

**MERCER COUNTY**  
**ALL HAZARD MITIGATION PLAN**

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# **Mercer County All Hazard Mitigation Plan**

## **Chapter 1 – Introduction**

### **I. Purpose of Plan**

The purpose of this All Hazard Mitigation Plan is to fulfill local Hazard Mitigation Plan requirements. The All Hazard Mitigation Plan will identify hazards, institute community goals and objectives, and select mitigation strategies/opportunities that are appropriate for Mercer County, Pennsylvania.

The Disaster Mitigation Act of 2000 (DMA 2000), Section 322 requires that local governments (communities/counties), as a condition of receiving federal disaster mitigation funds, have a mitigation plan that describes the process for identifying hazards, creating a risk assessment and vulnerability analysis, identifying and prioritizing mitigation strategies, and developing an implementation schedule for the County and each of the municipalities.

Congress authorized the establishment of a Federal grant program to provide financial assistance to States and communities for flood mitigation planning and activities. The Federal Emergency Management Agency (FEMA) has designated this Pre Disaster Mitigation (PDM).

The main purpose of this All Hazard Mitigation Plan is to implement the mitigation strategies, which Mercer County develops, to tackle the hazards and flood problems in the County.

The Mercer County All Hazard Mitigation plan is an umbrella plan that encompasses the input of the local municipalities. Mitigation begins at the local level, in communities, boroughs, and cities where impacts of damaging events are first felt. Local mitigation planning will focus community attention on development issues prior to a disaster, ensuring participation in a more proactive sense. Through participation in the hazard mitigation planning process, local entities will possess the capability to identify, take advantage of, and implement mitigation strategies. Active hazard mitigation in a community also contributes to public safety and welfare, economic development, and environmental protection.

## II. Methodology

The methodology used for the development and updating of the Mercer County All Hazard Mitigation Plan, consisted of the following task:

1. Coordination with the Northwest Pennsylvania Regional Planning and Development Commission (Northwest Commission) and other agencies/organizations
2. Municipal/Public involvement
3. Creating a Hazard Mitigation Team
4. Hazard area inventory
5. Problem identification
6. Hazard Mitigation Team review, analyze, and prioritize possible mitigation activities
7. Local adoption after public comment
8. Periodic review and update

This All Hazard Mitigation plan contains a list of potential hazard mitigation opportunities (projects) and it also give an explanation of how each opportunities relates to the overall mitigation strategy outlined in the plan.

This plan summarizes the activities outlined above to evaluate the effects of floods, severe snow events, windstorms (tornadoes, straight line, etc.) and other hazards in Mercer County and proposes mitigation activities.

The All Hazard Mitigation Plan will be evaluated and updated every five years. The plan will also be reviewed when a Presidential Disaster is declared that significantly affects Mercer County. The update will be completed no later than 12 months after the date the disaster occurred.

Routine maintenance of the plan will include adding projects, as new funding sources become available or taking projects off the list when they are accomplished.

### **III. Organization of All Hazard Mitigation Plan**

The plan is organized as follows:

#### **Chapter 1**

Chapter 1 includes sections on the purpose and goals of the plan, methodology used in creating the plan, organization of the plan and a general background on Mercer County.

#### **Chapter 2**

Chapter 2 identifies known hazards in Mercer County (flooding, windstorms (tornados, thunderstorms, etc.), severe winter storms, earthquake and landslide potential, manmade and technological hazards, etc. ) and the probability and vulnerability of each event. Chapter 2 also addresses historical hazard events that have occurred in Mercer County.

#### **Chapter 3**

Chapter 3 identifies the capabilities that Mercer County currently performs, what Mercer County can do to reduce the risks its communities face from hazards.

#### **Chapter 4**

Chapter 4 lists the potential Hazard Mitigation Opportunities/Strategies that Mercer County would like to implement to mitigate against their identified hazards.

#### **Chapter 5**

Chapter 5 outlines the municipal and public involvement in the plan. Chapter 5 will also document the planning process of the Hazard Mitigation Team (including the process for prioritizing hazard mitigation projects (opportunities/strategies) and how Mercer County will update the plan in the future).

#### **Chapter 6**

Chapter 6 addresses implementation procedures and a process for updating the plan.

# Mercer County

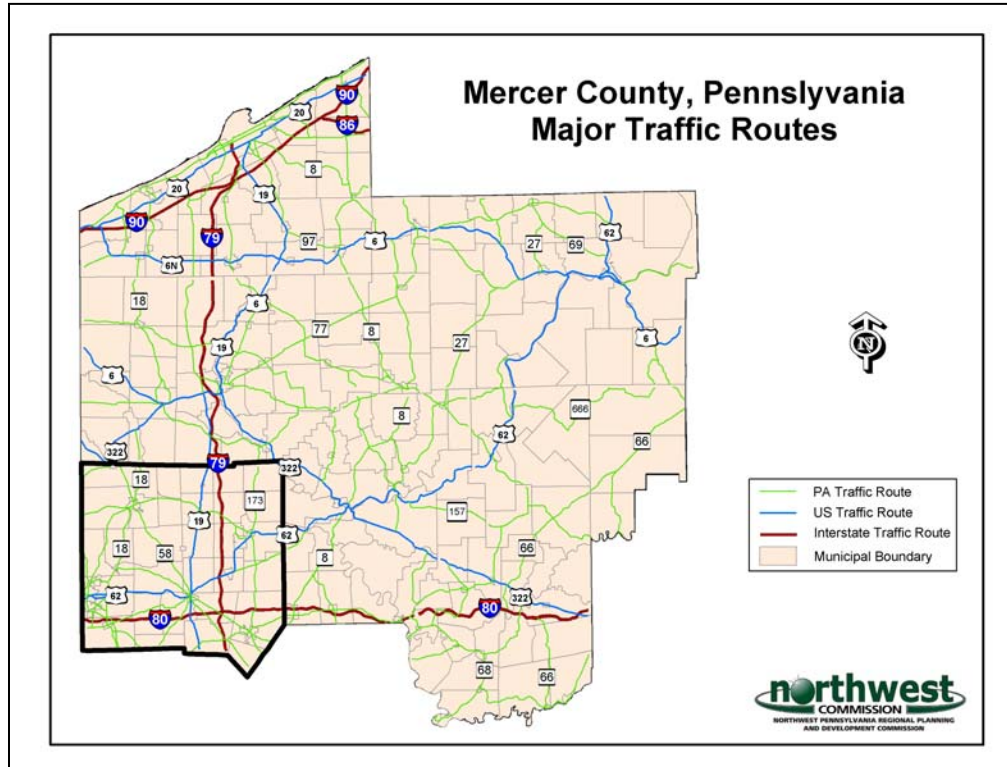


According to the Penn State Cooperative Extension Website ([www.extension.psu.edu](http://www.extension.psu.edu)), Mercer County (population 121,000) was created on March 12, 1800, from part of Allegheny County and named for General Hugh Mercer. It was attached to Crawford County until February 1804 when it was formally organized. Mercer is the county seat.

Located in Western Pennsylvania, at the crossroads of Interstates 79 and 80, the area features include 4 lakes, 12 golf courses, the world's only free golf course, forests abundant with game, the world's largest shoe store, candy shoppe and Christmas displays, America's oldest metal forge, top hotels and inns, Manufacturers' Outlet Shops, outstanding festivals and more! From Indian trails to Amish communities, traces of the past still exist in Mercer County.

Agriculture is the number one industry of Mercer County including dairy, livestock and grain operations with many agri-businesses providing service. Tourism and industry are other major parts of the economy.

Mercer County's transportation include Interstates 79 and 80, and Routes 18, 62.



main networks and 80, 58, and

**Land Use/Development Trends:**

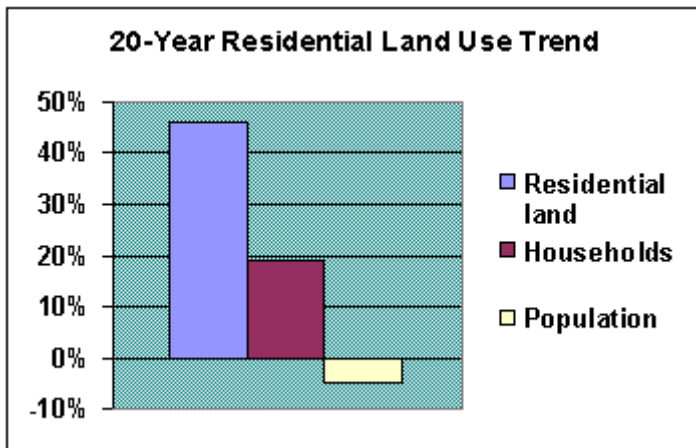
[Mercer County land use maps](#) for 1973 and 1993 were created in GIS format from aerial photography and field checks. The following table shows amounts of various land uses and 1973 to 1993 trends.

## Mercer County Land Use 1973 & 1993

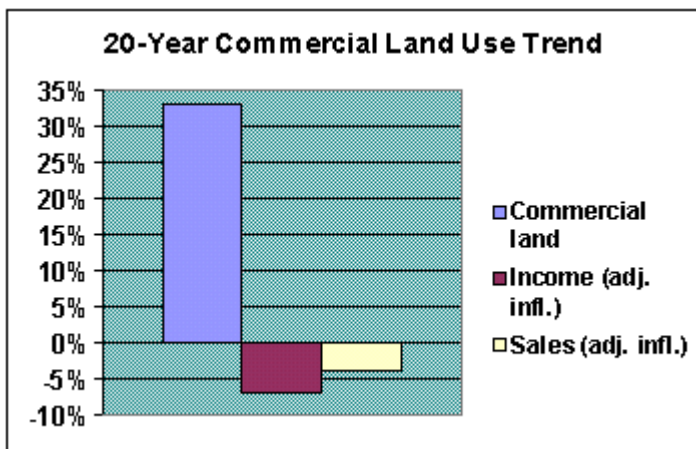
Land Use Category	1973 Acres	% Total Area	1993 Acres	% Total Area	Change 1973-93
<b>Residential</b>	20,502.07	4.76%	29,989.56	6.96%	46.28%
General Residential	20,370.85	4.73%	29,731.81	6.90%	45.95%
Mobile Home Park	131.22	0.03%	257.75	0.06%	96.43%
<b>Commercial</b>	1,464.85	0.34%	1,945.10	0.45%	32.78%
General Commercial	1,379.49	0.32%	1,676.85	0.39%	21.56%
Shopping Plaza	67.36	0.02%	268.25	0.06%	298.23%
<b>Industrial</b>	2,238.66	0.52%	2,769.46	0.64%	23.71%
<b>Public &amp; Semi-Public</b>	1,894.52	0.44%	2,086.72	0.48%	10.15%
<b>Recreation &amp; Public Open Space</b>	13,324.64	3.09%	15,224.23	3.53%	14.26%
<b>Woodland</b>	155,014.92	35.97%	225,664.20	52.36%	45.58%
<b>Mineral Extraction</b>	2,854.16	0.66%	955.50	0.22%	-66.52%
<b>Other</b>	233,708.80	54.22%	152,364.80	35.35%	-34.81%
<b>Total</b>	431,002.62	100.00%	430,999.57	100.00%	0.00%

(Other includes land not classified as any of the separately identified land uses. A major portion of other land use is active agricultural land.)

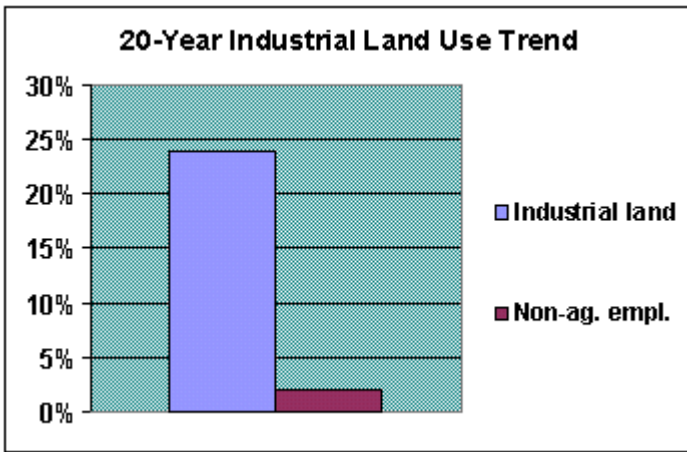
Source: Municipal Mapping Services, Inc. & Mercer County Regional Planning Commission.



In the 20-year period from the early 1970's to the early 1990's, residential land use grew 46% while the number of households grew only 19% and the population decreased 5%. In other words, less population lived in more housing units which on the average consumed more land than did older housing.



In the same 20-year period, commercial land use grew 33% while median family income (adjusted for inflation) decreased 7% and retail sales (adjusted for inflation) decreased 4%. A shift occurred from older downtowns to newer suburban areas with no real gain in market share.



In the same 20-year period, industrial land use grew 24% while non-agricultural employment grew only 2%. More land was consumed by an economy which, averaged over 20 years, was stagnant.

Graphs source: Mercer County Regional Planning Commission, U.S. Census Bureau & PA Department of Labor & Industry

In summary, a common theme emerges with each trend. *In 20 years, more and more land was consumed by relatively the same amount of people, housing, commerce, and industry.* People and development have simply chosen to relocate themselves, typically from the older, urban areas to the newer suburban and rural areas. If Mercer County were to undergo growth (very realistic given current indications), land consumption and sprawl development would be a major concern.

## Chapter 2 - County Hazard Identification & Vulnerability Analysis

The process of hazard identification is to recognize each of the hazards that can occur in Mercer County. The hazard identification process was based on historical data that was gathered from a variety of sources (County archives, historical societies, Internet sites, Pennsylvania Emergency Management Agency (PEMA) publications, and the National Weather Service). Mercer County has prepared, as part of their Emergency Operations Plan (EOP), a Hazard Vulnerability Analysis (HVA). The HVA and other documents were utilized to show what hazards are or are not a threat to Mercer County and its municipalities. Mercer County has prioritized the hazards that affect their county and has developed mitigation opportunities/strategies to deal with these hazards.

Gathering data on past natural disasters that affected Mercer County will provide a more thorough understanding of what hazards Mercer County is susceptible to. Paying attention to past occurrences of natural disasters has proven to be very informative due to the fact that history has a tendency of repeating itself. By noting the hazards of the past, the communities in Mercer County will be able to better understand, prepare for and take steps to mitigate against future natural disasters.

**Natural Disasters:** The County is most vulnerable to weather related events. Because weather, be it snow, rain, wind or heat, is unpredictable and could adversely impact all municipalities.

**Man-made:** As long as hazardous materials exist; active or inactive, mobile or fixed, solid or liquid, small or large, the potential threat of a hazardous materials incident exists. With 38 fixed facilities throughout the county and various transportation routes; the concern is county-wide.

### I. Hazard Identification & historical events

#### Floods

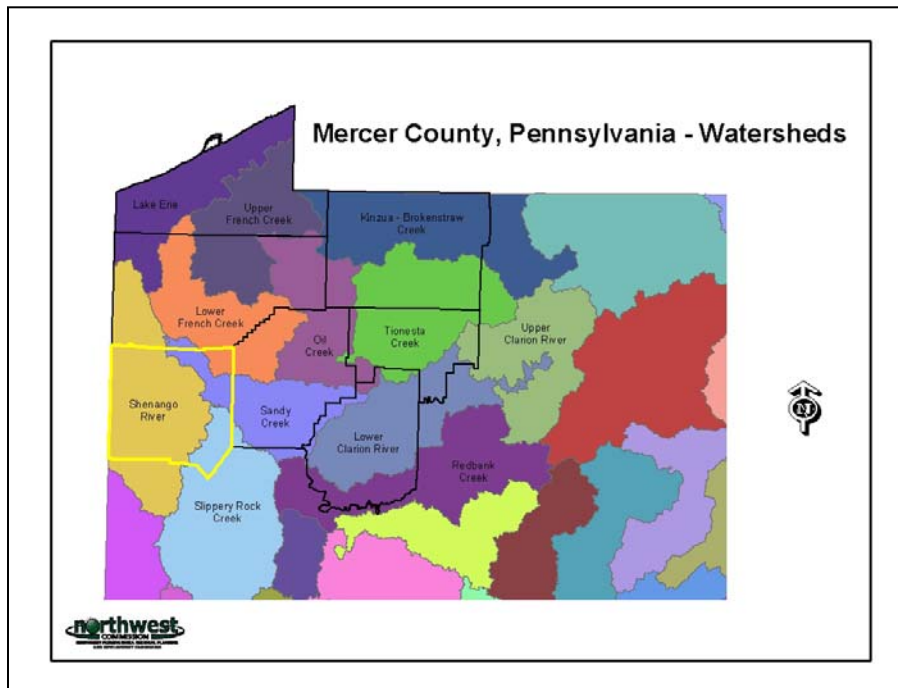
Flooding is normally the result of a larger event such as a thunderstorm, rapid snowmelt, and/or ice jam. Flooding is caused by excessive precipitation and can be generally considered in three categories: flash floods, ice jam floods, and general floods.

Flash floods can occur within several seconds to several hours, with little warning. Flash floods can be deadly because they produce rapid rises in water levels and have devastating flow velocities. Several factors can contribute to flash flooding. Among these are rainfall intensity, rainfall duration, surface conditions, and topography and slope of the receiving basin. Urban areas are susceptible to flash floods because a high percentage of the surface area is composed of impervious streets, roofs, and parking lots where runoff occurs very rapidly.

Ice-jam floods occur on rivers that are totally or partially frozen. A rise in stream stage will break up a totally frozen river and create ice flows that can pile up on channel obstructions such as shallow riffles, log jams, or bridge piers. The jammed ice creates a dam across the channel over which the water and ice mixture continues to flow, allowing for more jamming to occur.

The term "100-year flood" as referred to in the previous paragraph is very misleading. Many people incorrectly presume that the term "100-year flood" denotes a flood that will occur once every 100 years. Rather, it is the flood elevation that has a 1-percent chance of being equaled or exceeded each year. Thus, the 100-year flood could occur more than once in a relatively short period of time. The 100-year flood, which is the standard used by most Federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management and to determine the need for flood insurance. A structure located within a special flood hazard area shown on an NFIP map has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage.

Backwater upstream dam can rise rapidly overflow the channel Flooding moves when the ice dam the water stored dam is released. At flood takes on the characteristics of a with the added ice flows that, when the energy of the can inflict serious structures. An added being caught in an flood is hypothermia, quickly kill.



from the ice and banks. downstream fails, and behind the this time the flash flood, danger of driven by flood wave, damage on danger of ice-jam which can

General floods are precipitation over a longer time period and over a given river/stream basin.

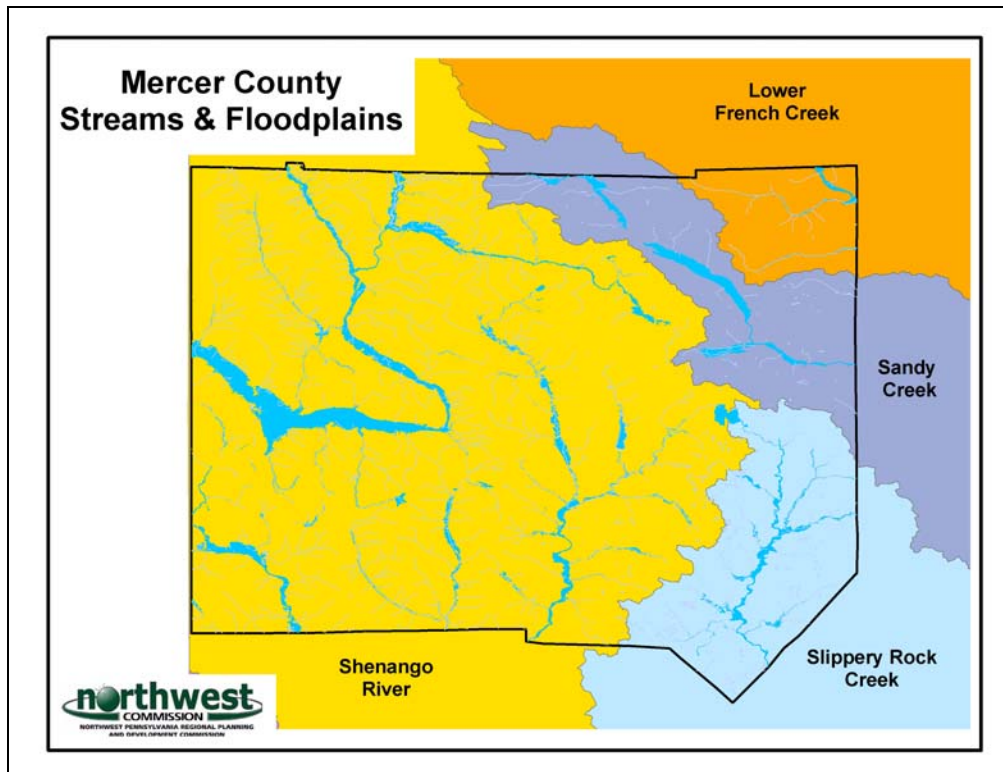
caused by

A combination of river basin physiography, local thunderstorm movements, past soil moisture conditions, and the degree of vegetative clearing determine the severity of a flooding event. Flooding is typically most severe in areas of the floodplain immediately adjacent to major streams and rivers.

Flooding can be as frequent as the occurrence of a spring rain or summer thunderstorm. The amount of precipitation produced by storm events determines the type of flooding. Flash floods, which typically occur more frequently than general floods, occur along small streams and creeks of the type that are widely present throughout northwest Pennsylvania.

The undermining or washing out of roads is typically associated with flash floods. General flooding occurs less frequently and as the result of much larger storm events such as hurricanes. These larger storm events occur in northwest Pennsylvania most often in the late spring and summer.

Both flash longer-term flooding can massive destruction structures these Many throughout Pennsylvania potentially be and many located within the



flooding and general cause damage and to the located in floodplains. individuals northwestern could left homeless businesses, primarily incorporated

municipalities, could be destroyed resulting in a reduction in economic activity, an increase in unemployment, and lower personal incomes.

Most of the municipalities in Mercer County have flood prone areas. The streams prone to flooding include: Shenango River, Crooked Creek, French Creek. The main flood season is usually December through April. However, most recently, between July 21, 2003 and Sept. 2003 we experienced flooding Co-wide. The flooding was the result of many storms producing large amounts of rain in a short period of time. The ground became saturated, causing the rain to ‘run-off’ down hill sides and into homes and basements as well as causing extensive road and bridge damage. The flooding didn’t occur in flood prone areas. The County did receive a Federal Disaster Declaration for these storms. We received Public Assistance and Individual Assistance. Individual Assistance received in county totaled approx. \$369,235.00.

### Historic Flooding – Mercer County

- March 23, 1913: Shenango Valley Flood; Shenango River crested at 18.6 feet; 1 death; height of flood waters made buildings collapse; damage to buildings, streets, railroads, industries, bridges and lost wages was set at 2 million dollars.
- Shenango River Flooding: In addition to the 1913 flood (considered the worst in the 1900’s) the Shenango River flooded on a grand scale in 1936, 1937, 1942, 1946, 1950, 1952, 1954 and 1958.
  - Flood water crest levels:
    - 1936 – 13.38 feet
    - 1937 – 13.58 feet
    - 1942 – 13.46 feet
    - 1946 – 14.26 feet
    - 1950 – 13.64 feet

1952 – 15.45 feet

1954 – 16 feet

- October 18, 1954: Shenango Valley flooding (worst since 1913); 1.5 million in damages to business, industry, homes, farms, streets and highways. 16 ft. crest.

### Tornados

Many times severe storms, such as thunderstorms, can produce smaller, more localized storms. Tornadoes, typically, the by-product of a larger storm, are violently rotating columns of air that come in contact with the ground. Tornadoes have a more localized impact and generally produce a narrow path of concentrated destruction from 0.01 mile wide to greater than 1 mile wide. Tornadoes may also produce paths of destruction from less than 1 mile in length to greater than 100 miles in length.

The destruction caused by tornadoes may range from light to severe depending on the path of travel. Typically, structures of light construction, such as residential homes, suffer the greatest damage from tornadoes. Tornadoes are generally rated according to the Fujita-Pearson Scale (F0-F5 – Light (40-72 mph) to Incredible (261-318 mph) wind speeds)

Because tornadoes are typically a by-product of thunderstorms, they have a higher likelihood of occurrence. Tornadoes and thunderstorms are most likely to occur during the spring months of May and June. Tornadoes during these months have also been the strongest, resulting in the greatest amount of harm or damage.

Tornados are considered a countywide hazard because their path is unpredictable and can affect everyone in the county. On May 31, 1985, multiple tornados swept through the Mercer County causing death and extensive damage.

There have been 11 reported tornadoes in Mercer County from 1954, with an F0 and F1 in 2002, as well as and F2, which struck Clark Borough, S. Pym. Twp and Delaware Twp. on November 10, 2002. The last major tornado that struck Mercer County was in 1985. The tornado struck the Borough of Wheatland, and City of Hermitage and Lackawannock Twp.

### Thunderstorms

Severe thunderstorms most frequently occur in the summer in northwestern Pennsylvania. These usually occur in the late afternoon or during the evening or night hours. Summer thunderstorms involve lightning, strong winds and heavy rains that can result in wildfires or localized wind damage and flash flooding. The impact of thunderstorms could be expected to be low due to the localized nature of the storms.

Mercer County experiences thunderstorms every year and over the years people have learned how to prepare when thunderstorms are predicted. Most County residents prepare by obtaining battery-operated radios, a non-electric phone, an emergency supply of water and non-perishable food, etc.

### Severe Winter Weather

Severe winter weather most frequently occurs during the winter month (November-March) and can be caused by lake-effect conditions, warm air masses associated with the Gulf Stream, etc. The impact of a winter storms in Mercer County are not as devastating as some other hazards can be. Winter storms are a frequent event in Mercer County and are mitigated through the plowing, salting, ashing,

and spraying efforts of PennDOT and local municipalities. During the rare occurrence of such a major event, severe winter storms could potentially produce an accumulation of snow and ice on trees and utility lines resulting in loss of electricity and blocked transportation routes. Frequently, especially in rural areas, loss of electric power means loss of heat for residential customers, which poses an immediate threat to human life.

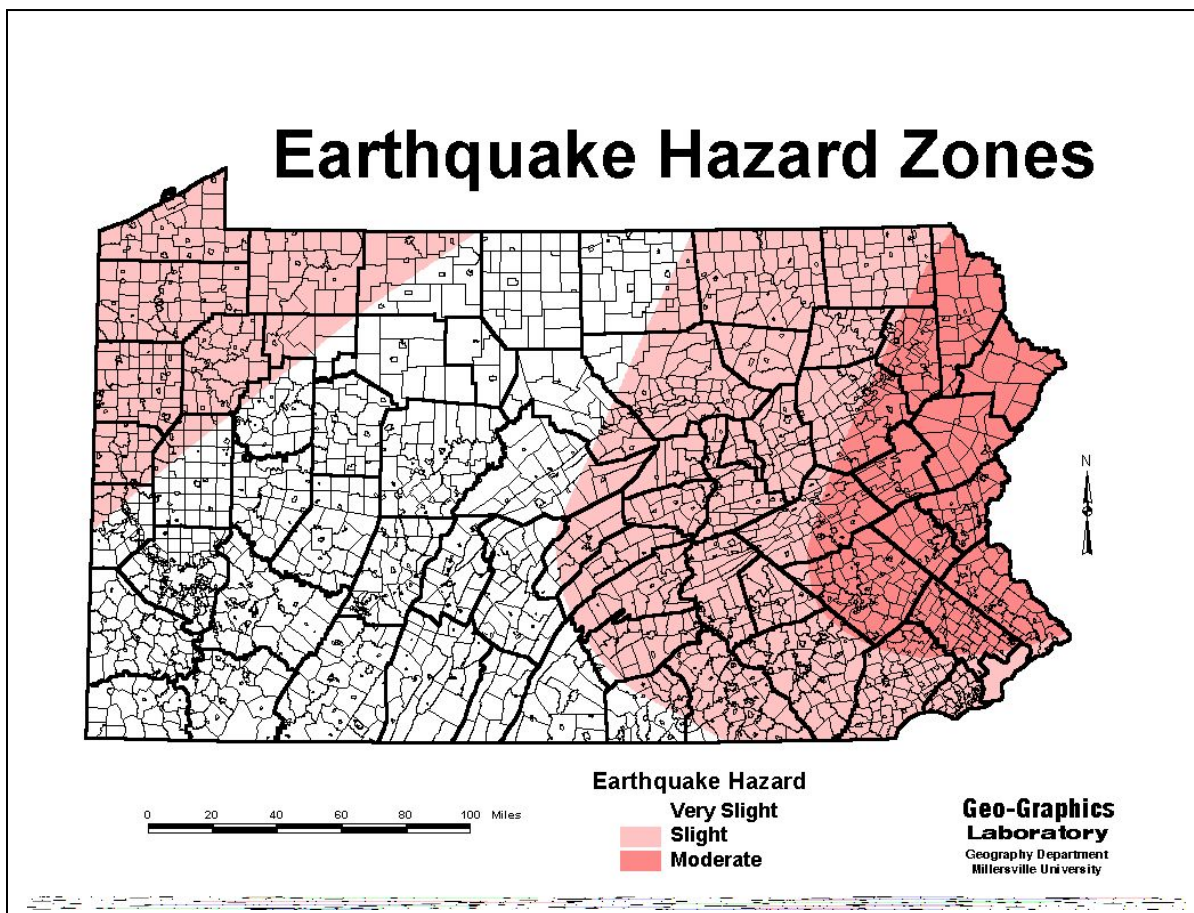
### Earthquakes

Earthquakes are geological events that involve movement or shaking of the crust of the earth. Earthquakes are measured in terms of their magnitude and intensity (instrumental – Catastrophic). Earthquakes can cause devastating destruction to the manmade environment.

Earthquakes are relatively infrequent and uncommon in Mercer County but there is existing data to indicate that earthquake activity have occurred in Mercer County.

Northwestern Pennsylvania’s vulnerability to earthquakes decreases from west to east. The effects of earthquake (if the hazard exists) could potentially be anything from detected only on seismographs to ground water wells collapsing to total destruction; trees falling, ground rises and falls in waves.

In January 1984, earthquakes tremors were felt. The tremors registered 4.0. It was felt from Erie to as far as Scranton. It had caused a 4 foot long by 1/8" wide crack in the side of the Sharon City Hall Bldg. It has been 52 years since the previous earthquake tremor has been felt in Mercer County. In October 1934, an earthquake struck Rochester County, New York; a slight tremor was felt though Warren County to Mercer County. No injuries or damages resulted. Another quake occurred on September 25, 1998, near the southern end of Pymatuning Reservoir, hence being named the “Pymatuning Earthquake”. The major effects were experienced in the West Salem Twp., Greene Twp., Jamestown and Greenville area. It was a magnitude of 5.2 on the rector scale, the largest ever recorded in Pennsylvania. Structural damage was minimal, with reports of things falling off shelves,



some chimneys cracked. However, the hydrologic changes in the area were more serious. Approximately 120 domestic wells went dry, while other, previously dry wells, started flowing again. Some residents reported dirty or sulfur-smelling water.

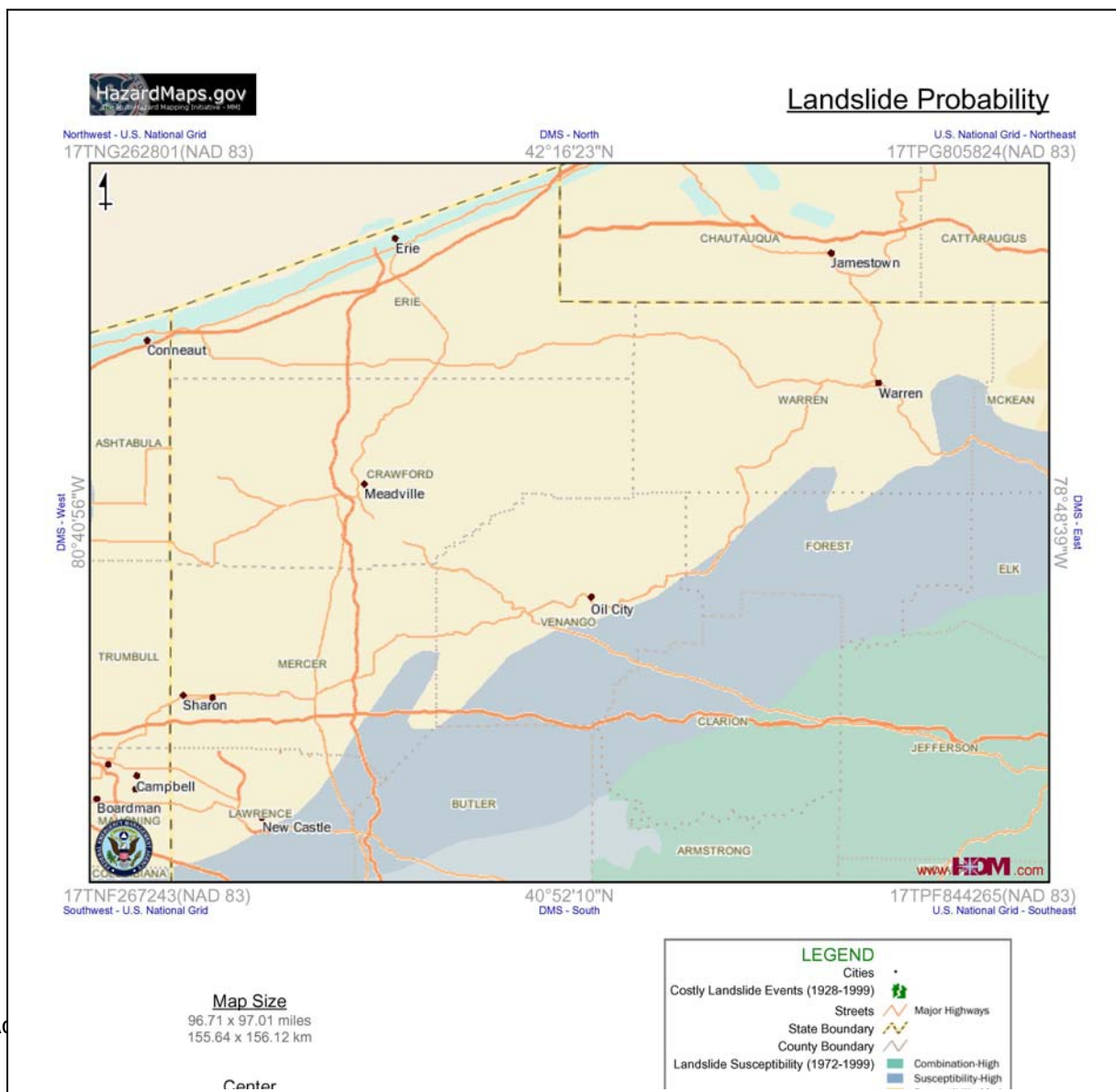
According to Millersville University's seismic risk study, Mercer County has a very slight risk of earthquakes.

Landslides

According to the United States Geological Survey (USGS), landslides are major geologic hazards that occur in all 50 states, cause \$1-2 billion in damages and result in an average of more than 25 fatalities each year. (USGS, 1997) Landslides often occur with other natural hazards such as earthquakes and floods.

Landslides are not a serious risk in Mercer County due to the relatively flat topography of the area (or they do occur due to the hill and valley areas of Mercer County). Limited areas of steep slopes associated with the banks of major watercourses in the County could collapse under heavy rainfall to produce a localized landslide. The potential of damage to lives or property from this type of natural hazard is low.

Although landslides may occur anywhere in Pennsylvania, only 15 to 18 percent of the commonwealth's land area is naturally prone to landslides. Landslides incidences in Mercer County should remain low.



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## Drought

Although a severe drought could have a devastating impact on the entire community it was determined to be the least likely to occur. However, communities in Mercer County could potentially experience problems associated with drought conditions. The biggest concern in these communities is the high demand on the water supply and below average rainfall for recharge of aquifers and reservoirs.

The main type of drought that could be included in this all-hazard mitigation plan is a hydrological drought. A hydrological drought occurs when surface and subsurface water levels drop, such as in streams, rivers, lakes, and reservoirs.

Some preliminary discussion of the impact of drought and potential solutions can be found in the Comprehensive planning document titled the State Water Plan. This document was published over twenty years ago and is dated. The State has been authorized by the legislature to rewrite this plan and it is expected to inventory existing and potential drought mitigation strategies and options that may avoid or lessen the consequences of prolonged hydrologic drought.

Mercer County has experienced drought/water supply deficiencies. The latest was in August 1991. As the winter snowfall becomes lighter, the greater the possibility of drought becoming a reality during the summer.

## Additional Hazard Information

The following is the Hazard Vulnerability Analysis that was developed by the Mercer County Department of Public Safety. It identifies, evaluates and prioritizes the hazards in Mercer County.

# MERCER COUNTY

## HAZARDS VULNERABILITY ANALYSIS

DECEMBER 1994

UPDATED: MAY 1996 - JUNE 2000

APRIL 2002 - APRIL 2003 - March 2004

This analysis was undertaken with state and federal efforts to develop an awareness of the hazards facing each county as a basis for improving emergency services and emergency management of all levels of government.

Prepared By:

MERCER COUNTY DEPARTMENT OF PUBLIC SAFETY

### CONCURRENCES:

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## I. INTRODUCTION

### A. Purposes.

1. To develop a common awareness among emergency service agencies, public officials and the public of the major hazards existing in Mercer County.
2. To identify the locations, the number of persons and the major facilities that may be vulnerable to each type of hazards.
3. To encourage cooperative management of emergency situations based on a common understanding of hazards and their impacts.
4. To enhance our emergency and disaster response and recovery capabilities for all hazards.
5. To encourage plans and actions for preventative measures and effective response to preserve life and property in areas vulnerable to effects of natural and man-made hazards.

### B. Methods of Analysis.

How often a disaster may occur (frequency) and the effects of severity of the event are important as a basis for planning emergency response and mitigation. Natural hazards tend to reoccur over time whereas man-made events tend to change as technology changes and our way of doing things change.

Four criteria were selected to assure a systematic and comprehensive approach to analyzing all hazards:

1. History, a record of past events is particularly helpful in evaluating natural hazards. Both the frequency and severity of past events are useful in predicting the future. The past records of man-made events also offer valuable information when tempered with the knowledge of preventive efforts, and changes in technology that may reduce the frequency or severity of such an event. Other man-made hazards exist and must be analyzed without the benefit of past experience.
2. Vulnerability, is the susceptibility of a community to destruction, injury or death. The degree of vulnerability may be related to geographic location as with floodplain, or to the type of facility or structure. Certain population groups may be more vulnerable to some hazards because of immobility or their inability to take protective action.
3. The maximum threat or worst-case disaster should be considered for each hazard. The maximum threat provides an upper boundary for the level of preparedness that may be necessary.
4. The probability of an occurrence in the future is another important factor to be considered when deciding on priorities, the level of preparedness and planning appropriate for minor in impact, may deserve more emphasis than a major event which occurs once in 50 to 100 years.

### C. Selection of Hazards

A comprehensive list of potential hazards was used as a checklist of disasters that occur or might occur in Mercer County. The following were addressed in this report:

1. Natural Hazards

- a. Flood
- b. Winter Storms
- c. Tornadoes, Hurricanes and Windstorms
- d. Droughts and Water Supply Deficiencies
- e. Subsidence - Natural/Mine Related
- f. Earthquakes
- g. Heat Wave

2. Man-Caused Hazards

- a. Dam Failures
- b. Hazardous Materials
- c. Fire Hazards
- d. Transportation Accidents
- e. Energy Emergencies
- f. Fixed Nuclear Facility
- g. Nuclear Attack
- h. Bio-Chemical Attack
- i. Civil Disorders
- j. Terrorism

## **II. COUNTY PROFILE**

Mercer County is situated in Northwest Pennsylvania about halfway between Pittsburgh and Erie. The County borders for 32 miles on the Ohio Line.

The County is drained by the Shenango River and by the Neshannock, Wolf Creek, Sandy Creek and Pymatuning.

Mercer County contains 53.9 miles of Interstate Highways, 757.23 miles of State and Federal Highways, and 1,307.87 miles of secondary and municipal roads.

As of 2000, 120,293 people resided within the 670 square miles that are Mercer County.

Mercer County government is headed by three elected Commissioners. Also elected are the four (4) Judges, Sheriff, District Attorney, Treasurer, Coroner, Record of Deeds, Clerk of Courts, Prothonotary, Controller. The County also operates a 140 capacity jail.

The principal educational facilities within the county include community campus installations for Pennsylvania State University/Shenango Campus, Fall 2001 enrollment 985. There are also two on campus private colleges. Those are Thiel College in Greenville, Fall 2001 enrollment 900 -1,100 and Grove City College in Grove City, enrollment 2,334. Public schools had a total of 18,717 students enrolled in 2001-2002 and non-public schools had a total enrollment of 1,654 in 2001-2002.

Medical needs are met by four (4) hospitals, with hospital bed space totaling 706.

<b>FACILITY NAME/LOCATION</b>	<b>BED SPACE</b>
United Community – Grove City	95
UPMC – Shenango Campus	119
UPMC – Greenville Campus	252
Sharon Regional Health System – Sharon	240
<b>TOTAL</b>	<b>706</b>

In addition to the normally furnished government services, various church, farm, veterans, fraternal and other organizations in the county cater to the needs of those who require such assistance.

25 Fire departments, 14 police departments, 4 Private Ambulance Services, and 2 Volunteer Services, provide emergency services throughout the county. Combinations of paid and volunteer staff characterize the personnel providing such services.

### III. NATURAL HAZARDS.

#### A. Floods.

Flooding is the most prevalent type of natural disaster occurring in the Commonwealth of Pennsylvania. In Pennsylvania, floods cause over \$1 billion worth of property damage annually. It is important for emergency management personnel to analyze flood-plains and other critical areas in the county and determine how vulnerable to flooding the community might be.

#### History.

Mercer County has suffered major floods in every decade since 1881 except the 1920's 1960's and 1970's, 1980's or 1990's. The longest span between major floods is 22 years. The largest recorded flood from the Shenango River at Sharon occurred March 26, 1913. The largest flood from the Little Shenango at Greenville occurred January 22, 1959 produced by a 2.5 inch rainstorm of 16 hours duration falling on four inches of snow. Direct damage was estimated to be \$334,000.

The most recent flooding occurred in July – August of 2003 in the county when some of these storms poured over seven inches of rain in six hours. This resulted in a presidential declaration with Mercer County receiving approx. \$370,000 for Individual Assistance. 36 of 48 municipalities applied for Public Assistance for approximately \$935,340. Hurricane Agnes, in 1972, was less intense in Mercer County than in the eastern portion of Pennsylvania. In addition, flood control dams in Shenango River, Little Shenango River, Sandy Creek and Saul-Mathay Watersheds were instrumental in minimizing the effects of the storm.

#### Flood Frequency

Flooding which causes minor damage to property or public facilities occurs annually. This flooding is localized and results from heavy rains, melting snow or ice jams, although the latter is a rare occurrence. It can occur at any time of the year but is most frequently caused by intense summer rainstorms.

Flood control structures have been built on the Shenango River, protecting the Shenango Valley communities, in the Sandy Creek watersheds protecting the boroughs of Sandy Lake and Stoneboro on the Saul-Mathay and Little Shenango River Watersheds protecting the Borough of Greenville.

### Vulnerability/Maximum Threat

Sixty percent of the population is located within the floodplain boundaries of Mercer County. There are facilities within the floodplain or flood prone areas which house people with special needs. The handicapped, senior citizens, blind and the hearing impaired are more vulnerable to these disasters. Disaster can and does occur with little or no warning, thus making advance evacuation an improbability.

Mercer County, being 55 percent rural, has a large agriculture area located within these same boundaries. Too much water or heavy flooding can and does cause severe damage to the farm areas.

### Probability

Flooding, such as occurred in the 1940's and 1950's is a thing of the past. This is due to various flood control dams that have been built. These measures do control but cannot eliminate the threat as flooding from runoff waters will always be a threat. The streams most likely prone to flooding are the Neshannock, Little Shenango, French Creek, Otter Creek, Coolspring Creek and Wolf Creek.

### B. Winter Storms

Winter storms occur on the average of five times a year in Pennsylvania. Every county in the Commonwealth is subject to sever winter storms, although the northern tier, western counties, and mountainous regions tend to experience these storms more frequently and with greater severity.

### History

Mercer County experienced major winter storms in 1950, 1977, 1978, 1982, 1983, 1993, 1994, 1996 and 1998.

The severe winter of 1977, with its extreme temperatures, heavy snow and strong winds coupled with fuel shortages, caused extreme hardship in Mercer County. Motorists were stranded on I-80 and some secondary roads; household fuel oil suppliers and food stocks ran out and re-supply was impaired by drifting snow. Heavy snow and drifting closed many roads, some for more than three days. Municipal and state road crews could not keep up with drifting snow and required supplemental equipment and manpower from the private sector.

In most recent years, 2000 & 2001 the mild winters have lead to spring like thunderstorms, during the winter months. These thunderstorms, accompanying wind related damage & power outages have been followed into the county by cold fronts and winter storms. Thus temperature drops of 50 degrees F. in a few short hours have been observed.

Average snowfall ranges from 40 inches in southwestern parts of the county to more than 50 inches in the northern and eastern parts. The total varies widely from year to year. Less than ten inches have been recorded in some years while more than 90 inches have been recorded in others. Expected total snowfall ranges from 30-60 inches. One-day totals seldom exceeds six inches. However, 16 inches have been recorded, and 28 inches in a four-day period have also been known to occur.

#### Vulnerability/Maximum Threat

Mercer County is vulnerable to winter storms varying in degree of severity; winter storms can cause road closing in the county, especially on secondary and farm roads that become virtually impassable.

Winter storms in the county can cause business losses to shopping centers in the outlying areas. There can be property losses and roof damages as a result of snow and ice loading and from falling tree limbs. During these storms, Mercer County households become vulnerable to interruptions in utility services for heat and electricity.

Drastic changes in temperature and electrical power status, under storm conditions emphasize the need to monitor sheltering requirements throughout the county

#### Probability

The severity and frequency of major winter storms is expected to remain fairly constant. However, due to increased dependence on various mode of transportation and use of public utilities for light, heat and power, the disruption by these storms is more significant today than in the past. Furthermore, the county population has become diffused into the rural area where necessary services become much more difficult for municipal authorities to provide during winter storm events.

## C. Tornadoes, hurricanes and windstorms

### History

Tornadoes pose a potential threat to Mercer County. Windstorms are usually associated with tornadoes, but may also include thunderstorms and other less violent storm systems. The destruction from these storms can be tremendous, destroying buildings, uprooting trees and injuring people.

There have been 12 reported tornadoes in Mercer County from 1954, with an F0 in 2003, F0 and F1 in 2002, as well as and F2, which struck Clark Borough in November 10, 2002. The last major tornado that struck Mercer County was in 1985. The tornado was a F5 that struck the Borough of Wheatland, and City of Hermitage and Lackawannock Twp.

Mercer County has experienced numerous severe wind damage storms. Power lines have been knocked down from high winds and fallen trees and limbs, resulting with power loss for hours in many areas. The strongest windstorms were in 1984, 1989, 1995, 1998 and the winter of 2000, which caused extended power outages, which lasted for 4 days in some areas.

### Vulnerability/Maximum Threat

There are 14 counties in the Commonwealth that are classified as areas experiencing a high frequency of tornadoes. Mercer County is not included on that list. However, Mercer County was the site of Pennsylvania's only F5 class tornado. The strongest on record within the Commonwealth.

### Probability

The frequency of windstorms and tornadoes occurring in the county is expected to remain constant.

As population increases and development continues in Mercer County, the number of persons and properties vulnerable to the effects of tornadoes and windstorms is expected to increase. Population density coupled with modern building techniques, such as truss, modular, prefabricated and mobile method increase vulnerability. Another area of concern with increased development is more homes being build in close proximity to forested areas there is becoming an increase risk of residential entrapment or confinement due to fallen trees in the aftermath of high wind events of any type.

#### D. Droughts and Water Supply Deficiencies

The World Meteorological Organization categorizes and defines six types of drought; meteorological, climatologically, atmospheric, agricultural, hydrologic, and water management. It is the latter two types that are of greatest concern to emergency management. A hydrologic drought is defined in terms of reduction of stream flows, reduction in lake or reservoir storage, and lowering of groundwater levels. A water management drought is characterized as water deficiencies, which exists because of water management practices or facilities to bridge normal or abnormal dry periods and equalize water supply throughout the year. Pennsylvania has faced, and will continue to face in the future, both types.

A hydrologic drought results when there is a shift in normal weather patterns over an area causing the amount of precipitation to fall significantly below the long-term average.

A water management drought, as the description above indicated, results not necessarily from a reduction in supply but rather a disparity in supply versus demands. This is generally caused by poor water management practices and/or community planning.

Despite the fact that Pennsylvania's average annual precipitation during the 1970's was greater than past averages, and even with precipitation during the 80's being average, the state still experiences severe water shortages. This is because in some areas natural hydrologic conditions, increasing demand, and the lack of storage potential, have created water supply limitation, which are in some cases irreversible.

<b>YEAR</b>	<b>PRECIPITATION</b>
<b>1999</b>	<b>36.21"</b>
<b>2000</b>	<b>40.12"</b>
<b>2001</b>	<b>35.74"</b>
<b><u>TOTAL</u></b>	<b>112.07"</b>

Areas with limited water supply are defined as areas exhibiting water demands beyond the capability of the watershed(s) to meet those demands and still maintain services.

#### History.

Within the last 25 years, Pennsylvania was hit by five drought emergencies. During the summer of 1983, the worst drought in 20 years occurred causing over \$157 million in damages to the state corn crop and over \$39 million to forage crop.

Mercer County has experienced drought/water supply deficiencies. The latest was in August 1991. As the winter snowfall becomes lighter, the greater the possibility of drought becoming a reality during the summer.

## Vulnerability/Maximum Threat

Currently there are no deficiencies in the county's water supply.

## Probability

Although probability of water supply deficiencies for the entire Mercer County does not exist, there are some areas of the county that have been projected under the State Water Plan that may have problems in the future.

### E. Subsidence - Natural/Mine Related

Subsidence may be natural or related to mining activities. Areas under-laid by coal or other minerals which use deep mining techniques may become susceptible to subsidence. Poor engineering practices at the time of withdrawal or progressive degradation in geological stability contributes to subsidence. Areas of the state that have underlying mines are subject to subsidence and constitute a potential threat to people living in those areas. Isolated incidents throughout the coal regions over the years have been houses, garages and trees swallowed up by subsidence holes. Lengths of local streets and highways, and countless building foundations have been damaged. Most recent occurrences, noted in 2002 are two occurrences of subsidence along the Barkeyville Road in Pine Twp. causing repeated damage to sections of public roadways.

Natural subsidence results from what are considered normal geological processes particular to certain landform. In Pennsylvania, water movement through carbonate terrain, i.e., limestone and dolomite, may result in topographic features such as swales, sinkhole and forms of subsidence.

## History

Mercer County certainly is no different than the majority of Pennsylvania, as at one time in history, it was a large coal mining area. Today, we think of coal mining in the eastern part of the county and not so much to the remaining section. Strip mining is the method of coal removal versus the tunnel method of the past.

### Vulnerability/Maximum Threat

Within the past five to ten years, sinkholes have been appearing notably within the Shenango Valley area and as recently as 2003, in the Findley Twp. area. These have been contributed to old coal mining methods that left a network of tunnels over which schools, homes, businesses and streets have been built. Due to the passage of time, expansion and development of cities and boroughs, these mines were thought to be non-existent and what records that were, have been lost or forgotten.

Figure 3 shows areas of sinkhole occurrence in the eastern portion of Mercer County. It fails to add to the events that have taken place in the Western portion of Mercer County.

It is hard to relate the number of people and properties vulnerable to a hazardous mining or other subsidence incident because of poor records of where the mine shafts were located, the depth of the shafts and the size of these shafts.

## Probability

As time passes, more sinkholes can be expected to appear throughout Mercer County. You can rest assured that they will be more frequent and more severe. This statement is based on two main factors: first, the age of the timber support for those mine shafts and secondly, the weight and pressure placed upon them due to building structures and traffic movement.

### F. Earthquakes

Earthquakes in Pennsylvania have been a rare occurrence causing no injury; however, the crust of the earth is constantly shifting and earthquakes do pose a possible threat that should be considered.

## History

In January 1984, earthquakes tremors were felt. The tremors registered 4.0. It was felt from Erie to as far as Scranton. It had caused a 4 foot long by 1/8" wide crack in the side of the Sharon City Hall Bldg. It has been 52 years since the previous earthquake tremor has been felt in Mercer County. In October 1934, an earthquake struck Rochester County, New York; a slight tremor was felt though Warren County to Mercer County. No injuries or damages resulted. Another quake occurred on September 25, 1998, near the southern end of Pymatuning Reservoir, hence being named the "Pymatuning Earthquake." The major effects were experienced in the West Salem Twp., Greene Twp., Jamestown and Greenville area. It was a magnitude of 5.2 on the rector scale, the largest ever recorded in Pennsylvania. Structural damage was minimal, with reports of things falling off shelves, some chimneys cracked. However, the hydrologic changes in the area were more serious. Approximately 120 domestic wells went dry, while other, previously dry wells, started flowing again. Some residents reported dirty or sulfur-smelling water.

## Vulnerability/Maximum Threat

Due to time frame of previous earthquakes and locations in Mercer County, it is difficult to project the vulnerability of Mercer County to an earthquake. Mercer County is located in a zone where minor damage would be expected should an earthquake occur. The water table becomes very vulnerable during an earthquake. The September 1998 earthquake showed just how vulnerable the water table can become. In 1998 quake cause some wells to go dry while other dry wells began to flow again.

## Probability

Unless a major shift of the earth's crust occurs, the probability of Mercer County to experience an earthquake would be minor.

### G. Heat Wave:

Heat can affect anyone. However it is more likely to affect young children, elderly people and people with health problems.

## History

The occurrence of prolonged periods of excessive heat and humidity has not been a major concern in Mercer County. On the few occasions when it did raise concern, it was usually due to the possibility of rolling black outs. During those times, the elderly were encouraged to visit Senior Centers or shopping malls to seek relief from the heat. We work with the Area Agency on Aging to open 'cooling stations' at the Senior Centers.

## Probability

The affect on Mercer County from Heat Wave conditions are expected to be minimal.

## IV. MAN-MADE HAZARDS

### A. DAM FAILURES

Major dam failures in the U.S. have occurred on 16 occasions in this century destroying several communities and permanently scarring others. The worst U.S. dam disaster on record occurred when the South Fork Dam above Johnson collapsed. This dam failure was caused by poor maintenance, clogged discharge and spillway.

## History

Presently there are eleven dams located in Mercer County. Of these, seven (7) are county flood control dams, one private, one state and one federal-owned.

One dam is located in Crawford County, which is the Pymatuning Dam. Failure of this dam would primarily effect the population of Mercer County and, therefore, is on the list with Mercer County. A joint "Down Dam Evacuation Plan" has been established between Crawford County EM Coordinator and the Dam Supervisor with the office of the Mercer County EM.

Mercer County has completed a "Down Dam Evacuation Plan" for all dams with the exception of the Shenango Dam, which is a Federal Dam and the Sugar Creek Dam, recently completed and a study is needed to be conducted by an Engineer prior to any plan being drawn.

All County dams are inspected annually by an engineer. The Lake Latonka Dam received a "red cover" which was considered an unsafe dam with several deficiencies (e.g., slope instability, excessive seepage, inadequate spillway, etc.).

Upon correcting these deficiencies and re-inspection, Lake Latonka has been removed from the "unsafe" category to the "safe" category. Lake Latonka Dam was the only dam to have a failure in Mercer County. This was in 1966. In October 1966, a youth had noticed a potential dam failure at the Lake Latonka Dam. Water and dirt were being forced out around the sides of the center block. Lake Latonka Board and all concerned were notified. The Dam waters were lowered and repairs made.

The Dam Safety Act of 1978 provides for the regulations of dams and reservoirs in the Commonwealth.

The Mercer County Emergency Management Agency maintains a copy of the warning and evacuation plans, generated in accordance with the Act, for each applicable dam in the county and for those outside the county, which could affect the county.

#### Vulnerability/Maximum Threat

If any dams were to fail, the following is a list of these dams with the total population vulnerable to the effects: **Hadley (PA 489)** 50 residents, 20 homes, 5 businesses; **Fairview Dam (PA-491)** approx. 6 residents, 2 homes, 1 school w/20 students, **Clarks Mills Dam (PA-490)** 50 residents, 20 homes, 5 businesses; **Stoneboro Dam (PA-474)** 100 residents, 40 homes, 10 businesses; **Saul Dam (PA-458)** 125 residents, 50 homes, 10 businesses; **Mathay Dam (PA-459)** 125 residents, 50 homes, 10 businesses; **Lake Latonka Dam (D43-49)** 200 residents, 48 homes, 15 businesses; **Lake Wilhelm Dam** 1,100 people; **Crooked Creek Dam** 200 residents, 50 homes, 25 businesses and Greenville City Hall; Pine Run 50; **Shenango Dam** 5,000+; **Pymatuning Dam DER (#20-007)** 22 miles through Jamestown and Greenville Boroughs, affecting various homes, schools, businesses and state and local roads and bridges.

#### B. Hazardous Materials

The number and quantity of hazardous materials being produced, stored and transported continue to increase each year in Pennsylvania. The number of accidents in Pennsylvania involving hazardous substances increased to 568 in 2000.

Hazardous materials fall into several categories, such as flammable combustible materials, compressed gases, explosive and blasting agents, radioactive materials, oxidizing materials, poisons and corrosive liquids.

## History

Hazardous materials have become a part of our day-to-day existence. Like many things that we depend upon, they have become a necessity. Although they may be of necessity, they must not become burdensome on our community.

Mercer County is no different than any other county in the State of Pennsylvania. Mercer County has users, generators and storage facilities for hazardous materials. It is the mishandling of accidents in transportation or storage of these materials that are of deep concern.

This report of historical incidents ranges from a low level radioactive dump site to a major highway spill.

## Vulnerability/Maximum Threat

As long as hazardous materials exist, either active or inactive, mobile or fixed, solid or liquid, small or large, you will have a potential threat of hazardous materials.

1. Fixed sites
  - a. Sara Facilities

There are currently 38 sites in Mercer County which manufacture, use, store, or treat extremely hazardous material. The facilities are required to maintain an on-site plan as well as an off-site plan in case of any spills.

## Training

The Mercer County LEPC recognizes the threat of the transportation routes with in Mercer County. Each year the LEPC, via grant funds, sponsors various hazardous material training classes. These classes are offered to all public safety, first responder and EMS entities, free of charge. Through this program 205 Responders were trained in 2000, 173 in 2001, 2002 434, 2003 over 100 Responders have taken advantage of the training offered.

**The list and location of these SARA Facilities as of April 2004 are:**

1. Alcoa Ivex Packaging – Grove City
2. Barber's Chemical - Sharpsville
3. CCL Container - Hermitage
4. Consumers PA Water Co - Sharon
5. Dean Foods, Inc - S. Pymatuning Twp
6. Farrell Sewage Treatment Plant - Farrell
7. Fredonia Sewage Treatment Plant - Fredonia
8. Greenville Sewage Plant - Greenville
9. Greenville Swimming Pool - Greenville
10. Greenville Water Plant - Greenville
11. Grove City Sewage Plant - Grove City
12. Grove City Water Plant - Grove City
13. Hermitage Sewage Plant - Hermitage
14. Interstate Chemical Co - Hermitage
15. Jamestown Sewage Plant – Jamestown
16. Jamestown Water Plant – Jamestown
17. MCI World Com
18. Mercer Boro Sewage Plant - Mercer
19. Pymatuning Independent Telephone Co. - Transfer
20. Reynolds Water Plant - Transfer
21. Reynolds Sewage Plant - Transfer
22. Salem Tube - Reynolds
23. Sandy Lake Water Co - Sandy Lake
24. Sears & Roebuck Auto Center - Hermitage

25. Sharon Sewage Plant - Sharon
26. Sharon Tube Co. - Sharon
27. Sharon Tube Co. - Wheatland
28. Sharpsville Water Co., - Sharpsville
29. Shenango Twp Sewage Plant - Shenango Twp.
30. Verizon – Grove City
31. Verizon - Mercer
32. Verizon - Sharon
33. Verizon - Sharpsville
34. Verizon – Greenville
35. Verizon – West Middlesex
36. Wheatland Tube Co. - Wheatland
37. Wheatland Tube (Sawhill Tube) - Wheatland
38. Wheatland Tube (Sawhill Tube) – Sharon

## b. NRC License

There is currently one NRC License storage site in Mercer County. That site is the former Whittaker Metals of Transfer/Reynolds Development. This site has been classified as a low level radioactive and poses no threat to the public.

## c. Fixed Sites -- Others

The following locations within Mercer County are not currently licensed facilities:

- (1) Osborne Dump, Pine Twp. - Superfund
- (2) Hermitage Landfill, City of Hermitage - Permit by Rule.

## 2. Pipelines

Tennessee Gas Company has approximately 250 miles of pipelines transporting natural gas into and through Mercer County. Tennessee Gas is the prime supplier of natural gas to all gas companies in Mercer County in addition to Lawrence and Venango County. This pipeline consists of:

- a. 41.45 miles of 21 inch pipe
- b. 12.49 miles of 36 inch pipe
- c. 14.45 miles of 24 inch pipe
- d. 14.45 miles of 30 inch pipe

In 1983, Mercer County experienced its first gas line break. Fortunately, no injuries or property damage resulted from this break. No vulnerable facilities are located near this pipeline. Since 1997 the county has responded to 3 minor gas well leaks.

Atlas Energy Producers is a major gas well operator in Mercer County. Currently with 57 sites.

Columbia Gas Transmission Corporation has approximately seven miles of gas line that runs from North Liberty in Mercer County to Slippery Rock in Butler County. This stretch of lines is located in a rural area and not located near any vulnerable facilities.

## 3. Transportation

Mercer County has responded to 50 reported hazardous material transportation accidents between 1995 and 2002. The severity of these incidents ranged from ruptured saddle tanks to propane truck rollovers.

Mercer County has 1125.9 miles of secondary/municipal roads; 839.2 miles of state/federal highways; and 53.9 interstate highway for a total of 2,019 miles.

Although all highways are utilized for transporting hazardous materials, only I-80 and I-79 are utilized for transporting nuclear waste. I-79 is utilized for shipment of spent nuclear fuel from the State of New York to I-80 and then west. I-80 is utilized for shipping nuclear waste from Three Mile Island for storage in the State of Washington.

#### 4. Railway

Mercer County has 139.5 miles of railway and a total of seven (7) hazardous material rail accidents since September 1977. Fortunately, no injuries or evacuation resulted in these spills.

There are two railways operating in Mercer County. These are the Conrail with 94.5 miles of railway and the Bessemer and Lake Erie Railroad with 45.0 miles of railway.

#### C. Fire Hazards

Pennsylvania as a state experienced 13 major urban/suburban fires in the past 80 years, ten of which occurred in the past ten years. Fire can be triggered or exacerbated by other events such as floods, storms, drought, transportation accidents and hazardous materials accidents. Thus fire as a secondary event may result in a very complex situation.

#### History

Mercer County has 25 fire departments, one (1) is a full-time paid fire department, 2 combination, 2 w/ paid Chiefs and 20 all- volunteer.

Each fire department conducts its own schedule of “in house” training sessions for its members. To assist each department a Fire School Training is held periodically with two comprehensive trainings being conducted annually. These programs are the Annual Mercer County Fire Training conducted by the Mercer County Fire Training Institute and the RescuExpo, which is sponsored jointly by the Mercer County Fire Training Institute and the Emergency Service of Mercer County.

Some of the fire departments are firefighter only; some are fire/rescue departments; one operates an ambulance service. Because of their versatility, they are considered the backbone of their community.

During the past ten years, Hermitage, Mercer Sharon and Farrell have experienced the worst fires in Mercer County.

In April 1992, McCandless Ford Dealership in Mercer was burned to the ground. An Amerigas Co. propane truck was being repaired and one of the valves was accidentally broken off. Propane leaked and although an attempt was made to shut off all ignition sources, the propane had ignited and burned for more than 5 hours. Evacuation was conducted of surrounding residents, schools and businesses. There were no injuries.

One of the worst things that could occur during any fire is the loss of a human life, yet it is noted that communities are reluctant to enact smoke detector requirements for residential occupancies.

#### Vulnerability/Maximum Threat

We are seeing hospitals expanding; newer and large number of senior citizen high rise and low income housing being built, thus creating larger groups of individuals being concentrated in a closed area and creating the potential for fire disaster situations.

The fire departments of Mercer County have a continuous education program for the public regarding fire awareness and fire safety. A great deal of these fires and deaths can be avoided in the future with stronger building codes and fire codes. The greatest first line of defense is good housekeeping. To supplement this good housekeeping, each resident, school, hospital, high-rise and industrial area should be equipped with fire alarm systems and smoke detectors. Due to the great saturation of information on smoke detectors, the vulnerability and maximum threat of loss of human lives and property has decreased.

#### Probability.

The probability of major fire disasters in Mercer County in the future is seen to be decreasing. Fires are reported earlier and fire department responses are faster with the support of modern equipment and mutual aid plans. This trend is seen to continue due to the training of fire personnel, the education of the public and implementation of statewide building codes.

#### D. Transportation Accidents

For this analysis a transportation accident is defined as an incident involving highway, air and rail travel resulting in death or serious injury or extensive property loss or damage. Accidents related to hazardous materials are also considered in the hazardous material section of the analysis. This analysis includes the location of all public and private airports, locations of passenger or freight rail lines and highways where major accidents are likely to occur.

#### History

Mercer County has two active airports located within the county. These are located in Grove City, and Greenville. Smaller private grass strips do exist. A moderate amount of recreational aviation does frequent these facilities. As a result, there have been three (3) serious aircraft accidents since 1995, and resulting in four deaths. In December 1995 a pilot crashed into the frozen Shenango Reservoir, this incident was believed to be a suicide. In 1999, over the 4<sup>th</sup> of July holiday, a small aircraft crashed in the Shenango Reservoir, resulting in 2 deaths. No one on the ground was injured and in the fall of 1999 one man was killed during a solo training flight near the Greenville Airport.

In November 1992, two small private planes collided in mid-air in Osgood, northeast of the Greenville Airport. This accident resulted in four deaths with wreckage being scattered in a one mile square area.

In 1982 and 1983, there were two separate small aircraft accidents in Shenango Twp. which resulted in two persons being injured in both incidents. In 1998, a small plane crashed while approaching Greenville Airport, killing the pilot.

Mercer County has approximately 139.5 miles of multi-rail lines. These lines are utilized by Conrail and Bessemer and Lake Erie Railroad.

The City of Sharon has had four derailments involving hazardous materials however; leakage resulted in one of the four incidents. Sandy Lake has had two rail derailments however; these were coal car hoppers and posed no immediate threat to the community.

Mercer County has 539 miles of interstate; 839.2 miles of state and federal highways; 1,125.9 miles of secondary and municipal highways/roadways, a total of 2,504 miles of highway. There are three (3) tunnels located on this highway system. One is located on Route 62, approximately four (4) miles north of Mercer; one located on Route 18 near Osgood and the third is in Jamestown.

### Vulnerability/Maximum Threat

With I-80 and I-79 intersecting within Mercer County and hazardous materials being transported on these interstates, Mercer County is highly vulnerable to transportation accidents. This has increased more so since the transportation of radioactive waste from Three Mile Island and spent fuel rods from the State of New York.

The two airports, although a hazard, pose minimum threat due to small population located in the path of their runways, each is located in a rural area. The frequency of small aircraft accidents will likely increase, as increased recreational use of aircraft grows. The Grove City Airport is now host to recreational Skydiving, thus skydivers and aircraft share the same air space. Skydiving aircraft also accumulate more air hours and carry increased passenger load.

Mercer County is also within the approach and departure lanes of both the Youngstown Ohio and Pittsburgh PA airports. It is not beyond the realm of possibility a major aircraft inbound or departing one of these destinations could encounter difficulties causing a major crash in Mercer County

### Probability

As time continues, Mercer County can expect a trend in transportation to continue. I-79 and I-80 are part of the main artery of transportation from the east/west coast and from Great Lakes-Canada/south. The link of I-60 from Pittsburgh to I-80 is now completed and this increases the traffic flow.

The maximum threat that can be posed to Mercer County is an accident resulting in mass casualties. This is due to high volumes of traffic and limited resources available to respond to any incident above the bounds of normal.

## E. Energy Emergencies

Energy emergencies may be caused by nationwide shortages or more localized imbalances of supplies due to weather, strikes, or an oil embargo. Such emergencies have been experienced in the United States including problems caused by rapid price increases, which also have the affect of leaving homes and industry without the needed fuel.

### History

Mercer County, like most of Pennsylvania, experienced long lines at gasoline pumps and shortages of fuel in 1973 and 1979. Government action was taken to ensure that fuel and power were available to emergency and priority users. In the late 1970's drastic increases in prices presented hardship for low-income consumers in particular. Artificial shortages developed as suppliers held out for higher prices.

### Vulnerability/Maximum Threat

Conservation and improved technology for more efficient uses of fuel have reduced the rate of increase of demand for energy for many purposes. The capability of substitution of fuel, should a shortage of one fuel develop, has also increased in Mercer County. The vulnerability to shortages seems to have decreased as a result of these changes and adjustments. Even so, Mercer County experiences minor shortages resulting in malfunction and overheating the electrical equipment. During cold weather conditions, the increased demand for natural gas requires some users to switch to oil or other sources of energy.

As a result of escalating fuel prices, in the 1970's low income households in particular have become more vulnerable to utility shut offs and more frequent depletion of fuel supplies. Mercer County has developed programs to provide emergency fuel assistance to these households.

There are two natural gas pump stations in Mercer County; the Tennessee Gas Pipeline and Columbia Gas. Of the two, Tennessee Gas provides the majority of the required natural gas in Mercer County. If a major disaster were to strike the Tennessee Gas Pump Station or its main switching area, it would create a large impact on the county's business, industries and citizens, especially during cold weather.

If a severe weather or disaster were to strike Mercer County, isolated areas could be without electricity, but not the entire County at one time.

Severe weather, hot or cold, could create shortages or disruption of fuel or electricity within Mercer County. For example, severe cold weather may cause low gas pressure or hot weather may result in an overload on electrical power.

Strikes such as the trucker's strike or utilities' workers could create a problem such as low supplies or lack of manufacturing of fuel, which could create a hardship for Mercer County.

## Probability

A major fuel crisis can develop in the future depending on international relationships and tensions. However, significant changes seem to have reduced both the likelihood of another major oil embargo and/or drastic price increases.

Alternative sources of energy, conservation and significant increases in proficiency through technological advances have reduced the growth in demand for oil, thus reducing the probability of another 1973/1979-type crisis occurring. However, the possibility must not be totally discounted. Localized problems are likely to continue. Frequency of an energy emergency occurring in Mercer County is estimated to be once every four years.

### F. Fixed Nuclear Facility

The Federal Emergency Management Agency (FEMA) and the Nuclear Regular Commission (NRC) have developed regulations and guideline pertaining to nuclear power plants. The NRC and FEMA have defined the "risk" area around a nuclear power plant as that within an approximate ten-mile radius of the plant and have termed this area to be the plume exposure pathway emergency planning zone (EPZ). The Pennsylvania Emergency Management Agency (PEMA) in conjunction with the counties involved, have identified the specific EPZ around each of the five nuclear power plants in Pennsylvania and has published maps depicting the "risk" areas.

## Vulnerability/Maximum Threat

Mercer County is within 50 miles of the Beaver Valley Power Station. A circle of 50 miles in radius around a nuclear power plant is called the "ingestion exposure pathway." Should an incident occur at a nuclear power plant, the area within 50 miles may receive some radioactive contaminant in very small amounts. While some small amounts are of little concern in terms of external exposure, protection of the food chain, particularly milk, is important in preventing internal exposure due to ingestion of radioactive contaminants. In milk, for instance, there is a magnification effect estimated to be about 200. Even so, the threat would not be immediate since harmful amounts could only be ingested over a period of time. If an incident would occur, state agencies would sample milk, livestock feed and forage, crops, farm water and public water supplies. County Emergency Management Agencies may be asked to assist in gathering samples and, if necessary, implement controls of food, foodstuffs and water. Counties affected by the ingestion exposure pathway for nuclear power plants in Pennsylvania and adjacent states are depicted in Figure 19.

### Probability

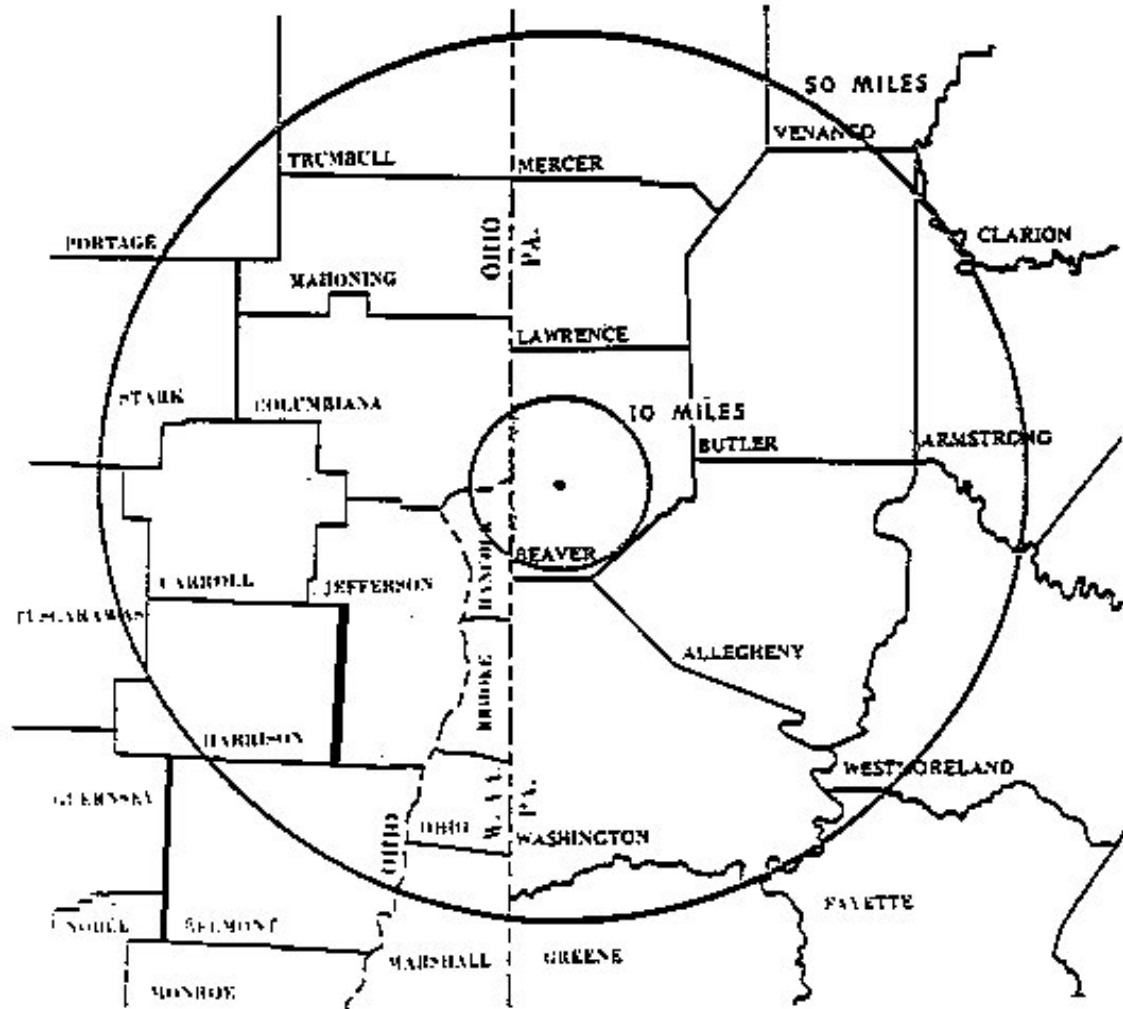
The possibility of a release of radiation in sufficient quantity to constitute a threat to the health and safety of the offsite population is extremely remote given all the precautions and safety regulations now in effect.

### G. Nuclear Attack

When a nuclear bomb explodes, the main effects produced are: intense light brighter than the sun; heat in thousands of degrees; blast and radiation. Explosions on or near the ground create large quantities of dangerous radioactive particles from irradiated dirt sucked into a fireball as it sweeps upward to form a mushroom cloud. The particles are called fallout. They begin falling back to earth in 30 minutes and mostly within the first 24 hours. The fallout gives off invisible gamma rays, an excess of which can kill or injure people.

MAP OF RISK AREAS  
 BEAVER VALLEY POWER STATION

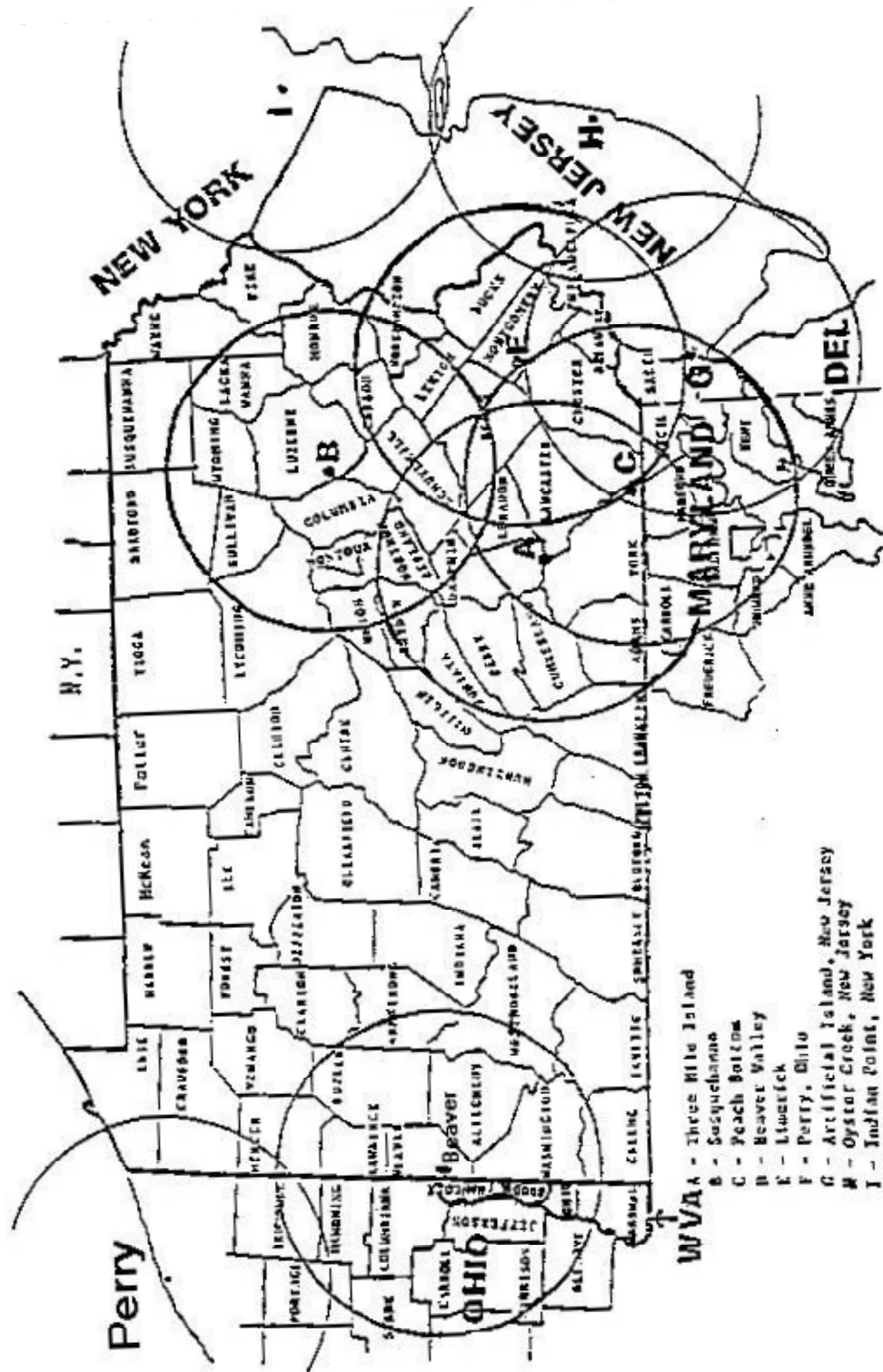
PLUME EXPOSURE PATHWAY EPZ AND  
 INGESTION EXPOSURE PATHWAY EPZ



Risk Counties: PENNSYLVANIA- Beaver,  
 OHIO- Columbiana  
 WEST VIRGINIA- Hancock

Plume Exposure Pathway EPZ

The 50 Mile Radius Designates The Ingestion Exposure Pathway EPZ



In a national nuclear attack, weapon size would determine the extent of the damage areas. People close to the explosions would be killed by the blast and heat. A few miles away, in the light damage area, most people would be endangered by the blast and heat to a lesser extent but would also be threatened by fires that the explosion might start, and fallout. Outside the immediate danger area, radioactive fallout would be the main danger. The invisible gamma rays can cause radiation sickness as a result of physical and chemical changes in the cells of the body. If a person receives a large dose of all-over-the-body radiation, in a short time he will die. Non-lethal doses would cause sickness in varying degrees but most would survive.

#### Vulnerability/Maximum Threat

Mercer County has been designated as a host area under criteria established by the Federal Emergency Management Agency. The population influx of 450,000 or greater from the Pittsburgh/Allegheny County area would be relocated in Mercer County at the time of a nuclear holocaust.

Given the proximity to Youngstown and Cleveland, only the lower western portion of Mercer County may be vulnerable to high levels of radioactive fallout.

#### Probability

FEMA suggests that the probability of a nuclear attack is low or less than one chance in 100 years, i.e., less than one percent chance. With the nuclear weapons treaties now in place among the superpowers around the globe, there is a consensus that the probability of a major nuclear exchange is decreasing. However, that consensus does not apply to the potential of an isolated attempt by terrorist or an attack by a improvised nuclear device of some type.

#### H. Bio-Chemical Attack

Although not under the auspices of nuclear, we must not be narrow-minded and wear blinders. Nuclear attack is not the only serious threat that can be imposed upon our nation.

History in the past, and still remains with us today, has shown the age-old method, biological and chemical warfare, as a serious threat that must not be overlooked and awareness of this should be made known.

The last chemical warfare that was fought worldwide was during World War I with the nerve and mustard gas. At the end of World War I, Germany was using nearly 50 percent chemical skills. Prior to the A-Bomb, bacteriological warfare was the second mass casualty system to be developed. The anthrax bomb was developed by England to be used against the Axis. Japan had conducted bio-warfare during their occupation of Manchuria during World War II. The United States had done research on bio-chemical warfare during World War II. At the end of this war, a treaty was drawn up that this type of warfare would never be used again. The problem with this treaty is two-fold: first, not all world powers today had sign that treaty and therefore are not obligated to do so; and secondly, promises and treaties have been known to be broken.

Most recently, Russia had used chemical warfare in Afghanistan as well as North Vietnam in Vietnam, Cambodia and Laos.

We talk about doing away with "unconventional bombs" which are nuclear bombs and missiles and use only "conventional weapons." Bio-chemical weapons are classified as "conventional weapons" and this term does not apply to the bombs alone, as we know them.

It really makes no sense to drop a nuclear bomb and not only destroy life, buildings and equipment and allows the earth to become contaminated for a long duration when a bio-chemical bomb would be advantageous; more advantageous because it destroys life only and leaves all buildings, equipment and supplies intact. Bio-chemicals can be tailored to conventional battlefield weapons, cost production is cheaper and finally the flexibility to a continent-wide attack or a small battlefield tactic situation.

## I. Civil Disorders

### History/Vulnerability

Mercer County has had one significant civil disorder in the last 40 years. This occurred in Farrell, Pa., in 1967. This disorder was primarily restricted to the lower southern part of Farrell and resulted in fires, looting and civil disorder. Due to the cooperativeness of the local officials and civil leaders, this disorder was confined and short-lived.

### Probability

The probability of any civil disorders always exists. It is like chemistry; if two unstable elements are introduced, a violent reaction could result. With the world situation today and the economic situation, civil disorders can be expected. Unemployment rate, at the present, is high and protests leading to civil disorder could result. Hazardous dump-sites with problems exist and protests against them can result. Although Mercer County is not susceptible to terrorist attacks, bomb threats, riots, strikes, and demonstrations can exist. These could be in a limited area and yet could encompass an entire community.

## J. Terrorism

### History:

There is to date no known occurrences of organized Terrorism aimed at targets within the borders of Mercer County. However in light of the sequence of events of September 11, 2001 now known to us consideration must be given to the fact that International Terrorism as well as domestic terrorism can occur within our community. It is now known the flight path of Flight 93 which, later crashed in Somerset crossed Mercer County. It is also known the struggle between the hijackers and the crew on board began as the aircraft left Mercer County airspace. Though it is now believed the intended target of this aircraft turned weapon was in the Washington DC area. The history of this event demonstrates the mobility and reach of such events. The history now known regarding the 1994 attack on the World Trade Center also reveals those terrorist took up residences in rural Perry County of Central PA, and on the domestic level in 1999 the KKK hosted a rally on the Mercer County Courthouse Steps.

### Vulnerability

Mercer County's rural setting and secluded areas could be attractive to those who commit or plan acts of terrorism. Seclusion provides areas for individuals or groups to plan and practice, while access to the interstate highway system provides easy access to targets of world-wide impact within the realm of one days vehicle travel.

### Probability

The probability of these types of activity being ongoing in Mercer County is hard to assess. It is certain these types of operations would be covert, disguised and mobile to all extent possible by the parties involved thus very difficult to detect.

### Hazard Mitigation

In the event of an actual Presidential Disaster Declaration, PEMA will ultimately determine if minimum program requirements are met through a review of actual funding applications. Specific items that must be included in those applications are to be found in the HAZARD MITIGATION GRANT PROGRAM ADMINISTRATION PLAN (404 Plan). While Section 404 funds cannot be used to substitute or replace funds available from other sources, they may be used in combination with other Federal, Commonwealth, County, Municipal or Private funding sources when appropriate.

With the review and update of this HVA we feel that Mercer County would be most vulnerable to the threats of severe weather. Therefore, we have obtained our "Storm Ready" certification at the county level and further encourage preparedness at the local level. We feel public warning and communication is currently a shortfall for our county. We do not have a comprehensive public warning system. Through joint efforts, we have been able to distribute one (1) NOAA Weather Radio to every school district in the county, one in every municipality, some daycare facilities, 2 libraries, 1 theater complex, 1 roller rink complex. Our goal is to have a NOAA Weather Radio in *every* school building, library, daycare and special needs facility. The general public also needs to be made aware of the value of the NOAA Weather Radio, as a warning tool. The NOAA Weather Radio can also be used to warn the public of Hazmat or WMD events.

## **PROJECT AND ESTIMATED COSTS**

### **Project 1**

APPROX. 150 - NOAA WEATHER RADIOS @ \$55.00 = \$8,250

PUBLIC EDUCATION – SKYWARN TRAINING AND NOAA WEATHER RADIO  
LITERATURE - \$500

**TOTAL PROJECT: \$8,750**

### **Project 2**

County Wide Weather Alert Siren System with Voice messages – estimated at 3 Million Dollars

Public Education on use of siren system \$5000.00

### **Project 3**

Integrated radio system for interoperability between emergency responders (Fire, Police, EMS and Municipal Public Works) estimated at 30 million dollars

## **VI. Summary.**

The hazard vulnerability analysis of Mercer County is a study prepared by the Mercer County Emergency Management Agency. This analysis is based on a format recommended by the Pennsylvania Emergency Management Agency (PEMA) to review and study potential disasters which have been addressed in this document in an attempt, prior to the actual occurrence of a crisis, to recognize the demands on emergency services and improve the response of Mercer County. It is recognized that all the demands of a disaster situation cannot be anticipated, but by an awareness of the people and property that may be vulnerable to each type of hazard, preventive measures and effective responses can be planned.

Responsibility for emergency management begins at the municipal level of government in Pennsylvania. However, as the scope of a disaster or the level of resources required increases, the county and even state governments must be involved. It is important, therefore, that every level of government assess the hazards that threaten their communities so that appropriate response, precautions and preventative measures can minimize the effects of these events.

The Mercer County Emergency Management Agency, based on a current assessment of the hazards that threaten Mercer County, is committed to the enhancement of emergency services and an effective and coordinated response capability.

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The Northwest Commission created a set of aerial photos showing the structures (residential, commercial, industrial, etc.) in the 100-year floodplain for the Mercer County Hazard Mitigation Team. This is a hypothetical list of structures that could be damaged by a flooding event. The Mercer County Hazard Mitigation Team knows that maps are broad in nature and could derive a potential dollar value if the County had a more developed GIS system. The Mercer County Hazard Mitigation Team realizes that analyzing these maps are important and will strive to have a more developed GIS system and list of structures (searchable by type, i.e. residential, commercial, etc.) by the time the next update occurs.

- Based on the consensus of the Mercer County Hazard Mitigation Team and the review of the county supplied Hazard Vulnerability Analysis (HVA), it was determined that the hazards that the communities face the most, are the most severe, cause the most damage, affect the most people, affect the largest area, and are the most costly to business and local community are windstorms (tornados, downbursts, etc.), flooding, and severe winter weather. It is determined that flooding is not the primary hazard concern in Mercer County and that tornadoes, downbursts and severe winter weather could most likely impact the whole county, not just one jurisdiction or another.

### Chapter 3 - Resources and Capabilities

In this section Mercer County has identified the resources and capabilities that are currently in place to reduce the risk from their identified hazards. A capability assessment, put simply, means looking at what you are doing, what you are not doing, what you can do, and even what you are doing wrong to reduce your communities risks from hazards. Capability assessment looks at government programs and policies, regulations and ordinances, existing emergency plans, personnel and equipment, and the like. Capability assessment also looks at the resources available to local communities to reduce disaster risks. Resources can be divided into five categories:

1. Human Resources – local police, fire, ambulance, emergency management, utility providers, medical assistance personnel, teachers, clergy, social workers, etc.
2. Physical Resources – equipment, vehicles, public lands, facilities and buildings, etc.
3. Technological Resources – Early warning systems, weather alert radios, stream-level monitoring, etc. Use of Geographic Information Systems (GIS) can produce sophisticated map images. When coupled with other information databases, GIS provides a wealth of visual and factual information for disaster planning, response and recovery. The Internet is home to hundreds of web pages and home sites related to all types of disaster, emergency management and hazard mitigation as well as PEMA ([www.pema.state.pa.us](http://www.pema.state.pa.us)) and FEMA ([www.fema.gov](http://www.fema.gov)).
4. Informational Resources – Public Awareness and Education efforts
  - National Weather Service (NWS) – Storm ready program
  - National Weather Service (NWS) – SKYWARN Program
  - American Red Cross (ARC) – Disaster Education
  - Salvation Army – Disaster Relief - Canteen
  - Business groups e.g. Hardware
  - Existing public outreach of EMA's
  - LEPC
  - Region 13 WMD Task Force Group
  - School District Plans
  - Day Care Plans
  - Municipal Emergency Operation Plans
  - Brochures on various hazards and ways to mitigate the affects of a disaster. (Family Emergency Plan, Emerg. Supply kit, Tornado – Plan to Survive, etc.
5. Financial Resources – “Where will we get the money for hazard mitigation in our community?” Federal and state sources of funding:
  - Hazard Mitigation Grant Program (FEMA/PEMA)
  - Pre-Disaster Mitigation Program (FEMA)
  - Flood Mitigation Assistance Program (FEMA/PEMA)

- Flood Mitigation Assistance Planning Grant (PEMA)
- USACE Water Resource Development Act, Section 22
- Community Development Block Grant
- Small Business Administration Loan Program
- Department of Community and Economic Development (DCED) (Floodplain Land Use Assistance Program, LUPTAP)
- Department of Transportation (DOT) Transportation Enhancement Program
- Department of Environmental Protection (DEP) (Growing Greener Grant Program, Stormwater Management Program, PennVEST)
- Department of Conservation and Natural Resources (DCNR) (Pennsylvania Greenways Initiative, Community Conservation Partnerships Programs)
- Department of Agriculture

## **I. Mercer County's Capabilities**

### Emergency Operations Plan (EOP)

An Emergency Operations Plan is an all-hazard plan developed for use by county government departments and agencies to ensure a coordinated and effective response to natural, technological, or man made disasters that may occur in Mercer County. The plan is organized to correspond to the four phases of emergency management: mitigation, preparedness, response, and recovery.

### Statewide Scour Study

The United States Geologic Survey in conjunction with the Pennsylvania Department of Transportation conducted a scour assessment of nearly 14,300 bridges in Pennsylvania. The assessments were prepared to assess the vulnerability of public bridges to scour.

Scour is the result of flowing water eroding the bed and banks of a stream. Scour at bridge foundations and channel instability during flooding are the primary causes of bridge failures.

The scour study developed a scour critical bridge indicator code (SCBI) and a scour assessment rating (SAR) for all bridges in the State that were over water and had spans of twenty feet and greater. These codes provide an indicator of those structures susceptible to scour, which could lead to their eventual failure.

By prioritizing and designing and implementing adequate scour countermeasures, the risk of failure is mitigated. Typical countermeasures include properly sized riprap, guidebanks and other measures.

### **Stream Gauges**

The Corp of Engineers maintains/monitors an electronic stream gauge that monitors stream velocity and height on the Little Shenango River at the Covered Bridge and Williamson Rd.

### **Water Elevation Gauges**

Mercer County does not monitor any water elevation gauges, however there are private gauges placed throughout the county.

### **Building Codes**

Mercer County its self has no building codes but does fall under the state wide building codes that are enforced at the local level.

### **Zoning Ordinance & Subdivision Ordinance**

Mercer County has zoning and subdivision regulations. Of the two, zoning most directly affects land use patterns, while subdivision regulations speak more to the way in which raw land is physically prepared for development. How these ordinances function and how well they perform are vital to any overall land use recommendations, which are contained in the Mercer County Comprehensive Plan.

**28 out of 48 municipalities in Mercer County have a zoning ordinance.**

The Subdivision Ordinance operates on a smaller scale than a Zoning Ordinance, but can be effective in achieving well planned new residential and commercial developments so as to insure the provision of adequate community facilities, public utilities, and streets plus an acceptable level of subdivision layout and design.

**12 out of 48 municipalities in Mercer County have a subdivision ordinance. All other municipalities are encompassed in the Mercer County Subdivision Ordinance.**

## Municipal Zoning

### Municipalities in Mercer County WITH locally adopted Zoning Ordinances

City of Farrell	Coolspring Township
City of Hermitage	East Lackawannock Township
City of Sharon	Findley Township
Clark Borough	Hempfield Township
Greenville Borough	Jackson Township
Grove City Borough	Jefferson Township
Jamestown Borough	New Vernon Township
Mercer Borough	Otter Creek Township
New Lebanon Borough	Pine Township
Sandy Lake Borough	Pymatuning Township
Sharpsville Borough	Shenango Township
Stoneboro Borough	South Pymatuning Township
West Middlesex Borough	Wilmington Township
Wheatland Borough	

Source: Mercer Co. Comprehensive Plan

### **Floodplain Ordinance**

"Floodplain management" refers to an overall community program of corrective and preventive measures for reducing future flood damage. These measures generally include zoning, subdivision, or building requirements, and special-purpose floodplain ordinances. Floodplain management requirements within Special Flood Hazard Areas (SFHAs) are designed to prevent new development from increasing the flood threat and to protect new and existing buildings from anticipated flood events.

### **Comprehensive Plan**

Mercer County currently has a Comprehensive Plan, which is a guide to future growth, development, land use, and community character. It is advisory and not itself a development ordinance, zoning map, or rules and regulations. Having such a plan was viewed as a strategic step "to improve the standard of living and quality of life for Mercer County citizens." Mercer County's Comprehensive Plan includes a variety of topics (trends & data, vision & policy statements, making communities livable, land use plan, implementation, and maps) that can be used to help Mercer County prosper and grow. Mercer County's Comprehensive Plans can be viewed at [www.mcrpc.com/comp-body.htm](http://www.mcrpc.com/comp-body.htm) or it can be accessed at Pennsylvania's E-Library (<http://www.elibrary.state.pa.us/elibpub.asp>).

**39 out of 48 municipalities in Mercer County have a Comprehensive Plan.**

### Conneaut Lake – French Creek Valley Conservancy

“To promote the environmental integrity of the French Creek watershed and its environs, and to advocate the protection of natural resources in the watershed to the aesthetic, ecological, recreational and economic benefit of the citizens of the area.”

Types of projects include: habitat improvement, riparian buffer restoration, riparian buffer conservation, education for general public, fund raising, grant writing, public and media relations, partnership development, keep your group going, watershed planning, geographic information systems use, and land use decision making.

### PA CleanWays of Mercer County

PA CleanWays' mission is to empower people to eliminate illegal dumping and littering in Pennsylvania.

Types of projects include: stream bank restoration, habitat improvements, education for watershed group, education for general public, education for other audiences, public and media relations, partnership development, and mapping.

### PA Rivers Resource Advisory Council

Types of projects include: stream bank restoration, stream channel restoration, habitat improvement, riparian buffer restoration, riparian buffer conservation, stream bank fencing, agricultural BMP's, abandoned mine drainage passive and active treatment, storm drain stenciling, education for watershed group, education for general public, education for other audiences, fundraising, grant writing, public and media relations, partnership development, keep your group going, watershed planning, community visioning, mapping, GIS development, GIS use, watershed or non-point pollution assessment, water monitoring (chemical and physical), water monitoring (biological), data analysis, land use decision making, storm water management, lake management and BMP design and selection.

Department of Environmental Protection (DEP) Growing Greener Grants

Mercer County has received 12 Growing Greener Grants, they include:

## Mercer County (12 Grants)

Watershed	Municipality Awardee	Amount Date Awarded	Grant Program	Legislative District	Project Description
	City of Hermitage  Hermitage School District	\$22,559.00  10/31/2001	Growing Greener 2001A	H007, S050	Project proposes to implement DCNR Park Master Plan grant recommendations. The Nature Area Enhancement component of the DCNR grant is proposed here including wetland construction, streambank protection a nature trail, etc.
	Coolspring  Mercer County Conservation District	\$24,500.00  1/13/2000	Growing Greener 1999A	H017, S050	Facilitates access to the Munnell Run Farm Education Center by providing transportation around the 2-mile farm tour and to improve facilities at a remote location where workshops are commonly held. These improvements will increase the value of the farm as a demonstration area for nonpoint source best management practices.
	Coolspring  Mercer County	\$24,950.00  1/13/2000	Growing Greener 1999A	H017, S050	Installs agricultural nonpoint source control measures on the Munnell Run

Conservation District				Farm Education Center to prevent runoff from barnyard and pasture from entering Munnell Run. Demonstrates best management practices to the public and to Mercer County farmers.
Hermitage City of Hermitage	\$100,000.00 2/1/2001	Growing Greener 2000C	H007, S050	The project will assess eight sub-watersheds (54.8 sq. mi.) of the Shenango River and develop a protection plan with recommendations for innovative techniques and best management practices for land development and watershed management.
Jackson Stream Restoration Incorporated	\$132,681.00 8/7/2002	Growing Greener 2002A		Aerobic wetlands proposed to treat net alkaline iron bearing discharges.
Liberty Stream Restoration Incorporated	\$8,000.00 7/24/2001	Growing Greener 2001A	H008, S050	This project will reclaim about 6000 cubic yards of spoil from an abandoned coal surface mine by returning it to the pit from which it was removed. The abandoned pit will be dewatered prior to earthmoving activities. The site will be revegetated with grasses suitable for hay cropping.
Liberty Stream Restoration Incorporated	\$550,000.00 12/1/2000	Growing Greener 2000C	H008, S050	The proposed project will backfill existing highwalls, eliminate and lime 2 water-filled pits, and put 40 acres back to

				productive use. Public education will include 3 presentations, posters and a traveling display.
mu	\$48,437.50	Growing Greener	H007, S050	Proposal is to assist in forming a watershed organization including start-up costs, equipment, and ed/out projects. Initial focus of the group is streambank cleanup of illegal dumping and littering.
Shenango River Watchers, Inc.	10/31/2001	2001A		
South Pymatuning	\$49,418.80	Growing Greener	H007, S050	Project will perform a "Rosgen" assessment of Booth Run by selecting 10 evaluation sites and 10 reference sites. The MCCD will collect some data and hire a contractor to do the other. Competitive bidding will be used to select the contractor
Mercer County Conservation District	10/31/2001	2001A		
South Pymaturning	\$3,600.00	Growing Greener	H007, S050	The project will gather hydrologic, hydraulic and physical data needed to design a natural stream restoration for about one mile of Booth Run, a tributary to Pymatuning Creek in the Shenango River watershed. Conservation District and other agency personnel will be trained on natural stream restoration techniques during the project.
Mercer County Conservation District	6/30/2000	1999C		
Wilmington	\$1,200.00	Growing	H017, S050	Project will fund

Wilmington Area School District	9/1/2001	Greener 2001A		purchase of necessary equipment essential to continue a very successful school watershed education project.
Wilmington Area School District	\$2,000.00	Growing Greener 2000C	H017, S050	Funding will provide equipment needed to incorporate watershed studies into the physical science curriculum. Students will study the 50.6 sq. mi. Little Neshannock Creek watershed; develop a watershed portfolio; conduct physical, chemical, and biological monitoring; identify current and potential pollution impacts; and carry out related activities.

Safe School Plans

Mercer County continues to work with the school districts to develop/update school disaster plans. Currently, the County has a team of 5 people trained in the Train-the-Trainer Multi-Hazard Safe Schools program. The team is prepared to assist schools in the development of their plans to respond in a coordinated effort to the multi-hazards facing our schools today.

Volunteer Organizations

Mercer County currently has **25** volunteer fire departments that assist during and after a disaster. The Red Cross is an active part of our EOC Staff and assists with coordination of shelters and disaster relief.

## **STORMREADY**

As of December 2003, Mercer County is certified by the National Weather Service as "Storm Ready." Storm Ready is a nationwide community preparedness program. The program encourages communities to take a proactive approach to improving local hazardous weather operations. To be officially StormReady, a few of the requirements are a community must:

- \*establish a 24-hr warning point and EOC
- \*Have more than one way to receive severe weather warnings and forecasts and to alert the public.
- \*Create a system that monitors weather conditions locally.
- \*Promote the importance of public readiness through community seminars.
- \*Develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises.

## **HAZMAT RESPONSE**

Mercer County recognizes the transportation routes as being one of the biggest threats of a hazmat incident, with both Interstate 79 and 80 passing through the county. Currently the County has a fleet 5 Hazmat Response Units strategically placed within the county boundaries. The response trailers are housed by local volunteer fire departments and equipped with mitigation and suppression supplies to assist local first responders.

## **MASS CASUALTY SUPPLY UNITS**

Through planning and exercise, the county understands that should a mass casualty event occur within Mercer County supplies would be in exhausted early on. With the assistance of private donations, assistance from the Mercer County LEPC and months of hard work by the Mass Casualty Planning Group, we now have two (2) trailers fitted and stocked with supplies that will supplement ambulance, fire and rescue units for up to an additional 2 hours of ongoing field treatment of an estimated 15-20 casualties on scene.

## **WEAPONS OF MASS DESTRUCTION TRAILER**

The Mercer County L.E.P.C. has replaced the last of the three original Hazmat Response Units with larger models. They choose to keep the old trailer and use it to store the WMD Equipment being received through the Region 13 Task Force. This unit will mobilize the equipment for use anywhere in the Region, in order to reduce the long term risk to life and property.

## Chapter 4 - County Hazard Mitigation Opportunities/Strategies

In this section Mercer County is developing hazard mitigation opportunities/strategies to reach the goals that they set. These opportunities/strategies are Mercer County's way to mitigate their identified hazards. Mitigation is any cost-effective action taken to eliminate or reduce the long-term risk to life and property from natural and technological hazards.

### General objective

- Prevent loss of life, property damage and economic injury.
- Protect the community tax base.
- Ensure long-term economic stability.
- Promote use of zoning controls throughout the county and encourage planning & zoning on a regional (joint municipal) basis.
- Preserve authority in municipal governments to enact and administer zoning controls.
- Develop performance-oriented land use controls, which allow flexibility and variety in meeting land use & community development objectives.
- Promote use of land use controls, which set standards for building style, signs, traffic control, etc., for high quality development.
- Encourage a regional approach to planning designated growth areas, economic development areas, revitalization areas & land use controls.
- Establish continuing lines of communication and educate communities and the public concerning disaster preparedness and hazard mitigation awareness.

There are six (6) general approaches to reducing (mitigate) hazard risks and they are as follows:

1. **Preventive Measures** keep problems from getting started or getting worse. The use of known hazard areas, like floodplains for example, can be limited through planning, land acquisition, or regulation. These activities are usually administered by building, zoning, planning, and/or code enforcement officials:
  - \* Planning and zoning
  - \* Open space preservation
  - \* Building codes and enforcement
  - \* Storm water management
  - \* Drainage system maintenance
2. **Property Protection** measures are those actions, which go directly to permanently getting people, property, and businesses out of unsafe areas. Property Protection measures include:
  - Property acquisition is the act of purchasing and removing homes/businesses from hazard prone areas.
  - Relocation of at risk structures

- Elevation of structures, construction techniques to improve structural resistance to high wind or heavy snow can be incorporated into new homes or retrofitted into existing structures.
  - Home and business insurance policies and participation in the National Flood Insurance Program.
3. **Emergency Service Measures** are taken during a disaster to minimize its impact. These measures are the responsibility of the County emergency management staff, operators of major critical facilities, and other local emergency service organizations. Emergency Service measures include:
- Alert warning systems
  - Monitoring systems
  - Emergency response planning
  - Evacuation
  - Critical facilities protection
  - Preservation of health and safety
4. **Structural Projects** are usually designed by engineers and managed and maintained by public works staff. They are designed to reduce or redirect the impact of natural disasters (especially floods) away from at risk population areas. Structural Projects include:
- Reservoirs
  - Levees, floodwalls
  - Diversions
  - Channel modification
  - Storm sewers
5. **Natural Resource Protection** preserves and restores natural areas or their natural functions. Park and recreation organizations, conservation agencies or wildlife groups usually implement such measures. Natural Resource Protection measures include:
- Wetland protection
  - Best management practices
  - Erosion and sediment control
  - Riverine protection
6. **Public Information Programs** advise property owners, potential property owners, and others of hazards and ways to protect people and property from them. A public information office usually implements them. Public information activities can include:
- Flood map data
  - Library resources
  - Outreach projects
  - Technical assistance
  - Real estate disclosure information
  - Environmental education programs

## **Mercer County Mitigation Opportunities:**

The Mercer County Hazard Mitigation Team (with assistance from the Northwest Pennsylvania Regional Planning and Development Commission) sent out questionnaires to each of the 48 municipalities that make up Mercer County. Each municipality was to describe where the hazards occur that affect their governing area. The hazard mitigation team determined Mercer County's hazard mitigation opportunities by using the questionnaires and opportunity forms that the municipalities completed. The following Mitigation Opportunity Forms are not prioritized. It is not the intention of this team nor has this team taken the authority to determine one opportunity to be more important than any other.

MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 19, 2003

NAME OF PROJECT: Stream & Storm Drainage – MERCER HMPO-001

Municipality: Clark Borough

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Russ Shaffer, President of Council

AGENCY: Borough of Clark

LOCATION (address) OF PROJECT: #3590 Valley View Rd.

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER \_\_\_\_\_

OR Tax Parcel ID: 51 400 008

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

**BRIEF DESCRIPTION OF PROJECT:**

Improvements to storm water culverts and drainage.  
Ease flooding to commercial property.

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Ease flooding of commercial property.

TOTAL ESTIMATED COST: \$5,000 - \$8,000 ASSESSMENT VALUE AND DATE

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 17, 2003

NAME OF PROJECT: Milton Street – MERCER HMPO-002

Municipality: Clark Borough

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Russ Shaffer, President of Council

AGENCY: Borough of Clark

LOCATION (address) OF PROJECT: #22, #28 Milton St.

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

**BRIEF DESCRIPTION OF PROJECT:**

Repairs to existing storm water collection system, replacing worn out culverts.

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Mitigate potential damage to property caused by erosion.

TOTAL ESTIMATED COST: \$5,000 ASSESSMENT VALUE AND DATE

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 17, 2003

NAME OF PROJECT: Milton Street – MERCER HMPO-003

Municipality: Clark Borough

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Russ Shaffer, President of Council

AGENCY: Borough of Clark

LOCATION (address) OF PROJECT: Vicinity of #60 through #25 Nora St.

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: 51 – 401-103

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

**BRIEF DESCRIPTION OF PROJECT:**

Repairs, relocate, upsize and improve storm water culverts, catch basins, flow lines and tail ditches.

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

To alleviate localized flooding of roadways and residential property in effected area.

TOTAL ESTIMATED COST: \_\_\_\_\_ ASSESSMENT VALUE AND DATE

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 17, 2003

NAME OF PROJECT: Update Public Warning System/Generator- MERCER HMPO-004

Municipality: Clark Borough

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Russ Shaffer, President of Council

AGENCY: Borough of Clark

LOCATION (address) OF PROJECT: 2798 Winner Rd. – Municipal Bldg.

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N **NO**

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

**BRIEF DESCRIPTION OF PROJECT:**

Replacement of the public warning siren as the existing equipment is 40+ years old. Needs is for two (2) new sirens that operate on less power and the locating of one (1) siren closer to the reservoir.

**BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:**

Improve early warning system for benefit of reduced risk to life and property loss. The current siren system is very old. It requires 125 amps to start and 64 amps to run. Our community has a high volume of recreational visitors, (ie; camping, boating, swimming.) Siren is used to alert boaters and others of inclement weather.

Will benefit three (3) communities, Borough of Clark, South Pymatuning Twp. and City of Hermitage.

TOTAL ESTIMATED COST: \$90,000 = \$50,000 Siren- \$40,000 Generator ASSESSMENT  
VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 25, 2003

NAME OF PROJECT: Rodgers Hill Rd.- MERCER HMPO-005

Municipality: Coolspring Twp.

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Robert McGhee, Supervisor

AGENCY: Coolspring Twp.

LOCATION (address) OF PROJECT: Rd. # T-595 and T656

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N **NO**

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

**BRIEF DESCRIPTION OF PROJECT:**

Repair and take steps to prevent further damage to road.

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Repair and make upgrades to ¾ mile of roadway on steep. This piece of road is consistently getting washed out by heavy downpours. The ditch is very deep.

400 – 500 Ton of rip-rap  
1 Culvert 24" x 40"  
Equipment  
Labor

TOTAL ESTIMATED COST: \$10,950

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 2003

NAME OF PROJECT: Enhance Communication - MERCER HMPO-007

Municipality: Findley Twp.

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Elliott Lengell, Supervisor

AGENCY: Findley Twp.

LOCATION (address) OF PROJECT: Municipality

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N **NO**

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

BRIEF DESCRIPTION OF PROJECT:

Two-way Communications between Municipality and County.

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Will provide the capability to communicate with County during emergency situations, which will improve response capabilities.

TOTAL ESTIMATED COST:

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 2003

NAME OF PROJECT: Early Warning System - MERCER HMPO-008

Municipality: Findley Twp.

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Elliott Lengell, Supervisor

AGENCY: Findley Twp.

LOCATION (address) OF PROJECT: Municipality

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N **NO**

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

BRIEF DESCRIPTION OF PROJECT:

Early Warning System

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Will provide the capability to disseminate early warning information to the community.

TOTAL ESTIMATED COST: \$50,000

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 2003

NAME OF PROJECT: Water Buffalo - MERCER HMPO-009

Municipality: Findley Twp.

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Elliott Lengell, Supervisor

AGENCY: Findley Twp.

LOCATION (address) OF PROJECT: Municipality

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N **NO**

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

BRIEF DESCRIPTION OF PROJECT:

Water Buffalo

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Will provide an alternative emergency water supply.

TOTAL ESTIMATED COST:

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 2003

NAME OF PROJECT: Emergency Generator - MERCER HMPO-010

Municipality: Findley Twp.

County: Mercer County

*PROJECT CONTACT*

TITLE: Mr. Elliott Lengell, Supervisor

AGENCY: Findley Twp.

LOCATION (address) OF PROJECT: Municipality

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N **NO**

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification \_\_\_\_\_

BRIEF DESCRIPTION OF PROJECT:

Emergency Generator

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 2003

NAME OF PROJECT: Nickleplate Rd. - MERCER HMPO-011

Municipality: French Creek Twp.

County: Mercer County

*PROJECT CONTACT*

TITLE: Mr. Mark W. Kline, Supervisor

AGENCY: French Creek Twp.

LOCATION (address) OF PROJECT: Black Rd. to Township Line

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification NO

BRIEF DESCRIPTION OF PROJECT:

Widen, Grade Rd. Install 3 Cross Drains  
Hydro Seed Bank  
Re-set Utility Poles

**BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:**

Road needs to be widened. Without the 3 cross drains road will continue to erode.

There are no cross drains on sections of township road due to the width of the road. Widening the road will permit installation of cross pipes and eliminate erosion from run-off water from bank.

TOTAL ESTIMATED COST: \$10,000

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

**HAZARD MITIGATION PROJECT OPPORTUNITY FORM**

DATE: November 2003

NAME OF PROJECT: Miller Rd. - MERCER HMPO-012

Municipality: French Creek Twp.

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Mark W. Kline, Supervisor

AGENCY: French Creek Twp.

LOCATION (address) OF PROJECT: 71 Miller Rd., Cochranon, PA

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification NO

**BRIEF DESCRIPTION OF PROJECT:**

Up-Grade 47" pipe to 72" x 60'. Placement of Rip-Rap

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Washed out berms and ends of pipe.

TOTAL ESTIMATED COST: \$6950.

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 2003

NAME OF PROJECT: W. Creek Rd. - MERCER HMPO-013

Municipality: French Creek Twp.

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Mark W. Kline, Supervisor

AGENCY: French Creek Twp.

LOCATION (address) OF PROJECT: 33 West Creek Rd., Carlton, PA

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification NO

BRIEF DESCRIPTION OF PROJECT:

Replace pipe to 48" x 40'. Dredge Stream 500 yards.

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Pipe currently in place fills and water goes over banks flooding residents property.

TOTAL ESTIMATED COST: \$4325.

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

HAZARD MITIGATION PROJECT OPPORTUNITY FORM

DATE: November 2003

NAME OF PROJECT: County Line Rd. - MERCER HMPO-014

Municipality: French Creek Twp.

County: Mercer County

**PROJECT CONTACT**

TITLE: Mr. Mark W. Kline, Supervisor

AGENCY: French Creek Twp.

LOCATION (address) OF PROJECT: Borger Residence to Nickleplate Road

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_

PARCEL NUMBER: \_\_\_\_\_

OR Tax Parcel ID: \_\_\_\_\_

ELEVATION \_\_\_\_\_ CERTIFICATE Y/N

Is the property within the 100-year floodplain? Y/N

The property is located on FIRM Panel Number \_\_\_\_\_

FLOOD INSURANCE Y/N Date of Insurance Verification NO

**BRIEF DESCRIPTION OF PROJECT:**

Grade, gravel, ditch and replace 2 culvert pipes.

BRIEF DESCRIPTION OF PROBLEM TO BE SOLVED:

Re-open Road to Local Traffic.

TOTAL ESTIMATED COST: \$10,000.

ASSESSMENT VALUE AND DATE: 11/03

SOURCE OF FUNDING FOR NON-FEDERAL SHARE:

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Community Ranking Score \_\_\_\_\_ Date \_\_\_\_\_

## Action Plan

The Action Plan's purpose is to describe the means of implementing County Hazard Mitigation Projects described throughout the plan. Several methods of mitigation are described within the plan.

### Preventive Measures:

**Goal #1** – Attempt to reduce the current and future risk of flood damage in Mercer County.  
(*Ongoing*)

Objective 1.1: Mercer County will attempt to reduce the current and future risk of flood damage by directing new development away from high hazard areas by reviewing existing regulations to ensure adequacy in reducing the amount of future development in identified hazard areas.

**>Action 1.1.1: Mercer County Planning Office and Municipal Offices to review regulations pertaining to their jurisdiction to make sure that adequate zoning regulations are in place to reduce future development in high hazard areas in their jurisdiction.**

Objective 1.2: Review all comprehensive plans to ensure that designated growth areas are not in hazard areas. (*Short*)

**>Action 1.2.1: Mercer County Planning Office and applicable Municipal Offices to review their comprehensive plans to ensure that designated growth areas are not in high hazard areas.**

Objective 1.3: Adoption and enforcement of statewide Uniform Construction Code (UCC).  
(*Ongoing*)

**>Action: 1.3.1: County Planning Office and Municipal Offices to review the statewide Uniform Construction Code to ensure the enforcement thereof.**

Objective 1.4: Review all capital improvement plans to ensure that infrastructure improvements are not directed towards hazardous areas. (*Ongoing*)

**>Action 1.4.1: County and applicable Municipal Offices to review their capital improvement plans to ensure programmed infrastructure improvements are not in high hazard areas.**

Objective 1.5: Evaluate and update existing floodplain ordinances to meet or exceed the NFIP standards.  
(*Short*)

**>Action 1.5.1: County and applicable Municipalities to review and update their floodplain ordinances to be sure that they are in full compliance with the NFIP.**

Objective 6: Improve the enforcement of existing floodplain regulations. (*Short*)

**Action 1.6.1: Mercer County will arrange with PEMA to hold training sessions with the County and the municipalities on the National Flood Insurance Program requirements.**

Objective 7: Evaluate existing shelters to determine adequacy for current and future populations. *(Ongoing)*

**>Action: 1.7.1: Ensure that all shelters within Mercer County have adequate emergency power resources and are not in high hazard areas. Work with the American Red Cross towards upgrading all shelter resources.**

**>Action 1.8.2.: Establish a protocol for the sharing of annual shelter survey information between the local ARC Chapter and the Mercer County Dept. of Public Safety by holding an annual work session to share information about local shelters. Information to include the site of each shelter, how many people it can house and feed, if it has back-up power available on site, completed site survey forms and types of resources that they have or that are unmet. This will benefit all areas of Mercer County in the event of the need to open shelters.**

## **Property Protection**

### **GOAL #2**

**Reduce the potential impact of natural and man-made disasters on public and private property. (Ongoing)**

**Objective 2.1: Encourage participation in the National Flood Insurance Program (NFIP)**

> Action 2.1.1: Local and state to conduct outreach efforts to educate municipalities and citizens about the NFIP and its requirements. Could be accomplished at Local Quarterly Training and/or Twp. Supervisors School.

>Action 2.1.2: County to obtain updated information on the number of NFIP policyholders in Mercer County and its municipalities from PEMA and FEMA.

**Objective 2.2: Protect Mercer County's most vulnerable populations, buildings and critical facilities through the implementation of cost-effective and technically feasible mitigation projects. (Long)**

>Action 2.2.1: Work with PEMA and FEMA to collect updated information of the number and location of all repetitive loss properties throughout the county and the municipalities in order to plan future mitigation activities such as raising electrical services and initiating property buy-outs.

>Action 2.2.2: County and Northwest Commission to develop a database using a GIS System, when the technology becomes available, of information on all repetitive loss properties including maps to be used in future mitigation activities.

**Objective 2.3: To enhance the existing information resources available to Mercer Co. Department of Public Safety. (Long)**

The management of and timely flow of accurate information to disaster responders is of utmost importance during a disaster response. Mercer County D.P.S. has assembled much of the needed information, and has a comprehensive communications system. This objective is designed to realize the Department of Public Safety's responsibility to gather, organize and disseminate information from and to those who plan for and respond to disasters.

**Action 2.3.1: Geographic Information Systems (GIS) are designed to help manage spatial information. More than simple computerized maps, a GIS assigns data to specific locations. The data are then searchable, and spatial relationships can easily be analyzed. Mercer County needs to develop a GIS with the Mercer County DPS having direct access to the data. The logical responsible entities to complete this project would be the County Commissioners and County Planning Commission.**

It will cost approximately \$700,000 to complete the project.

## Emergency Services Measures

**GOAL #3 - Improve upon the protection of the citizens of Mercer County from all natural and man-made hazards. (Ongoing)**

**Objective 3.1: Ensure adequate training and resources for emergency organizations and personnel. (Ongoing)**

>Action 3.1.1.: DPS to conduct annual tabletop disaster exercises with local law enforcement, emergency managers, county and local officials, and other disaster response agencies. Types of exercises to include: Flood Exercise, Weapons of Mass Destruction Exercise, Hazardous Materials Spill Exercise, Weather Exercise and Biological Terrorism Exercise.

>Action 3.1.2: Provide information about local, regional, state, and federal training opportunities to fire departments, EMS, ambulance services, and other emergency responders. Develop a list of training opportunities that are available and distribute the list to all local emergency responders. **This will benefit all areas of Mercer County.**

>Action 3.1.3: Continue to conduct National Weather Service SKYWARN classes by partnering with the National Weather Service to provide training to people throughout Mercer County on Skywarn, all weather preparedness.

**Objective 3.2: Improve emergency preparedness in Mercer County and its municipalities. By being better prepared the County hazard mitigation capabilities will be enhanced also. (Short)**

>Action 3.2.1.: Review the existing Mercer County Emergency Operations Plan (EOP) and update where necessary, based on the recommendations of the Mercer County Hazard Mitigation Plan. Include participation from all municipalities in the update process by ensuring that their EOP's are reviewed and updated annually.

>Action 3.2.2: Mercer County has obtained a bus to be used as an emergency command vehicle. We would like to complete it to be used to respond to emergencies within the county.

**Objective 3.3: Evaluate cost-effective ways to augmenting existing broadcast and communications systems to monitor warning information continuously and to disseminate appropriate warnings. (Long)**

>Action 3.3.1: Develop a plan to update the Communications Center equipment to allow faster more timely warning notifications to mitigate the results of a natural, man made or technological emergency.

>Action 3.3.2: Research the possibility of installing Alert Warning Sirens to reach all populated areas throughout the County.

>Action 3.3.3: Distribution of NOAA Weather Radios to Mercer County municipalities, schools, hospitals, nursing homes, day care centers, libraries, malls, SARA Facilities to initiate earlier warnings to minimize the impact of an emergency on the community.

## **Structural Projects**

**GOAL #4 – Reduce or redirect the impact of natural disasters (especially floods) away from at risk population areas. (Long)**

**Objective 4.1: Research possible mitigation projects to reduce flooding, reduce/eliminate sewage leakage and inflow/infiltration problems. Some projects may include, riprap, channel modification, storm sewers, raise utilities, property buy-outs.**

Action 4.1.1: Review the questionnaires returned by the municipalities and consider ways to best mitigate the affects of the hazards which the municipalities are most vulnerable to.

Action 4.1.2: Categorize and submit Hazard Mitigation Project Opportunity Forms for the municipalities that returned them upon request.

## **Natural Resource Protection**

**GOAL #5 - Protect existing natural resources and open space, including parks and wetlands with the floodplain and watershed to improve their flood control function. (Ongoing)**

**Objective 5.1: Protect Mercer County’s natural resources through the implementation of cost-effective and technically feasible mitigation projects. (Long)**

Action 5.1.1.: When GIS technology is available to Mercer County we would develop a database of natural resources areas including maps to be used in future mitigation activities.

Action 5.1.2.: When funds become available for hard mitigation projects, the county plans to hold meetings to identify high-risk properties in the county and to review the mitigation opportunities submitted by the municipalities.

## **Public Information Program**

**GOAL #6: Protect public health, safety and welfare by increasing the public awareness of existing hazards and by fostering both individual and public responsibility in mitigating risks due to those hazards. (Ongoing)**

**Objective 6.1: Develop and distribute public awareness materials about natural, man-made and technological hazard risks, preparedness, and mitigation. (Ongoing)**

>Action 6.1.1.: Use the media for the distribution and publication of hazard information by sending news releases to local newspapers, radio and TV stations about pre-disaster information. Design to reach all areas of Mercer County.

>Action 6.1.2.: Work with the American Red Cross to ensure that citizen's disaster classes are held on a frequent basis and that there is not a duplication of services. The American Red Cross holds a variety of courses to educate the public and responders to mitigate the effects of an emergency situation. Some courses offered: CPR, first aid, mass care, shelter ops., etc.

>Action 6.1.3.: Continue to provide public speaking series on hazard related topics which include, how to develop and family disaster plan and disaster supply kit, sheltering in place, development of a business continuity plan, and sheltering in place, how to use 9-1-1. These topics of instruction are offered to the civic groups such as Rotary, Kiwanis, Chamber of Commerce, local churches, scout groups.

>Action 6.1.4.: Update the county website to provide hazard related information that is easily accessible. The County website has information about disaster preparedness and related activities. The plan is to expand and update the website as needed and as appropriate in a timely manner to benefit all County residents.

>Action 6.1.5.: Develop a County Resource Directory, including all municipal equipment, that can be updated and accessed via the County website. A central resources directory will expedite mitigation and recovery efforts.

**Objective 6.2: Target owners of properties within identified hazard areas for additional outreach regarding mitigation and disaster preparedness. (Short)**

>Action 6.2.1: Continue working with representatives from NFIP to hold local course on the National Flood Insurance Program (NFIP) for realtors, bankers, and insurers to be attended from all areas of Mercer County.

## Chapter 5 – Municipal and Public Involvement

The planning process used in Mercer County was based on the Section 322, local planning requirement of the Disaster Mitigation Act of 2000 and supporting guidance developed by FEMA and PEMA. The planning process included the following steps.

- ❖ Establish a Core Planning Team
- ❖ Review and Update the Hazard Vulnerability Assessment
- ❖ Develop Capabilities Assessment
- ❖ Complete Mitigation Plan
- ❖ FEMA/PEMA Review
- ❖ Advertise Opportunity for Public Comment
- ❖ Adopt and Implement Mitigation Plan
- ❖ Present to Municipalities for Adoption

This process was initiated by the Northwest Regional Planning and Development Commission and supported by Mercer County Hazard Mitigation Team, PEMA and FEMA representatives.

Hazard Mitigation Officer, John R. Nicklin was appointed December 2000.  
Hazard Mitigation Team Members, appointed December 2002.

### **Team Members:**

John R. Nicklin, Deputy Director Mercer Co. EMA  
Jim Mondok, Director, Mercer Co. Soil Conservation District  
Michael Deforest, Director, Mercer Co. Revenue Dept.  
Mark Miller, Director, Mercer Co. Bridge Dept.

### MUNICIPAL RESPONSES TO QUESTIONNAIRES

MUNICIPALITY	WINTER STORM	STORMS/ TORNADO	FLOOD	HAZMAT	OTHER MISC.	NFIP
CLARK	1	2	3			Y
COOLSPRING	NR	NR	NR	NR		Y
DEER CREEK	NR	NR	NR	NR		Y
DELAWARE	3	4	5	1	2	Y
E. LACK	NR	NR	NR	NR	NR	Y
FAIRVIEW	NR	NR	NR	NR	NR	Y
FARRELL	NR	NR	NR	NR	NR	Y
FINDLEY	1	2	3		4	Y
FREDONIA	NR	NR	NR	NR	NR	Y
FRENCH CREEK	NR	NR	NR	NR	NR	Y
GREENE	NR	NR	NR	NR	NR	Y
GREENVILLE	NR	NR	NR	NR	NR	Y
GROVE CITY	NR	NR	NR	NR	NR	Y
HEMPFIELD	NR	NR	NR	NR	NR	Y
HERMITAGE		1	2			Y
JACKSON CENTER	NR	NR	NR	NR	NR	Y
JACKSON TWP	NR	NR	NR	NR	NR	Y
JAMESTOWN	NR	NR	NR	NR	NR	Y
JEFFERSON	NR	NR	NR	NR	NR	Y
LACK TWP	2	1	3		4	Y
LAKE	NR	NR	NR	NR	NR	Y
LIBERTY	NR	NR	NR	NR	NR	Y
MERCER	NR	NR	NR	NR	NR	Y
MILL CREEK	NR	NR	NR	NR	NR	Y
NEW LEB.	NR	NR	NR	NR	NR	Y
NEW VERNON	NR	NR	NR	NR	NR	Y
OTTER CRK	NR	NR	NR	NR	NR	Y
PERRY TWP	NR	NR	NR	NR	NR	Y
PINE TWP.	NR	NR	NR	NR	NR	Y
PYM. TWP.	NR	NR	NR	NR	NR	Y
SALEM	3	1	2			Y
SANDY CREEK	NR	NR	NR	NR	NR	Y
SANDY LAKE BORO	NR	NR	NR	NR	NR	Y
SANDY LAKE TWP.	NR	NR	NR	NR	NR	Y
SHARON	NR	NR	NR	NR	NR	Y
SHARPSVILLE	NR	NR	NR	NR	NR	Y
SHEAKLEYVILLE	NR	NR	NR	NR	NR	Y
SHENANGO	NR	NR	NR	NR	NR	Y
S. PYMATUNING	NR	NR	NR	NR	NR	Y
SPRINGFIELD	NR	NR	NR	NR	NR	Y

MUNICIPALITY	WINTER STORM	STORMS/TORNADO	FLOOD	HAZMAT	OTHER MISC.	NFIP PARTICIPANT
STONEBORO	NR	NR	NR	NR	NR	Y
SUGAR GROVE	NR	NR	NR	NR	NR	Y
WEST MIDDLE.	NR	NR	NR	NR	NR	Y
WEST SALEM	2	1	3	4		Y
WHEATLAND	NR	NR	NR	NR	NR	Y
WILMINGTON	NR	NR	NR	NR	NR	Y
WOLF CREEK	NR	NR	NR	NR	NR	Y
WORTH	2	1				Y

NR = NO RESPONSE RETURNED

**Mercer County All Hazard Mitigation Planning Process Timeline**

<b>DATE</b>	<b>ACTIVITY</b>	<b>PURPOSE</b>
12/2000	APPOINT HMO	LEAD PLANNING PROCESS
12/2002	APPOINT TEAM	TO SUPPORT THE PLANNING PROCESS
2/5/03	ATTEND HAZ MIT TRAINING AT TITUSVILLE	
10/14/03	PLANNING	MEET W/ NW PLANNING, FEMA, PEMA, TEAM MEMBERS
10/15/03	MAILING TO ALL MUNICIPALITIES	HAZ MIT QUESTIONNAIRE/HAZ MIT OPPORTUNITIES FORM
12/1/03	DEADLINE	TO RETURN QUESTIONNAIRES/HAZ MIT OPPORTUNITIES
2/19/04	EDIT PLAN	INSERT HAZ MIT OPPORTUNITIES FROM MUNI'S
2/24/04	PLAN MEETING	REVIEW PLAN STATUS
2/24/04	INPUT REQUESTED	
3/2 - 6/04	RESEARCH	RESEARCH FLOOD MAPS, ASSESS VALUE TO PROPERTY IN FLOOD ZONE
3/23/04	PLAN MEETING	REVIEW WITH NW PLANNING, FEMA. FINALIZE PLAN
4/04 - 05/04	EDIT PLAN MAKE REVISIONS AS RECOMMENDED	TO ADD MAPS, REPEAT FLOODING INFORMATION, GROWTH DEVELOPMENT INFO., GOALS, OBJECTIVES
5/7/04	PEMA PLAN REVIEW @ OIL CITY	
6/9/04	MEETING W/FEMA AND PEMA	FINAL REVIEW & COMMENTS
6/04	PREPARE FOR PUBLIC REVIEW	PUT ON WEBSITE MAIL TO MUNI'S, ADVERTISE
6/30/04	POSTED TO WEB	FOR PUBLIC REVIEW FOR 2-WEEKS
7/14/04	FORWARD TO COMMISSIONERS	FOR ADOPTION
7/14/04	MAIL TO MUNI'S	FOR REVIEW/ADOPTION
8/14/04	MAIL PLAN TO PEMA	COMPLETE

## Chapter 6 – Implementation of Plan

### Implementation Through Existing Programs

Mercer County and communities currently use their building regulations, health codes, subdivision regulations, and zoning resolutions, when applicable to help protect life and property and guide development. This Plan includes steps to include hazard mitigation strategies into the operations of these existing programs.

We will educate and encourage local municipalities to conform to the National Flood Insurance Program Regulations in developing areas of the County. Growth is expected to occur in and around several areas, Grove City, Springfield Twp., City of Hermitage and Pine Twp. The County is planning to review the need for updated flood hazard maps and would like to initiate an education program to advise local decision makers about the status of flood maps in their communities. Also, via the Mercer County DPS website, expansion of flood and other natural and manmade hazard emergency response information will be provided. The Dept. of Public Safety will also develop a “municipal resources directory” that will improve response capabilities during any type of disaster.

**Public Involvement:** Upon initial approval from FEMA the Plan will be made available on the County website and by hardcopy at the Mercer County Commissioners Office for public review and comment. It will be advertised in the Sharon Herald and the Greenville Record Argus. In preparation, a copy will be mailed to each municipality for their review and comment. This would allow the local officials time to ask questions and learn more about the plan in advance of their taking action. Any questions will be addressed by Mercer County DPS Staff.

**Local Jurisdiction Plan Adoption:** The final and critical step in the Public Involvement program was submittal of the Plan to communities for review and adoption. Each community was asked to review the Plan and formally adopt it. By adopting this Plan the municipality agrees to implement and support the goals and objectives outlined in this Mitigation Plan. As mentioned above the plan was made available for review and comment on the County website, the Co. Commissioners Office and the local municipal buildings. Copies of the formal Plan adopted correspondence from each community are included alphabetically at the end of this document.

## APPENDIX A

### MERCER COUNTY REPETITIVE LOSS PROPERTIES

MUNICIPALITY	BUILDING	CONTENTS	#OF LOSSES	AMT PD	INSURED	NAME	DATE OF LOSS
HERMITAGE	5057.40	0.00	3	5057.40	YES	NUGENTS	1992,1990,1988
MILL CREEK TWP	24,769.84	1196.80	2	25993.64	NO	ARDUINI	12/1985,4/1985
SHARON CITY	10,240.78	71,472.57	5	81713.35	YES	ASSUMED CONDO.	1997,1992,1969,1988,-1931
STONEBORO	18,252.08	12,086.02	5	30338.10	YES	SCHAUER	1999,1997,1983,1991,1995
<b>TOTAL</b>	<b>58,320.10</b>	<b>84,755.39</b>		<b>143,102.49</b>			

**APPENDIX B  
VULNERABILITY ASSESSMENT**

Mercer County properties in the 100 year flood plain.

Sample: 55 555 124 = Township or Borough, Map number, Property number.  
Assessment value is for building only.

In the case of multiple buildings counted, assessment value is averaged.

55 555 124 Sewage Treatment Plant Wolf Creek 499,250.  
3 Treatment Buildings Greenwood Dr.

22 218 120 Wolf Creek 27,450.  
Approx. 16 Residential Bldgs. Longwell Dr.

59 552 165 Wolf Creek 63,750.  
Approx. 35 Res. Bldgs. Area of Park Ave. Monroe St. E. Pine St. Havard St.

59 552 131 Penn Grove Hotel, Inc. Wolf Creek 70,500.  
129 E. Pine St.

59 552 140 Pinelands Co. Inc. Wolf Creek 11,550.  
Garage 155 Park St.

59 552 142 Pinelands Co. Inc. Wolf Creek 6450.  
Storage Bldg. 155 Park St.

59 552 114 Cooper Cameron Corp. Wolf Creek 612,450.  
Industrial Complex Lincoln Ave.

59 552 182 Grove City Boro Owned No Further Data

59 552 045 Wolf Creek 6,300.  
Approx. 10 Res. Bldgs. Area of Hazel St and Valley St.

59 545 029 Wolf Creek 9,450.  
Approx. 11 Res. Bldgs. Area of McConnel St. and E. Mall Plaza

59 545 032 Wolf Creek 7,800.  
5 Res. Bldgs. North St.

33 180 045 PO Box 745 Sandy Lake Rd. Black Run Creek 126,300.  
1 Res. Bldg. 1 Bus. Bldg. (Bus Garage)

33 180 047 1077 Sandy Lake Rd. Black Run Crk. 15,300.  
1 Res. Bldg.

33 180 047	178 Bell Rd.	Black Run Crk.	26,400.
2 Res. Bldg.			
33 167 037	149 E. Gilmore Rd.	unnamed branch of Wolf Crk.	
1 Res. Bldg. (Dairy Farm)		27,300	
Total value of farm bldgs. Is 11, 580.			
33 167 037	21 Montgomery Rd.	unnamed branch of Wolf Crk.	
1 Res. Bldg. (son of above)		20,700.	
9 34 599	599 Latonka Dr.	Lake Latonka	17,550.
1 Res. Bldg. Cool Spring Twp.			
9 34 616	616 Latonka Dr.	Lake Latonka	34,950.
Approx. 7 Res. Bldgs. Coolspring Twp.			
9 34 873	873 Latonka Dr.	Lake Latonka	24,750.
Approx. 7 Res. Bldg. Coolspring Twp.			
9 34 933	933 Latonka Dr.	Lake Latonka	21,600.
Approx. 2 Res. Bldgs. Coolspring Twp.			
9 34 972	901 Aztec Trail	Lake Latonka	30,600.
3 Res. Bldgs. Coolspring Twp.			
9 34 25	182 Latonka Dr.	Lake Latonka	26,550.
Approx. 18 Res. Bldgs. Jackson Twp.			
9 34 70	70 Lake Latonka Place	Lake Latonka	24,450.
Approx. 3 Res. Bldgs. Jackson Twp.			
9 34 83	83 Manto Trail	Lake Latonka	33,750.
Approx. 2 Res. Bldgs. Jackson Twp.			
9 34 115	115 Latonka Dr.	Lake Latonka	36,750.
Approx. 4 Res. Bldgs. Jackson Twp.			
59 557 027	158 E. Pine St.	Wolf Creek	12,900.
Approx. 13 Res. Bldg.			
59 557 018	212 Grace St.	Wolf Creek	14,950.
2 Res. Bldg.			
59 552 128	Broad St. (rear)	Wolf Creek	114,150.
2 Bus. Bldg. (Unkown type)			
59 552 130	117 Pine St.	Wolf Creek	335,600.
1 Bus. Bldg. (U.S. Post Office)			

59 552 113 104 N. Broad St. Wolf Creek 27,450.  
2 Bus. Bldg. (Auto Garage)

59 552 109 138 N. Broad St. Wolf Creek 9,300.  
Approx. 9 Res. Bldg.

59 552 016 N. Broad St. Wolf Creek 20,850.  
1 Bldg. (No. 1 Fire Station)

59 552 016 226 N. Broad St. Wolf Creek 34,500.  
1 Bldg. (United Steelworkers of America Local 6346)

59 557 036 East Main St. Wolf Creek No Data  
Grove City College Athletic Field

22 206 017 96 Old Hickory Lane Wolf Creek 32,100.  
1 Res. Bldg. (Area is a campground)

59 544 033 Edgewood Ave Lot 1 Wolf Creek 583,400.  
1 Bus. Bldg. (Grove City Medical Center)

59 544 034 Hillcrest Circle Wolf Creek 151,650.  
2 medical bldgs. Leased to Grove City Hospital  
--Grove City Boro Pump Station is located on Lot 1

22 218 071 720 N. Liberty Rd. unnamed Trib. Of Wolf Creek  
1 Res. Bldg. 7,650.

33 168 014 2713 Scrub Grass Rd. unnamed Trib. Of Wolf Creek  
1 Res. Bldg. 8,400.

33 168 002 1114 Centertown Rd. unnamed Trib. Of Wolf Creek  
1 Res. Bldg. 8,850.  
Beef Cattle Farm Barns and outbuildings assessed at 12,800.

33 167 061 123 E. Gilmore Rd. unnamed Trib. Of Wolf Creek  
1 Res. Bldg. 11,150.

65 577 059 E. Market St. Ext. Otter Creek 333,500.  
1 Bus. Bldg. Industrial (Mercer Forge Corp.)

65 577 062 647 E. Market St. Otter Creek 6,900.  
1 Bus. Bldg. Industrial (Mercer Forge Corp.)

65 577 056 McKinley Ave. Otter Creek 19,200.  
1 Bus. Bldg. (Sereday's True Value)

65 577 054	McKinley Ave. 1 Bus. Bldg. Industrial (FL Industries)	Otter Creek	892,450.
65 577 053	McKinley Ave (?) Mercer Water Co.	Otter Creek	No Data
65 577 066	733 E. Market St. Approx. 7 Res. Bldgs. Or Trailers	Otter Creek	4,050.
65 576 038	660 E. Market S. Approx. 3 Bus. Bldgs. (Possible Ferti-Blend Plant, formally Agway)	Otter Creek	31,650.
65 576 041	620 E. Market St. 1 Res. Bldg.	Otter Creek	4,950.
65 576 042	E. Market St. 1 Res. Bldg. and 1 Res. Trailer	Otter Creek	5,400.
65 576 074	Rt. 58 (Wilson Ave) 1 Bus. Bldg. (Mercer Boro)	Mill Creek	8,250.
65 576 045	Rt. 58 (757 Wilson Ave.) 3 Res. Bldgs.	Mill Creek	6,600.
65 576 081	Rt. 58 (748 Wilson Ave) 1 Res. Bldg. (Junkyard)	Mill Creek	21,150.
65 576 080	Rt. 58 (7 Wilson Ave) 4 Res. Bldg.	Mill Creek	9,900.
65 576 048	Rt. 58 (Wilson Ave) 1 Bus. Bldg. (Tavern)	Mill Creek	12,300.
65 576 074	Off E. Beaver St. 1 Bus. Bldg. (Mercer Boro Sewage Treatment Plant)	Neshannock Crk.	8,250.
65 576 001 001	325 Home St. 2 Res. Bldg.	Greenville Run	10,050.
06 163 007	Schaffer Rd. 3 Bus. Bldg. (Plantation Park Campers, campground) (office, bathhouse, laundry)	Neshannock Crk.	112,650.
06 164 023	818 Scrub Grass Rd. 2 Res. Bldg. and 1 Res. Trailer	Mill Creek	21,300.
06 176 001	685 Butler Pike 1 Res. Bldg.	Neshannock Crk.	7,050.

65 581 015	316 S. Shenango St.	unnamed trib. Of Neshannock Crk.	
2 Res. Bldg.		15,000.	
29 215 034	812 Leesburg Station Rd.	Neshannock Crk.	10,200.
1 Res. Bldg.			
29 215 007	819 Leesburg Station Rd	Neshannock Crk.	5,000.
2 Bus Bldg.	(Greenhouse)		
29 202 020	30 Millburn Rd.	Neshannock Crk.	32,100.
1 Res. Bldg.			
29 202 062 001	1463 Perry Highway	Neshannock Crk.	21,900.
1 Res. Bldg.			
29 202 057	1456 Perry Highway	Neshannock Crk.	14,850.
1 Res. Bldg.			
1 Kennel (Spruce Line Kennels)			Kennel assessed at 5,000.
29 202 056	1553 Perry Highway	Neshannock Crk.	84,750.
1 Bus. Bldg.	(Restaurant-Rachel's Iron Horse Inn)		
29 202 054	1553 Perry Highway	Neshannock Crk	7,500.
1 Res. Bldg.	(Owned by Rachel's Iron Horse Inn)		
29 202 053	763 Creek Rd.	Neshannock Crk.	1,800.
1 Res. Trailer			
Note: owns land for 29 202 053 000 100 and 29 202 .00 001			
29 202 000 100	773 Creek Rd	Neshannock Crk.	19,550.
1 Res. Modular Bldg.			
Note: only owns bldg. not land			
29 202 .00 001	763 Creek Rd.	Neshannock Crk	5,000.
Bus. (2 Trailers connected together. Hobby Shop)			
Note: only owns bldg. not land.			
29 202 072	1522 Perry Highway	Neshannock Crk.	13,150.
1 Res. Bldg.	(property also has 1 Barn)		
29 202 079	24 Dydeks Lane	Neshannock Crk.	35,950.
1 Res. Bldg.			
29 203 005	199 Millburn Rd.	Neshannock Crk.	25,950.
3 Res. Bldg.			
29 203 022	Milburn Rd.	Neshannock Crk.	3,900.
Unknown number of pole bldgs. Unknown use.			

05 98 026	984 District Rd.	Otter Creek	14,850
1 Res. Bldg.			
54 491 012	Mill St.	Otter Creek	14,850.
1 Res. Bldg.			
54 491 014	Mill St.	Otter Creek	14,850.
1 Res. Bldg.			
32 213 051	45 Orchard Rd.	unnamed branch of Little Neshannock Crk.	
1 Res. Bldg.		5,700.	
32 213 052	39 Orchard Rd.	unnamed branch of Little Neshannock Crk.	
1 Res. Bldg.		24,450.	
15 173 057	93 Lakeview Dr.	West Branch of Little Neshannock Crk.	
1 Res. Bldg.		27,300.	
15 173 058	83 Lakeview Dr.	West Branch of Little Neshannock Crk.	
1 Res. Bldg.		28,500.	
12 159 311	1115 S. Keel Ridge Rd.	Trib. Of Shenango River	
1 Res. Bldg.		26,950.	
12 159 312	1185 S. Keel Ridge Rd.	Trib. Of Shenango River	
1 Res. Bldg.		12,300.	
12 159 400	1440 S. Keel Ridge Rd.	Trib. Of Shenango River	
1 Barn	8,700		
75 882 072	Off Rt 18	Shenango River	387,200.
1 Bus Bldg.	Unknown Industrial type.		
27 197 118	3259 Frampton Rd.	Shenango River	23,100.
1 Res. Bldg.			
27 209 008	55 Riggs Rd.	Deer Creek	29,400.
1 Res. Bldg. and 3 Barns			
27 209 0013	91 Riggs Rd.	Deer Creek	16,200.
1 Res. Bldg.			
12 171 023	1985 Parkdale Ave.	Trib. Of Shenango River	
1 Res. Bldg.		8,250.	
12 158 285	2375 Rombold Rd.	Trib. Of Shenango River	

1 Res. Bldg.		28,200.	
12 158 302	1558 Maple Dr.		Trib. Of Shenango River
1 Res. Bldg.		24,150.	
12 158 303	Maple Dr.		Trib. Of Shenango River
1 Barn or slaughter house		11,250.	
12 171 229	1700 Broadway Rd.	Shenango River	346,650.
1 Bus. Bldg.	(Greenville Steel Sales Inc.)	(Industrial Warehouse)	
12 171 308	2850 Industrial Rd.	Shenango River	118,500.
1 Bus. Bldg.	(Leali Bros. Excavating, Inc.)	(office/warehouse)	
12 171 309	1800 Broadway Rd.	Shenango River	463,550.
1 Bus. Bldg.	(Chambers Steel Service)	(office/warehouse)	
12 171 310 010	1760 Broadway Rd.	Shenango River	359,450.
1 Bus Bldg	(Turner Steel Service)	(office/warehouse)	
12 171 314	Broadway Rd.	Shenango River	No Data
Hickory Twp. Municipal Sewer/Water Authority, Plant and offices.			
12 170 017 002	Ohio St.	Shenango River	39,000.
1 Bus Bldg	(Williams Bros.)	(Heavy Industrial/office)	
(Damaged by 1985 Tornado)			
27 170 010	91 Lilac Dr.	Shenango River	12,150
1 Res. Bldg. and 1 storage garage			
76 906 039	143 Shenango St.	Shenango River	573,800.
3 Bus. Bldg.	Yourga Trucking, Inc.	(Snow damage in 1999)	
76 911 008	Council Ave (Rt 718)	Shenango River	1,295,100.
1 Bus. Bldg.	(John Maneely Co.)	(Waste Water Treatment Facility)	
3 U 8 (aerial map 157)	Stewart St.	Shenango River	136,950.
1 Bus. Bldg.	(Chadderton Trucking, Inc.)	(steel garage)	
3 U 3 (aerial map 157)	251 Wheeler St.	Shenango River	383,000.
1 Steel warehouse, 2 steel office bldgs.	(Mico Industries, Michael Minea)		
3 U 5 (aerial map 157)	Riverside Dr. (?)	Shenango River	No Data
1 Bus. Bldg.	(sewage treatment plant)	(May belong to City of Sharon)	
3 2 1 (aerial map 157)	15 W. Connelly Blvd.	Shenango River	836,950.
1 Eight Story Apartment Bldg., 1 Business Shop	(K.B.Penn, L.P. owner)		

4 R 15x (aerial map 157) 680 S. Dock St. Trib. Of Shenango River 67,350.  
1 Warehouse, 1 office bldg. (Mercer County Industrial Development Authority)

4 R 11 (aerial map 157) 830 Bay Way Trib. Of Shenango River 3,600.  
1 Res. Bldg.

4 A 4B (aerial map 157) North and south of Connelly Blvd. Intersection of S. Dock St.  
No Data available, Possibly industrial and residential. Pine Run

1B 49 50 51 52 (aerial map 144) State St. Shenango River No Data  
(49 51 52 owned by James Winner) (50 owned by City of Sharon)

1 I parcels 1 through 15 Penn Ave and Rose Court Shenango River 604,100.  
(aerial map 144) Res. Bldg. Apartments (Mercer County Housing Authority)

1 M 10 (aerial map 144 Penn or Shenango Ave. Shenango River No Data  
1 Bus Bldg. Industrial (Sharon Acquisition Corp)

1 C I (aerial map 144) 128 N. Water St. Shenango River 12,900.  
1 Bus. Bldg. (Benjamin Yariah, Superior Floor co.)

1 C 1B (aerial map 144) 98 N. Water St. Shenango River 8,550.  
1 Bus Bldg. (William Hvozda, Lenny's Auto Service)

1 C 1C (aerial map 144) 100,102,106 N. Water St. Shenango River 6,750.  
1 Bus Bldg. (William Hvozda, West Side Beverage Co.)

1 U 3 600 N. Water St. Shenango River 3,900.  
1 Res. Bldg.

1 U 4 612 N. Water St. Shenango River 3,000.  
1 Res. Bldg.

1 U 2 590 N. Water St. Shenango River 3,000.  
1 Res. Bldg.

12 321 396 Westerman Ave. Unk. Stream No Data  
1 Bldg. Unknown type (Shenango Valley Water Authority)

12 321 388 192 Jonathon Place Unk. Stream 35,400.  
1 Res. Bldg. (condo) (Toby Brutz owns bldg. only)

12 321 394 1655 and 1660 Kimberly St. Unk. Stream 127,800.  
1 Apartment Bldg. (South Main Associates)

12 321 394 Woodside Dr., Highland Rd., Richmond Dr. Unk Stream 47,400.  
Approx. 27 Res. Bldgs.

12 330 141, 145, 157 Fairmont St. and Baker Ave. Pine Run 16,050.  
3 Res. Bldgs.

4 AU 52 (aerial map 157) 616 Smith Ave. Pine Run 19,800.  
1 Res. Bldg.

4 AS 53, 54, 53A, 54A Memorial Ave. and Spencer Ave Pine Run 29,100.  
2 Res. Bldgs.

4 AF 11, 15 1070 Memorial Blvd. Pine Run 11,700.  
Approx. 7 Res. Bldgs.

4 AD 49, 55, 45 Griswold St. Pine Run 14,400.  
Approx. 6 Res. Bldgs.

4 AE 19, 20 McClure Ave. Pine Run 10,200.  
2 Res. Bldgs.

11 145 169 Highland Rd. Ext. Pine Hollow Run 100,800.  
1 Church Bldg. (Interdenominational Christian Fellowship)

11 145 116, 002 001 3110 Highland Lot 1 Pine Hollow Run 199,200.  
1 Bus Bldg. (Highland Professional Center) (Physician's office)

11 145 116 002 002 737 Brookshire Dr. Lot 2 Pine Hollow Run 223,050.  
1 Bus. Bldg. (Dialysis Clinic, Inc.)

11 145 333 409 N. Hermitage Rd. Pine Hollow Run 34,200.  
1 Bus. Bldg. (Law offices)

11 145 334 395 N. Hermitage Rd. Pine Hollow Run 25,650.  
1 Res. Bldg. (Scoccia Group) (May be a business bldg.)

11 145 332 3095 E. State St. Pine Hollow Run 23,550.  
Approx 12 Trailers and 1 bldg. (Res. Trailer Park)

11 145 362 3149 E. State St. Pine Hollow Run 124,050.  
1 Bus Bldg. (Restaurant, Ponderosa Steak House)

11 145 363 3189 E. State St. Pine Hollow Run 37,050.  
3 Bus. Bldgs. (Pic & Pay Shoes) (other bldgs. May be office bldgs.)

11 145 256 N. Hermitage Rd. Pine Hollow Run 4,350,300.  
1 Middle School (Hermitage School District)  
Assessed value reflects all school bldgs. On property-only middle school affected.

11 146 137	863 N. Keel Ridge Rd.	Pine Hollow Run	26,400.
1 Res. Bldg.			
11 146 138 002 000	825 N. Keel Ridge Rd.	Pine Hollow Run	25,200.
1 Res. Bldg.			
12 158 052	155 Donald Lot 47	Pine Hollow Run	18,300.
1 Res. Bldg.	(Love's Green Acres Plan #3, subdivision name)		
12 158 082	269 Sunset Lots 1 and 2	Pine Hollow Run	36,600.
1 Res. Bldg.			
12 158 128	Easton Rd. and Butterfly Lane	Pine Hollow Run	28,650.
3 Res. Bldgs.			
11 132 055	S. Mercer Ave.	Unk. Stream	25,050.
4 Res. Bldgs.			
11 322 342	Monticello Ave	Unk. Stream	37,200.
6 Res. Bldgs.	(Buhl Park Village)		
11 132 026	2085 Trout Island Rd.	Pine Hollow Run	104,100.
1 Res. Bldg.			
11 132 028 001	Lamor Rd.	Pine Hollow Run	No Data
1 Sewage Pump Station	(Hermitage)		
11 132 014	2550 Trout Island Rd.	Pine Hollow Run	14,250.
1 possibly 2 Res. Bldgs.			
11 145 044	1529 Dutch Lane	Pine Hollow Run	9,600.
1 Res. Bldg.			
11 145 049	Dutch Lane	Pine Hollow Run	8,550.
2 Res. Bldgs.			
23 107 052, 053	Shenango Park Rd.	Brush Run	19,200.
2 Res. Bldg.			
23 107 047	Shenango Park Rd.	Brush Run	No Data
No Data probably residential			
23 107 085	480 Shenango Park Rd.	Brush Run	42,200.
1 Res. Bldg.	1 Barn		
23 343 086 (aerial map 95)	18 <sup>th</sup> St., Arlington Dr., Brentwood Dr.	Brush Run	
Approx. 12 Res. Bldgs.		16,800.	

23 342 017 000 200 (aerial map 94) Rt. 18 (N. Hermitage Rd) Brush Run  
2 Bus. Bldg. (Rowe's Auto Parts & Service) (Junkyard) 73,500.

23 342 020 Rt. 18 (3770 N. Hermitage Rd.) Brush Run  
1 Res. Bldg., 1 Res. Trailer 18,600.

23 094 011 3761 N. Hermitage Rd. Brush Run 20,700.  
2 Res. Bldgs.

23 094 031 Rt. 18 Brush Run 15,750.  
1 Bus. Bldg. (warehouse) Daniel Reimold Sales and Auction

11 146 170 Lamor Rd., Robertson Rd. Golden Run 29,100  
4 Res. Bldgs.

14 134 049 492 Clay Furnace Rd. Magargee Run 18,750.  
1 Res. Bldg.

14 134 082 356 Clay Furnace Rd. Magargee Run 21,900.  
1 Res. Bldg.

15 160 054 6905 Dermond Rd. Magargee Run 20,700.  
5 Res. Bldgs.

15 160 068 1071 Greenfield Rd. Magargee Run 10,050.  
1 Res. Bldg. 1 Barn

15 160 024 1081 Greenfield Rd. Magargee Run 18,150.  
1 Res. Bldg.

15 160 075 001 1088 Greenfield Rd. Magargee Run 34,950.  
3 Res. Bldgs.

15 160 074 1044 Greenfield Rd. Magargee Run 19,950.  
3 Res. Bldgs. 2 Barns

15 160 089 994 Greenfield Rd. Magargee Run 12,000.  
1 Res. Bldg.

15 160 076 001 Greenfield Rd. Magargee Run No Data  
Possibly 1 Res. Bldg. 2 Barns (Looks like a horse farm)

15 161 001 Rt. 62 Magargee Run 11,000.  
Approx. 32 mobile homes (Forrest Brooks Mobile Home Park)

14 136 002 003 2593 Valley Rd. Lackawannock Creek 10,750.  
2 Res. Trailers

14 136 028	2673 Valley Rd.	Lackawannock Creek	5,100.
1 Res. Bldg.			
23 082 005	Kidds Mill Rd.	Shenango River (?)	6,750.
1 Res. Bldg. (summer cottage)			
23 082 006	Kidds Mill Rd.	Shenango River (?)	11,100.
1 Garage 1 Workshop (agricultural)			
23 082 006 001	Kidds Mill Rd.	Shenango River (?)	No Bldg.
Business Reynolds Disposal Co. (Sanitary Sewer Lift Station)			
08 015 027	250 Dowling Rd.	Unk. Stream	15,150.
2 Agricultural Bldgs. (Dairy Farm) (impact on Barn and Milkhouse)			
08 015 038	161 Maysville Rd.	Unk Stream	12,300.
1 Res. Bldg.			
64 574 005	Liberty St.	Shenango River	53,550.
1 Bus Bldg. (Gas station/convenience store) Last Minit Mart, Inc.			
64 574 006, 007	Liberty St.	Shenango River	
2 Bus. Bldgs. (Pymatuning Boat Sales) (006 – 28,050.) (007 – 16,350.)			
64 574 008	Liberty St.	Shenango River	16,950.
1 Bus Bldg. (School bus garage)			
64 574 025	Spring Alley (St ?)	Shenango River	25,800.
1 Res. Bldg.			
64 574 026	Off Liberty St.	Shenango River	No Data
Sewer Plant (Jamestown Municipal Authority)			
64 570 009	100 Liberty St.	Shenango River	9,900.
1 Bus. Bldg. (Reynolds Drug Store)			
64 570 008	Liberty St.	Shenango River	2,400.
1 Bus. Bldg. (Bait Shop)			
64 570 010	106 Liberty St.	Shenango River	6,150.
2 Bus. Bldgs. (Office and warehouse)			
09 069 001	Hamburg Rd.	Shenango River	603,350.
1 Sewage Treatment Plant (Greenville Sanitary Authority)			
09 056 231	Ohl St.	Shenango River	543,500.

Approx. 10 Bus. Bldgs. (Bessemer and Lake Erie Railroad)

09 056 235 001 Waugh Ave. Shenango River 603,800.  
 Approx. 10 Bus. Bldgs. (Trinity Industries, Inc.)

09 056 233 38 Lancaster Ave. Shenango River 19,200.  
 1 Res. Bldg.

09 056 234 Hamburg Rd. Shenango River 64,800.  
 1 Bus Bldg. (several small outbuildings) (Lumber yard) (Taylor-Ramsey, Corp)

09 056 237 74 Hamburg Rd. Shenango River 10,350.  
 1 Res. Bldg.

30 31 055 25 Sheakleyville Rd. Little Shenango River 19,200.  
 1 Res. Bldg.

30 31 045 Methodist Rd. Little Shenango River 9,000.  
 1 Res. Bldg.

30 31 040 1086 Methodist Rd. Little Shenango River 11,850.  
 1 Res. Bldg. 1 Pole Bldg.

30 31 041 1069 Methodist Rd. Little Shenango River No Data  
 Possibly a Pole Bldg.

55 516 146 36 Ohl St. Shenango River 10,050.  
 1 Res./Bus. (Tavern with apartment)

55 517 034, 042 Ohl and Liberty Sts. Shenango River  
 2 Bus. Bldgs. (Industrial) (City Disposal Service) (034 – 47,250.) (042 – 24,750.)

55 517 043 69 S. Race St. Shenango River 46,800.  
 1 Bus. Bldg. (private club) (The Italian Club)

55 517 010 S. Race St. Shenango River 120,000.  
 1 Bus. Bldg. (Greenville Regional Hospital-Center for Human Services)

55 517 002 through 007 S. Race St. Shenango River 7,950.  
 Approx. 10 Res. Bldgs.

20 045 016 572 A D Williamson Rd. Little Shenango River 9,600.  
 1 Res. Bldg. 1 Pole Bldg.

20 045 023 1278 Petersburg Rd. Little Shenango River 9,600.  
 1 Res./Bus. Bldg. (Tavern with apartment) (The Friendly Tavern)  
 1 Bus. Bldg. (commercial truck garage)

21 046 035 T668 Pearson Rd. Little Shenango River 16,800.  
2 Res. Bldgs. (only one assessment found)

21 060 097 Rt. T 740 Little Shenango River 4,950.  
1 Res. Bldg.

21 060 114 Rt. 358 (3599 Hadley Rd. ?) Little Shenango River 41,450.  
1 Res. Bldg.

21 047 065 001 527 Carpenters Corner Rd. Little Shenango River 10,800.  
1 Res. Bldg. 1 Garage 1 Barn 1 Railroad Car (business) (Echo Dell Whistle Stop)

21 047 065 517 Carpenters Corner Rd. Little Shenango River 2,100.  
1 Res. Bldg.

21 047 068 487 Carpenters Corner Rd. Sandy Lake Total Value 60,450.  
17 Summer Cottages (Lakeside Park Assn.) Business (?) Average Value 3,800.

74 866 015 West Cottage Rd. Sandy Lake 17,850.  
Approx. 10 Res. Bldgs. (Summer homes, cottages, Primary residences)

74 866 042 Linden St. Sandy Lake 6,600.  
1 Res. Bldg.

74 867 105 7 Linden St. Unnamed Trib. To Sandy Lake 218,400.  
1 Church (Presbyterian)

74 867 050 Linden and Maple Unnamed Trib. To Sandy Lake 16,500.  
Approx. 8 Res. Bldgs. (Block between Linden and Maple)

74 867 032 Maple and Railroad Sts. Unnamed Trib. To Sandy Lake 11,100.  
Approx. 4 Res. Bldgs. (Block between Maple and Railroad Sts.)

74 867 068 Beech and Franklin Sts. Unnamed Trib. To Sandy Lake 15,600.  
Approx. 8 Res. Bldgs.

74 867 056 63 Elm Unnamed Trib. To Sandy Lake 11,100.  
Approx. 4 Res. Bldgs.

67 592 118 Main, Lacock, Lake Sts. Sandy Creek 24,450.  
Approx. 15 Res. Bldgs.

67 592 129 Rt. 62 (Lake St.) Sandy Creek 47,100.  
1 Church Bldg. (W. PA District of the Christian and Missionary Alliance)  
(Wesleyan Methodist Church)

67 592 030 Walnut, Main, Lake Sts. Sandy Creek 20,00.

Approx. 4 Res. Bldgs.

67 592 032 Walnut, Main, Lake Sts. Sandy Creek 17,250.  
1 Bus. (commercial) Bldg. with apartments

67 592 029 Walnut, Main, Lake Sts. Sandy Creek 66,600.  
1 Bus. Bldg. (medical office) (optometrist)

67 592 035, 036 Walnut, Main, Lake Sts. Sandy Creek No Data  
1 Bus. Bldg.

67 592 033 3295 N. Main St. Sandy Creek 83,700.  
1 Fire Station (Sandy Lake Volunteer Fire Dept.)

67 591 001 5241 Lake St. Sandy Creek 400,850.  
1 Bus. Bldg. (Industrial) (Magnetics Inc. Kemco Division)

67 595 001 25 Walnut Sandy Creek 24,750.  
1 Res. Bldg. (2 apartments)

67 595 005 Walnut and Maple Sts. Sandy Creek 148,350.  
1 Bus. Bldg. (grocery store) (Shur-Market Development Co. Inc.)

67 595 007 001 1 Market St. Sandy Creek 14,400.  
1 Maintenance Bldg. (Boro of Sandy Lake)

67 595 008 18 Walnut St. Sandy Creek 19,200.  
1 Truck Garage (Boro of Sandy Lake)

67 595 009 Main St. Sandy Creek 22,800.  
1 Bus. Bldg./ with apartments (True Value Hardware)

67 595 011 Main St. Sandy Creek 28,200.  
1 Post office Bldg.

67 595 012 S. Main St. Sandy Creek 27,150.  
1 Boro Bldg./Public Library (Boro of Sandy Lake)

67 595 014 Main St. Sandy Creek 18,000  
1 Bus. Bldg. / with apartments (Certainty Tech)

67 595 015 Main St. Sandy Creek 130,200.  
1 Bus. Bldg. (Mercer County State Bank)

67 595 016 Main St. Sandy Creek 19,550  
1 Bus. Bldg. (Mercer County State Bank, Mortgage Processing Center)

67 595 019 Main St. Sandy Creek 41,550.

1 Bus. Bldg. / with apartments

67 596 001 5236 Lake St. Sandy Creek 41,850.

1 Bus. Bldg. (commercial garage for milk tankers)

67 596 002 5242 Lake St. Sandy Creek 21,000.

1 Private Club (IOOF Lodge 573, Independent Order of Odd Fellows)

67 596 003 5264 Lake St. Sandy Creek 418,000.

1 Bus. Bldg. (industrial) (warehouse and office) (Clinch Tite Corp.)

67 596 004 5264 Lake St. Sandy Creek 56,550.

2 Bus. Bldgs. 1 Cement Silo (sawdust and shaving storage) (Clinch Tite Corp.)

67 596 005 253 Railroad St. Sandy Creek 88,500.

1 Bus. Bldg. (McQuiston & Co., Inc.)

67 596 005 007 Industrial Drive Sandy Creek 218,750.

1 Community Center (Mercer County Area Agency on Aging, Inc.)

67 596 006 Industrial Drive Sandy Creek 18,000.

1 Bus. Bldg. (Industrial)

67 596 007 Rt. 358 Sandy Creek 914,050.

1 Bus. Bldg. 1 Truck Garage (Iron City Sash and Door Co.) (owns bldgs. Only)  
(Land is owned by Sandy Lake Properties LLC)

67 595 022 296 Main St. Sandy Creek 45,000.

1 Bus. Bldg. (Walker Chevrolet, Inc.)

67 595 033 Main St. Sandy Creek 18,000.

67 595 034 Main St. Sandy Creek 19,350.

67 595 035 Main St. Sandy Creek 2,250.

Approx. 8 Bus. Bldgs. Approx. 6 Res. Bldgs. (Walker Chevrolet, Inc.)

67 595 024 Main St. Sandy Creek 37,200.

1 Res. Bldg.

67 595 026 Main St. Sandy Creek 31,800.

1 Private Club (Lake Lodge Masonic Temple)

67 595 029 Main St. Sandy Creek 35,100.

3 Bus. Bldgs. (Carwash, Bowling Alley, Restaurant)

67 595 031 Along Railroad (off Main St.) Sandy Creek 22,350.

1 Res. Bldg.

67 595 032	Main St.	Sandy Creek	18,900.
1 Res. Bldg.			
67 595 036, 037, 038	Lake St.	Sandy Creek	12,900.
3 Res. Bldgs.			
67 595 039	Lake St.	Sandy Creek	116,700.
1 Bus. Bldg. (Mercer County State Bank, Data Processing Center)			
67 593 016	Lake St.	Sandy Creek	35,100.
1 Bus. Bldg. (Sandy Lake Auto Sales) (Variety Store)			
67 593 019, 017, 018, 019 001	Lake St.	Sandy Creek	25,650.
4 Res. Bldgs.			
67 593 021	Along New York Central Railroad Right of Way	Sandy Creek	
1 Sewer Plant (Lakeview Joint Sewer Authority)			324,950.
55 516 023	S. Water St.	Shenango River	102,750.
3 Bus. Bldgs. (Car lot, car wash, body shop)			
55 516 022	Main St.	Shenango River	21,150.
1 Municipal Bldg. (Greenville Boro)			
55 516 023 001	Water St.	Shenango River	7,000.
1 Bus. Bldg. (Food distribution center) (Good Shepherd Center, Inc.)			
55 516 020	111 Main St.	Shenango River	235,500.
1 Church Bldg. (Greenville Christian Assembly)			
55 516 019	Main St.	Shenango River	6,000.
1 Bus. Bldg. (Store and tavern) (Greenville Christian Assembly)			
55 516 018	Main St.	Shenango River	5,850.
1 Bus./ Res. Bldg. (Store with apartments) (Greenville Christian Assembly)			
55 516 021	Main St.	Shenango River	18,450.
1 Bus. Bldg. (Lumpp Rent A Car) (Reed Oil Co.)			
55 516 024	Main and Water Sts.	Shenango River	12,600.
1 Bus. Bldg. (Greenville Parking Authority, leased bldg.)			
55 516 025	Main St.	Shenango River	7,650.
1 Bus. Bldg. (Storage)			
55 516 026	143 Main St.	Shenango River	16,200.
1 Bus. Bldg. (Apartments)			

55 516 027	145 Main St.	Shenango River	9,300.
1 Bus. Bldg.	(Main Moon Restaurant)		
55 516 028	147 Main St.	Shenango River	7,350.
1 Bus. / Res. Bldg.	(Flower Shop and apartments)		
55 516 029	149-151 Main St.	Shenango River	30,000.
1 Bus. Bldg.	(Tavern and Restaurant) (MTDR Rental)		
55 516 030	9 S. Race St.	Shenango River	18,750.
1 Bus. Bldg.	(Flower Shop)		
55 516 032, 033	15 and 17 Race St.	Shenango River	
2 Bus. Bldgs.	(Auto Body Shop) (15 Race St.- 900.) (17 Race St.-8,850.)		
55 516 090 001	5 Clinton St.	Shenango River	4,950.
1 Bus. Bldg.	(Beer Distributor)		
55 516 092	11 Clinton St.	Shenango River	13,200.
1 Bus. Bldg.	(Hamilton's Radiator Sales and Service)		
55 516 094	31 S. Race St.	Shenango River	10,200.
1 Res. Bldg.	1 Garage		
55 516 095	33 S. Race St.	Shenango River	17,550.
1 Bus. Bldg.	(Tire Sales Shop) (Combined Capital Corp.)		
55 516 097	41 S. Race St.	Shenango River	5,250.
1 Res. Bldg.	(Combined Capital Corp.)		
55 516 098	43 S. Race St.	Shenango River	14,100.
1 Bus. Bldg.	(Auto Body Shop)		
55 516 100	2 State St.	Shenango River	5,250.
1 Res. Bldg.			
55 516 101	53 S. Race St.	Shenango River	5,850.
1 Res. Bldg.	1 Garage		
55 510 045	Main St.	Shenango River	15,750.
1 Bus./Res. Bldg.	(Carpet Store, Barbar Shop, Dry Cleaner) (Apartments)		
55 510 046	106-108 Main St.	Shenango River	13,950.
1 Bus./Res. Bldg.	(Adam's Hotel Tavern, Plumbing Shop)		
55 510 047	110 Main St.	Shenango River	12,000.

1 Bus./Res. Bldg. (Beauty Shop with apartments)

55 510 048 114 Main St. Shenango River 14,400.  
1 Bus. Bldg. (Appliance Store, Heating and Air Conditioning Store)

55 510 049 Main and Water Sts. Shenango River 40,350.  
1 Bus. Bldg. (Warehouse)

55 510 050 10 N. Water St. Shenango River 15,300.  
1 Bus. Bldg. (Gibson Furnace Co.)

55 510 052 130 Main St. Shenango River 15,600.  
1 Bus. Bldg. (Kimmy's Lounge) (Restaurant)

55 510 053 132 Main St. Shenango River 12,300.  
1 Bus./Res. Bldg. (Jewelry Store with Apartments)

55 510 009 51 N. Race St. Shenango River 7,950.  
2 Bus. Bldg. (Ripple Auto Machine)

55 510 017 142 Achre Way Shenango River 20,400.  
1 Bus. Bldg. (Greenville Ice Co.)

55 510 015 33 N. Race St. Shenango River 13,200.  
1 Res. Bldg. (2 apartments)

55 509 101 Front, Second, Brackin Alley, Hoffman Sts. Shenango River  
Approx. 32 Res. Bldgs. 12,300.

55 500 499 034 N. Front, Second, Shaffer, Park Sts. Shenango River  
Approx. 10 Res. Bldgs.

55 504 511 033 N. Mercer St., Penn Ave. Little Shenango River 10,950.  
4 Res. Bldgs.

55 502 016 N. Race St. Ext. Little Shenango and Shenango Rivers  
Approx. 16 Res. Buildings 16,200.

18 78 004, 005 831 and 823 Glenn School Rd. Little Sandy Creek 20,700.  
2 Res. Bldgs.

7 25 055 Rt. 322 (Carlton) French Creek 4,650.  
Approx. 20 Summer Cottages

7 25 060 1283 New Lebanon Rd. French Creek 23,400.  
Approx. 11 Res. Bldgs.

7 25 029 Rt. 322 (Carlton) French Creek 11,400.  
Approx 11 Summer Cottages

7 25 014 Rt. 322 (Carlton) French Creek 22,500.  
Approx. 8 Res. Bldgs.

APPENDIX D – TORNADO 1985

