## A.4 Surface Drainage

Elk County is drained by two major drainage basins. The eastern and southeastern portion lies in the Susquehanna River Basin and is drained by Sinnemahoning Creek and its tributaries. The western and central portions are in the Allegheny River Basin and drained by the Clarion River and its tributaries. On a larger scale, east flowing waters ultimately end in the Chesapeake Bay. On the other side of the Continental Divide, west flowing waters end in the Gulf of Mexico. See Exhibit No. 1.

Within the Clarion River Watershed, a watershed plan (Act 167 Stormwater Management Plan) is currently being developed for the Elk Creek watershed in portions of the City of St. Marys, the Borough of Ridgway, and portions of Fox, Ridgway, and Jay Townships. The plan is expected to be completed in the year 2000.

Elk County and it's residents are actively working to protect the watersheds within the County through stormwater management plans, special interest groups, and coalitions including, but not limited to:

The Western Pennsylvania Coalition for Abandoned Mine Reclamation.

The Western Pennsylvania Coalition for Abandoned Mine Reclamation, established in 1981, provides for reclamation, development, and best use of abandoned mine lands in the bituminous coal area of western Pennsylvania. This non profit/non partisan group supports the efforts of the Pennsylvania Association of Conservation Districts, the Rural Abandoned Mine Program, and other similar programs.

The coalition includes Elk County and 22 other counties in western Pennsylvania.

## A.5 Topography/Slope

Exhibit No. 2 shows topography, considered to be restrictive to development. Slope is not indicated as a function of elevation above sea level, but rather by the percent of slope of the land. This map is based on the United States Geological Survey mapping which translates distance between adjacent contours into a percentage of slope and USDA soil survey mapping.

Generally, land having a slope of 15% or less is preferred for development. This slope condition usually occurs along river terraces, tributary stream valleys, and on ridge tops.

Slopes exceeding 25% are usually restrictive with respect to development. Steep slope areas generally are not suitable for development for both economic and environmental reasons. By comparing Exhibit No. 2 with the Existing Land Use Map it can be seen that no development has occurred on slopes exceeding 25%. A significant amount of the land is classified as having excessive slopes in Elk County. Slopes exceeding 25% should not be considered as having potential for routine future development.

Additional factors such as soil type, subsidence characteristics, or flood potential affect the suitability of development for lands having an otherwise desirable slope. This is addressed further under the section on soils.

Usually the easiest to develop, and therefore preferred land to develop is the level to rolling areas having a slope of less than 8%. Assuming other factors, such as flooding and soils do not present limitations, this slope category is generally suitable for large scale or intensive land uses. The upper slope areas in this category (7% - 8%) may impose some restraints on intensive land development. Generally, single family residential development is not restricted. Land with slopes between 0% and 3% is usually suitable for slab on grade buildings, large buildings, and major road development. Traffic circulation is not dictated by topography.

Land between 8% and 15% slope is considered to be generally suitable for development of roads and structures. Topography becomes a major planning factor that can limit road placement and may require special engineering design and construction. Practical use narrows to placing smaller buildings on large tracts and possibly terraced construction.