

EXECUTIVE SUMMARY

INTRODUCTION

The conversion of land over many decades from its natural covering of mostly forest to more intensive uses such as urban development and agricultural crops has been a major factor in the degradation of water and other components of the Great Lakes ecosystem. Pollution from man's activities on the land ("nonpoint" pollution) continues to increase as a result of population growth and technological change. Nonpoint pollution differs from that of industrial plants and municipal sewage treatment plants (point sources) in that the former results from a large number of diffuse sources often producing individually small, but cumulatively significant, quantities of pollution.

The Governments of Canada and the United States requested, in a Reference dated April 1972, that the International Joint Commission study and make recommendations on the extent and cause of pollution from land use activities, and on possible remedies. This Report is written in response to that request. The basic questions asked by the Governments were: are the boundary waters of the Great Lakes System being polluted by land drainage from land use activities? If such pollution is occurring, by what causes, to what extent, and where is the pollution taking place? What remedial measures would be most practicable to deal with such pollution, and what would be their probable cost? The Commission was also asked to assess the adequacy of existing programs and control measures for addressing nonpoint pollution.

To assist the Commission in answering the Reference, a binational group of scientists and other specialists, the Pollution from Land Use Activities Reference Group (PLUARG), was formed. The desire for widespread citizen input to the PLUARG program led the Reference Group to initiate a new approach in public participation. Nine public consultation panels in the United States and eight in Ontario were established to discuss the environmental, social and economic aspects of the study, and to present their resulting views and recommendations thereof. As well, the panels had the opportunity to review the PLUARG report and provide comments prior to its being completed. Additional public input was available directly to the Commission through public hearings held both before and after the study.

The information received through this process and subsequent reports forms the basis for the Commission's considerations, conclusions and recommendations.

POLLUTION FROM LAND USE ACTIVITIES

The Commission agrees, in general, with the study finding that the Great Lakes are being polluted from land drainage sources. Such pollution occurs most seriously from land areas of intensive agricultural and urban use. The most significant pollutants from these sources are phosphorus, sediments, a number of industrial organic compounds and pesticides, and some heavy metals.