EXPLANATION

- SAND OR INTERBEDDED SAND AND Silt
- Silt, clay, or mixture of silt and clay
- TILL MIXED WITH LAVES OF SAND AND Silt
- TILL OR CLOTTED Silt
- AREAS THAT HAVE NOT BEEN GLACIALLY
- GEODETIC CONTACT
- DOWNSLOPE LIMIT OF WISCONSIN GLACIATION
- BOUNDARY

PREFAE

These maps were first published at this scale, but in separate reports. In a groundwater report done by the U.S. Geological Survey in cooperation with the New York State Department of Environmental Conservation (Frimpter, 1976), these maps were presented in their original format for use in regional groundwater appraisal and planning.

INTRODUCTION

New York State's need to develop a groundwater-management program for protection of its aquifers led to a cooperative program between the U.S. Geological Survey and the New York State Department of Environmental Conservation (through regional planning agencies) to produce data on groundwater availability in the Lake Erie Basin. This work was the result of a study performed during the period of 1964-1967. The report includes a summary of the results of this study and provides maps of the United States that were used as a basis for the study.

DELOGIC SETTING

Most of the area is a low, dissected plateau. The plateau is an irregular extension of the Lake Erie Plain, a flat area composed of Lake Erie. The Lake Erie Plain is a narrow belt of nearly flat land that slopes gently from the Lake Erie shore. About 200 feet above sea level, to the Lake shore, about 10 feet above sea level.

A network of abandoned lakes and streams has been found in the area. Most locations, the meanders in this area are hills and ridges and are below the lower elevations. Many of the lower elevations are in lakes, abandoned lakes, and streams.

SOLICATIONAL SETTING

Most of the area was covered at least twice by continental glaciers that moved southwest across the region. Each glacier was separated by a time interval when the ice had advanced.