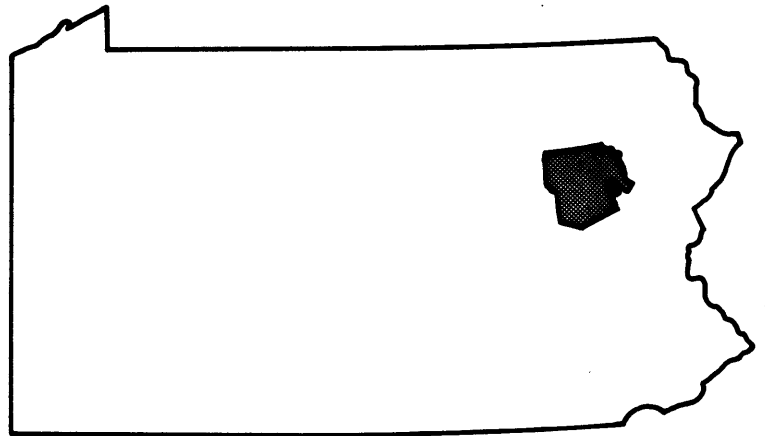


# FLOOD INSURANCE STUDY



**BOROUGH OF  
WEST WYOMING,  
PENNSYLVANIA  
LUZERNE COUNTY**



SEPTEMBER 15, 1983



Federal Emergency Management Agency

COMMUNITY NUMBER - 420629

### 2.3 Principal Flood Problems

Historic data and information from this study show that Abrahams Creek is the principal flood problem within the Borough of West Wyoming.

Major floods occurred in this area in 1865, 1902, 1904, 1936, 1940, 1946, 1960, and 1970 causing extensive damage to buildings and property (Reference 9).

Due to the level topography of parts of the Borough, there are two shallow flooding areas that create problems. Sheet flooding occurs when Abrahams Creek breaches Eighth Street. This sheet flooding flows southwest across the Borough and into the channel of an unnamed tributary. After passing through a culvert, this water ponds in a depressed area. The B zone between the two A0 zones is due to backwater flooding from Abrahams Creek in Wyoming and Swoyersville.

### 2.4 Flood Protection Measures

A local flood protection project along the Susquehanna River reduces flood hazards to the Borough. A local flood protection project has been constructed for Abrahams Creek through the Borough. Both of these projects are designed to accommodate the 100-year flood. Five existing upstream dams contribute to reduction of flood hazards 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. An upstream dam on Abrahams Creek, Slocum Dam, reduces flood hazards from Abrahams Creek.

## 3.0 ENGINEERING METHODS

For the flooding source 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 watershed 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 the stream studied in detail in the community.