

RESPONSES TO QUESTIONS OF THE SUBCOMMITTEE ON SCIENCE, RESEARCH,
AND DEVELOPMENT BY WILLIAM E. WARNE, CALIFORNIA DEPARTMENT
OF WATER RESOURCES

Question 1: In the course of your testimony on August 3, you made reference to a papermill that was to have been built in California on the upper reaches of the Sacramento River, plans for which were abandoned when the cost of providing the necessary water treatment was taken into account. Can you give more details on the proposed plant? Was it relocated elsewhere? Is the process finally adopted for a plant on the Sacramento River—a more efficient process than the original plant? Any other specific information you can provide with respect to this case will be helpful to the committee.

Answer: The plant originally proposed for location on the upper Sacramento River some 10 years ago eventually located in Virginia, and on a river, I believe. The plant process proposed would have wasted about 60 percent of the raw material (logs) to the stream. About 3 years ago, a different company built a plant on the upper Sacramento River. This plant, which produces bond paper, wastes only about 40 percent of the raw material and this waste is much more amenable to treatment than that from the plant process originally proposed.

There is also another pulpmill on the upper Sacramento River located on the exact site originally proposed 10 years ago. This second plant produces cardboard and brown paper, as well as some pulp, which is transported to other plants for finishing.

Quite stringent waste discharge requirements have been imposed on the two pulpmills on the upper Sacramento River. Similar restrictions have been applied to pulping operations on the Pacific Ocean in California's north coastal area. In the latter case, a limited dilution zone is allowed in the immediate vicinity of the submerged outfall.

Question 2: With reference to the problem of brine disposal from desalting plants referred to in your statement, have any studies or research been performed by the State of California on how these wastes can be disposed of? If so, will you furnish details on the findings? How are the wastes from the Coalunga plant disposed of?

Answer: To my knowledge, no research or studies have been performed by the State of California on the problems of brine disposal from desalination plants.

The 28,000-gallon-per-day electrodialysis plant at Coalunga produces sufficient water only for drinking and culinary purposes, and a separate supply system is necessary for the main flow of water, which is not desalted and which is used for all other consumer purposes. Twenty gallons per minute of waste water from the desalination plant containing about 3,700 parts per million dissolved solids is discharged to the supply reservoir for the main water system. The total dissolved solids content of the other system is increased only about 1 percent by this concentrated solution.