

Questions

ST. LAWRENCE RIVER—POLLUTION BY
AQUATIC WEEDSQuestion No. 595—**Mr. Rock:**

1. Do floating aquatic weeds in the International Section of the St. Lawrence River, Lake St. Francis and Lake St. Louis contribute to the pollution of these waters?

2. Were there floating aquatic weeds present in those areas during the duration of the Seaway strike from June 21st to July 14th and, if not, what would account for their absence?

3. Were there dense mats of floating aquatic weeds in these waters immediately after the strike was over and are there any at present and for what reasons?

4. Do floating aquatic weeds deplete oxygen and contribute to pollution when they deposit on bottom of lakes or in bays and decompose?

5. Does the accumulation of floating aquatic weeds cause growth of weeds in areas where there was no previous growth?

6. Have floating aquatic weeds when decomposing contributed to the spread of algae in those waters?

7. Do floating aquatic weeds form high coliform densities close to the shores of Lake St. Louis, Lake St. Francis and of the International Section of the St. Lawrence River?

8. Has any federal department or agency made any water test or pollution counts in these waters and, if so, what were the results from 1957 until present?

9. Has the International Joint Commission or any federal department or agency, investigated the question of whether floating aquatic weeds that are appearing in the waters of the St. Lawrence Seaway are caused by the turbulence provoked by the propellers of large ships while travelling through certain channels in the St. Lawrence Seaway?

10. Has the International Joint Commission or any federal department or agency, ever investigated the question of whether floating aquatic weeds contribute heavily to the pollution of these waters and induce algae growth?

11. Are Canadian federal agencies collecting water quality data in the waters under the jurisdiction of the St. Lawrence Seaway and, if so, what are the results?

[Translation]

Hon. Mitchell Sharp (Secretary of State for External Affairs): 1. The growth of aquatic weeds results from increased fertility of surface waters and therefore can be considered to result from pollution. The weeds themselves can be regarded as pollutants since their decomposition imposes an oxygen demand on the water and nutrients are released in the course of their decay.

2. The river was surveyed before and during the strike and the usual growth of aquatic weeds was observed for that period of the year on 31 ranges from Kingston to Cornwall.

3. This condition has not been observed during water quality studies of the international section.

[Mr. Forest.]

4. Yes.

5. This is not likely, suitable bottom substrate is probably required to support growth of aquatic weeds.

6. This phenomenon was not observed by the Department of National Health and Welfare in their surveys on behalf of the I.J.C., but the possibility of such an occurrence is real.

7. This phenomenon has not been observed, but the release of nutrients through plant decomposition may well stimulate bacterial reproduction. Pathogenic organisms are unlikely to reproduce because temperatures encountered in the river are generally lower than those ideal for the reproduction of pathogens.

8. The Department of Energy, Mines and Resources monitors water quality immediately downstream from the Robert H. Saunders generating station at Cornwall. Samples are collected bi-monthly for analysis of physical and inorganic chemical components. Data compiled since October 1967 indicates moderate fertility which is considered to be attributable in part to the inundation of arable land by the formation of the Lake St. Lawrence impoundment.

The Department of National Health & Welfare has been surveying the water quality of the international section of the St. Lawrence River since 1965, under an investigation by the I.J.C. Interim reports of the Commission to the Canadian and U.S.A. Governments have indicated the water quality of the St. Lawrence River to be generally good, with local pollution occurring near waste discharges. A comprehensive report on Lakes Erie, Ontario and the international section of the St. Lawrence is in the course of preparation for the International Joint Commission by its Water Pollution Advisory Boards. Following receipt of this Report, the Commission will conduct public hearings and formulate its report and recommendations to the two Governments.

9. No.

10. No formal study has been initiated, although experience indicates that these weeds probably do contribute to pollution and induce growth of algae. Water quality is only affected significantly near points of discharge of inadequately treated wastes. The problem of excessive quantities of aquatic weeds, which are indeed a nuisance and interfere with water use, is a result of natural and cultural enrichment of these waters, i.e.