

2.10. cont'd.(c) THE TYPE AND SOURCE OF REQUESTS
FOR SCIENTIFIC OR TECHNICAL ADVICE

It is fitting under this topic to concentrate attention on the Board's concern about the ever-mounting problem of aquatic pollution. Until the present, efforts to assess its effects on fisheries and recreational opportunities and to develop satisfactory control measures have been badly fragmented. Jurisdictional disputes have been but one of the obstacles. The Board has long been involved in studies of pollution and its effect on fisheries, yet chronic shortages of funds and facilities coupled with lack of coordination with other agencies have resulted in only modest advances. Still, the Board has been able to offer at least some guidance to the Department of Fisheries, other agencies and industry. The recent establishment of the Interim Interdepartmental Committee on Water Programs, with its several sub-committees, is recognized as a valuable first step towards coordinating the work of federal agencies. In this potentially improved atmosphere, the Board is willing to offer its special expertise, recognizing that clean water for fish means clean water for man. Coordination and expansion of federal and provincial efforts to control or eradicate pollution of our valuable water resources is a most vital necessity.

(d) FUTURE PLANS DETERMINED BY RECENT DEVELOPMENTS

Plans have already been made to improve on conventional techniques of fish population enumeration by adoption of recent technical advances in echo-sounders and automated fish counters. A recent break-through in the technique of tagging small, juvenile fish promises new rewards in the understanding of migrations, homing tendencies and differentiation of populations. Greater use of television, video-tape recorders and manned submersibles will be made in the study of fish behaviour -- for the purpose of improving the efficiency of techniques of capture. New advances in the design and efficiency of mid-water trawling gear will be adopted to obtain better understanding of the economic potential of animals inhabiting the sound-scattering layers of the ocean. Most of the Board's stations include in their future plans more extensive use of electronic computers not only to free precious man-hours from menial computations, but also to explore mathematic models of populations, food-chains and other complex biological events for the purpose of understanding observed phenomena and the roles played by man and nature in limiting production from the aquatic environment.