

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of License 2685)
(Application 1224) of)
MERCED IRRIGATION DISTRICT.)
ORDER: WR 95-3
SOURCE: Merced River
COUNTY: Mariposa

ORDER CONDITIONALLY APPROVING PETITION
TO CHANGE WATER RIGHT LICENSE 2685 (APPLICATION 1224)

BY THE BOARD:

1.0 BACKGROUND

A petition to add a place of use under water right License 2685 having been filed by Merced Irrigation District (MID); protests having been received; a public hearing having been held on July 12, 1994 by the State Water Resources Control Board (SWRCB); the petitioner, protestants, and interested parties having appeared and presented evidence which has been duly considered; the SWRCB finds and concludes as follows:

2.0 SUBSTANCE OF THE PETITION

Water right License 2685 was issued to MID on August 11, 1944, confirming a right to: (a) directly divert 1,500 cubic-feet per second (cfs) from March 1 through October 31 (and as needed for domestic use throughout the remainder of the year) and (b) collect 266,400 acre-feet per annum (afa) in Lake McClure from October 1 of each year through July 1 of the following year for irrigation use. The place of use is within the boundaries of MID.

On April 6, 1992, MID filed a petition to add to License 2685: (a) the Mariposa Town Planning Area (MTPA) to the place of use; (b) a point of diversion on the Merced River approximately one mile downstream from Briceburg, located within the SE 1/4 of SE 1/4, Section 9, T4S, R18E, MDB&M; and (c) municipal use as a

purpose of use. The proposed point of diversion is located approximately 40 miles upstream from New Exchequer Dam (Lake McClure).

The Mariposa Public Utility District (MPUD) is the entity which will operate the proposed water supply project described in the petition. MPUD presently pumps water from ground water wells and has Licenses 7743 (Application 12714) and 10582 (Application 15701) for storage of 428 afa of water in Stockton Creek Reservoir for municipal use. License 7743 also grants year-round direct diversion of 0.54 cfs of water from Stockton Creek for municipal use. (STAFF 1: License 2685; 4/6/92 Petition) Domestic use is the primary use of the MPUD water system, and 99 percent of the connections is metered. Representatives for MPUD testified that its current water supplies are inadequate to meet the future needs of the MTPA, and previous attempts to expand its supplies have proven unsuccessful. (T, 48:21-51:6; 52:23-53:10)

The proposed project consists of a water intake barrier under the Merced River, a pumping plant, and a pipeline to carry the water to the MTPA. The water intake will consist of two 40-foot-long, 24-inch-diameter perforated pipes buried in the gravel bed of the river. The perforated pipes will connect to a 36-inch diameter pipe which will convey the water by gravity flow to the adjacent pump station. The pump station will be located underground and will have an initial pumping capacity of 5.3 cfs. The pump station will be constructed to allow for the installation of a third pump for an ultimate pumping capacity of 7 cfs. The water will be pumped from the Merced River through approximately eight miles of 12-inch-diameter pipe to MPUD's existing 10-inch-diameter raw water supply line at the Stockton Creek Reservoir. (T, 54:6-55:6)

3.0 PROTESTS

The petition was protested based on injury to vested rights by the U.S. Bureau of Reclamation (USBR), the Delta Water Users

Association (DWUA), and the James J. Stevinson Corporation (Stevinson). The California Department of Fish and Game (DFG) and the California Sportfishing Protection Alliance (CSPA) protested based on environmental considerations.¹

The USBR requested that standard SWRCB Term 93² be added to License 2685. Under certain conditions, Term 93 prohibits diversion of water when it would interfere with water quality objectives at Vernalis on the San Joaquin River. Representatives from USBR did not appear at the hearing to present evidence to support their protest.

Stevinson alleged that delivery of water to the proposed place of use could decrease the amount of water that would otherwise be available to satisfy Stevinson's claimed water rights. To resolve the protest, representatives from MID and Stevinson Corporation stipulated to a condition to be included in License 2685. This condition would maintain the relative priorities of each party's water rights as set forth in previous agreements between the parties and the December 1, 1943 Decision and Decree in *Stevinson Water District v. East Side Canal and Irrigation Company* (Case No. 13673, Merced County Superior Court). Stevinson has agreed to dismissal of its protest if the

¹ The National Marine Fisheries Service protested based on environmental considerations also, but the protest was withdrawn prior to the hearing.

² Standard Permit Term 93 provides as follows:

"No diversion is authorized by this permit under the following conditions: (1) when in order to maintain water quality in the San Joaquin River at Vernalis at a level of 500 parts per million (ppm) Total Dissolved Solids (TDS), the Bureau of Reclamation is releasing stored water from New Melones Reservoir 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. These restrictions shall not apply when, in the judgment of the State Water Resources Control 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."

condition is added to License 2685. (STAFF 1: Stipulation under cover letter to Division of Water Rights, dated July 7, 1994)

The DWUA protest, based on injury to prior rights, was submitted on behalf of four of its members--Lafayette Ranch, Alexander Hildebrand, Edwin E. Hageman, and I. N. Robinson, Jr. Protestants allege they are being injured by reduced water flows in the San Joaquin River. Protestants use water for crop irrigation, recreation, fishing, and aesthetic enjoyment. In addition to the riparian rights claimed by protestants, Hildebrand also holds Licenses 7143 (Application 17950) and 7144 (Application 19194). Protestants allege that at times of low flow, the source of irrigation water may become unfit due to (1) poor quality drainage water from upstream land and (2) saltwater intrusion from San Francisco Bay. Protestants further allege that poor water quality results in reduced crop yields and values, and increased leaching and pumping costs. Protestants allege that the proposed diversion could decrease the outflow from the Merced River to the San Joaquin River and the Delta, thereby further degrading the quality of the water reaching the protestants.

DFG's protest alleges the proposed project could adversely affect resident trout and other fisheries in the Merced River downstream of the diversion, the Chinook salmon run of the lower Merced River, and the habitat of state-listed threatened or endangered species. (STAFF 1: DFG protest dated July 6, 1992) The protest was resolved by negotiations between DFG and MID. Protest dismissal conditions include:

1. Limiting MTPA diversion to 7 cfs.
2. Requiring a bypass flow of 50 cfs below the point of diversion to MTPA.

3. Requiring protection of the Limestone salamander and any other federal-listed threatened or endangered species.³

In addition, DFG stated in its April 25, 1994 memorandum to the Division of Water Rights that it has concerns regarding the cumulative impacts of diversions from the Merced River on anadromous fisheries in the lower Merced River. (STAFF 1) During the hearing, negotiations were concluded, and agreement was reached regarding conditions for dismissal of DFG's protest. (T,25:22-28:16) The agreed upon conditions are adopted as stated at the end of this order.

The CSPA protest also alleged the proposed project would adversely impact fishery resources downstream from Lake McClure. Representatives from CSPA did not appear at the hearing to present evidence to support their protest.

4.0 ISSUES

MID has developed fully its appropriative water right under Application 1224 and has received a license which limits the quantity of water which can be diverted from the Merced River and put to beneficial use. MID cannot increase its use of water from the Merced River without exceeding its water rights under the license. The burden of proof is on MID to demonstrate that it will reduce water deliveries in its existing place of use so that it can serve the proposed added place of use without exceeding its water right under the license. MID must demonstrate also that the proposed diversion to MTPA will not injure downstream users and specifically that the proposed diversion will not reduce Merced River flows downstream from Lake McClure.

³ DFG concurred that mitigation discussed in the August 1990 Final Environmental Impact Report (EIR) for the Saxon Creek Water Project would be adequate to avoid stated impacts to the Limestone salamander.

4.1 Permanent Water Savings to Serve MTPA

A representative from MID testified that water savings have resulted from a change in crop patterns. Evidence was submitted which shows 31,100 afa water savings within MID's place of use due to a shift from plantings of rice and pasture to field crops. This savings was quantified by comparing the rate of Evapotranspiration of Applied Water (ETAW) for major crops. The evidence shows a downward trend in the total acreage of crops and total ETAW. There is a pronounced downward trend in planted rice acreage from a high in 1984 of 8,200 acres to a low in 1991 of 800 acres with small increases in 1988, 1992, and 1993. (MID 4; MID 5) A representative from MID testified that these changes in crop patterns are expected to be permanent because of increasing rice production costs and decreasing profits. (MID 6; MID 10,4; MID 11,2-5)

Although evidence tends to support MID's contention that the reduction in rice acreage is permanent, a condition is needed in the license to limit ETAW for the acreage identified as rice lands by MID. Such condition will ensure that water consumption does not increase in the future to the extent that MID is no longer able to supply water to the MTPA and remain within the limits of its licensed water right. Subtracting the amount of water needed to supply the MTPA (5,000 afa) from the highest amount of ETAW (42,900 afa in 1984 according to MID's records and calculations) provides a limit of 37,900 afa per calendar year ETAW for the acreage identified as rice lands by MID. (MID 3)

4.2 Alleged Injury to DWUA

DWUA's central concern is whether the proposed addition of the MTPA to MID's approved place of use will reduce the quantity of water leaving MID's authorized place of use and, therefore, reduce the flow entering the San Joaquin River. As discussed previously, evidence submitted at the hearing regarding water savings derived from shifting to crops with a lower water demand

indicates that approval of the petition will not result in MID exceeding its licensed amount.

Flows in the lower Merced River to its mouth at the San Joaquin River are chiefly regulated by releases from Lake McClure. Thus, the effect of the diversion to MTPA upstream from Lake McClure on releases from Lake McClure must also be examined.

MID makes bypasses and releases from Lake McClure to comply with Army Corps of Engineers' flood control requirements, FERC license requirements, the Davis-Grunsky contract with the State of California, and to satisfy senior water rights on the Merced River. However, with the exception of flood control releases, these releases are not controlled by the level of the lake.

(T, 74:2-25)

Inflow to Lake McClure is not directly measured by MID. Instead, average daily inflow over 24 hours is calculated from various factors, which include but are not limited to: (1) afterbay demand to the Merced River, (2) storage change in Lake McSwain to the nearest 0.01 foot of elevation change, (3) releases from Lake McClure, (4) storage change in Lake McClure to the nearest 0.01 foot of elevation, (5) estimated side inflow to both lakes, and (6) air temperature/evaporation rate.

The flood control releases are determined by lake levels on certain dates and are generally made in the spring. A reduction of 3,700 afa (the portion of the proposed 5,000 afa diversion that is diverted during the collection season under License 2685 of October 1 through July 1) upstream from the reservoir could result in 3,700 afa less being released from Lake McClure during times when these releases are being made or when the reservoir spills. According to permit and license reports submitted to

the Division of Water Rights, the reservoir spilled only once (in 1969) since the reservoir was enlarged in 1966.⁴ (Staff 1) The frequency of flood control releases is not in the record, but the impact of removal of 5,000 afa upstream of the reservoir would have a negligible effect on downstream users during the time such releases would be made. We reviewed streamflow data for the years 1941 through 1993, measured approximately 40 miles downstream from Lake McClure at the U.S. Geological Survey (U.S.G.S.) gage on the Merced River near the town of Stevinson. Average daily streamflow for the months of March, April, and May is 1,120 cfs. Seven cfs (the proposed diversion rate to MTPA) represents less than one percent of the flow during the time period flood control releases would be made. In addition, 5,000 afa diverted upstream from the reservoir on a year-round schedule for municipal use results in less water being withdrawn from storage during the dry months, as compared to the amount previously diverted under the license at the reservoir during a compressed diversion season for irrigation. This may result in more water being held in storage over the dry season which will then be available to meet downstream release requirements during the critical summer season.

4.2.1 Effect of Change on Season of Use

MID has relied on water savings from the reduction in rice acreage to provide the water needed for the proposed project; however, the demand for water for irrigation occurs in a different season than the demand for municipal use. Because municipal use is year-round, there will be an increase in direct diversion during the winter months of November, December, January, and February if the petition is approved. During these times, water which would have gone into storage for use during the next irrigation season (if not released for flood control)

⁴ The progress reports for 1974 and 1975 are not in the file; therefore, it has not been confirmed whether the reservoir spilled during those years.

will be diverted upstream for the proposed project. As discussed above, a representative from MID testified that the decrease in inflow to Lake McClure as a result of the proposed project will not have an effect on releases from the lake and, consequently, will not impact water users downstream from the lake.

(T,94:22-96:19)

4.2.2 *DWUA Request That Merced River be Declared Fully Appropriated*

At the hearing, DWUA requested that the entire Merced River system be declared fully appropriated except in some wet years. As discussed above, the proposed change is within the licensed amount of License 2685. Before a stream can be added to the Declaration of Fully Appropriated Streams, the SWRCB must comply with the procedures set forth in Water Code Section 1205, et seq. In addition, the hydrologic evidence presented during this hearing is insufficient to support such a decision.⁵

4.3 Season of Diversion Under License 2685

The direct diversion season under License 2685 is limited to 1,500 cfs from March 1 through October 31 for irrigation use and "throughout the remainder of the year as required for domestic purposes". Since the change in use from irrigation to municipal will result in a shift from water being stored to water being used directly, the license should be amended to reflect the change. Direct diversion in the amount of 7 cfs should be added for the period November 1 through February 28, since only incidental direct diversion for domestic use is currently authorized during that period. The amount authorized under the license for diversion to storage should be reduced by the equivalent of what is directly diverted to MTPA over that period of time up to 1,667 afa.

⁵ Regulations pertaining to addition of a stream to the Declaration of Fully Appropriated Streams are contained in Title 23, California Code of Regulations, Division 3, Chapter 2, Article 23, Section 872.

A combined maximum limitation for direct diversion and storage should be also be placed on License 2685. Based on the license inspection report dated May 8, 1944 for License 2685, the irrigation water demand is 345,440 afa under this license. Thus, a maximum limitation of 345,440 afa will be placed on the license to ensure that total diversions will not increase as a result of conversion from irrigation use to municipal use.

4.4 Public Trust Resources

DFG is conducting fishery studies on the Lower Merced River. (STAFF 1: DFG protest dated July 6, 1992) These studies may show that greater releases are needed from Lake McClure for the protection of fish. Standard SWRCB Term 12 providing for continuing SWRCB authority should be added to the license to allow for future review and action if necessary.

4.5 MID's Future Commitments to Supply Water

In addition to the proposed delivery to MTPA, MID also anticipates future deliveries of up to 20,000 afa to El Nido Irrigation District (ENID) and up to 15,000 afa to the Merced Wildlife Refuge. (T,63:10-16) MID has allegedly been conveying water to ENID since the 1930s via the El Nido Canal. MID and ENID have adopted a resolution to consolidate the two districts with MID being the surviving entity. MID has submitted to the Division of Water Rights a petition to add El Nido Irrigation District (approximately 9,400 acres) to its place of use. This petition has been protested, and a hearing will be scheduled upon completion of DFG fishery studies on the Lower Merced River. MID contends that a water savings analysis is not necessary for the ENID change petition because deliveries to ENID were accounted for when the license amounts were established for License 11395 (Application 16186). This issue will be considered at a future hearing. (STAFF 1: Letter, dated July 23, 1993 from MID to Division of Water Rights; T 79:18-80:1.) The proposed delivery to Merced Wildlife Refuge is required by MID's FERC license (Project No. 2179-California) and by a subsequent settlement

agreement between FERC, the United States Fish and Wildlife Service (USFWS) and MID. According to the requirement, MID must begin the delivery of up to 15,000 afa to the Merced National Wildlife Refuge by March 31, 1995. An order changing the water right license to add the Refuge to MID's place of use is required before deliveries can commence. A representative from MID testified it is waiting until negotiations regarding easements along the conveyance route are completed before filing its change petition. (T,75:17-76:3) MID did not testify how it will demonstrate water savings to cover delivery of 15,000 afa to the Merced Wildlife Refuge.

Although MID has focused on savings resulting from changes in crop patterns on lands historically planted in rice, it has also provided evidence of water savings for its entire service area. Testimony and exhibits support MID's claim that 31,100 afa has been saved due to changes in crop patterns throughout its district. (MID 4, MID 10:3-5) Thus, we find that there is currently sufficient savings from changes in crop patterns to allow MID to deliver water to MTPA without restricting MID's ability to serve water to the Merced Wildlife Refuge. Any other future increases in consumptive use may impair MID's ability to comply with its FERC license and must therefore be accompanied by corresponding reductions in other areas.

4.6 Inclusion of Standard SWRCB Terms 80 and 93

Standard SWRCB Permit Terms 80⁶ and 93 were developed as a result of water right hearings regarding permits within the Sacramento-San Joaquin Delta Watershed. These hearings resulted in issuance

⁶ Standard Permit Term 80 provides 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."

of SWRCB Decision 1594 in 1983. Since 1965, the SWRCB has reserved jurisdiction over water right permits issued within the Sacramento-San Joaquin Delta watershed due to incomplete information regarding water availability. Through use of Standard Water Right Permit Term 80, the SWRCB has reserved jurisdiction to change the season of diversion when water availability becomes known with greater certainty.

Term 93 was developed to protect the water quality in the San Joaquin River downstream from Vernalis from further degradation. The term prohibits diversion of water when the USBR is releasing water from New Melones Reservoir to meet water quality standards at Vernalis, or at any time water quality standards at Vernalis are not being met.

License 2685 has a priority date of March 26, 1919. Since Term 93 was developed as a result of hearings conducted in connection with approval of the USBR's New Melones Reservoir (a project with a lower priority), it is not appropriate to add Term 93 to License 2685. In addition, Term 93 states that the restrictions shall not apply when, in the judgment of the SWRCB, curtailment of diversion under a permit will not be effective in lowering the amount of TDS at Vernalis. As stated, the proposed project will not affect the releases from Lake McClure; therefore, the proposed project will not have any effect on the TDS levels at Vernalis.

Since Term 80 results from an SWRCB decision regarding projects with lower priorities than License 2685, Term 80 should not be included in this license. The SWRCB, however, can hold a hearing on its own motion should it need to evaluate the effects of MID's diversions on the Sacramento-San Joaquin Delta.

4.7 Effect of August 1990 County of Mariposa/Merced Irrigation District Contract

In March of 1960, Mariposa County and MID entered into an agreement entitled "Agreement Between Merced Irrigation District and the County of Mariposa for Settlement of Water Right Disputes" as a means to resolve the protest of the County of Mariposa against MID's Application 16186 (License 11395). The agreement reserved water for diversion from specific streams upstream from Lake McClure for beneficial use within Mariposa County. Terms taken from the agreement were included in License 11395.

MID testified during the hearing that because of the background of MID's development of its Merced River project and its prior water rights, a further agreement was necessary to provide for the proposed diversion for MTPA. The new agreement, dated August 14, 1990, states that the County of Mariposa will not exercise 42,000 afa of the 112,000 afa of its priority over License 11395, and in exchange MPUD may divert up to 5,000 afa at a rate not to exceed 7 cfs under MID's License 2685 subject to approval by the SWRCB. (T,17:22-20:18) This agreement is only binding upon the parties to the agreement. Neither the SWRCB or others who might be affected are bound by the agreement until MID petitions the SWRCB to amend License 11395 to conform to the 1990 agreement, and the SWRCB amends the license.

5.0 ENVIRONMENTAL AND PUBLIC TRUST REVIEW

5.1 Compliance with the California Environmental Quality Act (CEQA)

Mariposa County assumed the role of Lead Agency for the proposed project under CEQA. In August 1990, Mariposa County Water Agency prepared a Final EIR for the Saxon Creek Water Project (State Clearinghouse No. 89022707) which covers construction and operation of the proposed water diversion facilities and a pipeline to convey water from the Merced River to the MTPA. In January 1992, Mariposa County Prepared a Final EIR for the MTPA

Specific Plan (State Clearinghouse No. 90020361) which covers the designated place of use for the project. In May 1994, Mariposa County and the MPUD prepared a Final Supplemental EIR for the Saxon Creek Water Project (State Clearinghouse No. 89022707) which covers relocating the proposed water diversion intake facility from the south side of the Merced River to the north side. (STAFF 3)

The EIRs prepared for the project adequately describe the environmental and public trust relationships for the project, with the exception of potential cumulative impacts on the Chinook salmon fishery and other public trust resources in the lower Merced River below Lake McClure. These issues will be discussed in Section 5.2.

Five significant adverse environmental effects of the proposed project, related to water resources development, are disclosed in the 1990 Saxon Creek Water Project Draft and Final EIRs. These environmental impacts are analyzed below.

5.1.1 Impacts on Terrestrial Wildlife Habitat

The 1990 Final EIR for the Saxon Creek Water Project (1990 Final EIR) concludes that construction of the proposed seven-mile pipeline between the diversion point on the Merced River and the MTPA water service area would cause a significant impact on wildlife habitat by disturbing up to 36 acres of existing wildlife habitat along the pipeline route. The 1990 Final EIR proposes a mitigation measure involving dedication of a specific 45-acre parcel of land identified by Mariposa County, to be operated as a wildlife management area. (STAFF 3, 1990 Final EIR, pp. 5-7 to 5-8)

In a June 14, 1990 letter to Mariposa County commenting on the 1990 Saxon Creek Water Project Draft EIR (1990 Draft EIR), SWRCB staff requested development of a specific plan for managing this 45-acre parcel to ensure that adequate compensation for expected

loss of wildlife habitat along the pipeline route is accomplished. (STAFF 1) Mariposa County's response in the 1990 Final EIR acknowledged that a specific wildlife management plan for the parcel would need to be prepared. Further, Mariposa County stated that such a plan should be developed under a specific written agreement executed between the County and DFG. No indication was given as to when the agreement would be negotiated or when the plan would be developed and put into operation. (SWRCB 3, 1990 Final EIR, p. 4-3) A suitable wildlife management plan should be developed and put into operation prior to commencement of construction of the pipeline to ensure adequate mitigation. Accordingly, this order includes a condition requiring development of a wildlife management plan.

5.1.2 Impacts on Rare, Threatened, and Endangered Species

The 1990 Final EIR (p. 5-9) concludes that construction of the pipeline could cause a significant impact on the state-listed threatened limestone salamander (Hydromantes brunus). Mariposa County's response in the 1990 Final EIR (pp. 4-8 to 4-9) to DFG's comments on the 1990 Draft EIR provides greater detail on measures proposed to mitigate potential impacts of the project. The mitigation measures include the following:

1. Presence of a qualified biologist on the site during construction of the pipeline to rescue any salamanders unearthed by construction and relocate them to suitable undisturbed habitat elsewhere.
2. If any salamanders are encountered, preparation of a detailed report by the biologist describing the relocation process.
3. Following construction, restoration, and regrading of the project site to provide appropriate habitat for the salamander pursuant to a specific agreement to be executed between Mariposa County and DFG.

Consequently, the 1990 Final EIR concludes that the above-described measures should adequately mitigate potential impacts of the project on the limestone salamander. (STAFF 3, 1990 Final EIR, pp. 5-9 to 5-10) (STAFF 3) We find that the above-described measures are adequate.

5.1.3 Impacts on Biological Resources Due to Soil Erosion

The 1990 Final EIR concludes that soil disturbance accompanying construction of the pipeline may lead to soil erosion which could produce significant impacts on local terrestrial and aquatic biological resources. The possible impacts include uprooting of plants and flooding of animals due to uncontrolled stormwater runoff, and increased turbidity and sedimentation in Merced River, Saxon Creek, and Stockton Creek which could severely damage the aquatic biota. (STAFF 3, 1990 Final EIR, pp. 5-6 to 5-7 and 5-9)

The 1990 Final EIR proposes a number of temporary and permanent mitigation measures that would be accomplished through development and implementation of an effective erosion control plan. This plan would be developed under consultation with and approved by the USDA Soil Conservation Service and DFG. A mitigation monitoring program would be included in the plan to ensure that the specific mitigation measures are implemented effectively to achieve the desired results. In addition, to ensure protection of Merced River, Saxon Creek, and Stockton Creek during project construction and operation, appropriate Streambed Alteration Agreements would be obtained from DFG and implemented. (STAFF 3, Final EIR, pp. 5-6 to 5-8) We find that such an erosion control plan should be developed and implemented to ensure adequate mitigation. The plan should be completed prior to the commencement of pipeline construction. This order includes a condition requiring development and implementation of an erosion control plan.

5.1.4 *Impacts on Fish and Riparian Wildlife Habitat in Upper Merced River*

The 1990 Final EIR concludes that since the proposed project will divert up to 7 cfs from the Merced River, this diversion could potentially affect biological resources in the Merced River downstream of the point of diversion. The 1990 Draft EIR identified potential impacts on fish and associated riparian wildlife habitat only in the upper portion of Merced River between the proposed diversion point near Briceburg and Lake McClure.

In response to these potential impacts, the 1990 Final EIR proposes several mitigation measures presumed to provide protection for fish and wildlife habitat in the Merced River between the diversion point and Lake McClure. These measures include:

1. No pumping at the point of diversion when flow in the Merced River at the point of diversion is 50 cfs or less.
2. Designing a pumping regimen that would draw from the Merced River during periods of moderate to high flow (flow in excess of 50 cfs).
3. Designing the pipeline system to allow delivery and storage of water in MTPA's Stockton Creek reservoir to meet MTPA water demands during Merced River low flow periods when pumping from the river must be curtailed.
4. Requiring that MTPA develop a water conservation program for all new construction prior to operation of the project.
5. Requiring that a Streambed Alteration Agreement be obtained from DFG for Merced River prior to constructing the project. (STAFF 3, 1990 Final EIR, p. 5-8)

We find that these measures are sufficient to protect fish and wildlife habitat in the Merced River between the point of diversion and Lake McClure. These conditions also incorporate measures related to this issue which were agreed upon between MID and DFG to resolve DFG's protest. This order adopts conditions incorporating these provisions.

5.1.5 Impacts on Cultural Resources

The 1990 Final EIR concludes that construction of the pipeline and related facilities could cause a significant impact on identified cultural resources sites. Mitigation measures are proposed in the 1990 Final EIR to avoid impacts of the project on these cultural resources, including the presence of a qualified archeologist to oversee construction activities near the identified sites to ensure they are not disturbed. (Staff 3, 1990 Final EIR, pp. 5-19 to 5-20) These mitigation measures appear to be inadequate because they focus only on cultural resources identified on that portion of the pipeline route which traverses land owned by the U.S. Bureau of Land Management (BLM) and which has been previously surveyed by a BLM archeologist. Since the BLM archeological survey covered only about 25 percent of the pipeline route, about 75 percent of the pipeline route has not been subject to any type of field reconnaissance. Moreover, although the 1990 Draft EIR states that a records search of the California Archeological Inventory at Stanislaus State University was made on the portion of the pipeline route not on BLM land, such a record search only lists cultural resources identified on surveyed lands. Prior to construction, therefore, an on-site archeological survey should be conducted for that portion of the pipeline route which is not on BLM land, and suitable mitigation measures should be developed and implemented to ensure that construction of the pipeline, and associated developments such as access roads, does not significantly affect cultural resources. This order includes a condition to ensure such mitigation.

5.2 Impacts on Chinook Salmon and Other Public Trust Resources in Lower Merced River

The 1990 Draft EIR provides a general discussion of the Chinook salmon (Onchorhynchus tshawytscha) fishery in the lower Merced River below New Exchequer Dam (on Lake McSwain) and describes current flow releases MID is required to maintain at New Exchequer Dam for protection of downstream fish and wildlife resources in the Merced River. (Staff 3, Draft EIR, pp. 4.3-6) Neither the 1990 Draft EIR nor the 1990 Final EIR concludes that the proposed project would adversely affect the Chinook salmon fishery or other public trust resources in the lower Merced River, presumably because the currently required flow releases at New Exchequer Dam would not be diminished. In its June 29, 1990 comments on the Draft EIR, however, DFG made the following statement:

"The cumulative impacts of reduced flow in the Merced River on flows below New Exchequer Reservoir was not addressed in detail in the Draft EIR. We believe the flows below New Exchequer for chinook salmon spawning and outmigration are currently inadequate.

"We are working toward the goal of restoring salmon production in the Merced River. Further diversion of water upstream of New Exchequer will affect the availability of water for release below the reservoir. We, therefore, believe it is appropriate in project documentation to address in detail the cumulative effects of the project on downstream salmon resources."
(STAFF 3)

Mariposa County's response in the 1990 Final EIR to DFG's comments reiterated the current MID flow release requirements for New Exchequer Dam, mentioned that most of the project diversions would occur outside of the salmon-spawning period, and pointed out that the Merced River is only one of several tributaries contributing to water stored behind the dam. In view of these factors, the response concludes that the cumulative impact of this project on the salmon fishery is not considered significant. The issue raised by DFG regarding the adequacy of the current

flow release requirements at New Exchequer Dam was not addressed. (STAFF 3, 1990 final EIR, pp. 4-7 to 4-8)

Subsequent to the 1990 Final EIR, correspondence from DFG indicated its dissatisfaction with Mariposa County's conclusions. Consequently, DFG and MID have agreed to resolve this matter by asking the SWRCB to exercise continuing authority over MID's License 2685 to address, in a future public trust proceeding, impacts of MID's overall diversions under the license on anadromous fisheries and other public trust resources in the lower Merced River. We find that such an approach may lead to measures which mitigate potential cumulative impacts of the project on anadromous fish and other public trust resources in the lower Merced River.

6.0 CONCLUSIONS

1. Since MID will not be altering the releases made from Lake McClure in connection with the proposed project, no injury to downstream users will occur as a result of approval of the petition to add the MTPA to MID's place of use for License 2685. Whether water users upstream of the Delta have a responsibility to release or bypass water to meet water quality and flow requirements in the Bay-Delta Estuary involves broad questions regarding the availability of water in the San Joaquin River watershed for appropriation. The SWRCB is addressing these issues in the Bay-Delta water right proceedings which include the major entities who have an interest in water development in the area.
2. There are sufficient water savings from acreage converted from rice plantings to other crops to serve the MTPA. Because approval of this petition is based on an analysis of water availability to supply the estimated maximum demand at MTPA, a term should be added to License 2685 limiting the amount of water that can be delivered to the MTPA to 5,000 afa at a rate not to exceed 7 cfs. The change in use from

irrigation to municipal will result in a shift from water being stored to water being used directly. Direct diversion in the amount of 7 cfs should be added for the period November 1 through February 28, since only incidental direct diversion for domestic use is currently authorized during that period. The amount authorized under the license for diversion to storage should be reduced by the equivalent of what is directly diverted to MTPA over that period of time up to 1,667 afa. In order to ensure that MID does not exceed its historical diversions, a term should be added to limit total diversions under this License to 345,440 afa.

3. Since the analysis of water availability is based specifically on conversion of rice lands to other crops, a term should be added to License 2685 limiting the total ETAW on rice lands. If, in the future, licensee wishes to increase the ETAW on rice lands, licensee shall submit an alternate water savings analysis for the approval of the Chief of the Division of Water Rights demonstrating the availability of water to serve the MTPA.
4. We have reviewed the CEQA documents associated with this petition and conclude that the terms and conditions contained in this order will (a) fulfill our obligations as a Responsible Agency for the project under CEQA and Section 15096 of the CEQA Guidelines, (b) fulfill our obligations as a Public Trust Agency for the project under the Public Trust Doctrine and the California Water Code, and (c) satisfy the concerns of DFG.
5. In consideration of the fishery studies currently being conducted by DFG on the Lower Merced River, a condition will be adopted providing for continuing authority over License 2685 to allow for future review and action if necessary.

6. The addition of municipal use for the MTPA will require submittal of an Urban Water Management Plan in conformance with Section 10610, et seq. of the California Water Code.

ORDER

IT IS HEREBY ORDERED THAT the petition of Merced Irrigation District to change License 2685 by adding the Mariposa Town Planning Area to the place of use is approved, subject to the following terms and conditions:

1. In addition to the place of use authorized in License 2685 as set forth on August 11, 1944, the place of use shall include an area described as follows:

"... 1,900 acres known as the Mariposa Town Planning Area, located within portions of projected Sections 9, 10, 11, 14, 15, 16, 22, 23, 24, 25, 26, and 36, T5S, R18E, MDB&M, as shown on a map on file with the State Water Resources Control Board dated _____* and prepared in accordance with the specifications contained in Title 23, Cal. Code of Regs., Div. 3, Ch. 2, Art. 7 (commencing with Section 715)."

*Such map is required to be filed with the Chief of the Division of Water Rights within 60 days from the date of this order.

Delivery of water for municipal use is limited to the above-described acreage.

2. Municipal use is added to License 2685 but confined to the place of use described in Condition 1 above.
3. A point of diversion is added to License 2685 located at a point North 48°34'35" West 1,113 feet from SE Corner of Section 9, within the SE 1/4 of the SE 1/4 of Section 9, T4S, R18E, MDB&M.

4. Licensee shall divert no more than 5,000 afa of water at a rate not to exceed 7 cfs for use in the area described in Condition 1 as the Mariposa Town Planning Area.
5. In addition to the 1,500 cfs direct diversion from March 1 through October 31 of each year, 7 cfs direct diversion is approved from November 1 of each year to February 28 of the following year. Correspondingly, storage under this license is reduced in the amount diverted to Mariposa Town Planning Area up to 1,667 afa. Combined maximum direct diversion and storage under this license shall not exceed 345,440 afa.
6. Licensee shall not exceed a total evapotranspiration of applied water (ETAW) of 37,900 acre-feet per calendar year on rice lands which shall occur only within the 13,452 acres identified on the map entitled Merced Irrigation District Map of Rice Lands dated June 1994. ETAW shall be calculated using Table 25, Estimated Evapotranspiration of Applied Water for Principal Crops - San Joaquin Valley, of Department of Water Resources Bulletin No. 113-3, "Vegetative Water Use in California, 1974". Other methods for calculating ETAW may be used upon written approval of the Chief, Division of Water Rights. Licensee shall monitor and record the annual total ETAW of the rice lands. This information shall be submitted triennially to the Division of Water Rights with the Report of Licensee. If, in the future, licensee wishes to increase the ETAW on rice lands, licensee shall submit an alternate water savings analysis for the approval of the Chief of the Division of Water Rights demonstrating the availability of water to serve the Mariposa Town Planning Area.
7. For the protection of fish and wildlife habitat in Merced River between the point of diversion to Mariposa Town Planning Area and Lake McClure, Licensee shall, during the period from January 1 through December 31, bypass a minimum

of 50 cubic feet per second in the Merced River at the point of diversion for water intended for delivery to Mariposa Town Planning Area. The total streamflow shall be bypassed whenever it is equal to or less than 50 cfs.

8. No water shall be diverted under this License for delivery to the Mariposa Town Planning Area until Licensee has installed a device, satisfactory to the State Water Resources Control Board, which is capable of measuring the bypass flow required by conditions of this License. Said measuring device shall be properly maintained. Prior to beginning construction, Licensee shall submit for approval to the Chief, Division of Water Rights, a plan and program for measuring and reporting flow in the Merced River near Briceburg sufficient to document full compliance with the bypass flow requirements of this License. Following approval by the Chief, Division of Water Rights, Licensee shall implement the approved flow measurement and reporting program.

9. In accordance with Sections 1601, 1603, and/or Section 6100 of the Fish and Game Code, no work shall be started on the diversion works and delivery facilities to supply water to Mariposa Town Planning Area that may cross, pass near, or otherwise affect the Merced River, Saxon Creek, or Stockton Creek; and no water shall be diverted under this License for delivery to Mariposa Town Planning Area until Licensee has entered into a streambed alteration agreement with the California Department of Fish and Game for the affected watercourses and/or the Department has determined that measures to protect fishlife have been incorporated into the plans for such diversion works and delivery facilities. Construction, operation, and maintenance costs of any required facility are the responsibility of the Licensee.

10. Prior to commencement of construction of the Saxon Creek Water Project water supply pipeline between Merced River near Briceburg and the Mariposa Town Planning Area water service area, Licensee shall submit for approval to the Chief, Division of Water Rights, a wildlife management plan to ensure full mitigation and/or compensation for the significant impacts of pipeline construction on wildlife habitat identified in the 1990 Saxon Creek Water Project Environmental Impact Report. The plan shall be developed in consultation with the California Department of Fish and Game and shall include at least the following elements:

- a. Identification of the land parcel of 45 acres, or more, to be dedicated and operated as the wildlife management parcel.
- b. Description of specific wildlife habitat management goals and objectives to accomplish the required mitigation and/or compensation.
- c. Description of activities required to achieve the goals and objectives.
- d. Identification of a monitoring program to determine whether the goals and objectives have been achieved and if not, additional activities required.
- e. Identification of parties who will be responsible for paying for and/or carrying out the various activities.
- f. Estimated budget and time schedule for carrying out the plan.

Following approval by the Chief, Division of Water Rights, Licensee shall implement the approved mitigation plan.

11. Licensee shall, in consultation with the California Department of Fish and Game, design, construct and operate the Saxon Creek Water Project pipeline in a manner which will mitigate any significant adverse impacts on the limestone salamander (Hydromantes brunus) or its habitat by carrying out the specific mitigation measures identified in the 1990 Environmental Impact Report for the Saxon Creek Water Project prepared by Mariposa County.

12. Prior to commencement of construction of the Saxon Creek Water Project pipeline to deliver water from Merced River to the Mariposa Town Planning Area water service area, Licensee shall prepare and submit for approval to the Chief, Division of Water Rights, an erosion control plan to ensure that soil disturbance along the pipeline construction route will not lead to potentially significant erosion-related impacts to biological resources identified in the 1990 Saxon Creek Water Project Environmental Impact Report. The erosion control plan shall be prepared in consultation with and receive prior approval by the USDA Soil Conservation Service and the California Department of Fish and Game and shall include at least the following elements:
 - a. Identification of the specific erosion control goals and objectives to be accomplished.

 - b. Description of activities required to achieve the goals and objectives, including a revegetation plan, a regrading plan, installation of temporary and permanent erosion control structures, and measures to prevent increased discharges of sediment to Merced River, Saxon Creek or Stockton Creek.

 - c. Identification of a monitoring program to determine whether the goals and objectives have been achieved and if not, additional activities required.

- d. Identification of parties who will be responsible for paying for and/or carrying out the various activities.
- e. Estimated budget and time schedule for carrying out the plan.

Following approval by the Chief, Division of Water Rights, Licensee shall implement the approved erosion control plan.

13. Prior to commencement of construction of the Saxon Creek Water Project pipeline to deliver water from Merced River to the MTPA water service area, Licensee shall conduct an intensive cultural resources reconnaissance on all portions of the proposed pipeline route and any related developments, such as access roads, outside of the Bureau of Land Management holdings. The reconnaissance shall be conducted by a professional archeologist and shall include an on-foot survey of the proposed areas of disturbance and a comprehensive literature search covering the project area. The findings of the reconnaissance shall be documented in a formal written report to the Chief, Division of Water Rights, which includes recommended mitigation measures for any identified cultural resources. Provided there are no objections or modifications to the recommended mitigation measures submitted to the Chief, Division of Water Rights, within 30 days of receipt of the reconnaissance report, Licensee shall implement all of the recommended mitigation measures identified in the report.
14. Under this license no water shall be: (a) diverted at the point of diversion described in condition No. 3, or (b) delivered to the place of use described in Condition 1, until the Mariposa Public Utility District has:
(a) consulted with the Division of Water Rights and,
(b) submitted to the State Water Resources Control Board its

Urban Water Management Plan as prepared and adopted in conformance with Section 10610, et seq. of the California Water Code, supplemented by any additional information that may be required by the Board.

15. Pursuant to California Water Code Sections 100 and 275 and the common law public trust doctrine, all rights and privileges under this license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the SWRCB in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water. The SWRCB also has continuing authority to initiate actions to protect holders of paramount rights to the use of water affected by this license.

The continuing authority of the SWRCB may be exercised by imposing specific requirements over and above those contained in this license with a view to eliminating waste of water and to meeting the reasonable water requirements of licensee without unreasonable draft on the source. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the SWRCB also may be exercised by imposing further limitation on the diversion and use of water by the licensee in order to protect public trust uses or to protect holders of paramount rights to the use of water. No action will be taken pursuant to this paragraph unless the SWRCB

License intended to alter the relative priorities of MID's
and Stevinson's vested water rights. (STAFF 1)

CERTIFICATION

The undersigned, Administrative Assistant to the State Board,
does hereby certify that the foregoing is a full, true, and
correct copy of an order duly and regularly adopted at a meeting
of the State Water Resources Control Board held on February 16,
1995.

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

NO: None

ABSENT: None

ABSTAIN: None


Maureen Marché
Administrative Assistant to the Board