

II. Physical and Demographic Analysis (ARRO 537)

A. Planning Area Identification

This update provides wastewater planning for the New Tripoli Wastewater Treatment Plant and the surrounding Village of New Tripoli. The planning area is similar to that of the 1976 Sewage Facility Plan created by the JPC with the exception of two new zoning areas along the eastern Township boundary.

Refer to ARRO 537 Plan Update Appendix for Map 1 of the existing service area. A municipal boundaries and regional location map is also provided as Map 2 in that plan as well.

B. Physical Characteristics Identification

Lynn Township is located in the northwestern corner of Lehigh Township at the base of Blue Mountain. The terrain to the north of the township at the base of Blue Mountain is rocky and steep, but the majority of the terrain in the township is gently sloping agricultural land and to a lesser degree, residential land.

The study area drains directly into Ontelaunee Creek, which along with Kistler and Stony Run Creeks drain into the Schuylkill River Basin. In the southeastern corner of the Township, Switzer Creek drains into the Jordan Creek Basin in the southeastern corner of the Township. The major recreation area within Lynn Township is the 117-acre Leaser Lake located in the northern portion of the Township. Leaser Lake was built by the PA Fish Commission for recreational purposes and opened for public use in 1971.

Refer to ARRO 537 Plan Update Appendix for Map 3 of the existing features within Lynn Township.

C. Soils

According to the Act 537 Plan Update for Lynn Township prepared by Keystone Consulting Engineers, Inc. and ARRO Consulting Engineers, Inc., PaDEP was consulted about the need for a soils analysis in the Plan and the conclusion of that consultation was that there is no need for analysis of soil types in this report.

D. Geology

The two main geologic formations within Lynn Township are the Martinsburg and the Tuscarora. The Martinsburg consists of an upper layer of medium to fine grained sandstone and a lower layer of thin-bedded shale. The Tuscarora formation on the other hand is a quartzite made with coarse rounded quartz firmly cemented in silica. The Tuscarora is the hardest and most resistant to erosion rock in this region. It underlies the base of Blue Mountain accounting for the relatively high height of this mountain when compared to the surrounding terrain.

E. Topography

Within Lynn Township, over 15% of the land is considered steeply sloped. Within Lynn Township, the majority of the land area consists of gentle slopes ranging between 0 and 8% slope. The areas with greater than 15% slope are centered around Blue Mountain in the Northwestern region of the township with an elevation of 1,640 feet and Shochary Ridge on the western edge of the Township with an elevation of 1,060 feet. The lowest elevation within the Township is 440 feet where Kistler Creek crosses into Berks County.

Refer to ARRO 537 Plan Update Appendix for Map 3 of the existing features and topography within Lynn Township.

F. Potable Water Supplies

Within Lynn Township, there are several small areas that are served by a public water system. The Lehigh County Authority's system in southwestern Lynn Township, Madison Park North's system which serves a small portion of New Tripoli and the system owned by Grim's Mobile Home Park. These areas were identified on Page 121 of the Public Water Systems in the Multi-Municipal Comprehensive Plan for the Northern Region of Lehigh County.

Ground and surface waters were found to be in overall good condition according to the Summary of Findings in the Upper Maiden Creek Joint Surface and Ground Water Resource Plan, dated October 2004.

G. Wetlands

Wetlands exist throughout Lynn Township. All construction activities will take note of this fact and act accordingly by following all regulations to properly identify and map any and all wetlands that exist within the proposed construction area.