

recreational boats may congregate in a sheltered bay or cove, with the effect that a tremendous burden of pollution suddenly is added to the water. These problems are real, and they are mounting every day as the number of commercial and recreational watercraft increases, as commercial tankers of greater hauling capacity are launched, and as their cargoes become more diverse.

Catastrophes with tankers in recent months are indications of some of the things that can happen. But it should be kept in mind that the wastes already being discharged from commercial and recreational watercraft are of substantial volume, and while the results of this recurring discharge are not as dramatic or singular as the Torrey Canyon wreck, for example, without doubt they are annually destroying water-related resources and values of infinitely greater magnitude and over a much broader area.

The Department of the Interior study report on "Wastes From Watercraft" (Senate Document No. 48) estimates there are about 46,000 documented commercial vessels, 65,000 non-documented commercial fishing vessels, 1,500 federal vessels, and 8 million recreational watercraft using the navigable waters of the United States. There also are about 40,000 foreign ship entrances recorded each year. Their sewage and other wastes are being discharged into the waters of the United States, a practice that has been followed since the beginning of navigation.

The discharges can greatly exceed the ability of the receiving waters to assimilate them. Public health may be endangered by the release of ballast waters brought in from foreign harbors. The transient nature of water-borne pollutants poses a hazard to areas used for water-contact sports, drinking water supplies or shellfish beds. Organic wastes and nutrients promote algal growth, the lowering of dissolved oxygen levels and, in addition to harming aquatic life, may produce offensive odors and stimulate the growth of undesirable vegetation.

Reports show, Mr. Chairman, that 29 states have laws to regulate vessel discharges, but these vary greatly in their coverage. Another 12 states have statutes that apply to recreational craft. Other minimal efforts are being made, such as by some watercraft operated by federal agencies, but these efforts in the main are only minor in comparison to the problems that exist. There is a scant record of the degree to which the various statutes are enforced, if at all. And furthermore, there is no measure of their adequacy to meet the situation that exists and is worsening steadily. I suspect that many of the laws are aimed at eliminating hazards to navigation rather than at maintaining the quality of water.

I will not attempt to summarize the sizeable records of problems and contradictions that have been compiled. Pollution emanating from vessels in the navigable waters in the United States already is seriously contaminating the environment. The problems are both local and regional in cause and effect, and all available evidence points to their intensification in the absence of corrective action. Certainly, the demonstrated destruction of environmental values, including the hazards that are presented to public health and welfare, leaves no question but that this is a problem of large magnitude. It arises from several sources, among them, the lack of uniform guidelines and requirements, the absence of consistent and vigorous enforcement, the unavailability of a continuing surveillance and monitoring network, inadequate information on which to base programs, and for many other reasons.

Conservationists sincerely hope that the committee will recommend appropriate action to counteract this serious source of water-borne pollution in the legislation reported. It presently constitutes one of the largest, single sources of pollution in the navigable waters of the United States. It is time that steps are taken to prevent it from going untended any longer.

WATER POLLUTION AND SCENIC AREAS

Mr. McCARTHY. Thank you very much, Mr. Gutermuth.

Dr. SMITH. Mr. Tupling is next.

Mr. McCARTHY. Mr. Tupling, the Washington representative of the Sierra Club.

Mr. TUPLING. Mr. Chairman, the Sierra Club is particularly concerned about the impact of pollution on scenic areas. It goes without saying that polluted water and scenic grandeur are mutually incom-