# FOREWORD

This report is a compilation of the results of field and laboratory analyses conducted on the waters of the Mystic River Basin during 1979, 1980 and 1981 by the Technical Services Branch of the Massachusetts Division of Water Pollution Control. These surveys are part of an on-going monitoring program which included similar water quality assessments in 1967, 1973 and 1978. The main purpose of these surveys was to determine in a general sense the pollution load of the streams and to identify specific problem areas. An attempt was also made to locate the source, or sources, of previously observed high ammonia levels in the upper watershed.

All analyses included within this report are the result of grab samples. The exact time of sampling is located within the dissolved oxygen data (Table 2).

Dissolved oxygen samples were analyzed by Division personnel using the azide modification of the Winkler method. Temperature was measured in situ at time of collection.

All chemical and bacteriological samples were transported to the Lawrence Experiment Station of the Department of Environmental Quality Engineering for analyses conducted according to the procedures set forth in the American Public Health Association's Standard Methods for the Examination of Water and Wastewater (fourteenth edition, 1975, New York.) The actual method used in the analysis of a given parameter is listed in this report. The data were compiled and tabulated by personnel of the Division of Water Pollution Control.

Flow measurements were taken during the survey weeks at several river locations by personnel of the Division's Technical Services Branch. These measurements were taken to supplement flow measurements recorded at the U.S. Geological Survey gage on the Aberjona River in Winchester.