

Economic Resources

Beginning about the early 18th century humans began exploiting the rich deposits of iron, zinc and graphite in the Highlands. Within the region's Precambrian rocks, many mines have operated over the last 250 years, extracting materials that have played important roles in American history. The most famous is the role of iron. The presence of magnetite iron ore deposits throughout the Highlands allowed numerous mines to flourish, and at one time New Jersey led the nation in production. Much of the raw material went to producing stoves, steel, guns, and munitions for the Revolutionary War effort.

Iron mines operated throughout the Highlands of Sussex County. Additionally, zinc was mined in Ogdensburg and Franklin. Franklin Mine and Sterling Hill Mine in Ogdensburg are world famous for the minerals extracted there. More than three hundred different minerals were discovered at Franklin and Sterling Hill, of which forty-two were new to science.

Quarries were also common throughout the Highlands, and to a lesser extent, the Ridge and Valley. Precambrian granite and gneiss were quarried for crushed stone at Hamburg; marble was quarried extensively in the Franklin area north to McAfee. Paleozoic limestone and slate were quarried at numerous locations in the Ridge and Valley. Glacial sand and gravel pits were mined in the Highlands and Ridge and Valley.

Water Resources

Surface Water

The New Jersey Department of Environmental Protection (NJDEP) has organized New Jersey into 20 Watershed Management Areas (WMA) based on physical characteristics and stream drainage patterns. Each WMA is named for one or more prominent rivers that drain that particular watershed. Each WMA contains several sub-watersheds that highlight the importance of smaller streams in delivering water to the larger waterways of the watershed. The logic of approaching water quality from a watershed perspective is apparent. Only by considering all actions in upstream locations that drain to a common waterway can the impact on the stream from development, wildlife populations and other natural and cultural actors be analyzed.

There are four WMAs within Sussex County. These areas delineate the principal stream systems that drain the county's land area. The largest watershed in the county by area is WMA 1, the Upper Delaware River Watershed. The waters of WMA 1 drain west and southwest to the Delaware River. Second in area in Sussex County is WMA 2, the Wallkill River Watershed. The Wallkill, which flows north into Orange County, New York, drains the north-central and northeastern section of Sussex County. WMA 3 (Pequannock River Watershed) and WMA 6 (Rockaway River Watershed) both drain to the southeast, and comprise small parts of the County. **Map 4: Watershed Management Areas in Sussex County** shows the location of Sussex County's four WMAs.