Apr 1-Jun15 Sep15-Jan31 | Sep 1-Sep15 | <u>*</u> - | Term 91 Term 91 | Term 91 | <u>-</u> - | Ret Ret - Ret Ret - |
| 23284 | Calosso, F | I · · | 3.00 | - | Apr 1-Sep30 | - | . - | N.C. | - | | Ret |
| 23343 | Honcut Creek Ranch | WI | 73.40 | - | Apr 1-Apr15 | Nov 1-Jan20 | •. | Term 91 | Term 91 | - | Ret Add - |
| 23344 | Yosuba Farms | WI | 28.90 | - | Apr 1-Apr15 | Nov 1-Jan20 | - | Term 91 | Term 91 | - | Ret Add - |
| 23345 | Zall, S | WI | 10.60 | - | Apr 1-Apr15 | Nov 1-Jan20 | - - | Term 91 | Term 91 | - | Ret Add - |
| 23673 | Morehead, J & B | I | 2.00 | - | Apr 1-Jun30 | Sep 1-Oct31 | - | Term 91 | Term 91 | - | Ret Add - |
| 2 3690 | South Sutter WD | ı | 25.00 | - | Apr 1-Jun30 | Sep 1-Oct31 | - | Term 91 | Term 91 | - | Ret Add - |
| 23711 | Farmer, Z & A, et al | I | 0.40 0.05 | - | Jun 1-Oct31 Nov 1-May30 | - - | - | N.C. N.C. | - | - | Del Del |
| 23749 | Swanson, B | 1 | 6.25 | - | May 1-Oct30 | | - | N.C. | · - | | Ret |
| 23757 | Browns Valley ID | SID | 70.00 | - | Nov 1-Jun30 | - | - | Term 91 | - | - | Ret Add - |
| 23810 | Crag View CSD | D | 1.00 | - | Sep 1-Jun30 | <u>.</u> . | - | Term 91 | - | - | Ret Add - |
| 23811 | Georgi, P & A | SI S | 0.80 0.01 | - | Apr 1-Oct15 Oct16-Mar31 | · | - - | N.C. | <u>-</u> | - | Del Del - Del Del - |
| 23812 | Georgi, P & A | sı | 0.60 | · - | Apr 1-OctJ.5 | Octl6-Mar3l | - | N.C. | N.C. | - | Del Del - |
| 23838 | South Sutter WD | I | 10.00 | _ | Apr 1-Jun30 | Sep 1-0ct31 | | Term 91 | Term 91 | - | Ret Add - |
| 23945 | Wallace Bros | ı | 17.00 | - | Apr 1-Jun30 | Sep 1-Sep30 | _ | Term 91 | Term 91 | · - | Ret Add - |
| 23946 | Wallace Bros | I | 17.00 | - | Apr 1-Jun30 | Sep 1-Sep30 | - | Term 91 | Term 91 | - | Ret Add - |
| 23 967 | Adkisson, TG et al | DI | 0.05 | - | Jan 1-Dec31 | - | . , | N.C. | | _ | Del |
| 24016 | Capik, M & Curtis, J | SRIE | - | 568 | _ | • • | Octl5-Marl5 | - | - | Term 91 | Ret Add - |
| 24 098 | Sierra Pacific Ind | WRH | - | 200 | - 1 | <u></u> | Nov 1-May 1 | - | - | Term 91 | Ret Ret - |
| 2 4099 | Sierra Pacific Ind | WRH | | 300 | - . | - | Nov 1-Apr30 | - | - | Term 91 | Ret Ret - |
| 24100 | Sierra Pacific Ind | WRH | 1.00 | 120 . | Jan 1-Dec31 | - , · | Nov 1-May 1 | N.C. | - . | Term 91 | Ret Ret - |
| 24136 | Eames, AW & AL | SIED | 60.0 | - | Jan 1-Dec31 | - | - | N.C. | - | · . | Del |
| 242 42 | Bristow, DM | I | 0.35 | - - | Apr 1-Oct31 | - | - | N.C. | . - | - | Del |

| | | | DIRECT | | ï | XISTING SEAS | 50N | R | EVISED SEASO | OSI | REVISIONS TO |
|------------------|----------------------------------|------------|-------------------------|----------------------------|----------------------------|------------------------|-------------|------------------------|-----------------------|-------------|--------------------------|
| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT E PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT DE PRIMARY | IVERSION SECONDARY | STORAGE | PERMIT TERMS 80 91 93 |
| 24326 | CA Dept of Forestry | E D | 0.01 | - | Jan 1-Dec31 | _ | - | N.C. | - | - | Del |
| 24331 | Redfearn, E et al | SRI | - | 45 | - | - | Nov 1-Jul 1 | - | - | Nov 1-Jun15 | Del |
| 24351 | Linn, AA et al | I | 0.13 | 12 | Mar 1-Dec 1 | | Mar 1-Apr30 | N.C. | - | N.C. | Del |
| 24354 | Siskiyou Co FCWCD | R | 0.15 | . 8 | May 1-Oct31 | - | May 1-May15 | N.C. | - | N.C. | Del Del - |
| 24367 | Jacobsen, MT & S | ِ وَ | 0.01 | - | Jan 1-Dec31 | - | - | , N.C. | - | - | Del |
| 24383 | Simunich, FL & IM | ı | 1.00 | - | Apr 1-Jun30 | - | - | Term 91 | - | - | Ret Add - |
| 24387 | Dumont, J et al | SRE | - | 30 | - | - | Nov 1-Jun 1 | - | - | N.C. | Del |
| 24416 | Jepperson, RB | DB | 1.50 | 8 | Nov 1-Jun30 | <u>-</u> | Nov 1-Jun30 | Term 91 | - , | Nov 1-Jun15 | Ret Ret - |
| 24418 | Ahlers, DF & PJ | ı | 0.38 | - | May 1-Jun30 | Sep 1-Nov 1 | - | May 1-Jun15 | N.C. | - | Del |
| 24420 | Lea, C | ı | 2.13 | . - | Marl5-Jun30 | Oct 1-Oct31 | · <u>-</u> | Term 91 | Term 91 | - | Ret Ret - |
| 24428 | Gautschi, DL | SRI | . - | 24 | | - | Nov 1-Mar31 | - | - | N.C. | Del Del - |
| 24432 | Skalli Corp | SRI | - | 35 | | | Sep15-May31 | - | - | n.c. | Del |
| 24439 | Bugni, LD & D | I. | 2.00 | - | Mar 1-Jun30 | Sep 1-Nov15 | - | Term 91 | Term 91 | - | Ret Add - |
| 24440 | Bugni, LD & D | I | 2.00 | - | Mar 1-Jun30 | Sep 1-Nov15 | - | Term 91 | Term 91 | | Ret Add - |
| 24449 | Triplett, M | I | 3.00 | - | Marl5-Jun30 | Oct 1-Oct31 | - | Term 91 | Term 91 | - | Ret Ret - |
| 24472 | Buttes Gas & Oil Co | SRNI | - | 98 | - | - | Nov 1-Apr30 | - | - | N.C. | Del |
| 24473 | Buttes Gas & Oil Co | SRNI | - | 98 | . - | - | Nov 1-Apr30 | - | - | N.C. | Del |
| 24474 | Buttes Gas & Oil Co | SRNI | | 98 | - | · – | Nov 1-Apr30 | - | • | N.C. | Del |
| 24475 | Buttes Gas & Oil | SRNI | - | 98 | <u>-</u> | - | Nov 1-Apr30 | - | - | n.c. | Del |
| 24482A 24482B | Anton, MW & WB Anton, MW & WB | SRNI N | - | 90 | _ Apr 1-May15 | - · | Oct 1-Jun30 | Term 91 | · · · = | Oct 1-Jun15 | Del Del - Ret Ret - |
| 24497 | Souza, HM & SL | SRE | _ | 4 | · - | - | Oct15-May 1 | - | - | N.C. | Del |
| 24523 | Lawrence, D & BB | ī S | 1.86 0.01 | . - | May 1—Jun30 Oct 1—Jun30 | - - | <u>-</u> | Term 91 Oct 1-Jun15 | - - | - | Ret Add - |
| 24535 | Hodapp, AW & KE | SRIED | , | 2 0 | - | - | Nov 1-May30 | _ | · - | N.C. | Del |

| | | | | | | | | , | | | |
|---------------|---------------------|---------|------------------|-------------------|----------------------------|------------------------|----------------|----------------------|-----------------------|----------------|--------------------------|
| | | | DIRECT DIVER- | STORAGE | I | existing seas | SON | RI | EVISED SEAS | DF1 | REVISIONS TO |
| APPL NO. | PERMITTEE | USE | SION (CFS) | (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT DI PRIMARY | IVERSION SECONDARY | STORAGE | PERMIT TERMS 80 91 93 |
| 24559 | Johnson, CA & V | D I | 0.01 0.01 | - - | Jan 1-Dec31 May 1-Sep30 | <u>-</u> - | <u></u> | n.c. | - | - - | Del Del |
| 24561 | Mason, RI et al | SRIE | - . | 70 | - | - | Dec 1-May30 | · _ · | - | N.C. | Del |
| 24564 | Hafner, GF & NF | SRIE | · - | 20 | - | - | Nov 1-Jun 1 | - | - | N.C. | Del |
| 24565 | Hopkins, DE | SRIE | - | ` 20 | - | - | Nov 1-Jun 1 | - | | N.C. | Del |
| 24589 | Brackett, LC et al | RED | | 2 | - | - | Oct 1-Jun30 | - | - | Oct 1-Jun15 | Del |
| 24590 | Ellia Scholar Inc | I | 35.00 | - | Mar 1-Jun15 | - | Term 91 | - | - | N.C. | Ret Add - |
| 24611 | Moulton, WJ & AE | RED | , - | 2 | - | - | Dec 1-Apr 1 | - | - | N.C. | Del |
| 24620 | Scheidel, J & M | I | 5.00 | | Apr 1-Jun30 | Sep 1-Oct31 | - | Term 91 | Term 91 | - | Ret Add - |
| 24621 | South Sutter WD | I | 20.00 | - | Apr 1-Jun30 | Sep 1-Oct31 | . - | Term 91 | Term 91 | - | Ret Add - |
| 24624 | Hing, D & IY | SRE | | 25 | - | , ·- | Dec 1-Apr30 | | - : | N.C. | Del Del - |
| 24631 | Rowen, DM & K | SRIE | 1.15 | 8 | Marl5-Octl5 | - | Dec 1-Apr 1 | Term 91 | - | N.C. | Ret Add - |
| 24632 | LaBruzzo, AJ & F | SRIE | - . | 3 | - | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 24637 | Trust of B Epperson | I | 4.20 | - | Apr 1-Jun30 | Sep 1-Oct 1 | , - | Term 91 | Term 91 | - | Ret Add - |
| 24 638 | Trust of B Epperson | I | 3.00 | - | Apr 1-Jun30 | Sep 1-Oct 1 | - | Term 91 | Term 91 | - | Ret Add - |
| 24639 | Trust of B Epperson | I | 3.00 | - | Apr 1-Jun30 | Sep 1-Oct 1 | _ | Term 91 | Term 91 | - | Ret Add - |
| 24655 | Smith, TD & II | SRI | 0.09 | . 5 | Apr 1-Jun30 | Sep 1-Oct31 | Nov 1-Jun15 | Apr 1-Jun15 | N.C. | N.C. | Del |
| 24672 | Infalt, HH & EL | SRIED | - | 15 | - | - | Nov I-Apr i | - | - | N.C. | Del |
| 24683 | Russell, FH & MG | . RNIE | - | 10 | - | | Nov 1-Apr 1 | · | | N.C. | Del |
| 24685 | El Camino ID | r i | 1.75 | - | Apr 1-Nov 1 | | _ | N.C. | - | . . | Ret |
| 24696 | Stanford, RA & BY | SRIE | · - | 30 | · <u> </u> | - | Oct 1-Apr 1 | - | | N.C. | Del Del - |
| 24718 | Shellenbarger, R | I | 0.18 | - | May 1-Oct31 | <u> </u> | - | N.C. | _ | _ | Del |
| 24730 | Arnold, JW | I | - | 25 | | - | Nov 1-May31 | - | - | N.C. | Del |
| 24750 | Walters, LG & OJ | P RE | 1.50 | - 1 | Jan 1-Dec31 - | <u>-</u> | Nov 1-May31 | N.C. | - | N.C. | Ret Ret |

| | | | DIRECT | | Œ. | EXISTING SEA | SON | R | EVISED SEAS | SON | <u></u> |
|-----------------------|----------------------|----------|-------------------------|----------------------------|------------------------------|------------------------|------------------|----------------------------|------------------------------|----------------|--------------------------|
| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT D | DIVERSION SECONDARY | STORAGE | DIRECT D | IVERSION SECONDARY | STORAGE | PERMIT TERMS 80 91 93 |
| 24758 | Andreotti, A | 1 | - | 3200 | - | <u>,</u> | Nov 1-Apr30 | _ | - | Term '91 | Ret Ret - |
| 24797 | Waegell Bros | I | 0.25 | - | May 1-Oct15 | - | - | N.C. | - | - - | Del Del - |
| 24798 | Waegell Bros | SE I | 0.01 | - | Jan 1-Dec31 May 1-Oct15 | - | - | n.c. n.c. | - | _ | Del Del - Ret |
| 24750 | micyell hos | SE | 0.01 | - | Jan 1-Dec31 | - | - | 'n.C. | · - | · - | Ret |
| 24806 | Gmnersfield Ent Inc | I | 3.00 | | Apr 1-Jun30 | - | . - | Term 91 | - | - | Ret Add - |
| 24809 | Descmer Stables Inc | I | 0.30 | - | May 1-Oct30 | - | - gaa | N.C. | - | - | Del |
| 24814 | Bankowski, RA | SRIED | - | 2 | - | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 24818 | Wilson, DD et al | EI D | 0.12 0.01 | 9 | Apr 1-Jun30 Dec 1-Jun30 | - | Dec 1-Jun30 - | Apr 1-Jun15 Dec 1-Jun15 | - - | Dec 1-Jun15 | Del Del |
| 24824 | Anderson, ME & CM | SRIE | , - | 25 | | - | Oct 1-May 30 | - | - . | N.C. | Del |
| .24842 | Allen, FF | I SED | 0.50 0.01 | - - | Mar 1-Oct 31 Jan 1-Dec 31 | | - | N.C. | · <u>-</u> | - - | Del Del |
| 24349 | Kolpin, K | RIED | - | 20 | - | - | Nov 1-Apr 30 | - | - | N.C. | Del |
| 24375 | O'Neil, A | RWEDI | - | .8 | . - | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 24880 | Reuter, W et al | SRNIED | - | .25 | | - | Dec 1-May 1 | - | - | N.C. | Del |
| 24897 | Ziegermeyer, FH & MM | I | 3.00 | - | .Aprl5-Jun30 | Sep 1-Sep15 | - | Term 91 | Term 91 | - | Ret Add - |
| 24904 | Baker, KE & IM | D . | 0.03 | - | May 1-Oct31 Jan 1-Dec31 | - | - - | N.C. N.C. | - | · - | Del Del |
| 24927 | Pillikin, E & F | SI | 1.13 | - | Mar 1-Dec 1 | - | | N.C. | - | - | Ret |
| 24944 | Swanson, EH & VL | SI | 0.07 | | May 1-Oct30 | - | . • | N.C. | - | •• | Del |
| 24970 | Brauner, GM et al | WSRE | - | 40 | · | - | Nov 1-May 1 | - | | N.C. | Del |
| 24971 | Partch, NT & AW | SRIE | - | 42 0 | - ' | - | Dec 1-Jun15 | · • | · . - | Term 91 | Ret Add - |
| 24 97 7 | Van Vleck, LG & L | SRIE | - | 49 | | . - | Dec 1-Mar31 | | - | N.C. | Del |
| 24983 | Nevada ID | P | 700.00 | 62,080 | Jan 1-Dec31 | - | Nov30-Jun 1 | N.C. | - | N.C. | Ret |
| 24991 | Bland, WO & CA | I | 0.24 | - | Apr 1-Oct31 | - | - | n.c. | - | - | Del |
| 24992 | Bland, WO & CA | I | 0.12 | - | Apr 1-Oct31 | - | - | N.C. | - | - | Del |

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| | | | DIRECT | | . 1 | existing sea | SON | F | EVISED SEASO | N. | |
|---------------|--------------------------|--------|-------------------------|----------------------------|-------------|------------------------|----------------|---------------------|-----------------------|---------------|--|
| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT I | DIVERSION SECONDARY | STORAGE | DIRECT D PRIMARY | IVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 25211 | Kennelly & Stelling | SRI | _ | 50 | _ | — | Nov 1-Apr30 | • • | _ | n.c. | Del |
| 25216 | Hiller, BC & MA | ı | 0.75 | _ | Apr 1-Nov 1 | _ | _ | N.C. | _ | . | Del |
| 25217 | Connors, GT & DT | - I | 0.85 | _ | Mar 1-Nov 1 | _ | | N.C. | | | Del |
| 23211 | Combis, Gr & Di | S | 0.01 | | Jan 1-Dec31 | <u> </u> | . = | N.C. | - | - | Del |
| 25 220 | Lower Honcut Farms | RI | - | 28 | | ••• | Nov 1-Apr 1 | - | · - · | n.c. | Del |
| 25226 | Patterson, VP & RC | SRI | - | 119 | - ' | | Nov 1-Apr30 | - | - | Term 91 | Ret Add - |
| 25231 | Cook, JB | WSI | - | . 50 | · - | - | Feb 1-Jun30 | - | - | Peb 1-Jun15 | Del Del - |
| 25248 | US Lassen Natl Forest | SRW | - | 650 | - | | Nov 1-May 1 | - | - | Term 91 | Ret Ret - |
| 25264 | Katen, W | I | 0.70 | - | Apr 1-Oct15 | _ | ÷. | N.C. | : , | - | Del |
| | | s | 0.01 | - ` | Jan 1-Dec31 | - | - ` | N.C. | - | - | Del |
| 25315 | McArthur, JS et al | RD | - | 8 | - | - | Nov 1-Apr 1 | - | - : | N.C. | Del |
| 2 5348 | Boone, C & S | I | 0.04 | - | Mar 1-Oct31 | - | - | N.C. | <u>.</u> ' | - | Del |
| 25351 | Martinelli, RP & KL | IED | - | 15 | - | • | Nov 1-Apr 1 | - | | N.C. | Del |
| 25361 | Doherty, MV & KK | s | - . | 8 | · - | - · | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25379 | Heinze, W & L | D | 0.01 | | Jan 1-Dec31 | - | - | N.C. | - | - | Del |
| 25391 | Rewinkle, RL & GS | SI | 0.40 | 49 | Nov 1-May 1 | - | Nov 1-May30 | N.C. | - | N.C. | Del |
| 25403 | Trost, VL & JC | s | 0.01 | _ | Nov 1-May 1 | - | - | n.c. | - . | = | Del |
| 25408 | Campbell, BL | sı | - | 38 | - · | - · | Nov 1-Mar31 | · | - ; | N.C. | Del Del - |
| 25411 | Moore, J | SRIE | - | 15 | - | - | Nov 1-Mar31 | • - | - | N.C. | Del Del - |
| 25424 | Acalin, S & S | RIE | - | 4 | - | a- 7 | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25425 | Acalin, S & S | RIE | - | 2 | - | - | Nov 1-Apr 1 | - | * | N.C. | Del |
| 25427 | County of Shasta | М | 0.11 | _ | Jan 1-Dec31 | . - | . - | n.c. | - | - | Del |
| 25453 | Songer, HD & LR | D | 0.01 | - | Apr 1-Jun30 | Sep 1-Sep30 | ** | Apr 1-Jun15 | N.C. | - | Del |
| 25454 | Taves, GB & FW | RID | - | 12 | - | | Nov 1-Apr 1 | - | - | N.C. | Del Del - |
| 254 58 | Asgood, J | SIR | - | 2335 | - | - | Nov 1-Apr 1 | - | - | Term 91 | Ret Add - |
| 25495 | ચ દ્વિભ્ ષ્યુ, શા | SRIE | - | 5 | - | - | Nov 1-Apr30 | _ | - | N.C. | Del |

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| APPL NO: | PERMITTEE | USE | DIVER- SION (CPS) | STORAGE (ACRE- FEET) | DIRECT I | DIVERSION SECONDARY | STORAGE | DIRECT DE | IVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| | | , | | | | • | | | | | • |
| 24997 | Michigan Bluff Mutual WC | ED | 0.01 | ~ | Jan 1-Dec31 | | - | N.C. | - | - ' | Del |
| 25017 | Ferraro, F & N | NIE | | 4 | - · | • | Nov 1-Apr 1 | - ` ' | - | N.C. | Del |
| 25 029 | Giottonini, DJ & RJ | ERSI | · · · - · · | 40 | ** | - | Dec 1-May 1 | - | - | N.C. | Del |
| 25 030 | Graeagle Land & Wtr Co | I . | 1.75 | | May 1-Oct30 | _ | _ | n.c. | _ | _ | Ret - ·- |
| | | ME | 0.25 | | Jan 1-Dec31 | - . | • - | N.C. | - | - | Del |
| 25034 | Stanart, NC et al | Ţ | 1.00 | | Mar 1-Nov15 | •• | _ | N.C. | _ | - | Ret |
| 2505. | bourse, no co di | SRE | 0.01 | - | Jan 1-Dec31 | - | - | N.C. | - | - | Del |
| | | ISRE | - | 5 | - | | Nov 15-May 1 | - | - | N.C. | Del |
| | | 13/63 | | • | | | 100 13 127 2 | | | 211.21 | |
| 25049 | Vaccarello, D. et al | SRIE | - | 29 | | | Nov 1-May31 | - | | N.C. | Del |
| 25056 | East Bay MUD | P | 1200.00 | 353,000 | Oct 1-Jul31 | · - | Dec 1-Jul 1 | N.C. | - | N.C. | Ret |
| 25064 | Riener, M & C | NLI | 0.02 | ~ | May 1-Nov30 | · | - | N.C. | _ • | _ | Del |
| 23004 | idelet, a a c | ED | 0.01 | <u>.</u> | Dec 1-Apr30 | - | _ | N.C. | | _ | Del |
| | | FLD | 0.01 | | Dec 1-Apr30 | - | | M.C. | , – | | 202 |
| 25081 | Gumbmann, J & SP | SI | - | 2 | - | - | Nov 1-Apr 1 | - | · - ·· | N.C. | Del |
| 25086 | Yoga Fellowship | RIE | - | 47 | <u> </u> | - | Nov 1-May 1 | · | - | N.C. | Del |
| 25091 | La Bruzzo, AJ & F | SRIE | - | 10 | - . | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25097 | Souza, MA & AM | RIED | | 1 | - | | Nov 1-Apr 1 | . | | N.C. | Del |
| 25114 | Dean, L | I | 1.13 | | May 1-Tun30 | Sep 1-Oct31 | _ | Term 91 | Term 91 | _ | Ret Add - |
| 23114 | Death, 13 | ž | 1.13 | - | Nov 1-Feb28 | | | Term 91 | - | | Ret Add - |
| | | - | 1.10 | | 101 1 1000 | | | 101 71 | | | |
| 25115 | Dean, L | I | 0.69 | - | May 1-0ct31 | - | - | N.C. | · | | Del |
| 25133 | Scheiber, EM | Í | 5.00 | - | Apr 1-Jun30 | Sep 1-Oct30 | · _ | Term 91 | Term 91 | _ | Ret Add - |
| | | | | | | - · . | | | • | • | |
| 25135 | Ray, A et al | I | 0.13 | - | Apr 1-Jun30 | Oct15-Oct31 | _ | Apr 1-Jun15 | N.C. | _ | Del |
| j | 2 | Ď | 0.01 | _ | Jan 1-Jun30 | Oct15-Dec31 | | Jan 1-Jun15 | N.C. | _ | Del |
| 7 | | ISRD | _ | 20 | - | - | Oct15-Apr30 | - | - | N.C. | Del : |
| | | | | | | | - | | | | |
| 25139 | Summers, WJ | WRIE | - | 15 | - | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25159 | Park, E et al | I | 3.00 | - | Apr 1-Jun30 | Sep 1-Sep30 | | Term 91 | Term 91 | - | Ret Add - |
| 25160 | Estate of Roy Alford | SRE | , | 12 | <u>-</u> | - : * | Oct15-May30 | - | | N.C. | Del |
| 25172 | Hamilton, AL | ERSDI | - • | 5 | - | | Nov 1-May 1 | - | | N.C. | Del Del - |
| 25194 | Thiara, BS | 1 | 0.55 | * * - | May 1-Jun30 | Sep 1-Oct15 | · | May 1-Jun15 | N.C. | - | Del |
| | | | | | | | | | | | |

| | | | DIRECT DIVER- | STORAGE | | EXISTING SEAS | SOM | , R | EVISED SEASO | N | REVISIONS TO |
|------------------------|--------------------------|-------|------------------|-----------------|---------------------|------------------------|-------------|---------------------|-----------------------|----------------|--------------------------|
| APPL NO. | PERMITTEE | USE | SION (CFS) | (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT D PRIMARY | IVERSION SECONDARY | STORAGE | PERMIT TERMS 80 91 93 |
| 25496 | Asiera Inc | ĭ | 2.50 | - | Apr 1-Oct 1 | - | - ' | N.C. | - | - | Del Del - |
| 25503 | Rodgers, RJ & SA | SRI | - | 85 | - | - | Nov 1-Aprl5 | - | - | N.C. | Del Del - |
| 25506 | Thomas, CL & NG | SI | 0.41 | - | Apr l-Jul l | Oct15-Nov 1 | <u> </u> | Apr 1-Jun15 | N.C. | - | Del |
| 25522 | Balma, RV & MB | sı | - | 7 | - | - | Nov 1-Apr 1 | ** | - | N.C. | Del Del - |
| 25530 | Kuiken, DA | SRIE | - | 8 | - | - | Nov 1-Jun 1 | - | · - | N.C. | Del |
| 25554 | Smith, RD & DC | SRIED | | 1 | - | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25560 | Price, HD & ME | SRIE | - | 10 | - | - | Nov 1-Apr 1 | - | · - | N.C. | Del |
| 25567 | Price, HD & ME | RIE | - | 4 | | | Nov 1-Apr 1 | - | | N.C. | Del |
| 25582 | Parsons, JB & PB | WSRIE | - | 20 | - | -, | Nov 1-Apr 1 | . - | *** | N.C. | Del |
| 25584 | Peerless Mining Co et al | SRI | - | 12 | - | - | Nov 1-Apr 1 | - | · - : | N.C. | Del |
| 2 5586 | Schonauer Brothers | I, | 3.00 | - | Mar 1-Nov30 | - | - | N.C. | - " | - . | Ret |
| 25583 | Star Pacific Investment | SRI | - | 778 | | · - | Nov 1-Apr 1 | - | - | Term 91 | Ret Ret - |
| 25592 | Umphress, DL & S | SRI | -, | 1 | - | - | Nov 1-Apr 1 | - . | - | N.C. | Del |
| 25593 | Thompkins, ED et al | s | . <u>.</u> | 5 | - | | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25594 | Thompkins, ED et al | s | _ | 2 | - | | Nov 1-Apr 1 | | - | N.C. | Del |
| 25603 | Rathja, MC | s | - | 1 | - | - | Oct 1-May 1 | - | | N.C. | Del |
| 25604 | Rathja, MC | SR | - | 4 | · - | , - | Oct15-Apr15 | - | <u>-</u> : | N.C. | Del |
| 25605 | Rathja, MC | SR | ; ; | 7 | | | Oct 1-May 1 | | - ' | N.C. | Del |
| 25606 | Rathja, MC | S | · · · | 1 | - | - | Oct 1-May 1 | - | - | N.C. | Del |
| 25616 | East Yolo Comm Serv Dist | M | 62.0 | - | Jan 1-Jun30 | Sep 1-Dec31 | · _ | Term 91 | Term 91 | - | Ret Ret - |
| 2 56 2 8 | Jarvis, RW | SR | | 22 | . - | | Nov 1-Jun30 | - | - | Nov 1-Jun15 | Del |
| 25537. | Presleigh, NJ | WSR | - . | 40 | - | - | Nov 1-Apr 1 | | ** | N.C. | Del |
| 25633 | Stroing, E & M | SRE | - | 11 | - | - ' | Oct15-Apr30 | - | - | N.C. | Del |
| - 28630 | Stroing, E & M | s | <u>.</u> · | 6 | | · - | Nov 1-May15 | - | - | N.C. | Del |
| 25041 | Stroing, E & M | SR | - | 19 | - | - | Oct15-Apr30 | - | - | N.C. | Del |

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| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT ! PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT D FRIMARY | IVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 25648 | Teisseire, E | ī. | | 35 | - | - | Oct15-May30 | · - | - | N.C. | Del |
| 25660 | US Lassen Natl Porest | WSR | - | 50 | - | - | Nov 1-May 1 | - | - ' | N.C. | Del Del - |
| 25661 | Sims, GE & CJ | SIE | - | 14 | - | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25690 | Archibald, DR et al | I | 2.45 | . - | Marl5-Jun30 | Sep 1-Nov15 | - | Term 91 | Term 91 | - | Ret Ret - |
| 25714 | Van Vleck, S | I | - | 200 | - | - | Jan 1-May 1 | - | - | Term 91 | Ret. Ret - |
| 25715 | Van Vleck, S | SRI | - | 600 | - · | - | Oct 1-May30 | = | - | Term 91 | Ret Ret - |
| 25717 | Gorrill Land Company | I | 45.0 | - | Apr 1-Sep30 | - | - | N.C. | - | - | Ret |
| 25723 | Cahoon, CW & DL | SRE | - | 12 | - | - . | Nov 1-May31 | - | ** | N.C. | Del |
| 25728 | Villarreal, R | SRIE | - | 5 | - | - | Nov 1-Apr 1 | - | - | N.C. | Del |
| 25742 | Spanfelner, CD | WS | ** | 19 | - | - | Oct 1-May 1 | - | , - · | N.C. | Del |
| 25743 | Spanfelner, G | WS | . - | 34 | - | . | Oct 1-May 1 | · . | ·. <u>-</u> | N.C. | Del |
| 25744 | Spanfelner, G | WS | - | 20 | | · - | Oct 1-May 1 | . | - | N.C. | Del |
| 25751 | City of Yuba City | M | 21.00 | - | Jan 1-Jun30 | Oct 1-Dec31 | - | Term 91 | Term 91 | - | Ret Ret - |
| 25755 | Mosby, JM & MJ | S | • • | 24 | - | - | Dec 1-Apr30 | - | - | N.C. | Del |
| 25785 | La Conda Ranch, Inc | SRI | 0.25 | 6 | Apr 1-Oct31 | - ' | Nov 1-May31 | N.C. | - | N.C. | Del |
| 25305 | Lincoln, RG & ML | SRIED | - | 20 | - | . - | Jan 1-Apr 1 | - | - | N.C. | Del Del - |
| 25806 | Gates, RL & MS | WSRIED | - | 10 | - | - | Jan 1-Apr 1 | - | - | N.C. | Del Del - |
| 25307 | Doherty, MV & KK | WSR | - | 40 | - | - | Nov 1-Apr 1 | . - | - ' | N.C. | Del |
| 25335 | DeWitt C & D | SRIE | - | 48 | · . - | - | Jan 1-Apr 1 | · - | - | N.C. | Del Del - |
| 25347 | Steffen, SA | s | . . | 23 | - | - | Dec 1-Mar15 | <u>-</u> | | N.C. | Del Del - |
| 23986 | Van Cleve, DL & RR | · IE | 0.01 | - | Apr 1-Jun30 | Sep 1-Oct31 | - | Apr 1-Jun15 | N.C. | , - | Del Del - |
| 25379 | Wheeler, EL | s | - | 14 | - | | Jan 1-Apr 1 | - | - . | N.C. | Del Del - |
| 25533 | Akin Ranch | I | 6.70 | - | Apr 1-Jun30 | Sep 1-Sep30 | - | Term 91 | Term 91 | _ | Ret Ret - |
| 25353 | Toenjes, RS | I S | 0.50 0.01 | - | Apr 1-Jun15 Jan 1-Jun15 | Sep 1-Sep30 Sep 1-Dec31 | - | N.C. | N.C. • | - · | Del Del - Del Del - |
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| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT DI PRIMARY | VERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 258 97 | Matthews, WW & GE | SIE | - · | 2 | - | - . | Dec 1-Apr 1 | · • | - | N.C. | Del Del - |
| 25898 | Brooks, L & PB | s | - | 76 | - | - ' | Oct 1-Jun 1 | - | - | Term 93 | Del Del Add |
| 25908 | Wheeler, CT | IS. | 0.31 0.01 | 12 | May 1-Jun15 Jan 1-Jun15 | Sep 1-Sep30 Sep 1-Dec31 | Oct 1-Apr30 | N.C. | N.C. | N.C. | Del Del - Del Del - |
| 25923 | Estate of CS Howard | ERSOBI | - | 1127 | - | - | Sep15-Apr 1 | - | - | Term 91 | Ret Ret - |
| 25929 | Rogers, AL & BJ | I S | 0.38 | 10 | Apr 1-Nov30 Jan 1-Dec31 | - | ~ Nov 1-Apr30 | N.C. N.C. | - | n.c. | Del Del |
| 25931 | Anstin, M | SRIHD | - | 45 | - | - | Jan 1-Apr 1 | - | . - | N.C. | Del |
| 2 5936 | Weger, KJ & NH | IE | - | 1 | • - | - | Dec 1-Apr30 | _ | - . | N.C. | Del Del - |
| 25944 | Sierra Natl Trust | I S | 0.22 | 24 | Apr 1-Sep 1 Jan 1-Dec31 | , | Sep 1-May30 | N.C. N.C. | - | N.C. | Del Del - Del Del - |
| 25951 | Mi-Wuk Mutual WC, Inc | М | 1.00 | 8 | Nov 1-Jun30 | - | Nov 1-Mar31 | Term 91 & 93 | - | Term 93 | Ret Ret Add |
| 25952 | Pereira, EP & P | SRD | _ | 2 | - . | - | Dec 1-May30 | : | - | N.C. | Del Del - |
| 25956 | Carter, D & D | I | 0.08 | 4 | Apr15-Jun30 | Sep 1-Sep30 | Nov 1-Apr15 | Aprl5-Junl5 | N.C. | N.C. | Del Del - |
| 25962 | SH Delp Family Trust | WRE | - | 5 | - | _ | Dec 1-Mar31 | - | - | N.C. | Del Del - |
| 25963 | Davit, SN | I | 0.45 | - | Mar 1-Jun15 | Sep 1-Nov 1 | · – | N.C. | N.C. | . <u>-</u> ' - ' | Del Del - |
| 25973 | Horsfall, IH | , I | - | 3 | · . | - | Nov 1-Apr 1 | - | | N.C. | Del Del - |
| 25984 | Saul, EL & RM | sı | 0.50 | 0 | Apr 1-Nov30 | - | - | N.C. | . · | - | Del Del - |
| 25985 | Mather AFB | WR | - | 300 | - | | Nov 1-Apr30 | - | - , | Term 91 | Ret Ret - |
| 25993 | Van Dooran CE & BM | SI | 2.75 | - | Mar 1-Nov 1 | - | - | N.C. | - | | Del Del - |
| 25997 | Burton, LR & G | SIH | 0.08 | 5 | Aprl5-Jun30 | Sep 1-Oct30 | Oct 1-Apr30 | Aprl5-Jun15 | N.C. | N.C. | Del Del - |
| 25999 | Accornerro & Sons | WRI | 2.00 | - | Jan 1-Dec31 | - | | Term 91 & 93 | - | - | Ret Ret Add |
| 26000 | Thomas, CE | RH | - | 10 | - | - . | Nov 1-Jun30 | - | - | Nov 1-Jun15 | Del Del - |
| 26001 | Kings River Cons Dist | P | 452 | 90,000 | Jan 1-Dec31 | - | Sep 1-Jun30 | Term 91 & 93 | - | Term 91 & 93 | Ret Ret Add |
| 26007 | Gobel, LN & LR | s | - | 20 | - | - | Nov 1-Apr30 | , <u> </u> | - | N.C. | Del Del - |
| 26003 | Gobel, LN & LR | SI | 0.10 | 16 | Mar 1-May31 | · _ | Nov 1-Apr30 | n.c. | - | N.C. | Del Del - |

| | | | DIRECT | | existing season | | R | EVISED SEASON | ī | THE HOTOLOG MO | |
|---------------|--------------------------|--------|-------------------------|----------------------------|----------------------------|------------------------|----------------|---------------------|-----------------------|----------------|--|
| appl No. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT D PRIMARY | IVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26009 | Gobel, IN & LR | sı | 0.11 | 14 | Mar 1-May31 | - | Nov 1-Apr 30 | N.C. | - | N.C. | Del Del - |
| 26012 | Ginsburg, S & Brown L | IR | - | 7 | - | - | Nov 1-Apr15 | ** | - | N.C. | Del Del - |
| 26017 | Behrens, JM & JF | SI | - | 3 | - | - | Nov 1-Apri5 | , | - | N.C. | Del Del - |
| 26019 | Johnson, DH & JL | NI | - | 20 | - | - | Dec 1-Mar31 | - | | N.C. | Del Del - |
| 26023 | Swansboro Country POA | RE | - | 24 | - | - | Nov 1-May31 | - | - | N.C. | Del Del - |
| 26024 | Swansboro Country POA | RE | , - | 41 | - | - | Jan 1-Apr30 | - | - | N.C. | Del Del - |
| 26025 | Swansboro Country POA | RE | - | 22 | - | · | Nov 1-May31 | - | - | N.C. | Del Del - |
| 26026 | Swansboro Country POA | RE | - | 8 | | - | Nov 1-May31 | - | - | N.C. | Del Del - |
| 26027 | Swansboro Country POA | RE | - . | 40 | - | - | Jan 1-May31 | | -, | n.c. | Del Del - |
| 26 028 | Ostler Rocky Mtn Refract | G I | 0.01 0.01 | - | Oct 1-Nov 1 May15-Sep30 | - | · | N.C. N.C. | | - | Del Del - Del Del - |
| 26029 | Gregory, W & M | s | - | 15 | - | · | Dec 1-Mar 1 | . - | - | N.C. | Del Del - |
| 26030 | Nipper, JJ & GM | R | · - | 3 | - | - | Nov 1-Apr 1 | - | <u>.</u> | N.C. | Del Del - |
| 26031 | Pollock, P & L | SRI | - | 15 | - | | Nov 1-Apr i | - | - | N.C. | Del Del - |
| 26038 | Snider, DM & JM | ws | - | 63 | - | - | Nov 1-Apr30 | - | | N.C. | Del Del - |
| 26039 | Starr, JS & JA | I S | 0.03 | - | May 1-Nov 1 Jan 1-Dec31 | <u>-</u> | . - | N.C. | - - | - | Del Del - Del Del - |
| 26042 | Bethel Church | E | <u>.</u> | 2 | - | - | Nov 1-Mar31 | - | - | N.C. | Del Del - |
| 26054 | Miller, DE & BG | IWSE | . 🖚 | 23 | - · | - | Oct 1-Apr30. | . | - · | Term 93 | Del Del Add |
| 26056 | Reis, RS & K | WSRI | | 12 | · • | . | Dec 1-Apr 1 | - | . - | N.C. | Del Del - |
| 26057 | King, RE & AM | SRIE | - | 60 | - | | Nov 1-May31 | - , | - | N.C. | Del Del - |
| 26060 | White, VL & GI | R | | 1 | · . - | - , | Nov 1-Apr30 | - | _ | N.C. | Del Del - |
| 2 6063 | Robinet, RJ & B | sı | 0.05 | - | May 1-Jun30 | Sep 1-Nov 1 | - | May 1-Jun15 | N.C. | · | Del Del - |
| 2სან ნ | Dembny, JS | WRE | ~ | 15 | - | - | Nov 1-Mar30 | - | . = | N.C. | Del Del - |
| 28067 | Woodward, FJ et al | HWR | - | 30 | - | | Nov15-Apr15 | - | - | N. C : | Del Del - 13 |
| 2 6033 | Hunt, CV | I., | | 49 | - | <u></u> | Oct 1-Mar31 | - | - | N.C. | Del Del - |

| | | | DIRECT | | E | ocisting seas | SON | R | EVISED SEASO | N | |
|---------------|--------------------------|----------|-------------------------|----------------------------|----------------------------|----------------------------|-------------|----------------------------|-----------------------|--------------|--------------------------|
| APPL NO. | PERCITTEE | USE | DIVER- SION (CFS) | Storage (ACRE- FEET) | DIRECT E | DIVERSION SECONDARY | STORAGE | DIRECT D PRIMARY | IVERSION SECONDARY | STORAGE | PERMIT TERMS 80 91 93 |
| 26069 | Dill, WE | sı | ·- | 1 | - | - | Nov 1-Apr30 | . - | - | N.C. | Del Del - |
| 26072 | Nevco Land, Inc et al | R | - | 18 | - | - | Nov 1-Apr15 | - , | - | N.C. | Del Del - |
| 26073 | Low, JC & MJ | SRI | - | 9 | • | - | Nov 1-Apr15 | - | - | N.C. | Del Del - |
| 26074 | La Porte Pines Ctry Club | D | 0.08 | - | Jan 1-Dec31 | - | - | N.C. | - | - | Del Del - |
| 26076 | Hays, D | RI | - | 36 | | | Nov 1-Aprl5 | ** | - | N.C. | Del Del - |
| 26077 | Otley, D et al | WR | - | 14 | . - | - | Nov 1-Apr 1 | - | - | N.C. | Del Del - |
| 26078 | Slingsby, OF & BL | SRI | - | 1 | - | - | Nov 1-Apr30 | - | · - | N.C. | Del Del - |
| 26092 | Thousand Trails Inc | ER ER | 0.22 0.07 | 7 | May15~Jun30 Feb 1~Jun30 | Sep 1-Oct15 Sep30-Oct30 | Mar 1-Jun30 | May15-Jun15 Feb 1-Jun15 | n.C. N.C. | Mar 1-Jun15 | Del Del - Del Del - |
| 26084 | Williams, MC | WESRID | - | 3 | : . - | · <u>-</u> · | Nov 1-May31 | - | ¿ - | Term 93 | Del Del Add |
| 26085 | Trust of E Maddux | s | - ' . | 4 | - | - | Nov 1-Apr30 | - | | N.C. | Del Del - |
| 26088 | Trust of Mathis | s | - | 218 | , - | - . | Nov 1-Apr30 | <u></u> | - | Term 91 & 93 | Ret Ret Add |
| 26098 | Basye, G & MA | 1 | 0.25 | <u>.</u> | Apr 1-Jun30 | Sep 1-Oct31 | - | Apr 1-Jun15 | N.C. | - | Del Del - |
| 26100 | Nevco Land, Inc et al | R | . · · · · <u>- ·</u> · | 5 | | | Nov 1-Aprl5 | - | _ | N.C. | Del Del |
| 26101 | Rehse Land & Livestock | WSE | - | 35 | - | - | Nov 1-May30 | . - | - | N.C. | Del Del - |
| 26102 | Rehse Land & Livestock | WSE | - | 23 | | - | Nov 1-Marl5 | - · | | N.C. | Del Del - |
| 26105 | Alford, A & A | SE | = | 17 | . = | - - | Nov 1-May31 | = | - | N.C. | Del Del - |
| 26107 | Estate of CS Howard | RSI | 0.40 | 9 | Jun 1-Oct31 | - | Nov 1-Apr30 | N.C. | | n.c. | Del Del - |
| 2 6108 | Balma, RV & MB | WSI | · | 8 | - | . <u>-</u> | Nov 1-Apr 1 | - | <u>-</u> | N.C. | Del Del - |
| 26109 | Byran, SE & MP | WSE | - | · 8 | - . | · - | Nov15-May15 | - | - | Term 93 | Del Del Add |
| 26114 | Ostrander, AW & MA | D . | 0.01 0.01 | - - | Jan 1-Dec31 Mar 1-Oct31 | - - | - | n.c. n.c. | - | - | Del Del - Del Del - |
| 26116 | Caldwell, GR & KL | SI | - | 20 | - | - | Jan 1-Mar31 | | - | N.C. | Del Del - |
| 26117 | City of Nevada City | M | | 54 | - | - | Dec 1-Apr 1 | - | | N.C. | Del Del - |
| 26119 | Kelley, BA | R | · | . 1 | - | - | Nov 1-Mar31 | - | - | N.C. | Del Del - |
| 26122 | Leach, R & MA | RSI | 0.09 | . 3 | Apr 1-Jun30 | - : | Dec 1-May30 | Apr 1-Jun15 | · - | N.C. | Del Del - |

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| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT D PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT DI PRIMARY | VERSTON SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26130 | Black Butte Land & Cattle | SR | - · | 78 | - | - | Dec 1-Marl5 | - | ~ . | n.c. | Del Del - |
| 26137 | Markstein, S & SH | WSRI | - | 3 | •• | - | Nov 1-Mar31 | _ | • | N.C. | Del Del - |
| 26144 | Spencer, M | WSIE | _ | 10 | - | - | Sep 1-Jun15 | - | - | n.c. | Del Del - |
| 26151 | Boumann, WP & MH | I S | 0.01 0.01 | - | Mar 1-Oct31 Jan 1-Dec31 | - | - | N.C. | ~ | - | Del Del - Del Del - |
| 26159 | Erickson, R & EJ | E | <u>.</u> | 1 , | - | · <u>-</u> | Oct 1-May30 | <u>.</u> | - | n.c. | Del Del - |
| 26160 | Waddle, IA | I D | 0.01 0.01 | · - | Apr 1-Oct30 Jan 1-Dec31 | <u>-</u> | - - | N.C. | ~ | <u>-</u> - | Del Del - Del Del - |
| 26162 | South Sutter Water Dist | P | 725.00 | 103,100 | Jan 1-Dec31 | - | Oct 1-Jun30 | n.c. | - | N.C. | Ret |
| 26172 | Roufs, DA & S | I D | 0.02 0.01 | - - | May 1-Nov30 Jan 1-Dec31 | - | - | Term 93 Term 93 | - | - | Del Del And Del Del And |
| 26174 | Windswept Livestock Co | sı | - | . 30 | - | - | Nov 1-Apr30 | - | '. <u>-</u> : | N.C. | Del Del - |
| 26189 | Bertillion, BW | D | 0.01 | - | Jan 1-Dec31 | - | ·: | N.C. | ~ · | - . | Del Del - |
| 26190 | McCoy Ranch Associates | S | - | 9 | - | - | Nov 1-Apr 1 | | - | N.C. | Del Del - |
| 26191 | Nicol, DL | WS | - | 14 | · · · • | - | Oct 1-May15 | | - | N.C. | Del Del - |
| 26194 | Clanton, WW & ET | WSI | - | 20 | - | - | Nov 1-Apr30 | - | • • | N.C. | Del Del - |
| 2 6196 | Boring, RE & MG | WSRE | - | 10 | - , | - | Oct 1-Apr 1 | - ` | - | N.C. | Del Del - |
| 2 6197 | Dumbar, N et al | WSR | - | 4 | - | - | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| 26206 | Hamm, M | WSE | ÷ | 4 | <u>.</u> | - , | Dec 1-Marl5 | - | -, | N.C. | Del Del - |
| 26208 | US Modoc Natl Forest | WS | • | 1 | . . | - | Oct15-May30 | | - | N.C. | Del Del - |
| 26209 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - , | ' - | N.C. | Del Del - |
| 26210 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - | - | N.C. | Del Del - |
| 26211 | US Modoc Natl Forest | WS | · - | 1 | , `- | - <u>-</u> | Oct15-May30 | - | . | N.C. | Del Del - |
| 26212 | US Modoc Natl Forest | WS | · - | 1 | · - | - | Oct15-May30 | - | | N.C. | Del Del - |
| 26213 | US Modoc Natl Forest | ws - | - | 6 | _ | - | Oct15-May30 | · | - | N.C. | Del Del - |
| 26214 | US Modoc Natl Forest | WS . | | 1 | • | - | Oct15-May30 | - . | | N.C. | Del Del - |

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|------------------------|----------------------|-------|-------------------------|----------------------------|---------------------|---------------------------------------|--------------|---------------------------------------|-----------------------|---------|--|
| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT I PRIMARY | OIVERSION SECONDARY | STORAGE | DIRECT DI PRIMARY | IVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26215 | US Modoc Natl Forest | ws | | 6 | - | - | Oct15-May30 | _ | - | N.C. | Del Del - |
| 26216 | US Modoc Natl Porest | WS | - | ı | - | - , | Oct15-May30 | - | - | N.C. | Del Del - |
| 26217 | US Modoc Natl Porest | WS | - | 1 | - | <u>.</u> | Oct15-May30 | = | *** | N.C. | Del Del - |
| 26318 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - | · - | N.C. | Del Del - |
| 2 6219 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - | - | N.C. | Del Del - |
| 2 62 2 0 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - | _ | N.C. | Del Del ~ |
| 2 6221 | US Modoc Natl Forest | WS | - | 1. | - | <u> </u> | Oct15-May30 | - | - | n.c. | Del Del - |
| 26222 | US Modoc Natl Forest | WS | - | <u> </u> | - | · - . | Oct15-May30 | - | · | N.C. | Del Del - |
| 26223 | US Modoc Natl Forest | WS | - | 1 | · - | - | Oct15-May30 | · - | | N.C. | Del Del - |
| 26227 | Lee, DF | WSR | . - | . 5 | - | <u>-</u> | Nov 1-Apr30 | - | - : | N.C. | Del Del - |
| 26229 | Tudesko Bros Ranch | WS | - | 18 | - | | Nov 1-Apr30 | - | - - | N.C. | Del Del - |
| 26230 | O'Neill, CS et al | WSRIE | | 15 | - ' | - | Nov 1-Mar31 | · · · · · · · · · · · · · · · · · · · | - | N.C. | Del Del - |
| 26234 | Bishop, RE & F | SRIE | - | 2 | - | · | Nov 1-Apr30 | ÷ | - | N.C. | Del Del - |
| 26239 | Eatchel, DG | WERSI | . . | 35 | _ | · · · · · · · · · · · · · · · · · · · | Nov 1-Apr 1 | - | - | N.C. | Del Del - |
| 2 6243 | Shaw, V et al | WRS | - • | 10 | - | - | Jan 1-Mar 1 | _ | ·. • | N.C. | Del Del - |
| 26244 | Klein, P & P | WRIE | - | , 3 | - | · · · · · · · · · · · · · · · · · · · | Jan 1-Mar 1 | · - | - | N.C. | Del Del - |
| 26245 | Baker, R et al | ED | 0.01 | . , - | Sep 1-Jun30 | - | _ | Sep 1-Jun15 | - | - | Del Del - |
| 26246 | Harless, P | RE | • | 31 | · - | - | Nov 1-Apr30 | | | N.C. | Del Del - |
| 2 62 4 7 | Niesen, HC | s | | 10 | - | <u>-</u> | Dec 1-Marl5 | - | - | N.C. | Del Del - |
| 26262 | Scott, HW & KG | RE | - | 2 | - | , · · • | Nov 1-Apr30 | · •• | | N.C. | Del Del - |
| 2 623 2 | Blasdell, H | RH | - | 7 | | - | Oct. 1-May 1 | , - | - | N.C. | Del Del - |
| 2 628 5 | US Modoc Natl Porest | WS | - | 1 | - | - | Oct15-May30 | | - | N.C. | Del Del - |
| 26286 | US Modoc Natl Forest | WS | • | . 1 | | - | Oct15-May30 | - | - . | N.C. | Del Del - |
| 26237 | US Modoc Natl Forest | WS | - | 1 | - | - | Nov 1-May30 | · | · - | N.C. | Del Del - |
| 26286 | US Hodoc Natl Forest | WS | | 1 | - | - | Nov 1-May31 | • | · • | N.C. | Del Del - |
| | | | | · | | | | | • | | |
| | • | | ø | | | 14 - | • | • | | | |
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| APPL NO. | PERMITTEE | USE | SION (CFS) | STORAGE (ACRE- FEET) | DIRECT DI | IVERSION SECONDARY | STORAGE | Direct di Primary | VERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26289 | US Modoc Natl Forest | WS | , | 1 | - | - | Nov 1-May31 | - | <u> </u> | N.C. | Del Del - |
| 26290 | US Modoc Natl Porest | WS | - | 1 | | . 🗕 . | Oct15-May30 | | - | N.C. | Del Del - |
| 26291 | US Modoc Natl Forest | ws | - | 1 | _ | | Oct15-May30 | - | - , | N.C. | Del Del - |
| 26292 | US Modoc Natl Forest | WS | - | 1 | . - | - | Oct15-May30 | - . | - | N.C. | Del Del - |
| 26301 | Jones, JM | SR | 0.01 | 25 | Nov 1-May31 | - | Nov 1-May31 | n.c. | - | N.C. | Del Del - |
| 26317 | Godfrey, PA & EI | REDS | 0.01 | 1 | Jan 1-Dec31 | · · | Nov 1-Apr 30 | N.C. | _ | N.C. | Del Del - |
| 26319 | Mid City Nursery, Inc | REID | 0.01 | 12 | Jan 1-Dec31 | - | Nov 1-Mar31 | N.C. | - | N.C. | Del |
| 26324 | US Modoc Natl Rorest | WS | - | 1 | · - | , | Oct15-May30 | - | | N.C. | Del Del - |
| 2 6325. | US Modoc Natl Forest | WS | - | 1 | · - | - . | Oct15-May30 | , - , | - | N.C. | Del Del - |
| 2 6326 | US Modoc Natl Forest | WS | - , | 1 | | · - | Oct15-May30 | - . | - | N.C. | Del Del - |
| 26327 | US Modoc Natl Forest | WS | • | 1 | - | - | Oct15-May30 | . | - | N.C. | Del Del - |
| 26329 | US Modoc Natl Forest | WS | - | 1 | , - . | | Oct15-May30 | - | · | N.C. | Del Del - |
| 26 330 | US Modoc Natl Forest | ws | - | 1 | - | - | Oct15-May30 | - | | N.C. | Del Del - |
| 26331 | US Modoc Natl Forest | WS | . - . | 1 | - | - · | Octl5-May30 | - | - | N.C. | Del Del - |
| 26332 | US Modoc Natl Forest | WS | •• | 1 | - | - | Oct15-May30 | | - | N.C. | Del Del - |
| 26333 | US Modoc Natl Porest | WS | - | 1 | - . | , - | Oct15-May30 | · - | | N.C. | Del Del - |
| 26334 | US Modoc Natl Forest | WS | • | 1 | - | - | Oct15-May30 | - , | - | N.C. | Del Del - |
| 26335 | US Modoc Natl Forest | WS | - | 1 | - *· | - | Oct15-Apr30 | . - | | N.C. | Del Del - |
| 26336 | US Modoc Natl Forest | ws | | 1 | | - | Oct15-Apr30 | 440 | · - | N.C. | Del Del - |
| 26337 | US Modoc Natl Forest | WS | - | 1 | - ,: | | Octl5-May30 | | - | N.C. | Del Del - |
| 26333 | US Modoc Natl Forest | WS | - | 1 | - | . - * | Oct15-May30 | . - | - | N.C. | Del Del - |
| 26339 | US Modoc Natl Porest | WS | | 1 | - | - | Oct15-May30 | - | - | N.C. | Del Del - |
| 2 63 4 0 | US Modoc Natl Forest | WS | | 1 | <u>.</u> . | _ | Oct15-May30 | - | | N.C. | Del Del - |
| 26341 | US Modoc Natl Forest | WS | - | 1 | - | - . | Oct15-May30 | , - . | - | N.C. | Del Del - |
| 26342 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - . | | N.C. | Del Del - |
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| appl No. | | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT (PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT D PRIMARY | IVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26343 | US Modoc Natl Forest | ws | - | 1 | - | - | Oct15-May30 | - : | · - | N.C. | Del Del - |
| 26344 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | · <u>-</u> | · - | N.C. | Del Del - |
| 26345 | US Modoc Natl Forest | WS | | . 1 | - | ~ | Oct15-May30 | - | - | N.C. | Del Del - |
| 26346 | US Modoc Natl Forest | WS | - | 1. | - | - | Oct15-May30 | | - | N.C. | Del Del - |
| 26347 | US Modoc Natl Forest | WS | - | 1 | - · | - | Oct15-May30 | · - | , ÷ | N.C. | Del Del - |
| 2 6348 | US Modoc Natl Forest | WS | - | . 1 | - | <u>-</u> . | Oct15-May30 | - | - ' | N.C. | Del Del - |
| 2 635 5 | Vandoorn, C & BM | 1 | - | 25 | · - | . - · | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| 26365 | Braatz, M & R | RI | . | 5 | - | · - · | Nov 1-Aprl5 | - | - | N.C. | Del Del - |
| 26373 | Leland Meadows WD | D | 0.03 | | Dec 1-Mar31 | - | · | Term 93 | - | | Del Del Ald |
| 26376 | EID & ED Co WA | WRLN JDMI | - | 13,368 | - | • | Nov 1-Jun30 | - | <u>-</u> | Term 91 | Ret Ret - |
| 26384 | Morriss, JF & AM | RDI | _ | 1 | - | - | Nov 1-May15 | <u>-</u> · | - | N.C. | Del Del - |
| 26336 | Morriss Land Co | 1, | 1.50 | - | May 1-Jun30 | - | · - | Term 91 | - | - `` | Ret Ret - |
| 26390 | Red Bank Farms | WS | · | 10 | - | | Nov 1-Mar31 | - | - | N.C. | Del Del - |
| 26404 | US Modoc Natl Forest | WS | · | 1 | - | - | Oct15-May30 | - | - | N.C. | Del Del - |
| 26405 | US Modoc Natl Forest | WS | - | 1 | - | | Oct15-May30 | · - | | N.C. | Del Del - |
| 26406 | Allison, M & C | SRI | - | 1 | - | · <u>-</u> | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| 26408 | Winther, JL & PB | R | - | 2 | - | - | Dec 1-Mar31 | - ' | - . | N.C. | Del Del - |
| 26410 | Auburn Lake Trails POA | R | - . | . 14 | • - | - | Nov 1-May 1 | · - | - | N.C. | Del Del - |
| 2 6-22 | Joe Cotta Prop Inc | NLI | - . | 180 | - | - | Dec 1-Mar31 | - | · - | Term 91 | Ret Ret - |
| 26425 | Neary, G | WS | - | 8 | - | - | Nov 1-Jun15 | | · <u>-</u> | N.C. | Del Del - |
| 26427 | Cak Meadow, Partnership | RIE | | 25 | , | · - | Dec 1-Mar31 | - | - | N.C. | Del Del - |
| 25436 | Dobbas Ranch | SD | 0.01 | - | Jan 1-Dec31 | - | - | N.C. | - | - : | Del Del - |
| 25437 | Dobbas Ranch | SR | · | 15 | _ | · - | Nov 1-May15 | | | N.C. | Del Del - |

| | | | | DIRECT | | E | XISTING SEA | SON | R | EVISED SEASON | ı | |
|---|-----------------------|----------------------|------|-------------------------|----------------------------|---------------------|-----------------------|-------------|---------------------------------------|--------------------|----------|--|
| | APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT D PRIMARY | IVERSION SECONDARY | STORAGE | DIRECT DI PRIMARY | [VERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| | 26438 | Dobbas Ranch | SD | 0.01 | - | Jan 1-Dec31 | - | - | N.C. | - | - | Del Del - |
| - | 26449 | Sierra Natl Trust | NI | - | 750 | - | - | Nov 1-May31 | - | - | Term 91 | Ret Ret - |
| | 26457 | VeerKamp, ML & H | SRIE | | 49 | - | - | Nov 1-May31 | - | - | N.C. | Del Del - |
| | 2 6469 | Yolo Co FCWCD | P | 400.00 | 300,000 | Jan 1-Dec31 | <u>-</u> | Oct 1-Jun30 | N.C. | - | N.C. | Ret Del - |
| | 26475 | Willis, RG & DN | WR | 0.01 | 2 | Sep 1-Jun30 | ~ | Nov 1-Apr30 | Sep 1-Jun15 | . - | N.C. | Del Del - |
| | 26477 | US Modoc Natl Forest | WSJ | | 1 | - | - | Oct15-May30 | - | - | N.C. | Del Del - |
| | 26478 | US Modoc Natl Forest | WS | - | 1 | - | - | Nov 1-May30 | - ' | - | N.C. | Del Del - |
| | 26486 | Kyburz Water Co Inc | М | 0.20 | - | Jan 1-Dec31 | _ | - | n.c. | - | - | Del Del - |
| | 26491 | Moffatt, GM & IE | SRI | - | 3 | - | - | Nov 1-Apr30 | - | | N.C. | Del Del - |
| | 26493 | Rogers, W et al | WERS | | 25 | ···· | - | Nov 1-Apr30 | - | | N.C. | Del Del - |
| | 26497 | Penrod, G & C | SRE | - | 11 | - | - , , , | Nov 1-Apr30 | - | - | Term 93 | Del Del Add |
| | 26498 | Kablanow, R | SRE | · - | 11 | _ • | _ | Nov 1-Apr30 | · _ · · | - | Term 93 | Del Del Aid |
| | 26499 | Jeffery, S | R | - | 1 | - . | - | Oct30-Apr 1 | · · · · · · · · · · · · · · · · · · · | - | N.C. | Del Del - |
| | 26501 | Cobb, LL & KA | MNID | - | 4 | - | - , | Nov 1-Apr30 | - | | N.C. | Del Del - |
| | 26515 | Rogers, RJ & SA | S | - | 12 | _ | - | Nov 1-Aprl5 | - . | | N.C. | Del Del - |
| | 26520 | Scott WK & DP | RI | - | 510 | . - | - . | Nov 1-Apr30 | - | - | Term 91 | Ret Ret - |
| | 26521 | Scott WK & DP | RI | _ | 142 | _ | | Nov 1-Apr30 | - | _ | Term 91 | Ret Rot - |
| | 26522 | Boda, JM & ME | WSRI | - | 24 | - | - | Nov 1-Apr30 | . | - | N.C. | Del Del - |
| | 26523 | Hubbs, H et al | ESD | 0.01 | | Oct 1-Febl5 | - | - | N.C. | | _ | Del Del - |
| | 26525 | Bess, DE & RM | RIED | 0.01 | - 8 | Jan 1-Dec31 | _ | Dec31-Mar31 | N.C. | | N.C. | Del Del - |
| - | 26571 | Torri, KA | I | 2.45 | - | May15-Jun30 | - | . | Term 91 | - | _ | Ret Ret - |
| | 26576 | Wagner, DD & PD | SE | - | 12 | <u>, -</u> | - | Dec 1-Mar 1 | - | - | Term 93 | Del Del Add |
| | 26577 | Mt Ralston PA et al | D | 0.05 | - . | Jan 1-Dec31 | - | | n.c. | 4. - | - | Del Del - |
| | 2 653 3 | Dunlap, CL & JL | SI | , <u>-</u> | 25 | _ | - | Nov 1-Apr 1 | - | _ | N.C. | Del Del - |
| | 26594 | Chaffin, G et al | I | 2.00 | | Aprl5-Aug31 | - | <u>-</u> | N.C. | , ** | _ | Ret |
| | • | | | | • | | | • | - - | | | 4 |

| | | | DIRECT | | | existing sea | SON | REV | ised season | ı | |
|---------------|------------------------|--------------|-------------------------|----------------------------|----------------------------|------------------------|---------------|-----------------------|---------------------|---------|--|
| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE— FEET) | DIRECT PRIMARY | DIVERSION SECONDARY | STORACE | DIRECT DIV PRIMARY | ERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26605 | Bigelow, P et al | WERSBI \ | - | 45 | , - | - | Dec 1-Mar31 | - | - | N.C. | Del Del - |
| 26612 | Moreno, T & LH | ERS | 0.01 | 8 | - | - | Nov 1-May 1 | - , | - | N.C. | Del Del - |
| 26613 | Bowman, DT & J | ERI | | 1 | <u> </u> | <u>.</u> | Nov 1-May31 | - , | - | N.C. | Del Del - |
| 26628 | Wihtol, A & HS | SRE | - | 18 | - . | - | Nov 1-Apr30 | <u>-</u> | - | N.C. | Del Del - |
| 26633 | Brady, DW & O | RE | | . 1 | - | | Nov 1-May31 | · _ | - | N.C. | Del Del - |
| 26638 | Bell, Acqua Inc | RH | - | 120 | - | - | Oct 1-May 1 | - | - | Term 91 | Ret Ret - |
| 26640 | Laue, MJ | RSI | - | 3 | - . | · - | Dec 1-Mar30 | - | | N.C. | Del Del - |
| . 26641 | Silbaugh, PJ | s | - | 9 | - ' | - | Oct15-Apr15 | · - | . · | N.C. | Del Del - |
| 26642 | Laue, MJ | RSDI | - | 3 | - . | · - | Nov 1-Aprl5 | • . | | N.C. | Del Del - |
| 26645 | DeDaminoo, VM & MG | WS | - | 4 | •• | - | Nov 1-Apr 1 | - | - | N.C. | Del Del - |
| 26ō6 5 | Covert, FE | WEDB | , | 5 | - ;. | . + | Oct 1-Jun30 | - | - | N.C. | Del Del - |
| 26671 | County of Shasta | М | 0.70 | | Jan 1-Jun30 | Sep 1-Dec31 | · • | Jan 1-Jun15 | N.C. | - | Del Del - |
| 26674 | Silva, C & R | s | - | 10 | · • | - | Oct15-Jun 1 | - | | N.C. | Del Del - |
| 26684 | Pine Lake Committee | SRIE | - · | 45 | . | _ | Dec 1-Mar31 | - | - | N.C. | Del Del - |
| 26685 | Fisk, G | NIWSRE | - | 40 | - | - | Nov 1-May 1 | - `_ | - | N.C. | Del Del - |
| 26686 | Black, OS | WSE | - | 6 - | | | Oct 1-Apr30 | : - | - | N.C. | Del Del - |
| 26691 | Bush, WC et al | RH | 0.40 | 49 | Apr 1-Oct30 | - | Nov 1-Apr30 | N.C. | - | N.C. | Del Del - |
| 26694 | Christenberry, DH & DJ | SIE | | 6 | • | - | Nov 1-Apr30 | - | 7 | N.C. | Del Del - |
| 26698 | Erreca, B | SI | 0.19 | 5 | Mar 1-Apr30 | 1 1 X - " | Nov 1-Apr30 | Term 93 | `- | Term 93 | Del Del Add |
| 2669 9 | Bouman, R et al | I , , | 0.02 | - | Mar 1-Oct31 | · . • | • . | N.C. | - | - | Del Del - |
| 26703 | Palley, MN & MK | D D | 0.01 0.01 | - | May15-Oct15 Oct16-May14 | - - | <u>-</u> | N.C. N.C. | - | - | Del Del - |
| 26709 | Burke, FR III | I | 4.00 | | Aprl5-Mayl5 | - | - . | Term 91 | - | - | Ret Ret - |
| 26711 | Kreth, HH et al | S | - , | 15 | _ | - | . Dec 1-May31 | - | - | N.C. | Del Del - |
| 26714 | South Fork ID | P | 190.00 | 22,240 | Jan 1-Dec31 | - | Nov 1-Apr15 | N.C. | | Term 91 | Ret Ret - |

| | | | DIRECT | | Е | XISTING SEA | SON | REVISEI | SEASON | DESTICIONO DO |
|---------------|--------------------------|--------------|-------------------------|----------------------------|----------------------------|-----------------------|------------------|---|---------------------|--------------------------|
| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT D PRIMARY | IVERSION SECONDARY | STORAGE | DIRECT DIVERSI PRIMARY SECO | on storage NDARY | PERMIT TERMS 80 91 93 |
| 26717 | Runyan, RI | I D | 0.06 0.01 | 5 | May 1-Jul 1 Jan 1-Dec31 | - | Nov 1-May31 - | May 1-Jun15 N.C. | - N.C. | Del Del - Del Del - |
| 26718 | Yancey, J & B | ı | · | 1 | - , | - | Nov 1-May15 | - | - N.C. | Del Del - |
| 26722 | DiGiorgio Dev Corp | WRE | • | 42 | · • , | ٠_ | Oct 1-Jun30 | - | - Oct 1-Jun15 | Del Del - |
| 26723 | Grizzly Lake Resort ID | , M . | · · · · - | 43 | - | - <u>-</u> | Oct 1-May30 | - | - N.C. | Del Del - |
| 26725 | Wolin, ES | S | • - | 5 | <u>.</u> | - . | Nov 1-Apr30 | - · · · · · · · · · · · · · · · · · · · | n.c. | Del Del - |
| 26728 | Speer, B | D. | • • | - - | Jan 1-Dec31 | - | - | N.C. | - , : | Del Del - |
| 26758 | DP Scott Trust et al | WRSE | <u> </u> | 6 | | _ | Nov 1-May31 | - ' | - N.C. | Del Del - |
| 26763 | Newfarmer, RA & SE | D | 0.01 | - | Jan 1-Dec31 | - | · _ | n.c. | - - | Del Del - |
| 26768 | SMUD: | P | 270.00 | 60,000 | Jan 1-Dec31 | - | Oct 1-Jul31 | N.C. | - N.C. | Ret Del - |
| 26772 | Sac-Yolo City Mosq Abate | н | 0.06 | 33: | Sep 1-Jun30 | - | Nov 1-Apr30 | Sep 1-Jun15 | - N.C. | Del Del - |
| 26773 | Johnson, A & G | S | - | 20 | . | - | Nov 1-Apr30 | - | - N.C. | Del Del - |
| 26774 | Kauk, L & C | RH | s - , . | 1 | - | - | Oct 1-Apr30 | | - N.C. | Del Del - |
| 26787 | Poulton, WR. | WSPID | • - | 44 | | - | Oct 1-May 1 | - | - N.C. | Del Del - |
| 26789 | US Modoc Natl Forest | ws | - | 1. | - | - | Oct15-Apr 1 | - ' | - N.C. | Del Del - |
| 26793 | Ehlman, J | SR . | - - | 20 | - | | Nov 1-Apr15 | - | - N.C. | Del Del - |
| 26795 | Nelson, CF & SC | SI | - | 49 | - | - . , | Oct 1-Apr 1 | - | - N.C. | Del Del - |
| 26.796 | Wooster, PA et al | S: | - : | 16 | - | | Nov 1-Apr 1 | <u>.</u> - | - N.C. | Del Del - |
| 2 6809 | Guild, R: & M | SE | · <u>-</u> . | 4 | - | - ` | Oct 1-Apr30 | - | - N.C. | Del Del - |
| 26310 | Riley, JC | SE | | - 11 | | - | Nov 1-May 1 | <u>-</u> . | - N.C. | Del Del - |
| 25312 | Shenandoah Spr. Vin. | SI | - | 28 | - , | - | Jan 1-Apr30 | - | - N.C. | Del Del - |
| 2 6215 | DiGiorgio Dev Corp | WRE | - | 2 | - | | Oct 1-Jun30 | - | - Oct 1-Jun15. | Del Del - |
| 2 6316 | DiGiorgio Dev Corp | WRE | · - | 4 | - | | Oct 1-Jun30 | , - | - Oct 1-Jun15 | Del Del - |
| 26817 | DiGiorgio Dev Corp | WRE | • | 39 | - | - | Oct 1-Jun30 | | - Oct: 1-Juni5 | Del Del - |
| 26813 | Didiorgio Dev Corp | WRE | <u>-</u> | 5 | - | | Oct 1-Jun30 | | Oct 1-Jun15 | Del Del - |
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| | | | | XISTING SEASON | | | REVISED SEASON | ī | | | |
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| APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT DIV PRIMARY | VERSION SECONDARY | STORAGE | DIRECT PRIMARY | DIVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26319 | Truman, JC & HG | E | - | 1 | - | <u>.</u> . | Jan 1-Mar31 | - | | N.C. | Del Del - |
| 26920 | Bertolero Inc | R | - | 30 | . — | - " | Oct 1-May 1 | - | - | N.C. | Del Del - |
| 20321 | Bertolero Inc | R | , · - | 45 | | | Oct 1-May 1 | - | . - | N.C. | Del Del - |
| 2 632 2 | Bertolero Inc | R | - | 30 | | - | Oct 1-May 1 | - | - | n.c. | Del Del - |
| 26325 | Townzen, EE | SWE | - | 4 | - | - | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| 26828 | Spencer, HL | E | - | 18 | . ~ | - · | Jan 1-Apr30 | - | - | n.c. | Del Del - |
| 26 830 | Levi, DF & Ranny NR | W | - | 1 | - | - | Oct15-Apr15 | · - | - | N.C. | Del Del ~ |
| 26 865 | Stow, JB & BM | . D | 0.01 | - | Jan 1-Dec31 | - . | - | N.C. | - | · _ | Del Del - |
| 26877 | US Plumas Nat For et al | WERSIJ | - | 42 | · - | - | Nov 1-May30 | - | <u>.</u> | N.C. | Del Del - |
| 26879 | Hughes, JM & EC . | s | - | 4 | - | - | Nov 1-Apr30 | . — | _ | Term 93 | Del Del Add |
| 268 80 | Hughes, JM & EC | S | - | 4 | - " - <u>-</u> - | - . | Nov 1-Apr30 | - | - | Term 93 | Del Del Add |
| 26881 | Hughes, JM & EC | S | - | 4 | | - | Nov 1-Apr30 | - | - | Term 93 | Del Del Ald |
| 26903 | Fay, SW | ERSI | _ | 5 | | ••• | Sep 1-May30 | - | - | n.c. | Del Del - |
| 26904 | Datwyler, DR | NHRSDI | - | 49 | | - ' | Dec 1-Mar31 | _ | - | N.C. | Del Del - |
| 2 6907 | Rush, D | I D DERSI | 0.27 0.01 | - 47 | May15-Aug15 Jan 1-Dec31 | - ' | - Oct 1-May 1 | n.c. n.c. | * <u>-</u> - | - N.C. | Del Del - Del Del - Del Del - |
| 26909 | Addington, E | s | - | 11 | _ <i>_</i> / | · - | Nov 1-Aprl5 | - | - | N.C. | Del Del - |
| 26914 | Yuba River Rec Group | ZR | - | 3 | - | - | Oct 1-Apr30 | - | - | N.C. | Del Del - |
| 26915 | Atkinson, VL | ī | 3.00 | · | Apr 1-Nov 1 | | · - | N.C. | · _ | - | Ret |
| 26916 | Banks, WR | SRE | - | 15 | . - | - | Nov 1-Mar31 | - | . - | N.C. | Del Del - |
| 26917 | Lang, KA & VI | WERDI | - | 48 | - . | - | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| 26-24 | Pantle Mining Co | EB | | 300 | - | _ | Nov 1-Apr30 | - | - · · · - | Term 91 | Ret Ret - |
| 26031 | Senator Outing Club | WR | | 100 | - | - | Jan 1-Jun30 | - | - | Term 91 | Ret Ret - |
| - ~.25932 | Straight, CA | SRID | · - ; | 1. | - | - | Nov 1-May 1 | - | - | , N.C. | Del Del - |
| 2₹₹34 | Crowl, WJ & MJ | SR | | 2 | - | - | Nov 1-Aprl5 | . - | - | N.C. | Del Del - |

| | | | DIRECT | | F | XISTING SEA | SON | , 1 | REVISED SEASON | | • |
|---------------|-------------------------|----------|-------------------------|----------------------------|----------------------------|------------------------|--------------|---------------------|------------------------|------------|--|
| APPL NO. | PERMITTEE . | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | REVISIONS TO PERMIT TERMS 80 91 93 |
| 26940 | Jeffery, PR | SRIE | - | 2 | - | - | Nov 1-Apr30 | - | ~ | N.C. | Del Del - |
| 26945 | Yrary, TM & AM | WSI | - | 3 | - | ~ | Oct 1-May31 | - | - | N.C. | Del Del - |
| 26949 | Fletcher, WA & ML | WERI | - | 1 | - | - | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| 26955 | Adams, F | DE DE | 0.03 | - | Apr 1-Oct 1 Jan 1-Dec31 | - | = | N.C. | - | <u>-</u> · | Del Del - Del Del - |
| 26960 | Hamilton, J | s | · - | 5 | • | - | Nov 1-May 1 | - | - . | N.C. | Del Del - |
| 26961 | Deardorf, DA | WSE | - | 10 | - | - | Oct 1-Apr30 | - | - , | N.C. | Del Del - |
| 26962 | Grant, A et al | S | 0.01 | - | Jan 1-Dec31 | · - | - | Term 93 | - . | - | Del Del Add |
| 26963 | Grant, A et al | WES | 0.01 | - | Jan 1-Dec31 | · - | . • | Term 93 | <u>-</u> . | - , | Del Del Add |
| 26964 | Grant, A et al | s | 0.01 | ~ | Jan 1-Dec31 | - | - | Term 93 | - | - | Del Del Add |
| 26969 | Hildebrand, H et al | RSI | | 3 | · <u>-</u> | - | Oct 1-May31 | - | _ | N.C. | Del Del - |
| 26986 | Sprague Ranch | RSI | - | 48 | | • • | Jan 1-Aprl5 | - | - | N.C. | Del Del - |
| 26987 | Sprague Ranch | SI | - | 22 | . - | . | Jan 1-Aprl5 | - | . - | N.C. | Del Del - |
| 26988 | Sprague Ranch | SI | - | 6 | - | | Jan 1-Aprl5 | - | - | N.C. | Del Del - |
| 27000 | Pantle Mining Co | EB | - | 20 | - | - | Nov 1-Apr30 | | - | N.C. | Del Del - |
| 27018 | Kellog, F et al | D. | 0.01 | - | Jan 1-Dec31 | - | - · · | Term 93 | . - | | Del Del Add |
| 27019 | Lewis, TE & WD | SRI | - | 2 | - | - | Oct 1-Apr30 | - | - | N.C. | Del Del - |
| 27027 | Maddux, E | WS | - | 3 | - | - | Nov 1-Apr30 | <u>-</u> · | <u> </u> | N.C. | Del Del - |
| 27034 | Snider, DM & JM | SW | - | 32 | · · · - | - | Nov 1-Apr30 | | | N.C. | Del Del - |
| 27037 | Art & Lerroot, Ltd Part | WI | - | 2 | - | - | Nov 1-Apr30 | - | | n.c. | Del Del - |
| 27038 | Chu Ranch Assn | SDI | 0.01 | ~ | Jan 1-Dec31 | - | - · · | Term 93 | - | - | Del Del Add |
| 27039 | Haist, CT & AK | WERSZI | - | 6 | · - | - | Nov 1-May 1 | · - | - | N.C. | Del Del - |
| 2 7040 | Lake Mgt Committee | WER | • | 15 | . . | - | Nov 1-Apr 1 | - | | N.C. | Del Del - |
| 27043 | Bissett, LO & AE | s. | - | 10 | - | - | Oct 1-May31 | - | - | Term 93 | Del Del Add |
| 27049 | Heller, J | В | 0.77 | ~ | May15-Oct31 | - | - | N.C. | - · | - | Del Del - |

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| | | | DIRECT DIVER- | STORAGE | I | oxisting sea | SON | | REVISED SEASON | | REVISIONS TO |
| APPL NO. | PERMITTEE | USE | SION (CFS) | (ACRE- FEET) | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | DIRECT PRIMARY | DIVERSION SECONDARY | STORAGE | PERMIT TERMS 80 91 93 |
| 27054 | Hertlein, H et al | SI | - | 2 | - | - | Oct 1-Apr 1 | - | - | N.C. | Del Del - |
| 27061 | Bruzzo, AJ et al | ERS | - | 15 | - | - | Oct 1-Apr30 | · - | - | N.C. | Del Del - |
| 27070 | Searcy, M et al | R | - . | 4 | - | - | Dec 1-Apr 1 | - | _ | N.C. | Del Del - |
| 27071 | Donovan NL | WSE | - | 32 | - | - | Nov 1-Apr30 | | - | N.C. | Del Del - |
| 27074 | DeStefano, R | D | 0.01 | - | Jan 1-Dec31 | - | ••• | N.C. | - | . | Del Del - |
| 27119 | Oostello, J | I | 0.23 | - | Aprl5-Octl5 | - | - | N.C. | - | - | Del Del - |
| 27120 | Costello, J | ES | - | 15 | . | - | Nov15-May15 | - | - | N.C. | Del Del - |
| 27131 | Gomes, UD | sı | _ | 10 | - | - | Nov 1-Apr30 | - | - , ' | Term 93 | Del Del Add |
| 27136 | Coon, Jean L | ISRE | | 10 | - | · - | Nov 1-Apr30 | - | · · · · | N.C. | Del Del - |
| 27141 | . Hanson, WD | WSRI | | . 1 | - | - | Oct31-May 1 | | - | N.C. | Del Del - |
| 27152 | Smith & Smith Ranch | ERSI | · 🕳 | 4 | - | <u></u> | Nov 1-Apr 1 | - | · ·- | N.C. | Del Del - |
| 27157 | Trust of HW Thompkins | S | - | 2 | | - , | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| 27165 | Gnos Bros Inc | 1 . | 3.00 | • | Apr 1-Nov 1 | | - | N.C. | - | · - | Del |
| 27166 | Meath, A | R | · - | 350 | - | _ | Oct 1-Apr 1 | - | . . | Term 91 | Ret Ret - |
| 27171 | Peddy, WL & S | NI | - , | 29 | · - | - , | Oct 1-May 1 | - | _ | N.C. | Del Del - |
| 27172 | Cory, J | D | 0.01 | • | Jan 1-Dec31 | - | - | N.C. | - | - | Del Del - |
| 27173 | Breaw, C | WERPSI | - | 20 | - . · | - | Nov 1-Apr30 | · _ | - | N.C. | Del Del - |
| 27181 | Stewart, S | s | - | 4 | | - | Nov 1-Apr30 | | - | N.C. | Del Del - |
| 27185 | Greiten, JE & K | r | 3.00 | | Mar 1-Oct3l | - | · - | N.C. | - | - | Ret |
| 27190 | Harmond, J | WER | · - | 2 | - | - | Dec 1-Mar31 | - | - | N.C. | Del Del - |
| 27202 | Will of LE Merrit | WSE | _ | 5 | - | · - | Nov 1-Aprl5 | - | . • | N.C. | Del Del - |
| 27207 | Thompson, D et al | SRE | | 8 | - | · , - | Nov 1-Apr30 | | - | N.C. | Del Del - |
| 27229 | US Modoc Natl Forest | WS | . v. • • | 1 | - | - | Oct15-May30 | - | - | N.C. | Del Del - |
| 27230 | US !bdoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - | . - | N.C. | Del Del - |
| 27231 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - | | N.C. | Del Del - |

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| | APPL NO. | PERMITTEE | USE | DIVER- SION (CFS) | STORAGE (ACRE- FEET) | DIRECT D | IVERSION SECONDARY | STORAGE | DIRECT I PRIMARY | DIVERSION SECONDARY | STORAGE | PERMIT TERMS 80 91 93 |
| | 27233 | US Modoc Natl Forest | ws | | 1 - | · 🕳 | - | Oct15-May30 | · - | | N.C. | Del Del - |
| , | 27234 | US Modoc Natl Porest | WS | | . 1 | · - | - | Octl5-May30 | - . | - | N.C. | Del Del - |
| | 27235 | US Modoc Natl Forest | WS | - | 1 | - | - | Oct15-May30 | - | - | N.C. | Del Del - |
| | 27236 | US Modoc Natl Porest | WS | | 1 | - | - | Oct15-May30 | - | - . | N.C. | Del Del - |
| | 27237 | US Modoc Natl Forest | ws | ' | . 1 | . · · · - | - | Oct15-May30 | · <u>-</u> | - | N.C. | Del Del - |
| | 27238 | US Modoc Natl Forest | WS | - | 1 | . - , . | - | Oct15-May30 | | | N.C. | Del Del - |
| | 27251 | Hierliby, W | WS | | 6 | ÷ . | - | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| | 27256 | Graves, GA | R | . 🕳 🕟 | 1 | - | - | Oct 1-Jun30 | - | - | Oct 1-Jun15 | Del Del - |
| | 27273 | La Porte Pines CC | D . , | 0.08 | | Jan 1-Dec31 | | <u>-</u> | N.C. | - | - | Del Del - |
| | 27283 | Robinson, MW | WR | - | 2 | - 1 | - | Oct30-Jun15 | • • | - | N.C. | Del Del - |
| | 27284 | US Tahoe Natl Forest | W | . - | 32 | - | - | Oct 1-May31 | - | - | N.C. | Del Del - |
| | 27286 | Preister, W & I | SRI - | . - | 5 | | - | Oct 1-Apr30 | | • | N.C. | Del Del - |
| | 2730 2 | Browns Valley ID | P | 160.00 | 57,000 | Jan 1-Dec 31 | → . | Oct 1-Jun 1 | N.C. | - | N.C. | Ret Del - |
| | 27314 | Hospenthal, J et al | ı | · - | 1 | | - | Feb 1-May 1 | · - | · • | N.C. | Del Del - |
| | 27315 | Fox, NK | I D | 0.04 0.01 | - , - | May 1-Sep30 Jan 1-Dec31 | <u>-</u> - | <u>-</u> - | N.C. | - - | - - | Del Del - Del Del - |
| | 27322 | Hesseltine, HL & LB | s ⁻ | - | . 40 | - | - | Oct 1-Apr15 | | ~ | n.c. | Del Del - |
| | 27335 | Stolle, CM | WRIE | - | 6 | <u>.</u> | - | Dec 1-Mar31 | - | • | N.C. | Del Del - |
| | 27337 | Lewallen Land & Cattle Co | WS | - | 5 | - | - | Nov 1-Apr 1 | - | - | N.C. | Del Del - |
| | 27339 | Aqua Clear Farms Inc | WS | . - | 10 | - | - | Nov 1-Apr30 | - | - | N.C. | Del Del - |
| | 27371 | Bennett, G & B | WRSI | - | 12 | - | - | Nov 1-Apr 1 | , - | · | N.C. | Del Del - |
| | 27378 | Wanlass, AT | RSI | - | 8 | . - | - | Nov 1-Jun 1 | · - | • | N.C. | Del Del - |
| | 27394 | Patterson, RC & V | WRS | - | 33 | · _ | - | Nov 1-Apr 1 | - | - | N.C. | Del Del - |
| | 27441 | Cirlisi, J & D | WRS . | - | 1 | - | - | Oct 1-Apr30 | - | | N.C. | Del Del - |
| | 27455 | Farrell, RH | WERS | - | .25 | - | - | Nov 1-Apr30 | - | - | N.C. | Del Del - |
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| 27465 | McAuliffe, J | ERS | , - | 6 | - | - ,. | Sep15-May 1 | - | - | N.C. | Del Del - |
| 27488 | Roddy-Smith Cattle Co | s | - | 1 | - | | Nov 1-May31 | - | <u>-</u> | N.C. | Del Del - |
| 27501 | Gendron, LJ & VS | s | - | 10 | - | ~ ` , | Nov 1-May15 | | - | Term 93 | Del Del Add |
| 27508 | Anderson, R | D | 0.01 | ;- | Jan 1-Jun15 | Sep 1-Dec31 | . - | N.C. | N.C. | - | Del Del - |
| 27511 | Mowrer, I | EDI | · - | 1 | - . | - | Dec 1-Mar31 | _ | - | N.C. | Del Del ~ |
| 2 751 3 | Minard, DR | ERH | | 9 | - | - | Oct15-Mar31 | - | | N.C. | Del Del - |
| 27519 | Baker, P | ESI | - | 6 | - | - | Nov 1-Apr30 | ⇒ , | | Term 93 | Del Del Aid |
| 27524 | Quinard, AF | SRE | - | 13 | - | ' | Nov 1-May31 | - | _ | n.c. | Del Del - |
| 27527 | Haggard, Merle R | IREW | _ | 34 | . 🛥 | | Nov 1-May31 | - | - · · · · · · · · · · · · · · · · · · · | N.C | Del Del - |
| 27533 | Hiff, B | SD | - , | 3 | - | -, | Jan 1-Aprl5 | - | - | Term 93 | Del Del Add |
| 27542 | Richards Land & Cattle Co | S | · - | 12 | • | , - | Oct 1-May31 | - | - | N.C. | Del Del - |
| 27544 | Kittinger, SR & L | D | 0.01 | - | Jan 1-Dec31 | - | - | Term 93 | - | - | Del Del Add |
| 27 55 3 | Brandon, BM | D . | 0.01 | <u> -</u> | Jan 1-Dec31 | - | - | Term 93 | · <u>-</u> | | Del Del Add |
| 27574 | Butcher, JM & ME | ERSI | - | 15 | - | - | Nov 1-Jun15 | - | - · | N.C. | Del Del - |
| 27578 | Daval, M | WERI | - | 6 | - | - | Nov 1-May31 | - | - | N.C. | Del Del - |
| 27590 | Estate of CS Howard | WERS | | 6 | - | - | Nov 1-Apr30 | - | _ | N.C. | Del Del - |
| 27591 | Estate of CS Howard | WERS | - | 11 | - | - | Nov 1-May31 | . | . · - : | N.C. | Del Del - |
| 27592 | Estate of CS Howard | WERS | | 12 | - | • | Nov 1-Apr 1 | · . | , - | N.C. | Del Del - |
| 27593 | Estate of CS Howard | ERS | - | 8 | ••• | - | Nov 1-May31 | - | - | N.C. | Del Del - |
| 27594 | Estate of CS Howard | WERS | . - | . 9 | - | · • | Nov 1-Apr 1 | | - | N.C. | Del Del ~ |
| 27595 | Estate of CS Howard | WERS | ٠. ـ | . 6 | - | - | Nov 1-Apr 1 | # | - | N.C. | Del Del - |
| 27602 | Swift, EM et al | WER | - | 7 | - | • | Nov 1-May31 | - | · · · | N.C. | Del Del ~ |
| . 27603 | Richards Land & Cattle Co | RS | | 49 | - | - | Oct 1-May31 | - | - | n.c. | Del Del - |
| 27604 | Estate of R Alford | ERS | - | 37 | | - | Oct15-May30 | · - | , - | N.C. | Del Del - |
| 27613 | Mcceler, J | RSI | | 49 | ••• | - | Nov 1-May31 | . · . | · • • | N.C. | Del Del - |

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| 27615 | Hurling, FE & CM | WRSI | - | 5 | - | _ | Nov 1-Apr30 | ·_ · | V | N.C. | Del Del - |
| 27624 | Morrill, GL & LR | WS | - | 18 | - | - * | Nov 1-Apr 1 | - | | N.C. | Del Del - |
| 27 629 | Fitzpatrick, B & D | ERZI | | 16 | · - | - | Nov 1-May31 | - | - / | N.C. | Del Del - |
| 27630 | Graffunder, G & G | WER | - · | 9 | - | - | Nov 1-May31 | - | - | N.C. | Del Del - |
| 2 7638 | Wilson, WG & RM | ER | - | 2 | • 🖛 | - | Oct15-Apr15 | - | | n.c. | Del Del - |
| 27640 | De Maria, A | SR | - | 29 | - | | Sep 1-May31 | - | - | N.C. | Del Del - |
| 27643 | Lehman, DL | RSDI | * | 6 | | _ | Nov 1-May 1 | | • • • • • • • • • • • • • • • • • • • | N.C. | Del Del - |
| 27644 | Cupp, A & MW | HRDI | · - | 8 | • | | Nov 1-May 1 | - . | - | N.C. | Del Del - |
| 27659 | Wiggin, B Inc | RSI | . | 6 | - | - | Oct 1-May30 | • • • | - | N.C. | Del Del - |
| 27660 | Wiggin, B Inc | SI | - | 15 | - | | Oct 1-May30 | . | , <u> </u> | N.C. | Del Del - |
| 27661 | B Wiggin, Inc | SRI | - | 8 | _ | - | Oct 1-May30 | | - | N.C. | Del Del - |
| 27667 | Harris, KF & JH | ERSI | | 1 | | | Oct 1-Jun 1 | · - | - . | N.C. | Del Del - |
| 27680 | McDonald et al | WERS | <u>.</u> | 11 | • | - | Nov 1-Apr30 | - | , | Term 93 | Del Del Add |
| 27681 | McDonald et al | WERS | - | 7 | - | . - . | Nov 1-Apr30 | . - . | . - √11 | Term 93 | Del Del And |
| 27690 | Graffunder et al | R | - | 15 | • - | - , | Nov 1-May31 | | - , | N.C. | Del Del - |
| 27703 | Santavasci et al | WER | , . - | 5 | - | - | Nov 1-May31 | · - . | | N.C. | Del Del - |
| 27759 | Smith, VC | . α | 0.01 | _ | May 1-Sep30 |) -, | <u> </u> | Term 93 | - | | Del Del Add |
| 27767 | Baldwin BJ & KA | RSI | - , | 5 | | <u>-</u> | Nov 1-Apr 1 | · - | - | N.C. | Del Del - |
| 27767 | Baldwin, BJ & KA | SRI | - | . 5 | - | - | Nov 1-Apr30 | - | | N.C. | Del Del - |
| 27768 | Baldwin BJ & KA | RSI | - | . 8 | - | - · | Nov 1-Apr 1 | - | - ,; | N.C. | Del Del - |
| 27768 | Baldwin, BJ & KA | SRI | • • | 8 | - | _ | Nov 1-Apr30 | - | , | N.C. | Del Del - |
| 27795 | Hughes LE & Diede SL | ERS | - | 15 | · - | · - | Dec 1-May 1 | - | •• | Term 93 | Del Del Add |
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STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of

WATER RIGHT PERMITS IN THE SACRAMENTO-SAN JOAQUIN DELTA WATERSHED

in Which the Board Reserved Jurisdiction to Change the Season of Diversion (TERM 80 PERMITS) ORDER: WR 84-2

ORDER AMENDING AND AFFIRMING DECISION 1594 AND DENYING PETITIONS FOR RECONSIDERATION

BY THE BOARD:

The Board having issued Decision 1594 on November 17, 1983;

Decision 1594 having amended the permit conditions and season of diversion authorized in numerous specified water right permits subject to the Board's reserved jurisdiction under Standard Permit Term 80; petitions for reconsideration of that decision having been filed by the United States Bureau of Reclamation, the Delta Water Users Association and South Delta Water Agency, and fourteen water agencies and permittees represented by the law firm of Downey, Brand, Seymour & Rohwer; and the petitions having been duly considered; the Board finds as follows:

1. Grounds for Reconsideration

The Board may order reconsideration on all or a part of a decision adopted by the Board upon petition by affected persons (Water Code Section 1357). The Board's regulations provide that reconsideration may be sought for any of the following causes:

- a. A procedural irregularity which has prevented the petitioner from receiving a fair hearing;
 - b. The decision is not supported by substantial evidence;
- c. There is relevant evidence available which, in the exercise of reasonable diligence, could not be produced at the hearing; or
- d. An error in law.
 (23 Cal.Admin.Code §737.1.)

2. Summary of the Petitions

a. Bureau of Reclamation

The petition for reconsideration filed by the Bureau of Reclamation requests that the word "conserved" be deleted from newly adopted Permit Term 93 which regulates water availability for permittees in the San Joaquin Basin upstream of Vernalis. The request to delete the word "conserved" from Term 93 is directed at prohibiting diversions by all Term 80 permittees upstream of Vernalis when the Bureau is releasing water from storage or foregoing diversion of water to storage in order to meet the 500 parts per million total dissolved solids standard at Vernalis. The Bureau's request is discussed in Section 3 below.

b. Delta Water Users Association and South Delta Water Agency

The Delta Water Users Association and the South Delta Water Agency (hereinafter collectively referred to as South Delta) have filed a petition for reconsideration requesting that Decision 1594 be amended in the following two respects:

- (1) Petitioners request that the Board add a term to permits for diversion in the San Joaquin Basin upstream of Vernalis which would restrict diversion of water by such permittees
 - "... when the flow in the San Joaquin River at Vernalis on the average falls below the following:

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May -- 551 cfs (cubic feet per second)
June -- 695 cfs
July -- 1044 cfs
August -- 908 cfs
September -- 617 cfs
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or below the calculated net channel depletion in the southern Delta in the remaining months." (Petition by Delta Water Users Association and South Delta Water Agency for Reconsideration of Decision 1594, pp. 6 and 7.)

The petition refers to certain evidence in the record as justifying the requested change. In the alternative, South Delta requests that the Board hold a further hearing to consider additional evidence on South Delta's request to regulate Term 80 permittees on the basis of minimum flows at Vernalis. This subject is discussed in Section 4 below.

(2) Petitioners further request that the decision not conclude that the lack of surface hydraulic continuity between an upstream Term 80 permittee and the Delta is a basis for exempting the permittee from restrictions on the season of diversion which would otherwise apply. Stated differently, South Delta suggests that Term 80 permittees should be subject to regulation under Terms 91 and 93 and any other restrictions related to water availability in the Delta even if there is no surface hydraulic continuity between their point of diversion and the Delta. South Delta also requests that if the Board concludes that there is presently insufficient data regarding subsurface flows, then the Board should continue to reserve jurisdiction over

all Term 80 permittees until such time as adequate information is available. The request for reconsideration based on subsurface flow and hydraulic continuity considerations is addressed in Section 5 below.

c. <u>Various Term 80 Permittees, Water Agencies, and Water Users</u> Associations

The petition filed by Downey, Brand, Seymour & Rohwer on behalf of several Term 80 permittees and other interested parties requests that the Board modify Decision 1594 as follows:

- (1) Delete Term 80 from power permits where hydroelectric power generation does not change the streamflow regime in a way which alters the rate or quantity of flow entering the Delta.
- (2) Delete Term 80 and Term 91 from all permits issued on applications filed prior to August 16, 1978, and include a fixed diversion season in those permits excluding the period June 16 through August 31.
- (3) Adopt as Board policy the position that only applications filed after the date of the Board's final decision in this matter will be subject to any future San Francisco Bay standards.
- (4) Adopt as Board policy the position that Permit Terms 80 and 91 shall not be included in permits as a condition for approving a petition to change point of diversion, place of use, or purpose of use or granting a petition for extension of time.
- (5) Delete all references to the public trust doctrine and National Audubon Society v. City of Los Angeles.

These subjects are addressed in Sections 6 through 10 below.

3. Revision of Standard Permit Term 93

Decision 1594 provides that diversion of water under all Term 80 permits in the San Joaquin Basin above Vernalis shall be subject to the restrictions of Permit Term 93 which reads as follows:

"No diversion is authorized by this permit when conserved water released from New Melones Reservoir is being used to maintain the water quality in the San Joaquin River at Vernalis at a level of 500 parts per million (ppm) Total Dissolved solids (TDS) or during any time of low flows when TDS levels at Vernalis exceed 500 ppm. This restriction shall not apply when, in the judgment of the Board, curtailment of diversion under this permit will not be effective in lowering the TDS at Vernalis, or when, in the absence of the permittee's diversion, hydraulic continuity would not exist between the permittee's point of diversion and Vernalis. The Board shall notify permittee at any time curtailment of diversion is required under this term." (Decision 1594, pp. 33, 59-60.)

The term "conserved water" was taken from SWRCB Decision 1422 which imposes an obligation upon the Bureau to release water from New Melones to meet a water quality standard of 500 parts per million total dissolved solids at Vernalis. The Bureau's petition requests that the word "conserved" be deleted from Term 93 since the Bureau's prior rights of diversion at New Melones are restricted both when the Bureau is releasing stored water to meet the Vernalis standard and when the Bureau is foregoing diversion of water to storage to meet that standard. The Bureau argues that if its prior rights for an inbasin project are subject to restrictions due to the Vernalis water quality standard, the junior rights of Term 80 permittees should be similarly restricted. The Bureau's contention is valid provided that the place of use of water diverted under the New Melones permit remains within the existing four county area authorized as the place of use. Therefore, the language of Term 93 will be revised as shown in paragraph (1)(a) of the Order which follows. Decision 1594

should also be amended to provide that Term 93 shall not be included in projects which do not alter the rate or quantity of flow entering the Delta since such projects will not affect water availability in the Delta.

4. Use of Flow Standards as a Criteria for Determining Water Availability in the San Joaquin River

a. Amendment to Decision Based Upon Existing Record

South Delta requests that the Board amend Decision 1594 to restrict diversion of water under Term 80 permits at times when the average monthly rate of flow in the San Joaquin River at Vernalis falls below the levels stated in Section 2 above. The rationale is that maintenance of acceptable water quality to holders of prior rights in the Southern Delta requires a minimum flow in the San Joaquin River at Vernalis which varies with the month in question. Without such minimum flow levels, South Delta argues, salinity increases to the point of adversely impacting holders of prior rights. Diversion by Term 80 permittees during such low flow periods, it is argued, can further aggravate water quality problems.

South Delta cites SWRCB Exhibits 9, 14 and 21 as providing the necessary evidence for supporting its desired conclusion and also refers to several additional items of evidence not included in the hearing record. The SWRCB exhibits referred to in the petition provide the necessary data for calculation of channel depletion allowances for the southern Delta during the months of May through September. Since channel depletion allowances for other months vary widely due to varying precipitation patterns, South Delta proposes that they be calculated at the time in question. Whenever the flow at Vernalis falls below the specified or calculated net channel depletion allowance, South Delta suggests that Term 80 permittees be prohibited from diverting since the available water supply is less than the demand by holders of prior rights.

The Board is well aware that the provisions of Decision 1594 do not solve the water quality problems in the southern Delta. The Board also acknowledges that low flows can contribute to water quality problems in the southern Delta. Thus, some type of proposal to establish minimum flow standards based on channel depletion estimates may be worthy of further investigation. However, the Board finds that the approach proposed in South Delta's petition is unacceptable. During the times that the proposed restrictions on diversion would be triggered, a large portion of the Southern Delta's channel depletions are being satisfied from sources other than the San Joaquin River.

Operations of the State Water Project (SWP) and Central Valley
Project (CVP) can bring Sacramento River water into the northern portions of
the South Delta Water Agency. The Environmental Impact Report for the 1978
Delta Plan indicates that CVP- and SWP-induced reverse flow conditions occur in
approximately the upper half to two-thirds of the South Delta Water Agency at
fairly moderate flow conditions in the San Joaquin River. The Environmental
Impact Report states:

"Additionally, flow reversal in the main channel of the San Joaquin River from Stockton south to the bifurcation with Old River near Mossdale occurs generally when the export rates of the CVP and SWP are greater than five times the San Joaquin inflow at Vernalis. The various flow reversals are pictured in Figure III-8." (SWRCB Exhibit 9, p. III-24.)

Preliminary calculations based on the above information indicate that, even at the restrained project pumping rates of 6,000 cfs set for May and June by Decision 1485, reverse flow conditions in roughly the northern half to two-thirds of the South Delta Water Agency could occur when flows in the San Joaquin River at Vernalis drop below 1,200 cfs. Since the flow levels

specified in South Delta's petition are all below 1,100 cfs, the northerly half to two-thirds of the land within South Delta Water Agency could be supplied from the Sacramento River, not the San Joaquin River, during periods when South Delta's proposed permit term would be triggered. Therefore, the channel depletion requirements in this northern area would have to be properly accounted for in order to arrive at supportable channel depletion figures for the area actually receiving San Joaquin River supplies. In addition, areas receiving water service from sources other than the San Joaquin River, such as Banta Carbona, would also have to be accounted for. South Delta points to no place in the hearing record where this information can be found. The Board concludes that, on the basis of the existing record, it would be inappropriate to modify Decision 1594 to establish an entirely new method of determining water availability to Term 80 permittees in the San Joaquin Basin. The discussion in this paragraph is not intended to prejudge findings which may be made upon consideration of additional evidence in an appropriate proceeding in the future.

The Board also notes that Delta hydrology is an extremely complex subject. South Delta's proposal was not mentioned in the hearing notice, nor was it addressed in any detail at the hearing. Before any such method could be adopted, it should be thoroughly aired before all affected parties in order to ensure that the assumptions and data utilized are correct.

b. Reopening Record for Submission of Further Evidence

As an alternative to amending the Decision on the basis of the existing record, South Delta requests that the Board hold a further hearing and reopen the record for submission of additional evidence. The Board's regulations permit reconsideration where "[t]here is relevant evidence available, which in the exercise of reasonable diligence, could not be produced at the hearing." (23 Cal.Admin.Code. §737.1.) Petitioners offer new evidence

which they allege, without explanation, was unavailable at the time of the hearing. The proposed evidence is attached as Exhibits 1 through 4 to South Delta's petition for reconsideration.

A brief examination of the proposed additional exhibits indicates that they are excerpts from, were derived from, or are extremely similar to information contained in readily available public documents which were published well before the Board hearing in this matter. The information provided by these exhibits could eaily have been introduced at the Board hearing if South Delta had chosen to do so.

The general rule is that the showing of diligence in attempting to produce evidence must be convincing. In an analogous situation involving evidence offered after a trial, the California Supreme Court ruled:

"Ordinarily newly discovered evidence is looked upon with disfavor, and a party relying thereon must make a strong showing on his part in preparing for trial [citations omitted]"
(Estate of Cover (1922) 188 Cal. 133, 149.)

Similarly in <u>Miles v. A. Arena & Co.</u> (1937) 23 Cal.App.2d 680, 685-686, the appellate court ruled that an experiment that was performed after the

Lexhibit 1 to South Delta's petition for reconsideration is the South Delta Water Agency's exhibit II-H presented in the 1976 hearings leading to Decision 1485. Exhibit 2 to the petition is the same information in a different format as that produced by the Department of Water Resources Day Flow Summary, which was introduced as SWRCB Exhibit 14 in this proceeding. South Delta's proposed exhibit has been updated to include the two most recent years. Exhibit 3 to the petition is a slightly modified version of the data which appears in a different format on page 92 of a report entitled "Effects of the CVP upon the Southern Delta Water Supply; Sacramento-San Joaquin River Delta, California". This document was prepared jointly by the Water and Power Resources Service (U. S. Bureau of Reclamation) and the South Delta Water Agency in June 1980. Exhibit 4 to the petition shows similar water quality distribution patterns as are shown in figures contained in "Alternative Solutions to Southern Delta Water Program", a document by the Water and Power Resources Service dated September 1980.

trial could as readily have been performed before the trial and excluded the evidence. In the current matter, the Board concludes that South Delta has not met the criteria established in the Board's regulations for introduction of additional evidence after the close of the hearing. Therefore, the Board declines to reopen the record for receipt of further evidence.

c. Conclusion

The Board finds that the petitioner has not established sufficient cause for amending the Decision or for reopening the record. The Board acknowledges, however, that the continuing water quality problems in the southern Delta should be addressed. To the extent that Board involvement would not interfere with matters subject to ongoing litigation, one opportunity for addressing such problems could be in the reopened hearings on Delta water quality standards currently scheduled for 1986. At that time, the Board can examine all appropriations subject to the Board's jurisdiction which may affect water quality problems in the southern Delta and throughout the entire Delta. Due to the possibility that future information may establish cause for further revisions in the permit conditions of appropriators in the San Joaquin Basin, Decision 1594 should be amended to provide that Term 80 will remain in all permits in the San Joaquin Basin in which it appeared prior to issuance of the Decision.

5. Diversions in Areas Lacking Hydraulic Continuity With the Delta

Decision 1594 provides that the restrictions on diversions under Permit Term 91 will not be applied in situations where, in the absence of a particular permittee's diversion, there would be no hydraulic continuity between the permittee's point of diversion and the Delta. (Decision 1594, pp. 30, 31.) Similarly, Permit Term 93 specifically states that it does not apply when "in the absence of the permittee's diversion, hydraulic continuity would not exist between the permittee's point of diversion and Vernalis."

(Decision 1594, p. 54.)

South Delta requests that the decision should be amended to provide that diversion by Term 80 permittees in areas which lack surface hydraulic continuity with the Delta should be subject to regulation under Terms 91 and 93 and any other restrictions related to water availability in the Delta. South Delta's petition cites various reports which discuss the fact that subsurface flow may resurface at a lower elevation. Thus, where there is "subsurface hydraulic continuity" between an upstream point of diversion and the Delta, South Delta suggests that upstream Term 80 permittees should be subject to permit terms which are directed at protecting water quality for holders of prior rights in the Delta. There are two major deficiencies with South Delta's proposal.

First, as with the minimum flow proposal, the "evidence" which South Delta relies upon is not evidence which was submitted at the hearing in accordance with the Board's regulations and the hearing notice. Rather, South Delta relies upon the fact that it mentioned or "cited the existence of" various reports at the hearing or in letters to the Board after the hearing. (South Delta Petition for Reconsideration, pp. 11, 12.) However significant the information in the studies cited may be, the studies were not submitted as exhibits at the Board hearing, nor did the authors of such reports provide either direct testimony or testimony under cross-examination. If South Delta wishes for detailed technical information to be considered in the formulation of a Board decision restricting diversions by other water users, it has the

obligation to fully present such information as evidence at the hearing. The Board's decision must be based on evidence in the record.

The second problem with South Delta's proposal is that, even if all the evidence to which it refers were in the record, additional detailed hydrologic information would be needed to support the restrictions suggested. Such data is not currently available. Terms 91 and 93 are directed at determining restrictions on water availability on a real-time basis. The rationale for restricting diversions by Term 80 permittees when Term 91 or Term 93 is triggered is that additional water will remain in the stream and flow downstream to the Delta within the period when water quality problems exist. Applying the same rationale to Term 80 permittees in areas of no surface hydraulic continuity with the Delta would require much more extensive information than is presently available on rates, quantities, and direction of subsurface flow at numerous locations within each river basin.

South Delta suggests in the alternative that if the Board determines the available information is insufficient to make the change required, the Board should continue to reserve jurisdiction over all Term 80 permittees until more complete information is available. As discussed in Section 4 above, Decision 1594 will be amended to retain the Board's reserved jurisdiction under Term 80 in all present Term 80 permits for diversion in the San Joaquin River watershed upstream of Vernalis. Thus, if adequate information becomes available to demonstrate that diversion by a particular permittee in an area lacking hydraulic continuity with the Delta should be regulated on a real-time basis under Term 91 or Term 93, the Board will have reserved jurisdiction to make appropriate adjustments under Term 80.

6. Deletion of Term 80 From Permits for Certain Hydroelectric Projects

The petition for reconsideration filed on behalf of several Term 80 permittees requests that Term 80 be deleted from permits authorizing hydroelectric power generation at facilities which previously received permits authorizing diversion of water for other purposes. The specific projects involved are covered by permits issued on Applications 25056, 26162, 26469, and 27302. The rationale is that the hydroelectric facilities are an incidental use added to projects which were approved prior to the use of Term 80 and that simply adding the use of water for hydroelectric purposes does not change the rate or quantity of flow entering the Delta.

The Board acknowledges that only under unusual circumstances would it be neccesary to change the season of diversion for permits authorizing hydroelectric projects if the diversion of water under those permits did not affect the rate or quantity of flow downstream. In this instance, the history of the applications in question and the declaration of engineer Keinlen submitted on behalf of the petitioners indicate that the use of water for hydroelectric purposes is simply a secondary use of the same water diverted under the earlier permits which are not subject to Term 80. However, since separate permits were acquired for the hydroelectric projects and the earlier facilities to which the hydroelectric use was added, a potential for future misunderstanding may exist.

In order to prevent any such misunderstanding, a term should be added to the specified permits for hydroelectric use to clarify that the permits do not authorize any additional diversion of water to storage beyond that quantity authorized by the earlier permits at the same location. Clearly, if additional water could be stored under hydroelectric permits, such storage

would change the rate and quantity of downstream flow. If no additional water can be stored, however, the flow entering the Delta will not be changed and Term 80 may be deleted from the permits. The four affected permittees have advised the Board, by letter from their attorney, Ms. Anne Schneider, dated January 17, 1984, that they have no objection to addition of a permit term of the type described. The Board finds that a permit term prohibiting diversion of additional water to storage should be added and Term 80 deleted from the permits on Applications 25056, 26162, 26469, and 27302.

7. Use of Term 91 Method for Determining Water Availability for "Old Term 80" Permittees

a. Overview of Changes Requested by Petitioners

The petition for reconsideration filed by the Term 80 permittees requests that Terms 80 and 91 be deleted from all permits issued on applications filed before August 16, 1978, and that a fixed season of diversion be included in those permits excluding the period from June 16 to August 31. The purported rationale for this request is essentially twofold: (1) the petitioners contend that the Board's reserved jurisdiction under Term 80 is not broad enough to allow the Board to adopt the Term 91 Method of determining water available for so-called "old Term 80" permittees, and (2) the petitioners contend their due process rights were violated since Term 80 permittees, as a group, were not notified of the hearing which led to adoption of the water quality standards set forth in Decision 1485. These contentions are addressed in parts "b" and "c" below. Part "d" addresses the fact that there is little or no relationship between the alleged defects of Decision 1594 and the "remedy" suggested by the petitioners.

b. Scope of Reserved Jurisdiction Under Term 80

Contrary to the position of the petitioners, the Board's reserved jurisdiction under "old Term 80" was not narrowly restricted to allow only adjustments in the season of diversion as necessary for protection of prior rights. Since 1959, Section 1394 of the Water Code has expressly authorized the Board to reserve jurisdiction if insufficient information is available

"... to finally determine the terms and conditions which will reasonably protect prior vested rights ... or which will best develop, conserve, and utilize in the public interest the water sought to be appropriated." (Emphasis added.)

Thus, the Board clearly had the authority to reserve jurisdiction to adjust the season of diversion as necessary for protection of the public interest as well as for protection of prior rights.

The language of the original Term 80 states that jurisdiction is reserved "for the purpose of conforming the season of diversion to later findings of the Board on prior applications involving water in the Sacramento River Basin and Delta...." The term states nothing to indicate that the later findings of the Board on prior applications may not address public interest concerns such as fish and wildlife. The water quality standards reflected in Decision 1485 must be met by the Department of Water Resources and the Bureau of Reclamation as conditions of their water rights in the Sacramento River Basin and Delta. With respect to Term 80 permittees, these water rights of the Bureau and the Department were initiated by "prior applications" and the conditions included in the permits subject to Decision 1485 are findings on those prior applications. Therefore, changes in the season of diversion of so-called "old Term 80" permittees which are based upon assisting in meeting

Decision 1485 water quality standards are, in the language of Term 80, "for the purpose of conforming the season of diversion to later findings of the Board on prior applications."

One additional point to note is that the petitioners appear to be drawing an inappropriate distinction between the exercise of the Board's reserved jurisdiction for the purpose of protecting prior rights and the exercise of jurisdiction for the purpose of assisting in meeting the water quality standards based upon protection of fish and wildlife. In accordance with the provisions of Decision 1485, the Bureau and the Department, as a condition of their water right permits, are required to ensure that specified water quality standards in the Delta are met. At times this requires the release of stored water. If diversions by Term 80 permittees are not curtailed during times when the Bureau and the Department are releasing stored water for water quality purposes (including fish and wildlife), Term 80 permittees could end up diverting a portion of the water released from storage and the Project operators would have to make additional storage releases to compensate.

The Project operators view diversions by Term 80 permittees during periods when Decision 1485 requires release of stored water as an infringement on their prior rights. Thus, with respect to the water rights of the Project operators, adding Term 91 to the permits of "old Term 80" permittees is a proper exercise of the Board's reserved jurisdiction even if such reserved jurisdiction were limited, as petitioners suggest, to actions directed at protection of prior rights. As explained above, however, the Board concludes that its reserved jurisdiction under Term 80 authorizes changes necessary for

protection of water quality based upon public interest concerns as well as protection of prior rights.

c. Due Process Considerations

Decision 1594 adopted the Term 91 Method of regulating the authorized season of diversion for certain permittees subject to the Board's reserved jurisdiction under Term 80. The petitioners who now allege lack of due process were notified of and participated in the hearings and virtually every aspect of the administrative proceedings which led to adoption of Decision 1594. Petitioners have not questioned the adequacy of the notice for these particular proceedings. Rather, their argument is that since Decision 1594 utilizes the same water quality standards which are recognized in Decision 1485, petitioners were entitled to receive individual notice of the proceedings leading to Decision 1485. The lack of such notice, petitioners contend, constitutes a denial of due process.

Petitioners' position reflects a fundamental misunderstanding of the interrelationship between the water quality control planning process and the appropriative water right process. The water quality standards which were relied upon in both Decision 1485 and Decision 1594 were established by the "Water Quality Control Plan, Sacramento-San Joaquin Delta and Suisun Marsh", August 1978, State Water Resources Control Board (hereinafter referred to as the Delta Plan). (SWRCB Exh. 8.) Since the Delta Plan and Decision 1485 were primarily concerned with water quality in the Delta, the proceedings leading to the adoption of each were held jointly. Decision 1485 was the first water right decision in which the water quality standards established in a Delta Plan were applied to specific water right permits. Hence, in Decision 1594 and other water right proceedings, the short-hand reference to the standards has

become the "Decision 1485 standards". It should be recognized, however, that, pursuant to Water Code Section 13170, the standards reflected in Decision 1485 were adopted in the Delta Plan as the State's water quality standards for the Delta area. In order to clarify the source of these standards, Decision 1594 should be amended to make specific reference to the Delta Plan.

Section 1258 of the Water Code requires that:

"In acting upon applications to appropriate water, the board shall consider water quality control plans which have been established pursuant to Division 7 (commencing with Section 13000) of this code, and may subject such appropriations to such terms and conditions as it finds are necessary to carry out such plans."

Thus, by providing that permits granted on applications under consideration in the Decision 1594 proceedings should be conditioned to reflect the water quality standards adopted in the Delta Plan, the Board simply proceeded as directed by statute. Water Code Section 13170 provides that state water quality control plans shall be adopted in accordance with the provisions governing adoption of regional water quality control plans. The applicable notice requirements for the proceedings leading to adoption of the Delta Plan are set forth in Water Code §13244 which requires notice by publication in the affected county or counties. Extensive public notice of the Delta Plan hearing was in fact provided.

In this instance, notice was also provided to the Department of Water Resources and the Bureau of Reclamation since their permits were directly before the Board in the water rights aspect of the combined proceedings. However, the "Plan of Implementation" section of the Delta Plan clearly states that actions other than revision of the permits issued for the CVP and SWP would be required to fully implement the plan. Pages VII-1 and VII-2 of the Delta Plan state:

"At the time it adopts the final water quality control plan, the Board will adopt a corresponding water right decision amending terms and conditions for permits issued for SWP and CVP. Such terms and conditions will supplement the relevant provisions of this plan. However, a series of other actions by the Board will be required in order to implement the plan more fully and resolve all the concerns which cannot now be fully addressed for various reasons." (Emphasis added.)

As stated in State Board Resolution No. 80-18, the proceeding leading to Decision 1594 is part of an integrated effort by the State Board to fully implement the Delta Plan.

The law does not require nor would it be reasonable to require, individual notice to every waste discharger or water user who might eventually be affected by the water quality standards established in a state water quality plan. Term 80 permittees, as a group, were not individually notified of the proceedings leading to adoption of the Delta Plan, nor were their rights adversely affected when such plan was adopted. The question of the responsibility of Term 80 permittees toward assisting in meeting the water quality standards established in the Delta Plan was not before the Board until proceedings were initiated leading to adoption of Decision 1594. The petitioners were notified of the Decision 1594 proceedings and they have participated at all stages.

Although the general nature of the proceedings differed from those involved in the present matter, the language of the court in <u>Dami</u> v. <u>Department of Alcoholic Beverage Control</u> (1959) 176 Cal.App.2d 144, 151, appears equally applicable to petitioners' contention in this proceeding:

"Due process cannot become a blunderbuss to pepper proceedings with alleged opportunities to be heard at every ancillary and preliminary stage, or the process of administration itself must halt. Due process insists upon the opportunity for a fair trial, not a multiplicity of such opportunities."

In this instance, the Board finds that the notice to petitioners was adequate and that due process has been provided. Furthermore, as discussed in paragraph "d." below, consideration of the fish and wildlife standards to which petitioners object has a minimal effect upon their season of diversion. However, if petitioners' concern is that the quantity of water required for fish and wildlife values may be increased in <u>future</u> proceedings, they will have the opportunity to appear in those proceedings. Since the season of diversion of most Term 80 permittees is now directly linked to the water quality standards established in the Delta Plan, Decision 1594 specifically provides that Term 80 permittees will be notified of any future proceedings involving revisions to Delta water quality standards which could affect their season of diversion. (Decision 1594, p. 36.) Further proceedings on Delta water quality standards are scheduled to begin in 1986, and if petitioners wish to become actively involved in revision of the standards established in the Delta Plan, they will be afforded the opportunity to do so.

d. Petitioners' Request that Board Adopt a Fixed Season

The petitioners have not questioned the propriety of adjusting their season of diversion as may be necessary for protection of prior rights. Neither have they questioned that the agricultural and municipal and industrial standards recognized in Decision 1485 represent a proper determination of the standards necessary for protecting the use of water by holders of prior rights. Both at the hearing and in the memorandum of points and authorities in support of their petition for reconsideration, petitioners have stressed that

their objection is to considering the fish and wildlife standards in determining their allowable season of diversion. Therefore, in order to evaluate the petitioners' request that the Board establish a fixed season of diversion for "old Tem 80" permittees, it is helpful to identify the effect of considering the fish and wildlife standards upon the season of diversion. records shows that the average season of diversion would be reduced by only three days in the spring or early summer if Term 80 permittees are required to assist in meeting all Delta water quality standards rather than only those standards based on protection of prior rights (SWRCB Exh. 1, p. 46.) In late summer, consideration of the fish and wildlife standards would be expected to restrict diversions two days earlier than if only the prior rights standards are applied. (SWRCB Exh. 1, p. 46.) However, the entire month of August is excluded from the season of diversion in existing Term 80 permits for reasons unrelated to Term 91 and present Delta water quality standards. (Decision 1594, pp. 31, 32.) Therefore, in most years, the practical effect of considering the fish and wildlife standards would be limited on the average to a three-day reduction in the season of diversion.

The amendments to Decision 1594 suggested by petitioners have little relation to the problems which they perceive as arising from considering the fish and wildlife standards. Petitioners presented testimony by engineer Kienlen at the hearing which, in general, supported adoption of the Term 91 Method or the Storage Release Tracking Method to determine the availability of water. (RT 4/13/83, p. 113, lines 11-24.) In crossexamination, Mr. Kienlen elaborated further, however, and suggested that, due to the recognition of water quality standards included in Decision 1485 which

go beyond protection of prior rights, "old Term 80" permittees should not be regulated under Term 91. Rather, as the petitioners now suggest in their petition for reconsideration, Mr. Kienlen suggested that "old Term 80" permittees should continue to receive a fixed season of diversion.

(RT 4/13/83, p. 140, line 11 - p. 141, line 25.) The fixed season of diversion suggested in the petition for reconsideration would exclude the period of June 16 - August 31, a period which, incidentally, is based upon the average period of unavailability, assuming that the standards adopted in the Delta Plan apply. (Decision 1594, p. 29.)

A look at the practical effects of petitioners' requested change shows that the proposed cure is far worse than the perceived problem. Under the Term 91 Method, petitioners' season of diversion is regulated on a realtime basis and varies with the availability of water during each year. Even if petitioners' contention regarding the inapplicability of fish and wildlife standards were correct, the Term 91 Method would curtail their diversions only a few days early on the average. Using the suggested approach, however, petitioners would receive a fixed season which would be as much as ten weeks too long in a drought year such at 1977 and two weeks too short in a very wet year such as 1980. (SWRCB Exh. 1, p. 45.)

In light of the fact that the fish and wildlife standards affect the season of availability by only a few days, the petitioners' comments about "undermining the financial integrity of water projects" are not supported. (Memorandum of Points and Authorities in Support of Petition for Reconsideration, p. 10.) Those comments, combined with the petitioners' insistence upon receiving a fixed season of diversion, suggests a possible misapprehension of what a permit with a fixed season of diversion authorizes.

It clearly does not authorize a right to divert during a definite period regardless of water availability. Permittees who receive a fixed season of diversion are always subject to prior rights and may have to curtail their diversions accordingly. The Term 91 Method simply provides a reasonable indication of when such curtailment is necessary. Even if "old Term 80" permittees were considered exempt from any responsibility toward the fish and wildlife standards, their season of diversion in most years would be more accurately determined under the Term 91 Method than by relying upon a fixed season of diversion.

8. Responsibility of Term 80 Permittees Toward Future San Francisco Bay Flow Standards

The third change requested in the petition for reconsideration filed by various Term 80 permittees and interested parties is that Decision 1594 be modified to adopt as Board policy the position that only applications filed after the date of the final Board action in this matter will be subject to any water quality or flow standards for the San Francisco Bay. The memorandum of points and authorities submitted in support of the petition for reconsideration questions whether the Board's reserved jurisdiction under Term 80 is sufficiently broad to cover changes in permit conditions due to Bay standards.

The scope of the Board's reserved jurisdiction under Term 80 is addressed at length on pages 34-36 of Decision 1594 and in Section 7 above. That discussion will not be repeated here. Suffice it to say that the Board's reserved jurisdiction under the new and revised versions of Term 80 is broad, and that the Board has additional authority to regulate permittees in accordance with Article X, Section 2 of the California Constitution and under the Board's mandatory duty to consider public trust values. (National Audubon Society, et al. v. City of Los Angeles (1983) 33 Cal.3d 419, 189 Cal.Rptr. 346.)

Decision 1594 states that the evidence presented was suficient to put Term 80 permittees and new applicants on notice

"... that the Board <u>may</u> exercise its reserved jurisdiction under Term 80 to review their season of diversion as may be necessary for protection of beneficial uses in the Bay." (Decision 15494, p. 36; emphasis added.)

The decision also amends the language of Standard Permit Term 80 for use in future permits to assure that permittees are expressly on notice that their permit conditions are subject to change. (Decision 1594, pp. 37, 54.) However, the decision establishes neither flow standards nor water quality standards for the San Francisco Bay, nor does it attempt to determine who must share in the responsibility for meeting such standards, if and when they are adopted. The Board will not attempt to answer those questions without adequate information and opportunity for hearing. Similarly, the Board declines the petitioners' invitation to attempt to limit the jurisdiction which the Board may exercise over permittees in the future in order to carry out its constitutional and statutory functions.

9. Addition of Permit Terms 80 and 91 When Acting Upon Petitions for Extension of Time or Petitions to Change Point of Diversion, Place of Use or Purpose of Use

The Term 80 permittees seeking reconsideration request that the Board adopt a policy that Permit Terms 80 and 91 shall not be included in permits as a condition for approving a petition to change a point of diversion, place of use, or purpose of use or as a condition for granting a petition for extension of time. Decision 1594 did not address the subject of permit conditions to be included when acting upon change petitions or requests for extension of time because it was unrelated to the primary matters at issue in the hearing.

In some instances, the Board might agree with the petitioners that a minor change in place of use should not subject a permittee to new restrictions on the exercise of a water right. In other instances, where a permittee has been slow in completing a permitted project, the Board might determine that an order granting an extension of time would properly include permit conditions applicable to other projects completed at the same approximate time.

Attempting to establish a policy on this subject before knowing the issues and facts which may come before the Board appears both unnecessary and unwise. The decision will not be amended as requested.

10. Reference to Public Trust Doctrine

The final request of the petition for reconsideration filed by several Term 80 permittees is to delete all references to the public trust doctrine and National Audubon Society v. City of Los Angeles (1983) 33 Cal.3d 419, 189 Cal.Rptr. 346.) Petitioners object to relying upon the public trust doctrine as a basis for amending Term 80 permits since protection of the public trust may also justify similar changes in non-Term 80 permits.

Petitioners argument appears to be that all changes in the terms or conditions of appropriative water right entitlements due to certain public trust considerations must be made simultaneously or not at all.² As a practical matter, however, complex problems must be addressed in stages.

² It should be noted for the record that petitioners' suggestion that Term 91 could be applied uniformly to <u>all</u> permittees diverting from the Delta watershed could not be legally justified since many of those permittes have superior rights to the Bureau of Reclamation and Department of Water Resources. Consequently, their water quality obligations may differ substantially.

Nothing in the <u>Audubon</u> decision requires the Board to initiate proceedings to exercise jurisdiction over every possible water right on public trust grounds.

The Decision 1594 proceedings examined water right permits which are subject to the Board's reserved jurisdiction under Term 80. In acting upon those permits, the Board is required under the <u>Audubon</u> decision to consider the public trust values of maintaining acceptable water quality in the Delta. (33 Cal.3d 419, 447, 189 Cal.Rptr. 346, 364.) It is entirely appropriate to refer to the public trust in Decision 1594 and the decision will not be amended to delete such references.

ORDER

NOW, THEREFORE, IT IS ORDERED, that:

- (1) Decision 1594 shall be amended in the following respects:
 - (a) A footnote to the first sentence of Section 5 of the Findings portion of the Decision should be added as stated below and subsequent footnotes should be renumbered accordingly:

"The water quality standards were established in the 'Water Quality Control Plan, Sacramento-San Joaquin Delta and Suisun March', adopted by the State Water Resources Control Board on August 16, 1978 (Delta Plan). Board Decision 1485, also adopted on August 16, 1978, implements the water quality standards established in the Delta Plan. In this proceeding and other water rights proceedings, these standards have frequently been referred to simply as the Decision 1485 standards."

(b) The last paragraph of Section 24 of the Findings portion of the decision should be amended to read as follows:

"As shown in Tables 1 and 2 in Section 16, permittees diverting less than 1.0 cfs by direct diversion or less than 100 AF by diversion to storage account for a very small percentage of the water subject to the Board's reserved jurisdiction under Term 80. Such permittees will receive a fixed season of diversion which excludes the period of June 16 to August 31. (See Section 17.) The Board does not believe that continuation of reserved jurisdiction over the season of diversion for such water users is justified by the small quantity of water involved. Therefore, except in the San Joaquin Basin, Term 80 will be deleted from permits for direct diversion of less than 1.0 cfs or for diversion to storage of less than 100 AF. Due to the water quality prooblems discussed in Section 21. the Board will continue to reserve jurisdiction over all Term 80 permittees in the San Joaquin Basin."

- (c) Paragraph (5) of the Order portion of the decision shall be amended to read as follows:
 - "(5) Except for permits authorizing diversion in the San Joaquin Basin, Term 80 shall be deleted from all permits which authorize direct diversion of less than 1.0 cubic foot per second or diversion to storage of less than 100 acre-feet."
- (d) Paragraph (7) of the Order portion of the decision shall be amended to read as follows:
 - "(7) The following term (designated as Standard Water Right Permit Term 93) shall be added to all Term 80 permits which authorize diversion from the San Joaquin watershed upstream of Vernalis, except for permits for projects that do not alter the rate of quantity of flow entering the Delta:

'No diversion is authorized by this permit when (1) in order to maintain the water quality in the San Joaquin River at Vernalis at a level of 500 parts per million (ppm) Total Dissolved Solid (TDS), the Bureau of

Reclamation is releasing stored water from New Melones or is curtailing the collection of water to storage, or (2) during any time of low flows when TDS levels at Vernalis exceed 500 ppm. This restriction shall not apply when, in the judgment of the Board, curtailment of diversion under this permit will not be effective in lowering the TDS at Vernalis, or when in the absence of the permittee's diversion, hydraulic continuity would not exist between the permittee's point of diversion and Vernalis. The Board shall notify permittee at any time curtailment of diversion is required under this term. "

- (e) The following new Paragraphs 8 and 9 shall be added to the Order of the decision and the present Paragraphs 8 through 11 shall be renumbered accordingly.
 - "(8) Term 80 shall be deleted from the permits issued on Applications 25056, 26162, 26469 and 27302.
 - "(9) The following term shall be added to permits issued on Applications 25056, 26162, 26469 and 27302:

'This permit authorizes the use for hydroelectric power generation of water diverted under a permit or license issued pursuant to Application(s) . This permit does not authorize diversion of additional water to storage beyond the quantity which is diverted to storage under the permit or license issued on Application(s) .'"

(2) The Petition for Reconsideration of Decision 1594 by the U. S. Bureau of Reclamation is denied.

- (3) The Petition for Reconsideration of Decision 1594 by the Delta Water Users
 Association and South Delta Water Agency is denied.
- (4) The petition for Reconsideration of Decision 1594 filed by South Sutter Water District, Browns Valley Irrigation District, East Bay Municipal Utility District, Reclamation District No. 2068, 2047 Drain Water Users Association, Sacramento River Water Contractors Association, Yuba County Water Agency, Yolo County Flood Control and Water Conservation District, Natomas Central Mutual Water Company, Burtis Jansen, Gunnersfield Enterprises, Scheidel and Osterli Farming Company and Newhall Land and Farming Company is denied.

Dated: FEB 1 1984

CAROLE A. ONORATO, Chairwoman

WARREN D. NOTEWARE, Vice Chairman

ABSENT

KENNETH W. WILLIS, Member