

dissolved solids and sulfate content substantially exceed the recommended limits in all cases.

In light of such discrepancies, it is clear that we must know much more about the effects of wastes and pollutants before building expensive plants to enforce today's specifications. Further, we must know more about how a given body of water or air changes from area to area, and day to day. Figure 2 shows how the amount of dissolved solids in the Sacramento River changes as the river progresses downstream. Note how the dissolved solids vary from 60 parts per million to 250 parts per million and back again to below 50 parts per million. Many of these changes occur for natural reasons (i.e., highly saline rivers) rather than from manmade pollutants. Also, the values shown here are median values, a long way from the high and low points which may occur in times of storm or drought.

I believe it is clear from the foregoing that it is a task of the greatest importance to define specifically the kind of environment we want and to understand what various kinds of wastes are doing to that environment. Until we do, the only genuine response to the question of the adequacy of technology is—*adequate for what?*

All these formidable technical problems are paralleled, of course, by equally complex legal, political, and social considerations. Leadership of the Federal Government is mandatory to assign appropriate priority to waste management, among our other national objectives, and to set forth clear responsibilities and authorities so that the establishment of goals, and the implementation of programs to achieve them, can proceed in an orderly and expeditious fashion.

I know of no greater time and money waster than the "passing of the buck" from one governmental or industrial body to another. A brief outline of a plan we suggested in our California study as a possible starting point is presented in figure 3, to indicate a few thoughts on the possible division of authority among the interested bodies.

FIGURE 2

THE EFFECT OF VARIOUS COMMUNITIES AND RIVERS
ON THE MEDIAN DISSOLVED SOLIDS CONTENT
OF THE SACRAMENTO RIVER, 1951-1956

