STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of:	)	
	)	
HEARING RE: TAKING AN EMERGENCY	)	
DROUGHT-RELATED WATER RIGHTS	)	
ACTION ON A PETITION FOR TEMPORARY	)	**TESTIMONY OF**
URGENCY CHANGE FILED BY DWR AND	)	**C. MEL LYTLE**
USBR REGARDING TEMPORARY	)	
RELAXATION OF THE FEBRUARY DELTA	)	
OUTFLOW AND THE SAN JOAQUIN RIVER	)	
FLOW OBJECTIVES IN RESPONSE TO	)	
CURRENT DRY CONDITIONS	)	
_____	)	

I am C. Mel Lytle, Ph.D. I have been the Water Resource Coordinator for San Joaquin County, Department of Public Works, since February of 2002. As such, I am involved in many water related issues which affect the County. These issues include investigating and seeking additional supplies for agricultural and urban needs, as well as for groundwater recharge/storage. In addition, I participate with other local interests in reviewing ongoing processes and activities which affect Delta water supply and quality. In this capacity, I am generally familiar with the issues facing those parts of the Delta within the County. I have Bachelor's and Master's degree in Agronomy and a Ph.D. In Botany. I am a Post-doctoral fellow of the University of California Berkeley. Attached hereto as CDWA/SDWA/SJC Exhibit 2 is a copy of my current curriculum vitae.

The counsel for San Joaquin County, the Central Delta Water Agency and South Delta Water Agency asked me investigate and present certain facts related to the subject DWR and USBR Petition which seeks urgency changes to their permits in order to relax their responsibility to meet both the Water Quality Objective for Fish and Wildlife Beneficial Uses Delta Outflow Standard (sometimes referred to as the X2 standard), and River Flow Standard (for the San Joaquin River). To provide such data, I investigated and present here, information taken mainly from the State's California Data Exchange Center, or "CDEC" located at the website cdec.water.ca.gov.

Specifically, San Joaquin County, CDWA and SDWA asked that I present information relating to reservoir storage, river flows, export pumping, Delta outflow, compliance with standards.

Attached hereto as CDWA/SDWA/SJC Exhibit 1A (located at website http://cdec.water.ca.gov/cgi-progs/selectQuery?station_id=SNL&sensor_num=15&dur_code=D&start_date=09%2F01%2F2008+15%3A32&end_date=02%2F13%2F2009+15%3A33&geom) is a printout from CDEC for San Luis Reservoir storage from September 2, 2008 through February 13, 2009. One caution in reviewing this data is that the water year for the projects is not the same as the calendar year. The water year extends from October 1 through September 30.

CDWA/SDWA/SJC Exhibit 1A shows that at the end of the 2007/2008 water year, San Luis contained just under 240,000 AF of water (as of September 30, 2008). Thereafter, the Exhibit shows that the San Luis storage went up and down until November when it began to rise steadily through the final date of the printout, February 12, 2009. On that date, San Luis contained 716,220 AF of water. This means that the reservoir increased storage from October 1, 2008 to February 12, 2009 by 481,939 AF.

CDWA/SDWA/SJC Exhibit 1B (located at website http://www.usbr.gov/mp/cvo/vungvari/dsmeltsplitdly.pdf) is a printout of an operations report regarding SWP and CVP exports and "take" for Delta smelt, Splittail, and Longfin. The printout includes total exports, as well as a breakdown of how much is attributed to the SWP and to the CVP. As we see from the report, combined exports fluctuated from just over 2000 cfs to just over 1800 cfs from February 1 through February 10 of 2009. Then, on February 11, combined exports jumped nearly 1400 cfs, going from 2032 cfs to 3407 cfs. Exports jumped again on February 12 to 3910 cfs.

The period covered in the CDWA/SDWA/SJC Exhibit 1B report is pertinent as it deals with the time frame which is the subject of the Petition. The Petition seeks relaxation from the X2 standard during February, noting that in order to comply with the standard, the projects would have to "increase the NDOI [Net Delta Outflow Index] from 7,100 cfs to 11,400 cfs. Given the time allowed to prepare evidence for this hearing, I was not able to identify the exact sources of all the flows entering the Delta, and so I am not making any statements with regard to whether any or all of the flows entering and leaving the Delta are from upstream storage, pass through (reservoir) flow, accretions below the major dams, or other flows made available by transfers or foregone diversions. However, the CDEC data shows that exports have risen during the time when the Delta outflow was below the amounts claimed by DWR and USBR to be necessary to meet the existing standard.

I also note that per CDWA/SDWA/SJC Exhibit 1B, that when exports rose on February 11, the projects "salvaged" their first Delta smelt during February.

CDWA/SDWA/SJC Exhibit 1C (located at website http://wwwoco.water.ca.gov/cmplmon/reports/DeltaHydrology.pdf) attached hereto shows Delta Hydrology Conditions from January 14, 2009 through February 12, 2009. When compared with CDWA/SDWA/SJC Exhibit 1B, CDWA/SDWA/SJC Exhibit 1C shows us that when exports increased by approximately 1400 cfs on February 11, Delta outflow (as shown by Net Delta Outflow Index) decreased by approximately 1300 cfs. This indicates that exports increased to the detriment of outflow. This Exhibit also tells us that the Delta was in "balanced" conditions,

explained as meaning there are "no storage withdrawals." Per this explanation, the flows entering the Delta, leaving as outflow and being exported are not stored water.

The San Joaquin River flow standard which is the subject of the Petition is the Water Quality Objective for Fish and Wildlife Beneficial Uses measured at Vernalis. It extends from February 1-April 14 and May 16-June. The standard is 710 or 1140 cfs per D-1641 (Table 3, continued, page 184 of D-1641). I note that the Petition does not give any description of how much below the standard the projects expect the San Joaquin River flow to be, or how much additional flow they expect would be necessary to meet the standard. The Petition does indicate the projects want the Board to "waive" the higher Objective. From D-1641, it appears that the San Joaquin flow required would be the larger amount (1140 cfs) in light of the X2 requirements (see Footnote 13, page 186, D-1641).

CDWA/SDWA/SJC Exhibit 1D (located at website http://wwwoco.water.ca.gov/cmplmon/reports/DeltaHydrology.pdf), attached hereto is another printout of Delta Hydrology Conditions from January 14, 2009 through February 12, 2009. It indicates that the San Joaquin River flow from February 1, 2009 has been above the 1140 cfs requirement.

CDWA/SDWA/SJC Exhibit 1E (located at website http://wwwoco.water.ca.gov/cmplmon/reports/DeltaWaterQuality.pdf), attached hereto is a printout entitled Delta Water Quality Conditions South Delta Stations, for the period January 14, 2009 through February 12, 2009. The current standard at each of the four compliance stations (as well as throughout the channels themselves per the 2006 WQCP) is a 30 day running average of1.0 EC. CDWA/SDWA/SJC Exhibit 1E shows that the standards have been violated at Old River near Tracy from January 14 through February 12 and at Old River near Middle River from February 5-12. The data shows that during this same time period, the projects are just under or just meeting the standard at the remaining compliance locations.

I am generally familiar with the recent recirculation pilot projects done by USBR, with the assistance of DWR, and at the request of SDWA. In 2004 and 2007, the USBR recirculated water from the DMC, through the Newman Wasteway into the San Joaquin River for a short period of time in August and September, and for a longer period of time in 2008 (approximately July through September) I understand that the Newman Wasteway has a capacity of approximately 3000 cfs.

Recirculation of this type could also be done through the Westley Wasteway, but concerns have been raised that this channel has degraded capacity, and has collected sediment, such that it may have physical and water quality impediments to be part of any near term recirculation project. The system also allows DMC water to be delivered to the Mendota Pool, which is on the San Joaquin River. Through direct releases from the Pool, or through the use of the connecting irrigation/drainage channels, export water delivered to the Mendota Pool can be used to augment the flow of the San Joaquin River.

Implementing recirculation should not be met with reluctance by USBR as recirculation was mandated by Congress in 2004. In meeting the San Joaquin River flow requirements the Bureau must adhere to the Congressional mandates of HR 2828 (Public Law 108-261, signed October 25, 2004) which contains important direction for the Secretary of the Interior and Reclamation regarding operation of New Melones Reservoir. This Congressional mandate could be implemented now, if the USBR took their permit conditions imposed by the State Water Board seriously.

HR 2828 directed the Secretary of Interior to develop and initiate implementation within one year of enactment of a program to meet all existing water quality standards and objectives for which the Central Valley Project is responsible. The Program is to include recirculation to provide flow, reduce salinity concentrations and reduce the reliance on New Melones Reservoir for meeting water quality and fishery objectives through the use of excess capacity in export pumps and conveyance facilities.

In addition, HR 2828 directs the Secretary of the Interior to update the New Melones operating plan to take into account the actions in HR 2828 that are designed to reduce the reliance on New Melones Reservoir for meeting the water quality and fishery flow objectives. Since adoption in 2004, USBR has neither implemented a meaningful Program within the parameters of HR 2828 nor moved forward with a Revised Plan of Operation for New Melones Reservoir. Doing so could have potentially addressed the permit violations at issue in this proceeding as well as the summer southern Delta salinity objective violations.

From D-1641, I understand that X2, the Vernalis flow standard, and the southern Delta standards are permit conditions on all of the DWR and USBR permits. It is my understanding that a permittee must comply with his/her/its permit terms and conditions in order take the benefits of the permit. Hence, if my understanding is correct, DWR and USBR are obligated to plan ahead to meet X2, San Joaquin River flows and the southern Delta standards, and must meet them before exporting water. Instead, they have exported water this water year which could have been used to meet the X2 standard and have stored water in Sun Luis without any recognition that such water can be used to meet San Joaquin River flow and X2 requirements.

It is my understanding that the DWR and USBR permits for San Luis Reservoir also include the obligation for meeting X2, San Joaquin Flow standards, and the southern Delta standards. Given this, the water in San Luis is still available to meet these standards, and is arguably required to do so. As stated before, the USBR recirculation pilot projects shows that export water can be returned to the San Joaquin River. Hence, USBR and DWR can use their San Luis storage to meet (or help attempt to meet) the San Joaquin Rive flow standard, the southern Delta standards and the X2 standard. I note, that use of such water (from San Luis) does nothing to decrease the cold water pool in Sacramento system reservoirs which DWR and USBR contend is necessary for future protection of salmon.

I am also including CDWA/SDWA/SJC Exhibit 1F (located at website http://wwwoco.water.ca.gov/cmplmon/reports/DeltaWaterQuality.pdf) as an attachment to this testimony. It includes other CDEC printouts which cover quality and hydrology information

which pertain to the standards and conditions in the Delta, especially X2, which may be helpful to the Board.

Attached hereto as CDWA/SDWA/SJC Exhibit G (located at websites http://cdec.water.ca.gov/cgi-progs/iodir/WSIHIST; http://cdec.ca.gov/cgi-progs/iodir/B120; and http://cdec/water/ca/gov/cgi-progs-reservoirs/RES) is the Chronologized Reconstructed Sacramento at San Joaquin Valley Water Year Hydrologic Classification Indices. The most critical periods appear to be 1929 through 1934, 1976 and 1977, and 1987 through 1992. 2007 and 2008 are both listed as critical years and the possibility of additional dry and critical years is real. DWR and USBR should at the very least not be allowed to make contractor deliveries of water from San Luis or divert water from the Delta without a demonstration that such water is surplus to the present and future needs to meet the conditions of their permits based on a reoccurrence of historical hydrology.

In summary, DWR and USBR appeared to have been operating the CVP and SWP this water year in a manner which would not result in compliance with their permit obligations for X2, and others. Instead, they appear to be operating as if they have a right to a minimum amount of exports, and are taking such exports to the detriment of X2. As of February 12, 2009 the water being exported, and especially the increased exports as of February 11, 2009 could have been allowed to contribute to outflow/X2. The failure to plan ahead has resulted in the violation of the X2 standard, but at least a portion of those exports are still available to meet X2, the San Joaquin River Flow standard and the southern Delta standards.