CONTRA COSTA
WATER DISTRICT

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Pyzer 5/4/2001

May 4, 1998

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Mr. Rick Woodard
CALFED
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Subject: April 15, 1998 Water Quality Technical Group Meeting Summary

Dear Mr. Woodard:

The District would like to address a number of issues raised in the April 15, 1998 meeting summary regarding drinking water quality in the Delta. Water quality at the Contra Costa Water District's (CCWD or District) intakes is controlled by a number of factors, the most prominent of which are seawater intrusion, agricultural drainage discharged in the Delta, and contaminants in the San Joaquin River inflow. The relative impacts of these factors at the District's intakes depend on the hydrological conditions and any modifications to the circulation pattern in the Delta (e.g., from construction of agricultural flow barriers in the South Delta).

The CALFED program, through its core program and selected Alternative, has the potential to significantly reduce the adverse water quality impacts of each of these factors. However, there is also the possibility that interim or early implementation actions by CALFED could increase these water quality impacts, e.g., if South Delta barriers were installed as an interim action before any significant reductions in San Joaquin inflow salinity. Early implementation actions that could be used to mitigate impacts on the District's drinking water quality could include elimination of the Veale Tract agricultural drainage into Rock Slough, reduction of the local drainage into Old River in the vicinity of the District's Los Vaqueros intake (near Highway 4), or provision of higher quality water to CCWD in wetter years through an interconnection with East Bay Municipal Utility District (EBMUD)'s Mokelumne Aqueduct. Water surplus to EBMUD's needs could be diverted to storage in Los Vaqueros reservoir for use by CCWD as blending water to offset water quality impacts in the Delta.

Actions that could lead to the largest change in drinking water quality in the Delta are likely to come from outside the water quality common program. For example, the alternative selected for storage and conveyance would most likely have the largest impact on the magnitude and timing of seawater intrusion (and the bromide concentration at urban intakes). Ecosystem restoration actions such as flooding of Delta islands to create shallow water habitats may also increase the organic carbon concentrations at Delta urban intakes. The CALFED water quality program needs

to work closely with these other programs to ensure that the water quality impacts of the other programs are properly addressed and mitigated, and, equally importantly, to focus the water quality program on those water quality parameters that could be improved most effectively by the water quality actions.

The District considers management and control of local drainage to be among the most cost-efficient means of improving source water quality impacts at urban intakes in the Delta, and looks forward to working with CALFED to explore and implement these options. Drainage control programs could include treatment, volume reduction through management practices, consolidation of discharges and/or relocation of the point of discharge.

At the same time, the District believes that CALFED should address the incremental degradation in water quality that will likely result, if unmitigated, from the forecasted development and population growth in the Central Valley through year 2020 and beyond. The population could grow by as much as four to five million people in the Central Valley over the next fifty years. Watershed-wide programs to address and reduce the cumulative impacts due to increasing urban and industrial wastewater discharges associated with this growth are critical to the protection of Delta water quality in the future. CALFED, and in particular the water quality program, should assume a leading role in addressing this problem. CALFED's member agencies, such as the California State Water Resources Control Board and its Regional Water Quality Control Boards should begin immediately to take actions to reduce the discharge of urban, industrial and agricultural waste into the Bay-Delta and its tributaries.

The District also wishes to clarify several errors in the Meeting Notes:

- The summary of the Drinking Water Sub-group discussion (page 10 *et seq.*) suggests that the water quality at the District's Rock Slough intake is largely affected by the salt load in the drainage from Palm Tract (page 11). The comment was more likely directed at the drainage from Veale Tract, which discharges directly into Rock Slough rather than the Palm Tract drainage which discharges into Old River.

- The District is not aware of any data that supports the statement that "*the water quality at the CCWD intake at Old River is primarily affected by Victoria Island agricultural drains at the Highway 4 Old River Bridge*" (page 11). The District understands from discussions with USGS that the study cited on page 11 includes measurements of organic carbon concentrations at various locations along the Middle and Old River and was not designed to estimate the impacts of individual sources at CCWD's or other urban intakes in the Delta. The reference to the USGS study and the assertion of dominant impacts of Victoria Island discharge should be removed in future CALFED documents unless new evidence is produced. Agricultural drainage impacts at CCWD's Los Vaqueros intake may come from any of the neighboring islands or as far afield as the San Joaquin River above Vernalis.

- The salinity standard at Vernalis (page 9) in the State Board's May 1995 Water Quality Control Plan is 0.7 mS/cm (around 430 mg/L TDS or 93 mg/L chloride) during irrigation season (April to August) and 1.0 mS/cm (around 620 mg/L TDS or 140 mg/L chloride)

during non-irrigation season (September to March), and is higher than the 400 ppm total dissolved solids standard cited. As such, the Vernalis salinity standard does not offer sufficient protection for municipal and industrial beneficial uses of water diverted from the south and central Delta for use as drinking water. Any projects, such as the South Delta barrier program, which is common to all CALFED's Phase II alternatives, that will increase the amount of San Joaquin inflow reaching urban intakes, are likely to degrade the water quality at these intakes.

Please contact me at (925) 688-8187 if you have any questions.

Sincerely,

Richard A. Denton
Water Resources Manager

cc: Bruce Macler (EPA, Region 9, San Francisco)
Manucher Alemi (DWR, Sacramento)