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Lester Snow and BDAC Members

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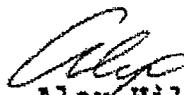
Dear Lester and BDAC Members:

There has lately been discussion of the difficulty of treating water for urban use when it contains bromides. It is generally understood that bromides are brought into the Delta by Bay water intrusion, but some people have questioned the source of bromides in the San Joaquin River. Dr. G. T. Orlob (U.C. Davis) has examined this question at the request of the South Delta Water Agency. His report is dated August 10, 1997.

Last year I made a presentation to you of Dr. Orlob's prior studies of the correlation between the salt load in the Delta Mendota Canal and the salt load that enters the San Joaquin River at troublesome concentrations. You will recall that the chemical composition of the salt load in the DMC provides a "fingerprint" which correlates closely with the chemical composition of the salt load in the San Joaquin River. This was true for boron and for each substantial ionic constituent that was examined. There seemed, therefore, to be little doubt that salts imported via the DMC were the dominant source of high salinity in the San Joaquin River. Bromide was not examined, however, that time. This new report correlates bromides in the same manner with the same result.

Measures that reduce Bay water intrusion into the Delta, including increased outflow, will reduce the bromides in the DMC. This in turn will reduce bromides in the San Joaquin River. Furthermore, the South Delta barriers substantially reduce the extent to which DMC salts which drain into the river are then drawn to the Federal pumps and reexported with consequent buildup of salts in the drainage basin.

Copies of Dr. Orlob's August 10 report will be furnished on request.



Alex Hildebrand

cc Dennis Westcot (Regional Board)  
Dr. G. T. Orlob  
SDWA Board