

LAND USE

Historically, Schuylkill County has gone through three periods of development. These have included the following:

- 1) A lumbering and agricultural phase, extending from 1750 to the early 1820's.
- 2) The growth of Anthracite mining, between 1820 and 1920.
- 3) The economic decline and transition, between 1920 and the present day.

The County population has paralleled these three periods of development, increasing from about 6,000 persons in 1811, to a peak of 235,505 persons in 1930. The greatest growth and increase in population coincided with the growth of the Anthracite economy. As coal production and mining employment declined, it was then accompanied by a drop in the size of the population to 173,027 persons by 1960.

At the present time, Schuylkill County is undergoing transition and a change, and a program of economic and industrial diversification is under way. Schuylkill County is an area of many contrasts. It is best known for its Anthracite resources and for its past mining history. The sharpest contrast lies in the physical differences and the character of development between the agricultural and the coal mining areas. In the agricultural areas development has primarily taken the form of small scattered villages set in attractive, beautiful natural surroundings. The villages of

Hegins and Valley View, for example, are as attractive as any other agricultural or wooded section to be found in Pennsylvania. These two villages are immediately north of Bear Mountain which separates the coal mining areas from the agricultural areas. In contrast, the coal mining areas have been stripped of their original natural beauty and lie as completely devastated land, exploited by man in his deep mining and strip-mining ventures.

The general rural character of the area is evidenced by the fact that less than five percent of the total land area is presently developed. The coal lands occupy practically all of the area in the watershed.

The following problems confront the area:

- a) other than the newly-constructed Interstate Highway Route 81, the area has inadequate highway facilities.
- b) the vast acreage of land which have been stripped or which are subject to subsidence.
- c) the absence of development and land use standards.

The area of potential development include the following:

- a) improved accessibility to the area with the completion of Interstate Highway Route 81.
- b) the availability of rail facilities.
- c) small areas of land for various forms of residential and industrial development.

The overall conditions and characteristics of the housing in the area is in dire need of renewal, with the majority of units being deficient and dilapidated. These units served as former villages for the many collieries that existed in the area.

Elevations range from 700 feet to over 1500 feet above mean sea level, and grades throughout the watershed range from three percent to over thirty percent along the slopes of the mountains.

In summation, the area has little to offer in the way of development. There are few, if any areas, that would be conducive to the development of recreational areas, agricultural areas or industrial development.

METHOD OF STUDY

A field and map study were initiated to locate and identify all pollution sources within the watershed study area.

Once the pollution sources were located and identified a program of collecting periodic water samples, making field measurements of flow and making other field observations was instituted.

Water samples were collected weekly, and water flow measurements were made simultaneously. The water samples were analyzed for the following:

- a) pH
- b) Fe
- c) sulfates
- d) acidity

Attempts to secure mine maps of the workings in the watershed area were, for the most part, rather fruitful. The Reading Anthracite Company was the only source of information that was not too obliging in assisting in relinquishing mining information that would have been beneficial in the compilation of data for this report.

Aerial photographs of the area involving the Watershed were utilized in the studies of the locations of both deep mines and strip mines, as well as the effects these features had upon the surface drainage. The mine maps also assisted in the study of the over-all sub-surface drainage trends of the entire watershed area.

INFORMATION SOURCES

The information contained in this report was obtained from the following various sources:

- a) The Department of Environmental Resources of the Commonwealth of Pennsylvania. We are indeed grateful to the personnel who so ably extended efforts to assist in contributing data for this report.

- b) the various publications for the Federal Water Pollution Control Authority.
- c) the various publications of the Pennsylvania Department of Health.
- d) the various pertinent publications of the United States Bureau of mines.
- e) the various pertinent publications of the United States Geological Survey.

- f) the coal mining information was secured from the various operators, most of whom were very obliging in assisting with the forwarding of pertinent information, as well as from the mining department of the Department of Environmental Resources located in the City of Pottsville.