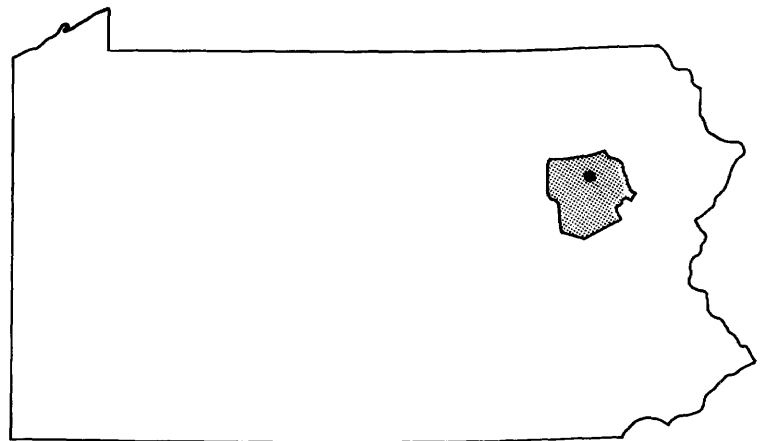


# FLOOD INSURANCE STUDY



**TOWNSHIP OF  
PLYMOUTH,  
PENNSYLVANIA  
LUZERNE COUNTY**



OCTOBER, 1976

**U.S. DEPARTMENT of HOUSING & URBAN DEVELOPMENT  
FEDERAL INSURANCE ADMINISTRATION**

## 2.4 Flood Protection Measures

The levee protecting the Borough of Plymouth also protects a small portion of Plymouth Township, but most of the Township is outside the levee, and the levee has a negligible effect. Five upstream dams contribute to the reduction of the flood hazard from the Susquehanna River. These include: Arkport Dam on the Canisteo River; Almond Lake on Canacadea Creek; Whitney Point Lake on the Otselic River; East Sidney Lake on Ouleout Creek; and Stillwater Lake on the Lackawanna River.

## 3.0 ENGINEERING METHODS

For flooding sources studied in detail in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Floods having recurrence intervals of 10-, 50-, 100-, and 500-years have been selected as having special significance for flood plain management and for flood insurance premium rates. The analyses reported here reflect current conditions in the watersheds of the streams.

### 3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for floods of the selected recurrence intervals for each stream studied in detail in the community.

All flood discharges were determined by the Susquehanna River Basin Commission.

The discharges for the Susquehanna River were obtained from the discharge-frequency curves for the stream gage at Wilkes-Barre, as published by the U. S. Army Corps of Engineers and adjusted for the Township. The gage has been operated since 1899. Wilkes-Barre gage is located about 4.2 miles upstream of Plymouth Township.

Peak discharge values are shown on Figure 2.

### 3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of streams in the community are carried out to provide estimates of the elevations of floods of the selected recurrence intervals along each stream studied in detail.