

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of Licensed	)	ORDER:	WR 93-2
Application 16186	)		
(License 11395) of	)	SOURCE:	Merced River
	)		
<u>MERCED IRRIGATION DISTRICT.</u>	)	COUNTIES:	Mariposa and
	)		Tuolumne

ORDER CONDITIONALLY APPROVING PETITION  
TO CHANGE LICENSE 11395 (APPLICATION 16186)

BY THE BOARD:

**1.0 INTRODUCTION**

A petition to change License 11395 having been filed by Merced Irrigation District (MID) to add a place of use; protests having been received; a public hearing having been held on November 15, 1989; the hearing record having been reopened on March 27, 1991 and further evidence having been received; draft orders on this petition having been discussed at meetings of the State Water Resources Control Board (State Water Board) on December 12, 1991, May 18, 1992, and July 16, 1992; a further hearing having been held on October 22, 1992 after a pre-hearing conference; the State Water Board having considered all the evidence in the record pertaining to this petition; the State Water Board finds and concludes as follows:

**BACKGROUND**

The MID change petition is one of many water right applications or petitions on the San Joaquin River or its tributaries which have been protested by the Delta Water Users Association. The protestants, who have joined in a single protest, include the Delta Water Users Association; South Delta Water Agency; Lafayette Ranch, a California Corporation; Alexander Hildebrand; Edwin E. Hagemann; and I. N. Robinson, Jr. Collectively, they are referred to herein as "Association". In Order No. WR 89-8, the State Water Board decided to accept the Association's protests against the applications and petitions in the San Joaquin River watershed, subject to the Association's meeting the protest requirements in the State Water Board's regulations. The State Water Board decided to group the cases for hearing, to the extent feasible, because the bases for the Association's protests are essentially identical. The MID petition was heard concurrently with Application 29047 of John and Mayla Clark. Because considerable controversy developed concerning the MID petition, the State Water Board adopted a separate decision approving Application 29047 on June 3, 1992. This order addresses only the MID petition.

The record was reopened in March 1991 to receive additional evidence regarding ground water wells within MID's service area which provide municipal and industrial water supply. The State Water Board staff offered five additional exhibits, and additional exhibits were also received from MID and Association. The record was closed on June 17, 1991. A draft decision was discussed at a State Water Board meeting on December 12, 1991, and comments were received on that date and subsequently from MID, the La Ventana Land and Cattle Company, and the Delta Water Users Association. The State Water Board discussed a second draft, denying the MID petition, at its meeting on May 18, 1992, and discussed a third draft denying the MID petition at its meeting on July 16, 1992. On July 16, 1992, the State Water Board gave MID a further extension of time to offer proof that it has water available for the La Ventana Project. In order to afford an opportunity for cross-examination and rebuttal of the new evidence, the State Water Board held a further hearing on October 22, 1992.

### **3.0 SUBSTANCE OF THE PETITION**

MID holds water right License 11395 (Application 16186). The license was issued August 15, 1983, confirming a right to collect 605,000 acre-feet per annum (afa) to storage in Lake McClure and Lake McSwain

from October 1 of each year to July 1 of the succeeding year. The license authorizes a maximum withdrawal from Lake McClure and Lake McSwain of 516,110 afa for beneficial use, in combination with the withdrawals under Licenses 2684 and 2685. The license requires MID to maintain gaging stations and furnish to the State Water Board flow records necessary to determine the quantity of water diverted or rediverted for beneficial use.

MID filed two petitions to change the license. By letter dated October 17, 1989, MID withdrew the first petition, which had been filed June 10, 1987 on behalf of a use proposed by Goldenbell Mining Corporation. MID filed the second petition on June 17, 1988. The second petition, which was considered in the hearing held November 15, 1989, would increase the place of use by 2010 acres, for use by a residential development proposed by the La Ventana Land and Cattle Company called the South Shore Club. The South Shore Club would receive water service from the Lake Don Pedro Community Services District, which obtains water from Lake McClure under a contract with MID.

#### **4.0**

#### **PROTESTS**

One protest, by the Association, was filed against MID's change petition.

The Association protested on behalf of four of its members--Lafayette Ranch, Alexander Hildebrand, Edwin E. Hagemann and I. N. Robinson, Jr.--and South Delta Water Agency. Association claims on behalf of its members riparian and appropriative rights in the Delta and in the lower San Joaquin River for irrigation use. Association also claims that its members use San Joaquin River water for recreation, navigation, fishing, and aesthetic enjoyment.

Association alleges that its members are being injured by reduced water flows in the San Joaquin River, and that the proposed appropriation will further injure its members by further reducing the flows.<sup>1</sup> Association alleges that low flows cause stagnation, shallow water depth, and poor water quality. Association explains that at times of low flow, the water in the San Joaquin River may become unfit for irrigation because of (1) salt-laden drainage water from upstream lands, which accumulates when there is no net downstream flow through the Delta, and (2) incursion of salt water from San Francisco Bay. Use of water with a high concentration of salt results in reduced crop yields

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*1 Association provided minimal evidence intended to show that approximately all of the annual unimpaired flow of the San Joaquin watershed is consumed under current water rights. Association did not support its assertion by studies offered in evidence or by detailed calculations showing how the evidence was derived. Consequently, we are unable to confirm its accuracy.*

and increases in leaching and pumping costs to rid the land of excess salts.

Because of the water quality and supply effects of stagnation or reverse flows on Association's members, Association urges that whenever the downstream flow at Vernalis on the San Joaquin River does not exceed the channel depletions in the southern Delta, no further diversions for consumptive use should be authorized. Association alleges that the standard permit terms routinely applied to new permits in the San Joaquin River watershed are not adequate to protect water users in the southern Delta and in the lower San Joaquin River. Association argues that these terms allow diversion by upstream appropriators when there is no net downstream flow in the channels of the southern Delta and there is either surface or subsurface hydraulic continuity between the point of diversion and the southern Delta.

Association's attorney stated in his letter dated June 15, 1989 that Association

"... would withdraw its Protest on the condition that no diversions be allowed when the USBR is making any New Melones Vernalis water quality or flow releases and no diversions be allowed when a 14-day running average at Mossdale on the San Joaquin of 0.7 mean daily EC [electrical conductivity] during April

through August or 1.0 mean daily EC during September through March is exceeded, provided that an adequate system of measurement and enforcement for these terms is established and utilized."

The permit term Association requests would set a standard for salinity in the southern Delta which differs from the standard the State Water Board adopted on May 1, 1991 after receiving extensive evidence in the Bay-Delta Proceedings. It also would establish a monitoring requirement at a new location in the southern Delta. The State Water Board has considered the salinity levels, length of the period for averaging the salinity levels, and monitoring and reporting requirements for the southern Delta, in the Bay-Delta Proceedings. The State Water Board soon will implement the water quality standards in the water right phase of the Bay-Delta Proceedings. The proceeding herein includes only MID. Other water users have information and insights not available in this proceeding, which may affect the reasonableness of the standard proposed by the Association. The standard permit terms and conditions which currently protect water users such as Association's members were developed in a broad proceeding with notice to all parties who might be affected. The wording of those terms and conditions resulted from a complex balancing of diverse interests. Because our adoption of the requested term could

potentially affect many of the same water users, who are not participating in this proceeding, we want to consider the term in a broader proceeding, such as the Bay-Delta Proceedings, before adding it to the permits or licenses of individual water right holders in narrowly noticed cases. Therefore, we will reserve jurisdiction and retain continuing authority to conform License 11395 to future State Water Board findings concerning the availability of water and the protection of beneficial uses of water in the Sacramento-San Joaquin Delta and San Francisco Bay.

**5.0 MERCED IRRIGATION DISTRICT CHANGE PETITION**

The central issue in deciding whether to approve MID's change petition is whether the change will operate to the injury of any legal user of the water involved. Water Code Section 1702.

**5.1 Burden of Proof**

Under Section 1702, the burden of proving that the change will not operate to the injury of any legal user of the water involved, is on the petitioner.<sup>2</sup> In this case, Association's members could be adversely affected by a decrease in the amount of water flowing downstream

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<sup>2</sup> Because MID is requesting a change in a license (the license represents the fact that MID has reached the maximum diversion and beneficial use within its authorized right), MID cannot increase the diversion and beneficial use of water over and above the licensed amount.



in the San Joaquin River toward the southern Delta. Such a decrease could result if the proposed change causes a net increase in the diversion and beneficial use of water, either under MID's license alone or in combination with other diversions of water that affect the amount of downstream flow. To show that it would not increase its use of water, MID had the responsibility to provide evidence from which we could conclude that the downstream flow below Lake McClure would not be reduced by this diversion. MID sought to meet its burden by showing that reductions in use in the existing service area will offset the increase in use in the proposed additional place of use.

In 1992, the State Water Board determined a second hearing was necessary to receive further evidence on the following issue:

Can Merced Irrigation District identify sufficient water savings from its operations to satisfy the consumptive water needs of the proposed South Shore Club without exceeding its water right or injuring any legal user of water?

This issue narrowly addresses a gap in the evidence provided by MID to establish that the change will not operate to the injury of Association's members. MID had argued that it had reduced its water use since it received its license, and that it had enough water

savings so that it could serve the proposed South Shore Club without reducing the downstream flow to Association's members. However, MID had not adequately documented the water savings, nor had it demonstrated that the savings were permanent. The hearing held on October 22, 1992, gave MID a final opportunity to meet its burden of proof.

In a brief filed after the October 22, 1992 hearing, the Association argued that: (1) injury should not be measured from the amount of water authorized for MID's use in the license, but rather should be measured compared with current use by MID; (2) water use by the South Shore Club will increase the injury to Association's members compared with agricultural use, because residential use consumes more of the water; (3) MID has not established the necessary water savings to supply the needs of the development.

With regard to the first argument of Association, it should be noted that if MID's water use has been less than the licensed amount recently, Association's position means that MID cannot use all of its rights in the future. This is an incorrect interpretation of the law. MID has a water right license which establishes its vested right to divert for use up to 605,000 acre-feet of water per year, to withdraw from storage in any one year up to 516,110 acre-feet per year, and to hold

in storage up to 1,034,330 acre-feet. The license also specifies the authorized places of use and purposes of use of the appropriated water. Under the license, MID's water use can fluctuate so long as it stays within the terms and conditions of the license and MID does not forfeit any part of its right.

Further, the fact that MID has filed a petition to add a place of use should not in itself expose MID to a reduction in its vested water rights. The purpose of this order is to determine whether approving the petition would itself cause an injury to the downstream users, not to redress alleged existing streamflow depletions that may be impairing Association's members' rights.

The evidence regarding the effect of water use by the South Shore Club and regarding MID's water savings is discussed below.

As the protestant, Association must establish that it is a legal user of the water or its members are legal users. Association met this burden by showing that the individuals and corporation who joined in the protest have water rights for use on lands downstream from MID.

Statutory Protection for the Lower San Joaquin River  
and the Delta

Association in its protest argues that approval of this application would violate the Delta Protection Act (Water Code Section 12200 et seq.) and the San Joaquin River Act (Water Code Section 12230 et seq.). In Order No. WR 89-8, we discussed the effect of the Delta Protection Act on applications to divert and use water within the watershed upstream of the Delta, and concluded that it does not preclude reasonable new development of water uses in the areas of origin. See Order No. WR 89-8, pages 28-29 and 34-35. As we previously explained, the Delta Protection Act applies to the effects of diversion and export of water from the Delta by the State Water Project and the Central Valley Project. It makes Delta protection subject to the two projects' satisfaction of the reasonable and beneficial uses of the areas of origin, under Water Code Sections 10505 and 11460-11463. Thus, the purpose of the Act is to protect the Delta from export effects, not to restrain upstream development.

In Order No. WR 89-8, we briefly discussed the San Joaquin River Act. We decided to address the issue of compliance with the Act as an issue for each of the evidentiary hearings to be held on the individual protested applications and petitions. The Act forbids state agencies, including the State Water Board, to do

anything in connection with their responsibilities to cause further significant degradation of the quality of water in the reach of the San Joaquin River between the Merced River and the Middle River. It also declares as state policy that no person, corporation, or public or private agency of the State or the United States should divert water from the San Joaquin River and its tributaries to which the users along the protected reach are entitled. The declaration of state policy reiterates the fundamental water right principle that nobody may take water to which someone else is entitled. A standard permit term will be included in the permit issued on this application to protect prior water rights.

The prohibition in Water Code Section 12230 et seq. against causing further significant degradation is unique to this reach of the San Joaquin River.

### 5.3

#### Protest Dismissal Term

Association has suggested a permit term that would, if included, satisfy its concerns regarding salinity levels. The suggested term is quoted and discussed in Part 4.1, above. The Bay-Delta Proceedings are addressing the interests the requested term would affect, as well as other issues important to the estuary. While the Bay-Delta Proceedings are lengthy

and complicated, they are designed to reach an overall determination on the issues affecting the estuary, including the southern Delta. The proceeding herein, on the other hand, is not as broad as we would prefer to have before adopting a term such as Association requests. We will reserve jurisdiction over License 11395, to conform it to our future determinations in the Bay-Delta Proceedings. Also, we will reserve jurisdiction under Standard Permit Term 80 to revise the season and amount of diversion to conform to our findings in the Bay-Delta Proceedings. In accordance with Water Right Decision 1594, we will also include standard terms 90, 91<sup>3</sup>

3 *Standard Permit Term 91 provides 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 all rights to divert water from streams tributary to the Sacramento-San Joaquin Delta or the Delta for use within the respective basins of origin or the Legal Delta, unavoidable natural requirements for riparian habitat and conveyance losses, and flows required by the State Water Resources Control Board for maintenance of water quality and fish and wildlife. Export diversions and Project carriage water are specifically excluded from the definition of inbasin entitlements.*

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

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

and 93<sup>4</sup> in the permit, to restrict the season of diversion in accordance with Water Right Decision 1594. The State Water Board routinely adds these standard terms to every applicable permit or license when approving a change petition; only exceptions authorized by Water Right Decision 1594 are allowed.

5.4 Alleged Injury to Association

Association asserts that its members will be injured if the change is approved, because Association predicts there will be a reduction in downstream flow.

Association alleges that a reduction in downstream flow will reduce the water supply in the southern Delta from the San Joaquin River, cause more frequent stagnation, and cause a buildup of salts in standing water.

Association also alleges it will cause significant degradation of the water quality in the San Joaquin River in the reach protected by the San Joaquin River

4 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 then 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 the permittee at any time curtailment of diversion is required under this term."

Protection Act and will increase the amount of water put to beneficial use under License 11395.

Because MID already has fully developed its appropriate water right and has received a license evidencing its right, MID cannot increase its use of water without exceeding its water right. The license limits the quantity of its diversion and beneficial use of water. Therefore, we sought evidence to show where MID is giving up water delivery so that it can serve the new place of use without exceeding its water right.

We also sought evidence whether a reduction in downstream flows would in fact injure Association's members. If there is enough water for ground water users, the proposed new place of use, MID's current uses, and maintenance of existing supplies for Association's members, or if a reduction in flow does not cause a significant increase in southern Delta salinity, there will be no injury to Association as a result of approving this petition.

5.4.1 Effect of Change on Southern Delta Salinity

Association's Exhibit 25 shows the effect of different upstream diversion rates on the level of total dissolved solids at Vernalis. The plotted diversion rates in Exhibit 25 are many times higher than the rate of diversion to the new place of use. An extrapolation



from Association's estimate shows that at an additional maximum calculated diversion rate of 122 acre-feet per month, the increase in total dissolved solids concentration would be 2.48 milligrams per liter. Thus, the maximum incremental increase in salinity in the southern Delta will be small, but could be cumulatively considerable in conjunction with other diversions.

5.4.2 Permanent Water Savings to Supply South Shore Club

MID alleges that approval of the petition will not result in a decrease in flow in the San Joaquin River because releases of water from Lake McClure will not decrease as a result of approving the petition. MID produced evidence that it is diverting and using less surface water from the Merced River as farmland around Merced in its current place of use is converted to housing. The new housing uses ground water, not surface water supplies. La Ventana and MID argue that the net result of using water in the new place of use would be either no change in downstream flows or an increase in downstream flows as the area converts from farmland to housing.

Association responded that extraction of ground water may decrease accretions to the river or increase the amount of river water percolating into the ground, so

that the net amount of downstream flow would decrease with the proposed change in place of use.

The Merced and San Joaquin Rivers are hydraulically connected with the underlying ground water bodies. Therefore, relying on ground water to replace surface water no longer available for agricultural use could result in stream depletion or a reduction in irrigation return flow to the rivers resulting in injury to downstream parties. Although the demand for irrigation water from MID has decreased on parcels annexed by the City of Merced, those parcels now receive ground water pumped from City-owned wells. MID did not provide evidence at the 1989 hearing that consumptive use of City-pumped ground water on the annexed parcels was significantly lower than the historic agricultural use of MID's water.

If conversion of farmland to residential use has resulted in a net decrease in water use in MID's service area equal to or greater than the amount to be diverted to the South Shore Club development, then diversion of surface water to the development will not result in compensatory ground water pumping. To insure that downstream users are not injured by increased ground water pumping resulting from the proposed change, the State Water Board asked MID to demonstrate a permanent reduction in consumptive water use within

the district at least equal to the estimated consumptive use at the South Shore Club. At the supplemental hearing on October 22, 1992, MID presented evidence that the conversion of land annexed by the City of Merced from agricultural use to urban use has resulted in a water savings exceeding the amount requested for the South Shore Club.

Since 1983, 1006 acres of agricultural land has been annexed by the City of Merced. (MID received License 11395 in 1983.) The entire 1006 acres has been rezoned by the City of Merced to urban uses. Of the 1006-acre total, 342.6 acres have been built upon at this time. (MID,J,p.1.)

MID testified that "it would be currently unlawful for any party, except to complete a crop, to attempt to provide for irrigation or agricultural uses upon any of the vacant land". (MID,J,p.2.) In 1991, only 22.2 acres of the undeveloped annexed land received irrigation water from MID. (MID,4A.) The undeveloped acreage in the annexed land is zoned identically to the already developed acreage. A more water-intensive use is not likely to occur on the undeveloped land. Therefore, the change in the duty of water on the annexed land is effectively permanent.

All of the annexed land that was once irrigated is included in the water savings analysis, regardless whether full municipal development has occurred. MID testified that 753.7 acres of the 1006-acre total had been irrigated regularly from 1973 to 1979. Therefore, the water savings from conversion of agricultural land to urban use is the difference between agricultural consumptive use on 753.7 acres and urban consumptive use on 1006 acres. MID calculated the consumptive use by the South Shore Club to be 772 acre-feet per year. (T,79:5-8.) (MID,H.) To support a finding that water is available to serve the Development, the difference between agricultural consumptive use and urban consumptive use must equal or exceed 772 acre-feet per year.

Urban consumptive use in the 342.6 acres of developed land is approximately 1.3 to 1.5 acre-feet per acre. (MID,6A.) At 1.5 acre-feet per acre, the eventual urban consumptive use in the total 1006 acres that was annexed to the City of Merced is 1509.0 acre-feet.<sup>5</sup>

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*5 Association argues that the urban consumptive use in the City of Merced is actually 2.23 acre-feet per acre rather than 1.5 acre-feet per acre. Association's estimate for urban consumptive use is too high because streets and sidewalks, on which no consumptive water use occurs, cover about one third of each acre.*

*Using Association's approach, corrected for the area in streets and sidewalks, the total urban consumptive use would be 1.6 acre-feet per acre. Using 1.6 acre-feet per acre in the consumptive use calculation, the eventual urban consumptive use would be 1609.6 acre-feet per annum.*

This analysis assumes that water used inside the home is not consumed. This water goes into the sewer system where it is treated and reused outside of the MID service area. The treated wastewater is used for agricultural irrigation and to sustain a wetland preserve also located outside of the MID service area. (T,48:25-50:5.) MID testified that much of the water applied to the wetland percolates to the underlying ground water basin. (T,50:6-16.)

The maximum diversion allowed by MID's license is based on MID's diversion in 1977-78, the maximum use is based on MID's total withdrawal from storage for consumptive use in 1969-70. MID presented evidence showing agricultural uses on the annexed parcels in 1973. The 1973 level of agricultural production on the annexed land was sustained until at least 1979, based on aerial photos from 1973 and 1979. (MID,K,p.3.) This represents a long-term permanent agricultural water use on the annexed parcels, after MID's year of highest water use. Because this level of use appears to have been stable, the State Water Board analyzed the change in water use by using the 1973 level of agricultural production on the annexed lands to determine the pre-annexation water use on these lands. As shown in

Table 1, the total agricultural consumptive use on the annexed land in 1973 was about 2870 acre-feet.<sup>6</sup>

The State Water Board analyzed the agricultural consumptive use before annexation using the information in MID Exhibits 1A and 5A. Exhibit 1A lists the number of acres irrigated and the crop grown for each annexed parcel for the year 1973. Three of the annexed parcels had two types of crops. Therefore, the number of acres planted in each crop was calculated.

TABLE 1.

Crop type, ETAW\*, acres planted and consumptive use for the annexations

ANNEXATION NO.	CROP TYPE	ETAW (in afa)	ACRES PLANTED	CONSUMPTIVE USE (in afa)
155	almonds	3.43	10.7	36.7
155	alfalfa	4.03	4.8	19.3
158	pasture	3.85	95.0	365.8
161	pasture	3.85	55.6	214.1
162	pasture	3.85	2.0	7.7
163	pasture	3.85	1.0	3.9
164	almonds	3.43	64.2	220.2
164	pasture	3.85	4.0	15.4
165	pasture	3.85	10.3	39.7
166	almonds	3.43	2.7	9.3
166	pasture	3.85	18.0	69.3
168	pasture	3.85	8.4	32.3
169	pasture	3.85	17.2	66.2
170	pasture	3.85	57.9	222.9
172	pasture	3.85	83.3	320.7
173	pasture	3.85	282.8	1088.8
174	pasture	3.85	25.3	97.4
175	pasture	3.85	10.5	40.4
TOTAL:				2870.1

<sup>6</sup> By 1983, the area of the annexed land under agricultural production had declined by approximately 50 percent; this may have been a response to impending annexation or other factors. (MID Exhibit 2A.)

\* ETAW means evapotranspiration of applied water.

Subtracting the urban consumptive use value of 1509 acre-feet from the agricultural consumptive use value of 2870 results in a water savings of 1361 acre-feet per year. The projected consumptive use by the South Shore Club is 772 acre-feet per year, approximately 57 percent of the demonstrated water savings.

Therefore, MID has shown that water can be served to the subdivision using savings from conversion of agricultural land to urban uses.

This analysis of the water savings for the permanently converted agricultural land in the annexed area compared to the water needed to serve the South Shore Club is based on consumptive use within both areas, and therefore ensures there will be a valid exchange of water savings for added use.

#### 5.4.3 Effect of Changes in Water Use Outside the Annexed Area

Association argues that MID's Reports of Licensee show that overall irrigated acreage has increased by about 3800 acres from 1983 to 1988, using up any savings in the annexed area. However, Reports of Permittee and Reports of Licensee (STAFF,1) filed by MID from 1970 through 1988 show an overall trend of decreasing acreage under irrigation with irrigated acreage a maximum 119,537 acres in 1973 and a minimum 90,244 acres in 1986. (Table 2.)

TABLE 2.

## Irrigated Acreage in the Merced Irrigation District

<u>YEAR</u>	<u>ACREAGE</u>	<u>YEAR</u>	<u>ACREAGE</u>
1970	114,299	1980	102,524
1971	115,849	1981	101,906
1972	115,894	1982	no data
1973	119,537	1983	93,854
1974	no data	1984	96,360
1975	no data	1985	95,316
1976	118,730	1986	90,244
1977	108,097	1987	92,850
1978	100,298	1988	96,028
1979	105,134		

Association further argues that DWUA Exhibits 16, 18, and 19, show a trend of increasing use by MID.

Exhibit 16 shows the annual withdrawals from storage by MID from 1922 to 1988. MID's withdrawals generally have been stable or decreasing since 1977-78, the year that MID reported maximum diversion to storage for licensing purposes. MID's use under licensed Application 16186 peaked in 1969-70, when MID withdrew 516,010 acre-feet from storage. Since 1969-70, MID's use under this right has been stable or declining, with a long-term reduction in acreage irrigated using surface water. This stabilization is the normal trend associated with the initiation and perfection of a water right. The exception to this trend is the year 1984 in which MID reported a higher withdrawal. Without more information, it is unclear whether MID's 1984 withdrawal represents increased releases for flood control and fisheries or a higher water use.



Association infers based on DWUA Exhibits 18 and 19 that water use within the MID service area is increasing. These exhibits show that from 1960 to 1988, diversions have exceeded unimpaired runoff in the Merced River Basin in 8 different years. These exhibits do not separate MID's use from other users in the Merced River Basin. MID's Reports of Licensee and Reports of Permittee show that irrigated acreage within the service area has generally decreased since 1970, and that except in 1984 withdrawals of surface water have stabilized since MID requested a license in 1980. DWUA Exhibits 18 and 19 indicate that in some years the water resources of the Merced River Basin may be overallocated. In these years, MID's water right may not be as large as its licensed amount, since the rights of riparians and senior appropriators must be satisfied before MID's.

5.4.4 Use of Water in the City of Merced

Because MID may in the future wish to serve water to the City of Merced under License 11395, the State Water Board will not require MID to exclude the City of Merced from its place of use to further ensure that the overall water use in MID's service area does not increase. Before MID can serve water to the City of Merced to replace contaminated ground water, MID must

receive State Water Board approval of a petition to add municipal and industrial use as approved purposes of use in License 11395. Availability of water for the proposed added place of use is based on MID not serving surface water to the City of Merced (City of Merced uses ground water).<sup>7</sup>

#### 5.4.5 Water Conservation

Because continued water conservation appears critical to ensuring that water is made available to South Shore Club without injuring other legal users of the water, we will add a term to MID's license requiring that no water be delivered for municipal or industrial use unless the recipient municipality or district has in place a mandatory water conservation ordinance or other enforceable requirement that requires all water users to implement certain water conservation measures, both indoors and in landscaping. The ordinances or requirements must comply with the requirements of the Water Conservation in Landscaping Act set forth in Government Code Section 65591 et seq. for landscaping, and with the Best Management Practices contained in the Memorandum of Understanding Regarding Urban Water Conservation in

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<sup>7</sup> In the event that MID receives State Water Board authorization in the future to serve water for municipal and industrial purposes, we will require MID to demonstrate, by way of operational plans and annual reports, that the net diversion and use of water within its service area does not increase.

California, dated September 1991, for indoor water uses. We will require MID to submit such ordinances or requirements to the Chief of the Division of Water Rights before commencing delivery of water for any municipal or industrial use, or delivering water to the South Shore Club.

This approval is based on water being permanently available, based on the estimated maximum water demand of 772 afa at South Shore Club. A term should be added to License 11395 limiting the amount of water to be delivered to South Shore Club to 772 afa. The estimated maximum annual water demand of 772 acre-feet was calculated with the assumption that 100 acres of the golf course at full buildout will be irrigated with treated wastewater. A limit on the amount of water to be delivered to the development will obviate any need for a term requiring the use of treated wastewater at the golf course, since MID water for this use is not included in the 772 acre-feet estimate. If for any reason water demand increased at the added place of use, MID would have to petition the State Water Board to increase the amount that can be delivered to South Shore Club in License 11395. MID would then be required to show that the additional water is available without injury to other legal users of water, and the Association would have the opportunity to protest the petition.

5.4.6 Continuing Authority

We will retain continuing authority over this license to amend it to ensure that no injury results to other users of water because of approval of this petition. With the terms and conditions discussed above, we believe that there will be no injury to Association's members or other legal users of water as a result of approving the requested change. We will not adopt the special condition Association requests or a similar condition in this decision because we believe that such a condition should be considered in a broader proceeding, with an opportunity for all of the affected water right holders to participate.

6.0 **ENVIRONMENTAL CONSIDERATIONS**

6.1 Compliance with CEQA

Tuolumne and Mariposa Counties have jointly prepared a final Environmental Impact Report (EIR) in accordance with the California Environmental Quality Act (CEQA) for the South Shore Club development proposed by La Ventana Land and Cattle Company. The EIR was certified by both counties as adequate in 1987.

Thereafter, both counties altered the project by imposing specific mitigation measures on the project as conditions upon approval, and approved it. Both counties concluded that, with the mitigation measures

they required, the proposed development would have no significant effects on the environment. We have reviewed and considered the information contained in the EIR. The alterations in the project imposed by Tuolumne and Mariposa Counties will mitigate or avoid the adverse effects of the project. These alterations are as follows:

- a. Development and implementation of a phased tree management plan which emphasizes minimizing removal of healthy Blue Oaks; maintaining healthy Blue Oak woodland stands in designated open areas; and establishing and preserving high-wildlife-value trees, shrubs, and bird nesting sites and granaries.
- b. Establishment of a wildlife habitat preserve at McNulty Springs.
- c. Prohibition on reducing local runoff into Lucas Gulch, which supports riparian wetland wildlife habitat.
- d. Restrictions on fencing design in the project area to permit free movement of young deer.
- e. Establishment of a site development permit process for the proposed marina on Lake Don Pedro which

requires detailed site-specific environmental assessments and development of appropriate mitigation measures (such as plans for avoiding disturbance of existing endangered Bald Eagle habitat near the site) to be approved by Tuolumne County.

- f. Development and implementation of site-specific plans to control and minimize erosion due to construction, maintenance, and operation of facilities within the proposed development.
- g. Development and implementation of procedures to avoid disturbing identified archeological sites.

Significant adverse effects of the proposed project, related to water resources, are discussed in the EIR. At pages 8-5 to 8-7, the EIR points out that the proposed project will include the discharge of reclaimed water to irrigate the golf course. Before use, the reclaimed water must be treated in accordance with requirements set by the Central Valley Regional Water Quality Control Board. As proposed, the project will include development of a central collection system and a package wastewater treatment plant. Treated effluent will be stored in detention reservoirs and used to irrigate the golf course. The developer will

pay for the costs of constructing the facilities, and operation and maintenance will be financed by connection fees and service charges. Construction of the detention reservoirs for the treated effluent will require approval of the Division of Dam Safety of the Department of Water Resources. (MID,7.)

Second, in Chapter 11 the EIR discusses the potential impacts of the proposed project on water quality and aquatic resources in Don Pedro Reservoir. Depending on the time of year when construction is done, and depending on construction practices, construction of the project could adversely affect water quality by increasing sedimentation. These short-term effects can be mitigated. The EIR recommends several practices to minimize water quality degradation during construction; the Central Valley Regional Water Quality Control Board, Fresno Office, has jurisdiction to establish requirements for this purpose. (MID,7.)

Third, Chapter 11 of the EIR indicates that after construction there could be long-term water quality impacts because of runoff from marina facilities and from paved and landscaped areas. The EIR recommends measures to trap pollutants, reduce flows, and promote infiltration. (MID,7.)

To mitigate for the above discharges of waste resulting from the project, we will condition the use of water under License 11395 upon the La Ventana Land and Cattle Company applying for and receiving from the Regional Water Quality Control Board for the Central Valley Region, before construction of the project, either waste discharge requirements or a waiver of such requirements. We will also require compliance with any such requirements, waiver of requirements, or other water quality direction of the Regional Water Board.

6.2

Flow Releases to the Merced River for Fish and Wildlife

MID presented in its Exhibit 3 an excerpt from a May 28, 1963 streamflow release agreement between MID and the California Department of Fish and Game. MID Exhibit 3 shows the various releases MID makes for fish, downstream riparian rights, Davis-Grunsky Act recreational grant requirements, and to comply with its power license from the Federal Energy Regulatory Commission. MID's manager testified that ordinarily MID makes just these minimum releases, and that they will be maintained. MID's manager testified that MID meets the fish releases based on the 1963 agreement. The 1963 agreement amends an agreement dated October 8, 1959. Notwithstanding the amendment, License 11395 remains subject to the terms of provisions 1, 2, 3, and 4 in the 1959 agreement. MID has never filed a water



right petition to substitute the provisions of the 1963 agreement for the provisions of the 1959 agreement in MID's license. The 1959 agreement requires higher flows for fish and wildlife than the 1963 agreement. MID should comply with the minimum requirements to which its license is subject--i.e., the 1959 agreement --unless and until it has petitioned the State Water Board and has received a change in its license. We refer this matter to the Chief of the Division of Water Rights for investigation and any appropriate action.

## 7.0

### CONCLUSIONS

1. 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 State Water Board is addressing these issues in the Bay-Delta water right proceedings which include the major entities who have an interest in future water development in the area.
2. The surface and ground water flow systems in the Merced Irrigation District are interconnected. An increase in ground water pumping in the MID service area to replace water delivered to the South Shore Club could cause stream depletion or a reduction in

irrigation return flow to the river to the injury of downstream parties.

3. There are sufficient water savings on land annexed to the City of Merced and converted from agricultural use to urban use, to serve the South Shore Club development. Because approval of this petition is based on an analysis of water availability to supply the estimated maximum demand at South Shore Club development, a term should be added to License 11395 limiting the amount of water that can be delivered to the development to 772 afa. If water demand at the South Shore Club increases for any reason, MID will have to petition the State Water Board to change the amount allotted for the development in License 11395.
  
4. The estimated maximum water demand of the South Shore Club was based on using reclaimed wastewater to irrigate 100 acres of the golf course. A term should be added to License 11395 prohibiting delivery of water to the added place of use until the development has received waste discharge requirements, water reclamation requirements, or a waiver of such requirements for the wastewater treatment facility and for the other water quality impacts, from the Regional Water Quality Control Board for the Central Valley Region.

5. Because MID has had difficulty demonstrating that it has water available for the new place of use, the State Water Board will require that future petitions for change by MID be accompanied by a showing of where water use has been permanently reduced or foregone to allow service to new areas. MID has two pending petitions currently before the State Water Board: (1) a petition to add to the place of use the Mariposa Town Planning Area and (2) a petition to consolidate the El Nido and Merced Irrigation Districts. In addition to these petitions, MID also is required by its FERC license to deliver up to 15,000 acre-feet of water per year to the Merced National Wildlife Refuge. MID must obtain authorization from the State Water Board before delivering the 15,000 acre-feet, since the refuge is outside MID's authorized place of use.
  
6. We will condition this approval upon inclusion in MID's license of Standard Permit Terms 80, 91 and 93, limiting diversions when the Bureau of Reclamation is releasing stored water from New Melones Reservoir to maintain water quality in the Delta. We will retain continuing authority to amend this license. We will also update the condition in License 11395 pertaining to the State

Water Board's continuing authority by conforming it with Title 23, Cal. Code Regs., Section 780(a).

ORDER

IT IS HEREBY ORDERED that the petition of Merced Irrigation District to change License 11395, issued on Application 16186, is approved, adding 2010 acres to the place of use within the Lake Don Pedro Community Services District, subject to standard terms 80, 91 and 93, the following terms and conditions, and the conformance of the condition in License 11395 pertaining to the State Water Board's continuing authority to the current wording in Title 23, Cal. Code Regs., Section 780(a).

1. In addition to the place of use authorized in License 11395 as set forth on August 15, 1983, the place of use shall include an area described as follows:

"2010 acres located within Sections 11, 12, and 13, T3S, R14E and Sections 7 and 18, T3S, R15E, MDB&M, as shown on a map on file with the State Board prepared in accordance with the specifications in Title 23, Cal. Code of Regs., Div. 3, Ch. 2, Art. 7 (commencing with Section 715)."

Licensee may deliver water for domestic use within this place of use.

2. Licensee shall not cause the downstream flow in the Merced River to decrease, by reducing either its releases or return flow to the Merced River due to its supplying water to the added place of use described in Condition 1, or due to the

combined effect of surface diversions and ground water diversions, or for any other reason within Licensee's reasonable control.

3. Licensee shall not deliver water for municipal or industrial use, or deliver water to the South Shore Club, unless the recipient municipality or district has in place a mandatory water conservation ordinance or other enforceable requirement that requires all municipal or industrial water users to implement water conservation requirements for both indoor and landscape water use. The ordinance or requirement shall comply with the requirements of Government Code Section 65591 et seq. and with the Best Management Practices contained in the Memorandum of Understanding Regarding Urban Water Conservation in California dated September 1991. Licensee shall submit such ordinance or enforceable requirement to the Chief of the Division of Water Rights before commencing delivery of water for any municipal or industrial use.
4. The State Water Resources Control Board reserves continuing authority to amend this license to ensure that there will be no injury to other users of water because of supplying water to the added place of use described in this order.
5. Use of water in the place of use added by Condition 1 is subject to licensee complying with all terms and conditions of this license.

6. No water shall be used in the place of use added by Condition 1 until the La Ventana Land and Cattle Company has filed a report of waste discharge with the California Regional Water Quality Control Board, Central Valley Region, pursuant to Water Code Section 13260, and the Regional Water Board or State Water Resources Control Board has prescribed waste discharge requirements or has indicated that waste discharge requirements are not required. Thereafter, water may be used in the place added by Condition 1 only if all waste discharge requirements or other orders issued by the Regional Water Board or State Water Board are being met. No point source discharges of waste to surface water shall be made unless waste discharge requirements are issued by a Regional Water Board.
  
7. In order to prevent degradation of the quality of water during and after construction of the South Shore Club, prior to commencement of construction, La Ventana Land and Cattle Company shall file a report of waste discharge pursuant to Water Code Section 13260 and shall comply with all waste discharge requirements and water reclamation requirements for waste water discharge and use of reclaimed water, and shall comply with directions for nonpoint source control imposed by the California Regional Water Quality Control Board, Central Valley Region. Licensee shall not deliver water to the South Shore Club unless and until it has complied with this term.



water use reduction or elimination sufficient to allow service in the new place of use before the State Water Board further processes the petition.

CERTIFICATION

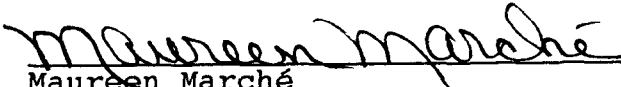
The undersigned, Administrative Assistant to the State Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on January 21, 1993.

AYE: Eliseo M. Samaniego  
John Caffrey  
Marc Del Piero  
James M. Stubchaer

NO: None

ABSENT: None

ABSTAIN: None

  
Maureen Marché  
Administrative Assistant to the Board