

GEOHYDROLOGIC MAPS OF THE ANTHRACITE FIELDS
OF NORTHEASTERN PENNSYLVANIA

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This report is a compilation of field measurements collected from 1955 to 1967 for administration of projects submitted under Public Law 162 which provided for the control of mine water where necessary to conserve anthracite reserves. It is not a uniformly current or complete inventory, however, the available information on the location and extent of mine pools and location and the amount of mine discharge is valuable for use in the future planning and development of the anthracite region (fig. 1).

The compilation of data is shown on ~~30~~ 7½-minute and one 15-minute quadrangle maps. The location of each map is shown in figure 2. On each map the base of the formation enclosing the anthracite-bearing rocks (base of Pottsville Formation) is outlined by a dotted line and the base of the outcrop of the lowest anthracite bed which has been mined or is now being mined is outlined by a dashed line. In the Northern field they nearly coincide, but in the Eastern Middle, Western Middle, and Southern Anthracite fields there are coals which are presently uneconomical to mine in the area shown between the outcrop lines. Solid lines on each map indicate the shorelines of the pools of water contained in flooded sections of underground mines where they are known to exist. Overflow or discharge points where the mine water appears at the land surface are shown and the corresponding hydrologic information is tabulated on the explanation where known.

In the Northern Anthracite field, from north of Forest City to Mocanaqua, the coal-bearing structure is indicated as being between the outcrops of the Lower Red Ash and the No. 3 Dummore anthracite beds. These locations were determined by recent geologic mapping between Mocanaqua and Pittston, and from older work of many organizations for the area north of Pittston. The location of the mined coal beds was determined from field inspection and aerial photographs and the shoreline of the underground pools was obtained from structure maps and mine-pool elevations. Most mine-water discharges were determined periodically.

In the Eastern Middle Anthracite field from White Haven to west of Hazleton and Humbolt, few field inspections have been made and the data is less current. Correlation of mined beds and outcrops are incomplete. The location, extent of mining and altitude of the mine-water pool levels are in many cases reported information. Only a few of the mine discharges have been measured.

The lowest mined coal in the Western Middle Anthracite field from south of Hazleton to Trevorton, has been outlined using either the Lykens Valley No. 4 or 6 coal beds as enclosing the limits of mining; which, in most areas is the Lykens Valley No. 4 bed. The location and extent of the mine-water pools were reasonably well known and all of the largest discharge points were visited and most have been measured.

The Southern Anthracite field, from Jim Thorpe on the Lehigh River to North of Harrisburg on the Susquehanna River has been outlined by the Lykens Valley No. 4 or 6 coal beds in the western half and by the Buck Mountain coal which is sometimes called the Mammoth in the eastern half. The extent of both the mining and the pools were determined from the mine-structure maps and the pool-level measurements. However, where there were no records available for many of the small older mines, only their discharge sites have been shown.

OPEN-FILE REPORT

* Unpublished (1963)

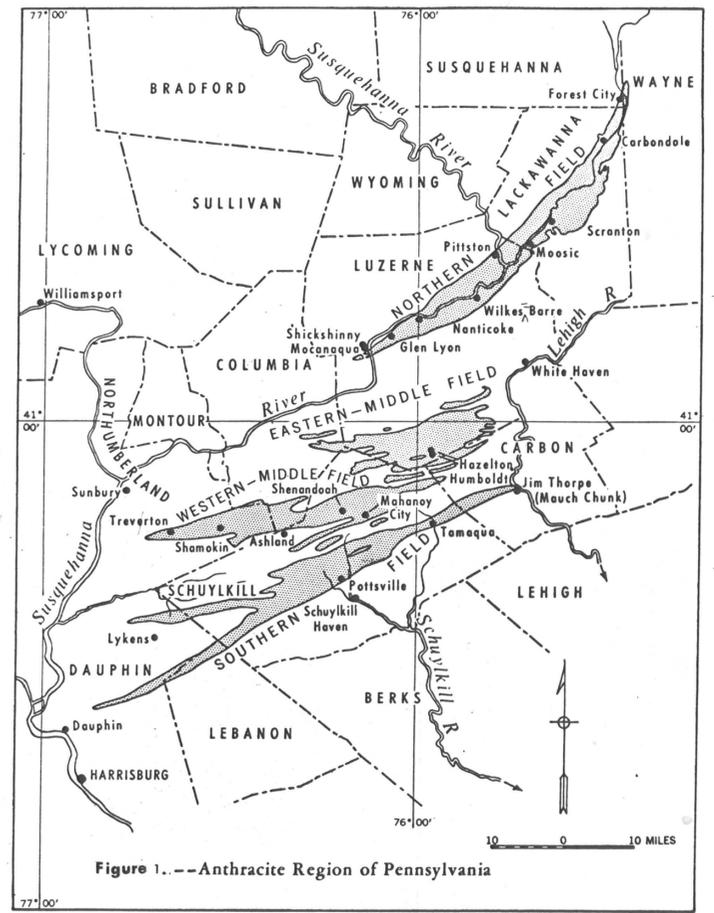


Figure 1.--Anthracite Region of Pennsylvania

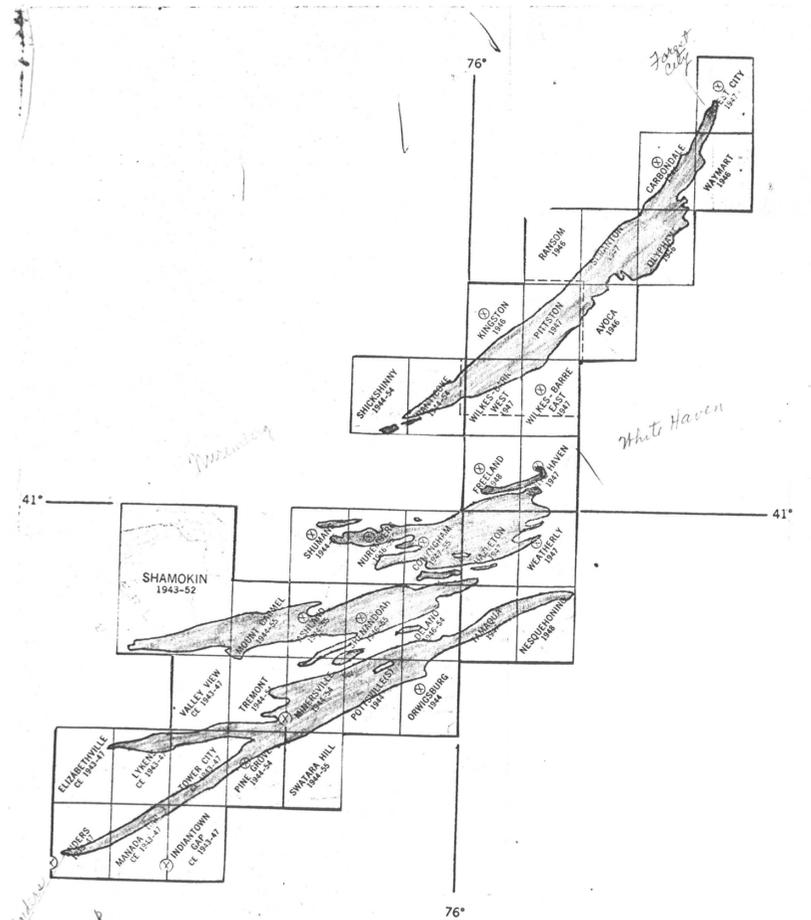


Figure 2.--Index to topographic maps.