

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of:)	
)	
HEARING TO CONSIDER MODIFICATION)	TESTIMONY OF
OF ORDER WR 2006-0006)	C. MEL LYTLE ON
)	BEHALF OF COUNTY OF
)	SAN JOAQUIN
)	
)	

I am C. Mel Lytle, Ph.D. I am appearing today on behalf of the County of San Joaquin and the San Joaquin County Flood Control and Water Conservation District (collectively hereinafter “County”). I have been the Water Resource Coordinator for the County of San Joaquin, Department of Public Works, since February of 2002. I have Bachelor’s and Master’s degrees in Agronomy and a Ph.D. in Botany. I am a Post-doctoral fellow of the University of California Berkeley. Attached hereto as SJC-2 is a copy of my current curriculum vitae.

I. Description of San Joaquin County

San Joaquin County is located at the northern end of the San Joaquin Valley in Central California. San Joaquin County’s population currently totals over 660,000 people. By the year 2030, the population is expected to increase by approximately 77 percent to 1.1 million. San Joaquin County is estimated to be the 3rd fastest growing County in California. The County encompasses nearly 920,000 acres of relatively level productive lands with 85% of the County’s 1423 sq. miles being used for agriculture. The County sustains an over \$2 billion agricultural economy. Historically, San Joaquin has been one of California’s leading counties in gross value of agricultural commodities.

In addition, industries that depend strongly on agriculture, such as food processing, wholesale trade, and transportation, benefit from San Joaquin's bounty. The preservation of agricultural land is a key economic and quality of life component for the County. Water demand in the County is approximately 1,600,000 acre-feet per year of which 60 percent is provided by groundwater.

The County is bordered on the east by the Sierra Nevada foothills, and the western portion includes nearly two-thirds of the Sacramento-San Joaquin Delta. The San Joaquin River flows south to north through the County, and the Mokelumne, Calaveras, and Stanislaus Rivers flow east to west through the County and into the Delta. All of the Delta salinity objective measuring locations are located within the County.

II. Water Districts and Water Supply within San Joaquin County

San Joaquin County is made up of various water interests, ranging from municipalities to large irrigation districts to smaller landowner districts. The surface water available to these various interests is limited, and in many cases is only an interim supply.

Stockton East Water District ("SEWD") serves the agricultural area to the east of the City of Stockton and provides treated drinking water for the urban area of Stockton. It receives a water supply from the Calaveras River, at New Hogan Dam, based upon a 1970 contract with the U.S. Bureau of Reclamation. Stockton East Water District more recently constructed a diversion structure and a series of canals and tunnels to bring New Melones water from the Stanislaus River to eastern San Joaquin County, which will make available to the urban area of Stockton an additional supply of treated water. This

conveyance project which was partially complete in 1994 cost over 65 million dollars and has made only limited deliveries of interim water to Stockton East Water District.

This system also serves to wheel Stanislaus River water to the Central San Joaquin Water Conservation District ("Central"), a neighboring agricultural water district. Although Central has a firm contract of approximately 50,000 acre feet from the Stanislaus River it also has received only a limited amount of water deliveries each year.

Oakdale Irrigation District and South San Joaquin Irrigation District both located in the south eastern portion of the County have pre-1914 appropriative rights and other rights to a supply from the Stanislaus River. A portion of these districts' water is currently being utilized by contract by other districts and cities within the County, including SEWD and the City of Stockton, as well as the cities of Lathrop, Manteca and Tracy.

The North San Joaquin Water Conservation District (North San Joaquin) has a small interim supply of water from the Mokelumne River based on a contract with the East Bay Municipal Utility District (EBMUD). On March 18, 2008 the State Water Board issued Order WR 2008-0016 granting North San Joaquin's time extension to place this water to beneficial use. The State Water Board's decision to grant the time extension "principally rests on the public interest in addressing the critical overdraft condition in the Eastern San Joaquin groundwater basin." [SJC-3, p. 10.]

Woodbridge Irrigation District receives a supply from the Mokelumne River based on pre-1914 and other rights.

In the southwestern part of San Joaquin County, various districts receive a supply from the State Water Project (SWP) and from the Central Valley Project (CVP).

Other water users in the southwestern portion of the County divert from the San Joaquin River and other channels of the Delta. Almost two-thirds of the legal Delta is located within the County of San Joaquin and which includes all of the Central Delta Water Agency (CDWA) and the South Delta Water Agency (SDWA). This includes growers within the south delta in the vicinity of the southern Delta compliance locations. Growers within the south and central Delta hold a combination of (1) riparian water rights (2) pre-1914 water rights and (3) water rights held as permits and licenses from the State Water Board with priority dates both before and after the operation of the SWP and the CVP.

The remainder of the County's water supply, including much of the water needed to satisfy the growing urban needs, is extracted from the groundwater basin. All seven cities within the County pump groundwater. A significant portion of the needs of the urban areas of Stockton are met from treated surface water supplied by the Stockton-East Water District. However, in dry years much of the water supply for the Stockton urban area, which contains over 300,000 people, must come from groundwater.

III. San Joaquin County's Water Use and Critically Overdrafted Groundwater Basin

The groundwater basin is not in a condition to meet the current demand put on it. The Eastern San Joaquin County Groundwater Basin ("Basin") has been the subject of much concern in the past. The Basin was identified in 1980 in the California Department of Water Resources Bulletin 118-80 as one subject to "critical conditions of overdraft." In addition, this critically overdrafted groundwater basin suffers from the migration of an ancient saline deposit underlying the Delta. Bulletin 118-80 described this situation as follows:

"This basin for many years has experienced overdraft, the adverse effects of which include declining water levels that have induced the movement of poor quality water from the Delta sediments eastward near the City of Stockton. Migration of these saline waters has severely impacted the utility of ground water in the vicinity of Stockton. Wells have been abandoned and replacement water supplies have been obtained by drilling additional wells generally to the east." [SJC - 4, Page 44.]

The County's historical and continual reliance on groundwater has resulted in significant overdraft of the groundwater basin of up to approximately 150,000 acre-feet annually, and is projected to increase to a deficit of approximately 175,000 acre-feet annually, if nothing is done to correct this problem.

Additionally, as a byproduct of the overdraft conditions, salt water has intruded into the groundwater basin from an ancient saline deposit underlying the Delta. Projections approximate that the migration of the saline front is approximately 150 to 250 feet a year. Long-term groundwater overdraft has lowered the groundwater table by approximately two feet per year in some areas to 60 feet below mean sea level. This has induced the intrusion of highly saline groundwater into the groundwater basin from the west. Continued pumping of groundwater and deterioration of water quality in the basin threaten the long-term viability of groundwater use within the County.

The County recognizes that without the development of a comprehensive groundwater conjunctive-use program, such salt water intrusion will degrade the groundwater in portions of the basin and render the groundwater supplies unusable for municipal and agricultural purposes. The County is making a concerted effort to address this problem.

Despite the fact that four major river systems flow through the County (the Mokelumne, Calaveras, San Joaquin, and Stanislaus Rivers), much of the water is

exported to meet the increasing demands of those outside of San Joaquin County. Due to this lack of adequate surface water supply, County water purveyors have had to rely heavily on groundwater to supply local demands. Groundwater currently accounts for about 60 percent of the County's water supply, with some communities, such as Lodi, relying entirely on groundwater for their drinking water supply.

IV. Agricultural Production within San Joaquin County and the Delta

During the administrative hearing in 2005 that resulted in Cease and Desist Order WR 2006-0006 the County submitted economic numbers related to agricultural production within the County and within the Delta. The County has updated this information based on the last available crop data information.

According to the San Joaquin County Agricultural Commissioner's Office 2007 Annual Crop Report the gross value of agricultural production for 2007 in the County is estimated to be \$2,005,793,000. Approximately 574,752 acres within the County were in agricultural production. The ten leading agricultural products in the County in 2007 were milk, grapes, cherries, almonds, walnuts, tomatoes, cattle and calves, hay, nursery, woody ornamentals, and apples. Many of these leading crops, and many more crops, are grown within the Sacramento-San Joaquin River Delta, including tomatoes, asparagus and grapes. Future success of agriculture and the County economy as a whole depends upon reliable water supplies of adequate quality.

Based on the San Joaquin County Agricultural Commissioner's Office Pesticide Program Database and the San Joaquin County 2007 Annual Crop Report data my staff within the San Joaquin County Department of Public Works prepared SJC -5, which depicts the total acreage and the total commodity value of commodities grown within the

South Delta Water Agency, the Central Delta Water Agency, and the area of San Joaquin County outside of these two Delta water agencies that receives irrigation water from the San Joaquin River or south Delta.

Based on the San Joaquin County Agricultural Commissioner's Office Pesticide Program Database and the San Joaquin County 2007 Annual Crop Report, the total acreage of land in agricultural production in the Delta is approximately 223,042 acres or 43% of the total land in agricultural production Countywide. As depicted in the attached Exhibit SJC - 6, Delta Crop Value Summary, the total value of Delta crops in 2007 is approximately \$421,504,467, which is 21% of total agricultural production value Countywide. For purposes of preparing SJC - 6, the analysis does not take into account potential yield variations throughout the County nor differences in variety values in commodity groups.

The percentages of total production acreage and total commodity values in the Delta area as compared to Countywide are clearly disproportionate. This is not due to the inability of Delta soils to produce quality agricultural crops as much of the Delta includes "prime farmland." The prime farmland classification is reported in the Soil Survey of San Joaquin County, California prepared by the United States Department of Agriculture Soil Conservation Service in cooperation with the Regents of the University of California (Agricultural Experiment Station) and the California Department of Conservation in 1992. This Survey provides that nearly 55 percent of the total acreage within the survey area would "meet the soil requirements for prime farmland if an adequate and dependable supply of irrigation water were available." [SJC- 7, page 147.] Prime farmland "is the land best suited to food, feed, forage, fiber and oilseed crops." [SJC- 7, p. 147.] "Prime

farmland is described as having the following characteristics: The soil qualities, growing season, and moisture supply are those needed for a well managed soil to produce sustained high yield of crops in an economic manner.” [SJC- 7, page 147.]

This Survey provides as follows regarding prime farmland:

“Prime farmland is one of several kinds of important farmland defined by the U.S. Department of Agriculture. It is of major importance in meeting the Nation’s short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation’s prime farmland.” [SJC-7, page 147.]

These unique “prime farmland” conditions exist in San Joaquin County and within the southern Delta, and similar conditions are limited across our State and our Nation. These unique, favorable conditions that optimize agricultural production need to be protected and preserved. As the U.S. Department of Agriculture indicates it would be contrary to public policy for the State Water Board not to protect the unique and valuable conditions that allow critically needed agricultural production to continue. However, currently the assortment of commodities grown in the Delta is limited in part due to water reliability, water availability, and water quality. There is a high degree of variability in water levels and water quality throughout the Delta both annually and seasonally. In addition, there are ongoing violations of the existing salinity objectives within the South Delta. As a result salt loading, drought intolerant crops are grown in the Delta at extreme risk. To a large extent farmers within the Delta choose not to grow these higher value

commodities due to the extreme risks associated with reliable water supply of adequate quality.

The County has long battled to protect and improve Delta water supplies. Further reductions in water quality would negatively impact agriculture values in the Delta and the value of agriculture as whole in San Joaquin County. These impacts are unacceptable.

V. County continues to support enforcement Order WR 2006-0006 requiring the Salinity Objectives of the San Joaquin River at Vernalis and within the South Delta Must be Met by DWR and USBR

The salinity standards in the southern Delta specified in State Water Resources Control Board Decision 1641 (“D1641”) are “to protect agricultural beneficial uses of water in the southern Delta.” [Staff Exhibit 2, D1641 at p. 79.] D1641 states that these “Objectives were developed following a study to determine the water quality needs of significant crops in the Delta.” (D1641 at p. 79.) Based on the State Board’s study, D1641 required that beginning in 2005 these salinity standards of 0.7 mmhos/cm from April through August be met at the three locations within the southern Delta. The Cease and Desist Order, Order WR 2006-0006, (CDO) issued against the Department of Water Resources (DWR) and the United States Bureau of Reclamation by the State Water Board in 2006 re-affirmed this requirement. [Staff Exhibit 1, WR 2006-0006 at page p. 26.]

The County participated in the CDO hearing and supported issuance of the CDOs. [Staff Exhibit 1, at page 15.] In that hearing the County argued that “DWR and USBR should be required to meet the objectives through options including water purchases, releases from various reservoirs [but not through increased releases from New Melones

on the Stanislaus River], water exchanges, recirculation, modifying operations of the temporary barriers, control of drainage to the San Joaquin River and export reductions.” [Staff Exhibit 1, Page 15.] During the CDO hearing, the County joined Stockton East Water District in arguing that while the EC objectives should be met, they should not be met through increased releases from New Melones reservoir on the Stanislaus River.” [Staff Exhibit 1, Page 15.]

The circumstances that required the salinity standards to be met in 2000 with the issuance of D 1641 and in 2006 with the issuance of the CDO Order remain. Since 2006 the County has continuously and consistently advocated that these requirements be met; unfortunately however, repeated violations of the standards have occurred and the State Water Board has failed to take any meaningful enforcement action. This pattern should not continue. The County submits that DWR and the USBR have failed to meaningfully consider and take actions to meet the salinity standards within the Delta or take action to “obviate the threat of noncompliance” with the salinity conditions in their permits and licenses as required Order WR 2006-0006. The State Water Board must not continue to permit this action by DWR and USBR and the County objects to any modification of WR 2006-0006. Rather, enforcement of D 1641 and WR 2006-0006 is warranted.

The County’s continuous efforts within the past year to request the State Water Board take action to enforce DWR and USBR’s compliance with D 1641 and WR 2006-0006 are well documented and are attached hereto as the following exhibits:

- (1) August 19, 2008 letter from the San Joaquin County Board of Supervisors to the State Water Board supporting SDWA and Lafayette Ranch, Inc.’s Motion for Reconsideration of WR 2008-0029-EXEC approving a modification of the joint points of diversion (JPOD) related to compliance with salinity conditions. [SJC - 8.]

At this time DWR and USBR sought and received as an urgency petition a temporary change to their permit terms to allow the operation of joint points of diversion in 2008 despite their failure to meet the salinity objectives which are required by D1641 and the CDO. As indicated in SJC-8, prior to this urgency petition, in November of 2007, State Water Board staff had cautioned DWR and USBR to bring such a request for modification “as soon as possible.” However, DWR and USBR delayed and such a request was brought during the summer of 2008 and thus an urgency petition was requested, and approved. The County supported SDWA’s petition for reconsideration of the order approving the urgency petition.

(2) October 14, 2008 letter from the San Joaquin County Board of Supervisors to the State Water Board supporting SDWA and Lafayette Ranch, Inc.’s Complaint for Violation of Permit and License Conditions, Violation of Cease and Desist Order and Trespass. [SJC- 9.]

SDWA and Lafayette Ranch have a compliant filed with the State Water Board regarding DWR and USBR’s continued violations of their permit conditions. The County encourages the State Water Board to take meaningful action on this complain and enforce the terms of the permits held by DWR and USBR.

(3) January 29, 2009 letter from San Joaquin County Special Water Counsel (DeeAnne Gillick) to State Water Board regarding JPOD Petitions for Reconsideration Draft Order. [SJC-10.]

SDWA’s petition for reconsideration of the order approving the 2008 urgency petition to allow joint points of diversion was denied by the State Water Board. The County requested that the State Water Board grant the motion for reconsideration. SJC-10 indicates that D 1641 was clear that “the actions of the CVP are the principal causes of the salinity concentrations exceeding the objectives at Vernalis.” (SJC- 10, page 10,

citing D 1641 (Staff Exhibit 2, page 89.) D 1641 provides that the circulation problems in the Delta are caused by "... export pumping by the SWP and CVP and in-Delta diversions in the southern Delta [which] cause null zones, areas with little or no circulation." (SJC- 10, page 4, citing D 1641 (Staff Exhibit 2, p. 87.)) SJC-10 points out that "Although the State Water Board found [in D 1641] that in-Delta users contribute in part to southern Delta salinity, based on substantial evidence it was reasonable to place the entire burden and obligation to meet the southern Delta salinity objectives on DWR and USBR." [SJC-10, page 4.] In addition SJC-10 points out that D 1641 acknowledged that "...the construction of permanent barriers alone is not expected to result in attainment of the water quality objectives." (SJC-10, page 4 citing D 1641 (Staff Exhibit 2, page 88.)) Based on D 1641 the need to implement additional mitigation measures to address salinity in the Delta should not be a surprise to DWR and USBR. Consequently failure to take any action outside of reliance on the barriers to "obviate" the threat of violations of D1641 should not be allowed by the State Water Board.

(4) February 17, 2009 letter from San Joaquin County Special Water Counsel (DeeAnne Gillick) to State Water Board Hearing Officers Baggett and Hoppin regarding the County of San Joaquin's Opening Statement in the February 17, 2009 Emergency Drought Conditions Hearing. [SJC-11]

Again, DWR and USBR sought in February of 2009 an emergency petition to modify their permit terms for a period in February 2009. The County again objected to the delay by USBR and DWR to take meaningful actions to meet their permit term obligations. The State Water Board in its decision regarding the petition cautioned DWR and USBR to bring any additional requests to modify their permit terms in a timely fashion.

(5) May 18, 2009 letter from San Joaquin County Special Water Counsel (DeeAnne Gillick) to the State Water Board regarding DWR and USBR's Petition to consolidate the place of use for certain DWR and USBR permits and licenses. [SJC-12.]

The County did not oppose this request to modify DWR and USBR place of use, due to the unique drought conditions facing the State. However, the County again insisted that the salinity standards be met consistent with the permit terms of DWR and USBR.

These comments by San Joaquin County regarding State Water Board matters document the continual lack of meaningful action by DWR and USBR to take action to "obviate" the threat of noncompliance with the salinity conditions of their permits and licenses and lack of action to meet their permit and license conditions. DWR and USBR have endlessly delayed, through both wet and dry periods, dealing with the very real problem of salinity in the San Joaquin River and the south Delta. DWR and USBR have been repeatedly advised and ordered to address the problem (see WR 2006-0006, Staff Exhibit 1, pages 8, 9., in addition to the admonishments by the State Water Board and its staff since 2006), but have continued to ignore all advice and have failed to follow orders. The time has come to tackle the salinity problem, and that time is now. Both DWR and USBR have the obligation and the ability to do so, but apparently fail to take their responsibilities and permit conditions seriously. If this is not addressed by the State Water Board now, violations and salinity problems will continue in 2009 and beyond. Modification of 2006-0006 is not warranted now, rather enforcement of D 1641 and WR 2006-0006 is warranted.