DIRECTOR'S STATEMENT

This volume reports on nearly two years of ecological investgation by the scientists of the Coastal Water Research Project. For the previous five years we reported annually; now the costs in time and money of producing such a document every year have become too burdensome. Much of the last year was spent on helping some of our sponsors document the effects of their ocean outfalls for the Environmental Protection Agency's applications for waiver of secondary treatment. Another few months went into moving our offices and laboratories to new and greatly improved facilities in Long Beach. Now, with more space for operations and storage, our scientific work is more efficient.

Most of the scientific work reported on here was completed in the first half of 1980. Since then, while these reports have been readied for publication, a number of other important events have occurred:

Professor John Isaacs, chairman of our scientific consulting board from the beginning of this project until early 1980, died on June 6, 1980. His advice and guidance during the formative years of this project was undoubtedly the most important single factor in the success of our environmental studies. From the very first he urged our scientists not to "look at the end of the pipes" but to understand the overall effects of man on the biology and chemistry of southern California's coastal waters.

As a result of those admonitions we probably understand how the various influences of man (including aerial fallout, stream discharge and harbor effects--as well as municipal waste outfalls) have affected natural conditions in this region as well as is known for any area in the world. Our surveys, which extend far beyond any known sources of pollutants and into much deeper water than is ordinarily studied, serve as a solid basis for understanding what has changed and whether any changes found near outfalls are ecologically significant.

John Isaacs showed us how to think about ocean environmental matters in a new way, by putting man-caused effects in perspective relative to natural conditions or to alternative actions. He was uncomfortable with governmental actions that minimized rational thinking about problems in favor of rigid and often inappropriate responses. He was most anxious to keep our beautiful world in good condition but he was much opposed to expensive and nonsensical regulation. These views were often illustrated with whimsical statistics. With reference to the disposal of ordinary sewage into the sea well offshore, he was fond of pointing out that "The fecal output of anchovies into southern California waters is ten times as great as that of the humans that live here" and he would say, "The ocean is starved for the nutrients sewage brings."

He was equally concerned about potentially detrimental effects of toxic materials such as PCB's. In recent years much of the public has swung around to his views which called for "thoughtful" disposal of all wastes. Whatever the ultimate answer, we hope that this trend towards enlightenment will continue and that some day the federal and state authorities will take all environmental factors--land, air, sea, energy and water conservation--into account when deciding how best to dispose of municipal wastes. Goodbye John; we will miss you and try to carry on as you would wish.

There have also been substantial changes in our senior staff during the last six months; several of our most valued associates have left for more rewarding positions. Dr. Alan Mearns and Dr. David Young, who formerly headed our biology and chemistry departments, periodically return to advise and assist with continuing research on subjects in which they have great personal interest. Jack Word and Marjorie Sherwood are now completing doctoral degrees but both will continue to work with us.

The losses have been cushioned by the smooth transition of their responsibilities to Dr. Gary Kleppel and Dr. David Brown, the new heads of biology and chemistry, and Dr. Jeffrey Cross, the Project's new fisheries biologist. The experience and professional interests of these scientists will gradually modify the direction of our research; in new ways each will be trying to understand man's effects on the sea off southern California.

We continue to develop new instruments and techniques for sampling and measuring. Among these are a new core tool that takes relatively deep undisturbed cores with a fraction of the effort required for a boxcorer; a new generation of current meters; and satellite measurements of ocean color and temperature that help us understand plankton distribution and the motions of water masses.

Cooperative arrangements with the University of Southern California and California State University at Long Beach are working out very well and will probably expand in the next year. SCCWRP has recently received a continuation of the National Science Foundation Grant for food web studies and two new grants from the National Ocean and Atmospheric Administration (NOAA) which deal with tracking special chemical pollutants and the extension of our sediment quality forecasting techniques to other areas. We are encouraged by our ability to compete successfully for scientific funding with large universities. This is especially important as the buying power of our basic funding continues to decline while the use of our scientific data continues to increase.

The scientists at SCCWRP are pleased that some of the ideas we put forth a few years ago about methods of sampling, measuring and defining pollution are gradually being acccepted. Slowly society is beginning to recognize that any action to deal with municipal wastes is relative to some alternative action. Although ocean disposal is by no means a perfect solution, it may be very much better for the overall environment than some of the arbitrary official proposals. Until the alternatives have received much more study no one will know.

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