

California Department of Water Resources
Testimony on Potential Rates and Timing of Delta Pumping Associated with
Yuba County Water Agency's Yuba River Accord and the
Long-Term Water Purchase Agreement¹

In past years the Department of Water Resources (DWR) has used the State Water Project (SWP) Banks Pumping Plant for extensive transfers of water across the Delta. California Water Code ¹ provisions grant other parties access to unused SWP conveyance capacity, although SWP contractors have priority access to capacity not used by DWR to meet SWP allocations. Since 1987 DWR has conveyed through its Banks Pumping Plant well over 2 million acre-feet of transfer water. The transfer of water varies based on hydrology and demand for water. In wetter years or years of no demand, transfer of water may not occur. In dry years with high demand, transfers may occur in the hundreds of thousands of acre feet. For example, during the 1991 Drought Water Bank, 800,000 acre-feet of water was purchased and DWR conveyed 470,000 acre-feet of this water across the Delta.

Transfer water originating from YCWA has played an important role in providing water during these years of high demand. Since 1987, DWR has conveyed approximately 785,000 acre-feet of transfer water from YCWA. Historically, DWR exports transfer water from the Delta at times when surplus pumping capacity at SWP export facilities is available and all Delta regulatory requirements are being met. As has been done in the past, DWR will transfer water made available under the Water Purchase Agreement of the Yuba River Accord when capacity is available and regulatory requirements are being met. The environmental documentation analyzing the transfer of water was done under these conditions

The surplus capacity available for water transfers varies with hydrologic conditions and the amount of SWP storage in upstream reservoirs carried over from the previous year. In general, under wetter hydrologic conditions, surplus capacity is low or nonexistent for transfer of non-SWP water because the SWP Delta pumping facility more fully utilizes capacity for conveying its own SWP supplies. The Banks Delta pumping plant has the most surplus capacity for water transfers in critical and most dry years. There is typically little or no surplus capacity in a broad middle range of hydrologic conditions.

It is anticipated that the vast majority of the Yuba River Accord water will be moved in the traditional transfer window during the summer and early fall months of July through October. This is the time when delta smelt and other listed species are typically not in the south Delta and therefore not susceptible to entrainment at the Project facilities. There may be opportunity to move water

¹ Presented December 5, 2007, by John Leahigh, DWR Engineer.

¹ See California Water Code Section 1810.

outside of this time if the Delta is in balanced conditions, there is surplus export capacity, and the exports are not constrained for fishery concerns.

In the spring months when Project operations are typically constrained for fishery protection, if the Delta happens to be in balanced conditions it is much more probable that Lower Yuba River Accord transfer flows will be regulated upstream into Lake Oroville rather than exported. The need for Feather River releases from Lake Oroville to meet Delta requirements will be lessened with the introduction of Yuba River Accord transfer flows thereby temporarily resulting in a credit of Accord water in Lake Oroville. This temporarily stored Accord water in Lake Oroville would most likely be released and exported later during the traditional summer transfer period if surplus SWP export capacity is available.

Rates of increased exports during this traditional summer/early fall transfer period are likely to be up to 500 cfs to capture Yuba River Accord fish flows and possibly up to an additional 1000 cfs to capture supplemental Yuba River Accord transfer flows or to capture previously stored Accord flows released from Lake Oroville. Rates of increased SWP exports outside the traditional summer transfer period, in the rare instances that they do occur, are not likely to exceed more than 500 cfs.

Under low outflow conditions, increases in Delta exports can cause additional seawater intrusion, even if the Delta outflow is not changed (i.e., if additional releases are made from upstream reservoirs to match the increase in export pumping). The additional increment of inflow (and corresponding increase in Delta outflow) that is needed to offset the additional effect of exports on seawater intrusion, and prevent degradation of water quality at Delta drinking water intakes, is referred to as "carriage water". Parties to the water transfer are responsible for providing the incremental change in flows required to protect Delta water quality standards.

In addition, DWR will transfer water only after meeting all regulatory obligations. DWR will meet requirements under Decision 1641 and the biological opinions for listed species under the Endangered Species Act. For example, DWR will operate to comply with the requirements of the federal court order for delta smelt that is expected in December 2007 and with any requirements for salmon once the court has issued its decision on the salmon biological opinion. Furthermore, over the long-term of the transfers provided by the Water Purchase Agreement, DWR will operate the Delta export facilities in compliance with future biological opinions, transferring water only after meeting obligations of the opinions.